APPENDIX D: LEVEL OF SERVICE CALCULATION SHEETS

2015 EXISTING AND EXISTING PLUS PROJECT

ALIGNMENT - 2015 EXISTING AM

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	761	561	121	662	6	467	0	103	0	0
Future Volume (vph)	0	0	761	561	121	662	6	467	0	103	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.95	1.00	1.00		1.00		0.95		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.97	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3276	1372	1770	3533		3433		1504		
Flt Permitted			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3276	1372	1770	3533		3433		1504		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	810	597	129	704	6	497	0	110	0	0
RTOR Reduction (vph)	0	0	14	276	0	0	0	0	0	64	0	0
Lane Group Flow (vph)	0	0	963	154	129	710	0	497	0	46	0	0
Confl. Peds. (#/hr)		9		16	16		9			18	18	
Confl. Bikes (#/hr)				5			2			2		
Turn Type	Prot		NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases				4						2		
Actuated Green, G (s)			40.3	40.3	12.9	57.2		20.9		47.3		
Effective Green, g (s)			40.3	40.3	12.9	57.2		20.9		47.3		
Actuated g/C Ratio			0.36	0.36	0.11	0.51		0.19		0.42		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1173	491	202	1796		637		632		
v/s Ratio Prot			c0.29		c0.07	0.20		c0.14				
v/s Ratio Perm				0.11						c0.03		
v/c Ratio			0.82	0.31	0.64	0.40		0.78		0.07		
Uniform Delay, d1			32.8	26.1	47.6	17.0		43.6		19.5		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			4.7	0.4	6.5	0.1		6.2		0.2		
Delay (s)			37.5	26.5	54.1	17.2		49.8		19.7		
Level of Service			D	C	D	B		D		B		
Approach Delay (s/veh)			34.2			22.8			44.3			36.1
Approach LOS			C			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	112.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	1
Future Volume (vph)	1
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1611
Flt Permitted	1.00
Satd. Flow (perm)	1611
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	1
RTOR Reduction (vph)	1
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	22.4
Effective Green, g (s)	22.4
Actuated g/C Ratio	0.20
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	320
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.00
Uniform Delay, d1	36.1
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	36.1
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	50	159	5	143	12	0	464	51	82	701
Future Volume (vph)	0	0	50	159	5	143	12	0	464	51	82	701
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.84	1.00	0.83		1.00		1.00	0.93	1.00	1.00
Flpb, ped/bikes			1.00	0.86	1.00		1.00		1.00	1.00	0.97	1.00
Frt			0.87	1.00	0.85		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1358	1515	1327		1770		3539	1471	1724	3539
Flt Permitted			1.00	0.95	1.00		0.35		1.00	1.00	0.47	1.00
Satd. Flow (perm)			1358	1515	1327		659		3539	1471	855	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	53	169	5	152	13	0	494	54	87	746
RTOR Reduction (vph)	0	0	44	0	125	0	0	0	0	14	0	0
Lane Group Flow (vph)	0	0	9	169	32	0	13	0	494	40	87	746
Confl. Peds. (#/hr)	93		85	85		93		2		18	18	
Confl. Bikes (#/hr)			4			6				2		
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			15.8	15.8	15.8		66.5		66.5	66.5	66.5	66.5
Effective Green, g (s)			15.8	15.8	15.8		66.5		66.5	66.5	66.5	66.5
Actuated g/C Ratio			0.17	0.17	0.17		0.74		0.74	0.74	0.74	0.74
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			237	265	232		485		2606	1083	629	2606
v/s Ratio Prot					0.02				0.14			c0.21
v/s Ratio Perm			0.01	c0.11			0.02			0.03	0.10	
v/c Ratio			0.04	0.64	0.14		0.03		0.19	0.04	0.14	0.29
Uniform Delay, d1			30.9	34.6	31.5		3.2		3.6	3.2	3.5	4.0
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	5.0	0.3		0.1		0.2	0.1	0.5	0.3
Delay (s)			31.0	39.6	31.8		3.3		3.8	3.3	4.0	4.3
Level of Service			C	D	C		A		A	A	A	A
Approach Delay (s/veh)		31.0			35.8				3.7			4.2
Approach LOS		C			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	90.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	789	121	186	952	79	61	401	93	110	646	110
Future Volume (veh/h)	94	789	121	186	952	79	61	401	93	110	646	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.94	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	99	831	127	196	1002	83	64	422	98	116	680	116
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	1110	168	234	1484	123	325	1395	609	449	1473	757
Arrive On Green	0.07	0.25	0.25	0.13	0.31	0.31	0.03	0.39	0.39	0.06	0.42	0.42
Sat Flow, veh/h	1774	4424	671	1774	4763	394	1774	3539	1546	1774	3539	1547
Grp Volume(v), veh/h	99	635	323	196	713	372	64	422	98	116	680	116
Grp Sat Flow(s),veh/h/ln	1774	1695	1705	1774	1695	1766	1774	1770	1546	1774	1770	1547
Q Serve(g_s), s	5.3	16.7	16.9	10.4	17.7	17.7	2.1	7.9	4.0	3.7	13.4	4.0
Cycle Q Clear(g_c), s	5.3	16.7	16.9	10.4	17.7	17.7	2.1	7.9	4.0	3.7	13.4	4.0
Prop In Lane	1.00		0.39	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	851	428	234	1057	550	325	1395	609	449	1473	757
V/C Ratio(X)	0.78	0.75	0.75	0.84	0.67	0.68	0.20	0.30	0.16	0.26	0.46	0.15
Avail Cap(c_a), veh/h	276	1160	583	460	1512	788	373	1395	609	495	1473	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	33.3	33.4	40.8	28.9	28.9	17.0	20.1	18.9	15.9	20.3	13.7
Incr Delay (d2), s/veh	10.0	1.8	3.7	7.7	0.8	1.5	0.3	0.6	0.6	0.3	1.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.0	8.3	5.6	8.3	8.8	1.0	4.0	1.8	1.8	6.7	1.8
LnGrp Delay(d), s/veh	54.0	35.1	37.1	48.5	29.7	30.4	17.3	20.7	19.5	16.2	21.4	14.1
LnGrp LOS	D	D	D	D	C	C	B	C	B	B	C	B
Approach Vol, veh/h		1057			1281			584			912	
Approach Delay, s/veh		37.5			32.8			20.1			19.8	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	42.0	16.7	28.2	7.3	44.1	10.9	34.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	38.0	25.0	33.0	6.0	40.0	15.0	43.0
Max Q Clear Time (g_c+I1), s	5.7	9.9	12.4	18.9	4.1	15.4	7.3	19.7
Green Ext Time (p_c), s	0.1	3.2	0.4	5.3	0.0	5.2	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	194	91	55	150	25	32	524	48	35	1027	36
Future Volume (veh/h)	36	194	91	55	150	25	32	524	48	35	1027	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	39	211	99	60	163	27	35	570	52	38	1116	39
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	257	294	138	159	383	63	318	2362	1025	551	2325	81
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	1173	1178	553	1055	1538	255	480	3505	1521	790	3451	121
Grp Volume(v), veh/h	39	0	310	60	0	190	35	570	52	38	567	588
Grp Sat Flow(s),veh/h/ln	1173	0	1731	1055	0	1793	480	1752	1521	790	1752	1819
Q Serve(g_s), s	3.0	0.0	17.0	5.7	0.0	9.2	3.9	6.6	1.2	2.0	16.2	16.2
Cycle Q Clear(g_c), s	12.2	0.0	17.0	22.7	0.0	9.2	20.1	6.6	1.2	8.6	16.2	16.2
Prop In Lane	1.00		0.32	1.00		0.14	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	257	0	431	159	0	447	318	2362	1025	551	1181	1226
V/C Ratio(X)	0.15	0.00	0.72	0.38	0.00	0.43	0.11	0.24	0.05	0.07	0.48	0.48
Avail Cap(c_a), veh/h	439	0	700	323	0	725	318	2362	1025	551	1181	1226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	0.0	35.7	46.1	0.0	32.8	13.0	6.6	5.7	8.3	8.2	8.2
Incr Delay (d2), s/veh	0.3	0.0	2.3	1.5	0.0	0.6	0.7	0.2	0.1	0.2	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	8.4	1.7	0.0	4.7	0.6	3.2	0.5	0.5	8.2	8.5
LnGrp Delay(d), s/veh	38.2	0.0	37.9	47.5	0.0	33.4	13.7	6.8	5.8	8.5	9.6	9.5
LnGrp LOS	D		D	D		C	B	A	A	A	A	A
Approach Vol, veh/h		349			250			657			1193	
Approach Delay, s/veh		38.0			36.8			7.1			9.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		29.9		74.0		29.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		22.1		19.0		18.2		24.7
Green Ext Time (p_c), s		5.1		2.0		10.3		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	28	83	65	138	111	46	12	540	40	49	1129	25
Future Volume (veh/h)	28	83	65	138	111	46	12	540	40	49	1129	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	29	86	68	144	116	48	12	562	42	51	1176	26
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	242	212	168	247	276	114	325	2480	1079	592	2479	55
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1211	953	753	1222	1241	514	463	3539	1539	812	3538	78
Grp Volume(v), veh/h	29	0	154	144	0	164	12	562	42	51	588	614
Grp Sat Flow(s),veh/h/ln	1211	0	1706	1222	0	1755	463	1770	1539	812	1770	1847
Q Serve(g_s), s	2.2	0.0	8.0	11.9	0.0	8.3	1.2	5.9	0.9	2.5	15.5	15.5
Cycle Q Clear(g_c), s	10.5	0.0	8.0	19.9	0.0	8.3	16.8	5.9	0.9	8.4	15.5	15.5
Prop In Lane	1.00		0.44	1.00		0.29	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	242	0	380	247	0	391	325	2480	1079	592	1240	1294
V/C Ratio(X)	0.12	0.00	0.41	0.58	0.00	0.42	0.04	0.23	0.04	0.09	0.47	0.47
Avail Cap(c_a), veh/h	425	0	638	432	0	657	325	2480	1079	592	1240	1294
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	34.6	43.1	0.0	34.7	10.8	5.6	4.8	7.0	7.0	7.0
Incr Delay (d2), s/veh	0.2	0.0	0.7	2.2	0.0	0.7	0.2	0.2	0.1	0.3	1.3	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.8	4.1	0.0	4.1	0.2	2.9	0.4	0.6	8.0	8.3
LnGrp Delay(d), s/veh	39.5	0.0	35.3	45.3	0.0	35.4	11.0	5.8	4.9	7.3	8.3	8.2
LnGrp LOS	D		D	D		D	B	A	A	A	A	A
Approach Vol, veh/h		183			308			616			1253	
Approach Delay, s/veh		36.0			40.1			5.8			8.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		27.2		77.0		27.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		18.8		12.5		17.5		21.9
Green Ext Time (p_c), s		4.6		0.9		11.2		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	204	106	133	111	38	25	497	112	57	1163	21
Future Volume (veh/h)	37	204	106	133	111	38	25	497	112	57	1163	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	40	222	115	145	121	41	27	540	122	62	1264	23
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	372	193	237	610	494	227	2119	918	471	2119	918
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1198	1137	589	1039	1863	1509	427	3539	1534	769	3539	1534
Grp Volume(v), veh/h	40	0	337	145	121	41	27	540	122	62	1264	23
Grp Sat Flow(s),veh/h/ln	1198	0	1725	1039	1863	1509	427	1770	1534	769	1770	1534
Q Serve(g_s), s	2.7	0.0	17.7	14.7	5.1	2.0	4.6	7.8	3.8	4.5	24.2	0.7
Cycle Q Clear(g_c), s	7.8	0.0	17.7	32.4	5.1	2.0	28.8	7.8	3.8	12.3	24.2	0.7
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	0	565	237	610	494	227	2119	918	471	2119	918
V/C Ratio(X)	0.10	0.00	0.60	0.61	0.20	0.08	0.12	0.25	0.13	0.13	0.60	0.03
Avail Cap(c_a), veh/h	529	0	747	347	807	654	227	2119	918	471	2119	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	30.5	44.1	26.3	25.2	22.6	10.3	9.5	13.2	13.6	8.9
Incr Delay (d2), s/veh	0.1	0.0	1.0	2.5	0.2	0.1	1.1	0.3	0.3	0.6	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	8.6	4.4	2.6	0.9	0.6	3.9	1.7	1.0	12.1	0.3
LnGrp Delay(d), s/veh	29.2	0.0	31.5	46.6	26.4	25.3	23.6	10.6	9.8	13.8	14.8	8.9
LnGrp LOS	C		C	D	C	C	C	B	A	B	B	A
Approach Vol, veh/h		377			307			689			1349	
Approach Delay, s/veh		31.3			35.8			11.0			14.7	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		39.5		69.0		39.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		30.8		19.7		26.2		34.4
Green Ext Time (p_c), s		4.8		2.3		13.0		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Future Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	152	1147	158	122	746	55	123	483	193	239	967	135
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1472	203	152	1571	468	185	1161	496	313	1858	553
Arrive On Green	0.11	0.33	0.33	0.09	0.31	0.31	0.05	0.33	0.33	0.09	0.37	0.37
Sat Flow, veh/h	1757	4451	613	1757	5036	1499	3408	3505	1497	3408	5036	1499
Grp Volume(v), veh/h	152	865	440	122	746	55	123	483	193	239	967	135
Grp Sat Flow(s),veh/h/ln	1757	1679	1707	1757	1679	1499	1704	1752	1497	1704	1679	1499
Q Serve(g_s), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Cycle Q Clear(g_c), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1110	564	152	1571	468	185	1161	496	313	1858	553
V/C Ratio(X)	0.82	0.78	0.78	0.80	0.47	0.12	0.67	0.42	0.39	0.76	0.52	0.24
Avail Cap(c_a), veh/h	350	1406	715	298	1958	583	272	1161	496	476	1858	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	30.3	30.3	45.0	27.9	24.7	46.5	26.0	25.7	44.5	24.7	22.0
Incr Delay (d2), s/veh	8.6	2.2	4.3	9.3	0.2	0.1	4.1	1.1	2.3	3.9	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	11.2	11.7	3.7	5.6	1.1	1.8	5.3	4.4	3.4	7.2	2.8
LnGrp Delay(d), s/veh	52.6	32.5	34.6	54.3	28.1	24.8	50.6	27.1	28.0	48.4	25.8	23.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1457			923			799			1341	
Approach Delay, s/veh		35.2			31.4			31.0			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	37.2	12.7	37.2	9.4	41.0	14.6	35.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	17.0	42.0	8.0	37.0	20.0	39.0
Max Q Clear Time (g_c+I1), s	8.9	12.7	8.8	25.3	5.6	17.0	10.5	14.0
Green Ext Time (p_c), s	0.4	3.5	0.2	7.8	0.1	7.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	621	89	165	549	107	83	629	129	75	526	148
Future Volume (veh/h)	158	621	89	165	549	107	83	629	129	75	526	148
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	163	640	92	170	566	110	86	648	133	77	542	153
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	837	359	207	707	137	111	1482	644	99	1117	314
Arrive On Green	0.11	0.24	0.24	0.12	0.24	0.24	0.06	0.42	0.42	0.06	0.41	0.41
Sat Flow, veh/h	1774	3539	1516	1774	2938	569	1774	3539	1538	1774	2707	761
Grp Volume(v), veh/h	163	640	92	170	340	336	86	648	133	77	353	342
Grp Sat Flow(s),veh/h/ln	1774	1770	1516	1774	1770	1737	1774	1770	1538	1774	1770	1698
Q Serve(g_s), s	8.4	15.7	4.6	8.7	16.8	17.0	4.4	12.1	5.1	4.0	13.7	13.8
Cycle Q Clear(g_c), s	8.4	15.7	4.6	8.7	16.8	17.0	4.4	12.1	5.1	4.0	13.7	13.8
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	200	837	359	207	426	418	111	1482	644	99	730	700
V/C Ratio(X)	0.82	0.76	0.26	0.82	0.80	0.80	0.78	0.44	0.21	0.77	0.48	0.49
Avail Cap(c_a), veh/h	381	1254	537	400	646	634	229	1482	644	210	730	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	33.1	28.9	40.2	33.2	33.3	43.0	19.3	17.2	43.4	20.1	20.1
Incr Delay (d2), s/veh	7.9	1.6	0.4	7.8	4.1	4.4	11.0	0.9	0.7	12.0	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	7.8	2.0	4.7	8.7	8.6	2.5	6.1	2.3	2.3	7.1	6.9
LnGrp Delay(d), s/veh	48.3	34.7	29.3	48.0	37.3	37.7	54.0	20.2	17.9	55.4	22.4	22.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	E	C	C
Approach Vol, veh/h		895			846			867			772	
Approach Delay, s/veh		36.6			39.6			23.2			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	43.0	14.9	26.0	9.8	42.4	14.5	26.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	21.0	33.0	12.0	38.0	20.0	34.0
Max Q Clear Time (g_c+I1), s	6.0	14.1	10.7	17.7	6.4	15.8	10.4	19.0
Green Ext Time (p_c), s	0.1	5.0	0.3	4.0	0.1	4.2	0.3	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	75	181	53	92	204	66	53	572	91	45	647	39
Future Volume (veh/h)	75	181	53	92	204	66	53	572	91	45	647	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.88	0.97		0.88	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	81	195	57	99	219	71	57	615	98	48	696	42
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	354	103	230	344	111	478	1973	314	488	2199	133
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1070	1337	391	1094	1299	421	716	3040	483	732	3389	204
Grp Volume(v), veh/h	81	0	252	99	0	290	57	357	356	48	363	375
Grp Sat Flow(s),veh/h/ln	1070	0	1728	1094	0	1721	716	1770	1754	732	1770	1824
Q Serve(g_s), s	6.7	0.0	11.6	7.9	0.0	13.8	3.5	8.2	8.3	2.9	8.4	8.4
Cycle Q Clear(g_c), s	20.5	0.0	11.6	19.5	0.0	13.8	11.9	8.2	8.3	11.1	8.4	8.4
Prop In Lane	1.00		0.23	1.00		0.24	1.00		0.28	1.00		0.11
Lane Grp Cap(c), veh/h	202	0	457	230	0	455	478	1148	1138	488	1148	1184
V/C Ratio(X)	0.40	0.00	0.55	0.43	0.00	0.64	0.12	0.31	0.31	0.10	0.32	0.32
Avail Cap(c_a), veh/h	520	0	972	556	0	968	478	1148	1138	488	1148	1184
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.1	0.0	29.3	37.7	0.0	30.1	9.8	7.1	7.2	9.6	7.2	7.2
Incr Delay (d2), s/veh	1.3	0.0	1.0	1.3	0.0	1.5	0.5	0.7	0.7	0.4	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	5.7	2.5	0.0	6.7	0.8	4.2	4.2	0.6	4.3	4.4
LnGrp Delay(d), s/veh	40.4	0.0	30.3	38.9	0.0	31.6	10.3	7.8	7.9	10.0	7.9	7.9
LnGrp LOS	D		C	D		C	B	A	A	B	A	A
Approach Vol, veh/h		333			389			770			786	
Approach Delay, s/veh		32.8			33.4			8.0			8.0	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		28.5		64.0		28.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		13.9		22.5		13.1		21.5
Green Ext Time (p_c), s		5.6		2.0		5.6		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	749	82	186	941	138	88	490	111	137	553	165
Future Volume (veh/h)	179	749	82	186	941	138	88	490	111	137	553	165
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.92	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	185	772	85	192	970	142	91	505	114	141	570	170
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	983	410	227	1247	182	350	1055	237	378	1383	592
Arrive On Green	0.12	0.28	0.28	0.13	0.28	0.28	0.05	0.37	0.37	0.07	0.39	0.39
Sat Flow, veh/h	1774	3539	1476	1774	4428	646	1774	2848	639	1774	3539	1515
Grp Volume(v), veh/h	185	772	85	192	742	370	91	313	306	141	570	170
Grp Sat Flow(s),veh/h/ln	1774	1770	1476	1774	1695	1684	1774	1770	1717	1774	1770	1515
Q Serve(g_s), s	10.4	20.6	4.5	10.8	20.6	20.7	3.2	13.8	14.0	5.0	12.0	7.9
Cycle Q Clear(g_c), s	10.4	20.6	4.5	10.8	20.6	20.7	3.2	13.8	14.0	5.0	12.0	7.9
Prop In Lane	1.00		1.00	1.00		0.38	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	220	983	410	227	955	474	350	655	636	378	1383	592
V/C Ratio(X)	0.84	0.79	0.21	0.85	0.78	0.78	0.26	0.48	0.48	0.37	0.41	0.29
Avail Cap(c_a), veh/h	364	1280	533	364	1226	609	370	655	636	448	1383	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	34.1	28.3	43.6	33.8	33.9	18.8	24.6	24.7	18.7	22.6	21.4
Incr Delay (d2), s/veh	8.9	2.5	0.2	9.9	2.4	5.0	0.4	2.5	2.6	0.6	0.9	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	10.4	1.9	6.0	9.9	10.3	1.6	7.2	7.1	2.5	6.0	3.5
LnGrp Delay(d), s/veh	52.7	36.6	28.6	53.6	36.2	38.8	19.2	27.1	27.3	19.3	23.5	22.6
LnGrp LOS	D	D	C	D	D	D	B	C	C	B	C	C
Approach Vol, veh/h		1042			1304			710			881	
Approach Delay, s/veh		38.8			39.5			26.2			22.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	41.9	17.1	32.4	8.8	44.0	16.7	32.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	35.0	21.0	37.0	6.0	40.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	7.0	16.0	12.8	22.6	5.2	14.0	12.4	22.7
Green Ext Time (p_c), s	0.1	3.6	0.3	4.8	0.0	4.6	0.3	6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	184	67	64	135	68	35	307	26	52	623	39
Future Volume (veh/h)	100	184	67	64	135	68	35	307	26	52	623	39
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	105	194	71	67	142	72	37	323	27	55	656	41
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	231	306	112	193	275	139	515	2196	182	724	2247	140
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	1143	1277	467	1094	1147	581	737	3269	271	1013	3344	209
Grp Volume(v), veh/h	105	0	265	67	0	214	37	172	178	55	343	354
Grp Sat Flow(s),veh/h/ln	1143	0	1744	1094	0	1728	737	1752	1787	1013	1752	1801
Q Serve(g_s), s	8.0	0.0	12.4	5.3	0.0	9.8	2.0	3.2	3.3	1.9	7.3	7.3
Cycle Q Clear(g_c), s	17.7	0.0	12.4	17.7	0.0	9.8	9.2	3.2	3.3	5.2	7.3	7.3
Prop In Lane	1.00		0.27	1.00		0.34	1.00		0.15	1.00		0.12
Lane Grp Cap(c), veh/h	231	0	418	193	0	415	515	1178	1201	724	1178	1210
V/C Ratio(X)	0.46	0.00	0.63	0.35	0.00	0.52	0.07	0.15	0.15	0.08	0.29	0.29
Avail Cap(c_a), veh/h	599	0	980	545	0	971	515	1178	1201	724	1178	1210
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.6	0.0	30.9	38.8	0.0	29.9	8.0	5.4	5.4	6.4	6.1	6.1
Incr Delay (d2), s/veh	1.4	0.0	1.6	1.1	0.0	1.0	0.3	0.3	0.3	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	6.1	1.7	0.0	4.8	0.4	1.6	1.7	0.6	3.6	3.7
LnGrp Delay(d), s/veh	39.0	0.0	32.5	39.9	0.0	30.9	8.2	5.7	5.7	6.6	6.7	6.7
LnGrp LOS	D		C	D		C	A	A	A	A	A	A
Approach Vol, veh/h		370			281			387			752	
Approach Delay, s/veh		34.4			33.1			5.9			6.7	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		25.8		65.0		25.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		61.0		51.0		61.0		51.0
Max Q Clear Time (g_c+I1), s		11.2		19.7		9.3		19.7
Green Ext Time (p_c), s		2.5		2.1		5.1		1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	162	75	88	123	55	45	266	34	46	642	47
Future Volume (veh/h)	35	162	75	88	123	55	45	266	34	46	642	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.95	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	37	172	80	94	131	59	48	283	36	49	683	50
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	234	281	130	185	284	128	425	1270	1040	723	1270	1064
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1166	1170	544	1110	1185	534	714	1845	1510	1041	1845	1545
Grp Volume(v), veh/h	37	0	252	94	0	190	48	283	36	49	683	50
Grp Sat Flow(s),veh/h/ln	1166	0	1714	1110	0	1719	714	1845	1510	1041	1845	1545
Q Serve(g_s), s	3.1	0.0	14.6	9.2	0.0	10.6	4.0	6.3	0.8	2.0	20.5	1.2
Cycle Q Clear(g_c), s	13.7	0.0	14.6	23.9	0.0	10.6	24.4	6.3	0.8	8.3	20.5	1.2
Prop In Lane	1.00		0.32	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	0	411	185	0	412	425	1270	1040	723	1270	1064
V/C Ratio(X)	0.16	0.00	0.61	0.51	0.00	0.46	0.11	0.22	0.03	0.07	0.54	0.05
Avail Cap(c_a), veh/h	319	0	537	266	0	538	425	1270	1040	723	1270	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.2	0.0	37.9	48.5	0.0	36.3	14.6	6.4	5.5	7.9	8.6	5.6
Incr Delay (d2), s/veh	0.3	0.0	1.5	2.1	0.0	0.8	0.5	0.4	0.1	0.2	1.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	7.1	2.9	0.0	5.1	0.9	3.4	0.4	0.6	10.8	0.5
LnGrp Delay(d), s/veh	42.5	0.0	39.4	50.7	0.0	37.1	15.2	6.8	5.6	8.1	10.2	5.7
LnGrp LOS	D		D	D		D	B	A	A	A	B	A
Approach Vol, veh/h		289			284			367			782	
Approach Delay, s/veh		39.8			41.6			7.8			9.8	
Approach LOS		D			D			A			A	

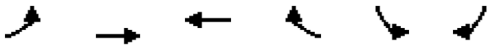
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		81.0		30.8		81.0		30.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		77.0		35.0		77.0		35.0
Max Q Clear Time (g_c+I1), s		26.4		16.6		22.5		25.9
Green Ext Time (p_c), s		2.3		1.5		5.9		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	240	80	65	196	63	44	207	49	76	668	81
Future Volume (veh/h)	59	240	80	65	196	63	44	207	49	76	668	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.92	0.98		0.87	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	60	245	82	66	200	64	45	211	50	78	682	83
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	436	342	199	304	97	484	1250	1030	776	2130	259
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	1078	1845	1444	1021	1287	412	692	1845	1521	1099	3144	382
Grp Volume(v), veh/h	60	245	82	66	0	264	45	211	50	78	380	385
Grp Sat Flow(s),veh/h/ln	1078	1845	1444	1021	0	1699	692	1845	1521	1099	1752	1774
Q Serve(g_s), s	5.0	10.9	4.3	5.7	0.0	13.1	2.7	3.9	1.0	2.6	8.3	8.3
Cycle Q Clear(g_c), s	18.0	10.9	4.3	16.5	0.0	13.1	11.0	3.9	1.0	6.5	8.3	8.3
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	181	436	342	199	0	402	484	1250	1030	776	1187	1201
V/C Ratio(X)	0.33	0.56	0.24	0.33	0.00	0.66	0.09	0.17	0.05	0.10	0.32	0.32
Avail Cap(c_a), veh/h	494	972	761	496	0	895	484	1250	1030	776	1187	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	31.3	28.7	38.5	0.0	32.1	8.4	5.5	5.0	6.6	6.2	6.2
Incr Delay (d2), s/veh	1.1	1.1	0.4	1.0	0.0	1.8	0.4	0.3	0.1	0.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.7	1.7	1.6	0.0	6.3	0.6	2.0	0.4	0.8	4.2	4.3
LnGrp Delay(d), s/veh	41.3	32.4	29.1	39.5	0.0	33.9	8.8	5.8	5.1	6.9	6.9	6.9
LnGrp LOS	D	C	C	D		C	A	A	A	A	A	A
Approach Vol, veh/h		387			330			306			843	
Approach Delay, s/veh		33.1			35.0			6.1			6.9	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		67.0		26.0		67.0		26.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		63.0		49.0		63.0		49.0
Max Q Clear Time (g_c+I1), s		13.0		20.0		10.3		18.5
Green Ext Time (p_c), s		1.8		2.0		5.8		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.2
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	166	1074	1057	171	381	383
Future Volume (veh/h)	166	1074	1057	171	381	383
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	173	1119	1101	178	397	399
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	210	2504	1461	236	1428	657
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4518	703	3408	1568
Grp Volume(v), veh/h	173	1119	849	430	397	399
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1698	1704	1568
Q Serve(g_s), s	9.2	13.7	21.5	21.5	7.3	18.9
Cycle Q Clear(g_c), s	9.2	13.7	21.5	21.5	7.3	18.9
Prop In Lane	1.00			0.41	1.00	1.00
Lane Grp Cap(c), veh/h	210	2504	1127	570	1428	657
V/C Ratio(X)	0.82	0.45	0.75	0.75	0.28	0.61
Avail Cap(c_a), veh/h	442	3798	1548	783	1428	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	15.5	28.2	28.2	18.2	21.6
Incr Delay (d2), s/veh	7.9	0.1	1.4	2.8	0.5	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	6.3	10.1	10.5	3.5	17.4
LnGrp Delay(d), s/veh	48.9	15.6	29.6	31.0	18.7	25.7
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		1292	1279		796	
Approach Delay, s/veh		20.1	30.1		22.2	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.5		44.0	15.4	36.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				72.0		40.0	24.0	44.0
Max Q Clear Time (g_c+I1), s				15.7		20.9	11.2	23.5
Green Ext Time (p_c), s				9.8		2.8	0.3	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	414	109	93	351	66	92	470	55	78	858	55
Future Volume (veh/h)	132	414	109	93	351	66	92	470	55	78	858	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	140	440	116	99	373	70	98	500	59	83	913	59
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	256	578	254	217	501	217	390	2132	251	567	2001	129
Arrive On Green	0.08	0.16	0.16	0.06	0.14	0.14	0.04	0.66	0.66	0.59	0.59	0.59
Sat Flow, veh/h	1792	3574	1569	1792	3574	1544	1792	3213	378	850	3402	220
Grp Volume(v), veh/h	140	440	116	99	373	70	98	277	282	83	480	492
Grp Sat Flow(s),veh/h/ln	1792	1787	1569	1792	1787	1544	1792	1787	1804	850	1787	1835
Q Serve(g_s), s	7.0	12.6	7.2	5.0	10.7	4.4	2.2	6.6	6.7	4.8	16.2	16.2
Cycle Q Clear(g_c), s	7.0	12.6	7.2	5.0	10.7	4.4	2.2	6.6	6.7	4.8	16.2	16.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.12
Lane Grp Cap(c), veh/h	256	578	254	217	501	217	390	1186	1197	567	1051	1079
V/C Ratio(X)	0.55	0.76	0.46	0.46	0.74	0.32	0.25	0.23	0.24	0.15	0.46	0.46
Avail Cap(c_a), veh/h	323	869	381	289	802	346	506	1186	1197	567	1051	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	42.9	40.6	36.6	44.1	41.4	9.0	7.2	7.2	10.1	12.4	12.4
Incr Delay (d2), s/veh	1.8	2.2	1.3	1.5	2.2	0.9	0.3	0.5	0.5	0.5	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	6.4	3.2	2.5	5.4	1.9	1.1	3.4	3.4	1.2	8.3	8.5
LnGrp Delay(d), s/veh	37.2	45.1	41.9	38.0	46.4	42.3	9.3	7.6	7.6	10.6	13.8	13.8
LnGrp LOS	D	D	D	D	D	D	A	A	A	B	B	B
Approach Vol, veh/h		696			542			657			1055	
Approach Delay, s/veh		42.9			44.3			7.9			13.6	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		75.0	10.7	21.3	8.1	66.9	13.0	19.0
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		71.0	11.0	26.0	11.0	56.0	13.0	24.0
Max Q Clear Time (g_c+I1), s		8.7	7.0	14.6	4.2	18.2	9.0	12.7
Green Ext Time (p_c), s		3.7	0.1	2.5	0.1	8.0	0.1	1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	162	97	30	173	146	58	373	39	93	591	168
Future Volume (veh/h)	187	162	97	30	173	146	58	373	39	93	591	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.96		0.93	1.00		0.96	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	203	176	105	33	188	159	63	405	42	101	642	183
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	432	355	254	257	200	359	2050	211	610	1184	1164
Arrive On Green	0.11	0.23	0.23	0.02	0.14	0.14	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1774	1863	1528	1774	1829	1419	661	3225	332	934	1863	1545
Grp Volume(v), veh/h	203	176	105	33	181	166	63	221	226	101	642	183
Grp Sat Flow(s),veh/h/ln	1774	1863	1528	1774	1770	1479	661	1770	1788	934	1863	1545
Q Serve(g_s), s	10.3	8.8	6.2	1.7	10.8	11.9	6.4	5.7	5.8	5.6	21.1	3.7
Cycle Q Clear(g_c), s	10.3	8.8	6.2	1.7	10.8	11.9	27.5	5.7	5.8	11.4	21.1	3.7
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	301	432	355	254	249	208	359	1125	1137	610	1184	1164
V/C Ratio(X)	0.67	0.41	0.30	0.13	0.73	0.80	0.18	0.20	0.20	0.17	0.54	0.16
Avail Cap(c_a), veh/h	404	575	472	278	305	255	359	1125	1137	610	1184	1164
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	35.8	34.9	39.2	45.3	45.8	18.8	8.3	8.4	10.7	11.1	3.9
Incr Delay (d2), s/veh	2.7	0.6	0.5	0.2	6.7	13.3	1.1	0.4	0.4	0.6	1.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	4.6	2.7	0.9	5.8	5.6	1.3	2.9	2.9	1.5	11.3	1.6
LnGrp Delay(d), s/veh	36.6	36.5	35.3	39.4	52.0	59.1	19.9	8.7	8.8	11.3	12.9	4.2
LnGrp LOS	D	D	D	D	D	E	B	A	A	B	B	A
Approach Vol, veh/h		484			380			510			926	
Approach Delay, s/veh		36.3			54.0			10.1			11.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.0	6.5	29.6		74.0	16.6	19.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		70.0	4.0	34.0		70.0	19.0	19.0
Max Q Clear Time (g_c+I1), s		29.5	3.7	10.8		23.1	12.3	13.9
Green Ext Time (p_c), s		3.4	0.0	1.3		6.4	0.3	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Future Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	284	827	180	195	630	59	60	802	81	132	1114	212
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	355	987	407	279	786	73	198	1329	134	309	1561	646
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.03	0.41	0.41	0.06	0.44	0.44
Sat Flow, veh/h	1774	3539	1460	1774	3244	303	1774	3217	325	1774	3539	1463
Grp Volume(v), veh/h	284	827	180	195	343	346	60	441	442	132	1114	212
Grp Sat Flow(s),veh/h/ln	1774	1770	1460	1774	1770	1777	1774	1770	1772	1774	1770	1463
Q Serve(g_s), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Cycle Q Clear(g_c), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	355	987	407	279	429	431	198	731	732	309	1561	646
V/C Ratio(X)	0.80	0.84	0.44	0.70	0.80	0.80	0.30	0.60	0.60	0.43	0.71	0.33
Avail Cap(c_a), veh/h	469	1171	483	360	488	490	207	731	732	350	1561	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	36.9	32.3	29.0	38.7	38.8	20.7	24.9	24.9	18.6	24.8	19.9
Incr Delay (d2), s/veh	7.2	4.8	0.8	4.1	8.2	8.4	0.8	3.7	3.7	0.9	2.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	12.4	4.5	4.6	10.7	10.8	1.1	11.0	11.1	2.2	14.2	4.4
LnGrp Delay(d), s/veh	33.8	41.7	33.0	33.1	46.9	47.1	21.5	28.6	28.6	19.6	27.6	21.2
LnGrp LOS	C	D	C	C	D	D	C	C	C	B	C	C
Approach Vol, veh/h		1291			884			943			1458	
Approach Delay, s/veh		38.7			44.0			28.2			25.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	15.0	34.3	7.4	52.0	19.0	30.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	16.0	36.0	4.0	48.0	22.0	30.0
Max Q Clear Time (g_c+I1), s	6.5	23.2	10.8	25.9	4.1	29.9	14.5	21.9
Green Ext Time (p_c), s	0.1	5.5	0.2	4.4	0.0	8.4	0.5	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Future Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	179	927	108	153	933	89	127	613	111	209	1062	144
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	213	1096	128	185	1176	466	262	1288	228	379	1694	495
Arrive On Green	0.12	0.34	0.34	0.10	0.33	0.33	0.07	0.30	0.30	0.10	0.33	0.33
Sat Flow, veh/h	1792	3181	371	1792	3574	1417	1792	4338	769	1792	5136	1500
Grp Volume(v), veh/h	179	521	514	153	933	89	127	481	243	209	1062	144
Grp Sat Flow(s),veh/h/ln	1792	1787	1764	1792	1787	1417	1792	1712	1684	1792	1712	1500
Q Serve(g_s), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Cycle Q Clear(g_c), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	213	616	608	185	1176	466	262	1017	500	379	1694	495
V/C Ratio(X)	0.84	0.85	0.85	0.83	0.79	0.19	0.48	0.47	0.49	0.55	0.63	0.29
Avail Cap(c_a), veh/h	330	763	753	278	1422	564	316	1017	500	479	1694	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	31.2	31.2	45.3	31.4	24.8	23.9	29.6	29.8	21.5	29.2	25.6
Incr Delay (d2), s/veh	10.9	7.3	7.4	11.8	2.6	0.2	1.4	1.6	3.4	1.3	1.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	14.8	14.7	4.9	12.5	1.8	2.6	5.8	6.1	4.0	8.7	3.2
LnGrp Delay(d), s/veh	55.3	38.5	38.6	57.1	34.0	24.9	25.3	31.2	33.1	22.8	30.9	27.1
LnGrp LOS	E	D	D	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1214			1175			851			1415	
Approach Delay, s/veh		41.0			36.3			30.9			29.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	34.6	14.7	39.5	10.9	38.0	16.3	37.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	28.0	16.0	44.0	10.0	34.0	19.0	41.0
Max Q Clear Time (g_c+I1), s	10.0	14.2	10.6	29.8	7.0	20.0	12.1	26.4
Green Ext Time (p_c), s	0.3	3.9	0.2	5.7	0.1	6.6	0.3	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Future Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.89	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	118	556	223	172	503	242	166	516	144	234	799	52
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	773	300	212	897	355	206	1246	333	279	1747	113
Arrive On Green	0.08	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.16	0.36	0.36
Sat Flow, veh/h	1774	3539	1373	1774	3539	1402	1774	3906	1044	1774	4853	314
Grp Volume(v), veh/h	118	556	223	172	503	242	166	445	215	234	557	294
Grp Sat Flow(s),veh/h/ln	1774	1770	1373	1774	1770	1402	1774	1695	1560	1774	1695	1776
Q Serve(g_s), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Cycle Q Clear(g_c), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.18
Lane Grp Cap(c), veh/h	150	773	300	212	897	355	206	1081	497	279	1221	640
V/C Ratio(X)	0.78	0.72	0.74	0.81	0.56	0.68	0.81	0.41	0.43	0.84	0.46	0.46
Avail Cap(c_a), veh/h	309	1192	462	453	1480	586	453	1081	497	577	1221	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	31.2	31.4	36.9	28.0	29.0	37.1	23.0	23.2	35.2	21.1	21.1
Incr Delay (d2), s/veh	8.7	1.3	3.6	7.2	0.6	2.3	7.3	1.2	2.7	6.7	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.2	5.2	4.4	5.2	5.4	4.2	4.3	4.4	5.9	5.2	5.7
LnGrp Delay(d), s/veh	47.3	32.5	35.0	44.2	28.5	31.3	44.4	24.1	25.9	41.9	22.3	23.5
LnGrp LOS	D	C	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		897			917			826			1085	
Approach Delay, s/veh		35.0			32.2			28.7			26.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	31.5	14.3	22.8	14.0	35.0	11.3	25.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	25.0	22.0	29.0	22.0	31.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	13.0	11.4	10.1	15.0	9.9	12.9	7.6	15.4
Green Ext Time (p_c), s	0.5	3.4	0.3	3.8	0.3	5.0	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Future Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	195	911	121	423	953	137	131	498	92	275	904	72
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1196	158	518	1194	517	196	1622	483	356	1750	139
Arrive On Green	0.08	0.26	0.26	0.15	0.34	0.34	0.06	0.32	0.32	0.10	0.37	0.37
Sat Flow, veh/h	3442	4523	598	3442	3539	1534	3442	5085	1514	3442	4788	380
Grp Volume(v), veh/h	195	682	350	423	953	137	131	498	92	275	639	337
Grp Sat Flow(s),veh/h/ln	1721	1695	1731	1721	1770	1534	1721	1695	1514	1721	1695	1778
Q Serve(g_s), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Cycle Q Clear(g_c), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	268	896	458	518	1194	517	196	1622	483	356	1239	650
V/C Ratio(X)	0.73	0.76	0.77	0.82	0.80	0.26	0.67	0.31	0.19	0.77	0.52	0.52
Avail Cap(c_a), veh/h	419	1205	615	839	1689	732	315	1622	483	594	1239	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	33.4	33.4	40.5	29.6	23.7	45.5	25.3	24.3	43.0	24.4	24.5
Incr Delay (d2), s/veh	3.8	2.0	4.0	3.3	1.9	0.3	3.9	0.5	0.9	3.6	1.5	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.8	9.3	5.8	12.0	2.8	1.9	3.5	1.9	3.8	7.0	7.6
LnGrp Delay(d), s/veh	48.2	35.4	37.4	43.8	31.5	24.0	49.4	25.8	25.2	46.6	26.0	27.4
LnGrp LOS	D	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1227			1513			721			1251	
Approach Delay, s/veh		38.0			34.2			30.0			30.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	35.4	18.8	30.0	9.6	40.0	11.7	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	28.0	24.0	35.0	9.0	36.0	12.0	47.0
Max Q Clear Time (g_c+I1), s	9.7	9.3	13.7	20.4	5.7	16.6	7.5	26.1
Green Ext Time (p_c), s	0.5	3.3	1.1	5.7	0.1	6.0	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Future Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	157	95	285	23	86	66	161	818	11	43	1382	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	3	495	37	119	495	191	2864	38	55	2235	218
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.11	0.55	0.55	0.03	0.47	0.47
Sat Flow, veh/h	0	9	1561	0	375	1559	1792	5217	70	1792	4727	462
Grp Volume(v), veh/h	252	0	285	109	0	66	161	536	293	43	1001	516
Grp Sat Flow(s),veh/h/ln	9	0	1561	375	0	1559	1792	1712	1864	1792	1712	1765
Q Serve(g_s), s	0.0	0.0	17.8	0.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Cycle Q Clear(g_c), s	37.0	0.0	17.8	37.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Prop In Lane	0.62		1.00	0.21		1.00	1.00		0.04	1.00		0.26
Lane Grp Cap(c), veh/h	53	0	495	157	0	495	191	1879	1023	55	1619	834
V/C Ratio(X)	4.75	0.00	0.58	0.70	0.00	0.13	0.84	0.29	0.29	0.78	0.62	0.62
Avail Cap(c_a), veh/h	53	0	495	157	0	495	323	1879	1023	108	1619	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	33.2	32.6	0.0	28.4	51.1	14.1	14.1	56.1	22.9	22.9
Incr Delay (d2), s/veh	1729.6	0.0	1.6	12.6	0.0	0.1	9.5	0.4	0.7	20.4	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.2	0.0	7.9	3.1	0.0	1.5	5.6	4.7	5.2	1.7	12.4	13.1
LnGrp Delay(d), s/veh	1785.8	0.0	34.9	45.2	0.0	28.5	60.6	14.5	14.8	76.5	24.7	26.3
LnGrp LOS	F		C	D		C	E	B	B	E	C	C
Approach Vol, veh/h		537			175			990			1560	
Approach Delay, s/veh		856.5			38.9			22.0			26.6	
Approach LOS		F			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	68.0		41.0	16.5	59.1		41.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	64.0		37.0	21.0	50.0		37.0
Max Q Clear Time (g_c+I1), s	4.8	11.8		39.0	12.3	27.4		39.0
Green Ext Time (p_c), s	0.0	5.9		0.0	0.2	10.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		162.5
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Future Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.74		0.63	0.75		0.63	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	81	65	98	79	38	38	593	95	66	1393	12
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	314	168	189	314	168	303	2424	1022	590	2486	21
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.03	0.68	0.68	0.03	0.69	0.69
Sat Flow, veh/h	935	1863	996	925	1863	996	1774	3539	1492	1774	3594	31
Grp Volume(v), veh/h	9	81	65	98	79	38	38	593	95	66	686	719
Grp Sat Flow(s),veh/h/ln	935	1863	996	925	1863	996	1774	1770	1492	1774	1770	1855
Q Serve(g_s), s	0.9	4.0	6.1	10.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Cycle Q Clear(g_c), s	4.8	4.0	6.1	14.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	192	314	168	189	314	168	303	2424	1022	590	1224	1283
V/C Ratio(X)	0.05	0.26	0.39	0.52	0.25	0.23	0.13	0.24	0.09	0.11	0.56	0.56
Avail Cap(c_a), veh/h	319	567	303	315	567	303	326	2424	1022	599	1224	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	38.0	38.9	44.4	38.0	37.8	6.6	6.3	5.6	4.6	8.2	8.2
Incr Delay (d2), s/veh	0.1	0.4	1.5	2.2	0.4	0.7	0.2	0.2	0.2	0.1	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.1	1.8	2.9	2.0	1.0	0.3	3.3	1.0	0.5	10.5	11.0
LnGrp Delay(d), s/veh	40.1	38.4	40.3	46.6	38.4	38.5	6.8	6.5	5.8	4.7	10.0	9.9
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	A
Approach Vol, veh/h		155			215			726			1471	
Approach Delay, s/veh		39.3			42.1			6.4			9.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	76.0		21.7	6.7	76.7		21.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	72.0		32.0	4.0	72.0		32.0
Max Q Clear Time (g_c+I1), s	3.1	8.7		8.1	2.7	22.5		16.8
Green Ext Time (p_c), s	0.0	4.9		0.8	0.0	14.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	368	151	58	1086	59	151	1128	27	60	930	212
Future Volume (veh/h)	124	368	151	58	1086	59	151	1128	27	60	930	212
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	129	383	157	60	1131	61	157	1175	28	62	969	221
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	157	1514	763	357	1181	64	206	1461	35	175	1078	245
Arrive On Green	0.05	0.44	0.44	0.36	0.36	0.36	0.07	0.43	0.43	0.03	0.39	0.39
Sat Flow, veh/h	1723	3438	1491	831	3311	178	1723	3430	82	1723	2763	629
Grp Volume(v), veh/h	129	383	157	60	587	605	157	589	614	62	602	588
Grp Sat Flow(s),veh/h/ln	1723	1719	1491	831	1719	1770	1723	1719	1792	1723	1719	1672
Q Serve(g_s), s	5.6	8.4	6.9	6.0	39.9	40.0	6.3	35.8	35.8	2.6	39.3	39.6
Cycle Q Clear(g_c), s	5.6	8.4	6.9	6.0	39.9	40.0	6.3	35.8	35.8	2.6	39.3	39.6
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.05	1.00		0.38
Lane Grp Cap(c), veh/h	157	1514	763	357	613	632	206	732	764	175	671	653
V/C Ratio(X)	0.82	0.25	0.21	0.17	0.96	0.96	0.76	0.80	0.80	0.35	0.90	0.90
Avail Cap(c_a), veh/h	157	1522	766	359	618	636	217	732	764	175	671	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	21.1	16.1	26.7	37.6	37.6	27.4	30.0	30.0	25.4	34.2	34.3
Incr Delay (d2), s/veh	28.3	0.1	0.1	0.2	25.8	25.5	13.9	9.1	8.8	1.2	17.1	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	4.0	2.9	1.4	23.3	24.0	3.8	18.9	19.6	1.3	21.8	21.5
LnGrp Delay(d), s/veh	58.0	21.2	16.2	26.9	63.4	63.1	41.3	39.1	38.8	26.7	51.4	52.2
LnGrp LOS	E	C	B	C	E	E	D	D	D	C	D	D
Approach Vol, veh/h		669			1252			1360			1252	
Approach Delay, s/veh		27.1			61.5			39.2			50.5	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	55.0		56.7	12.3	50.7	10.0	46.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	51.0		53.0	9.0	46.0	6.0	43.0
Max Q Clear Time (g_c+I1), s	4.6	37.8		10.4	8.3	41.6	7.6	42.0
Green Ext Time (p_c), s	0.0	6.4		3.1	0.0	2.8	0.0	0.7

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		46.7
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	150	139	39	675	108	292	987	25	46	812	190
Future Volume (veh/h)	141	150	139	39	675	108	292	987	25	46	812	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	147	156	145	41	703	112	304	1028	0	48	846	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	175	1045	467	52	799	357	335	1669	747	61	1122	502
Arrive On Green	0.10	0.30	0.30	0.03	0.23	0.23	0.19	0.49	0.00	0.04	0.33	0.00
Sat Flow, veh/h	1723	3438	1537	1723	3438	1536	1723	3438	1538	1723	3438	1538
Grp Volume(v), veh/h	147	156	145	41	703	112	304	1028	0	48	846	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1537	1723	1719	1536	1723	1719	1538	1723	1719	1538
Q Serve(g_s), s	9.2	3.6	8.0	2.6	21.8	6.7	19.0	24.2	0.0	3.0	24.2	0.0
Cycle Q Clear(g_c), s	9.2	3.6	8.0	2.6	21.8	6.7	19.0	24.2	0.0	3.0	24.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	1045	467	52	799	357	335	1669	747	61	1122	502
V/C Ratio(X)	0.84	0.15	0.31	0.79	0.88	0.31	0.91	0.62	0.00	0.79	0.75	0.00
Avail Cap(c_a), veh/h	219	1091	488	109	873	390	406	1669	747	141	1122	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	28.0	29.5	53.1	40.8	35.0	43.4	20.8	0.0	52.8	33.2	0.0
Incr Delay (d2), s/veh	20.4	0.1	0.4	23.3	9.7	0.5	21.1	1.7	0.0	19.6	4.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	1.7	3.4	1.6	11.4	2.9	11.0	11.8	0.0	1.8	12.2	0.0
LnGrp Delay(d), s/veh	69.0	28.0	29.9	76.4	50.5	35.5	64.6	22.5	0.0	72.3	37.9	0.0
LnGrp LOS	E	C	C	E	D	D	E	C		E	D	
Approach Vol, veh/h		448			856			1332			894	
Approach Delay, s/veh		42.1			49.8			32.1			39.7	
Approach LOS		D			D			C			D	

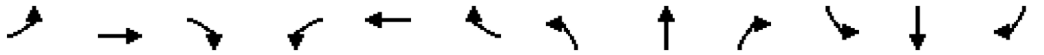
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	57.5	7.3	37.5	25.4	40.0	15.2	29.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	53.0	7.0	35.0	26.0	36.0	14.0	28.0
Max Q Clear Time (g_c+I1), s	5.0	26.2	4.6	10.0	21.0	26.2	11.2	23.8
Green Ext Time (p_c), s	0.0	7.8	0.0	1.3	0.4	3.8	0.1	1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	141	457	130	169	602	14	93	556	99	20	453	58
Future Volume (veh/h)	141	457	130	169	602	14	93	556	99	20	453	58
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	148	481	0	178	634	15	98	585	104	21	477	61
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9	9	9	9	9	9	9
Cap, veh/h	184	762	341	214	823	365	124	1764	308	31	1252	546
Arrive On Green	0.11	0.23	0.00	0.13	0.25	0.25	0.07	0.43	0.43	0.02	0.38	0.38
Sat Flow, veh/h	1660	3312	1482	1660	3312	1467	1660	4061	709	1660	3312	1443
Grp Volume(v), veh/h	148	481	0	178	634	15	98	455	234	21	477	61
Grp Sat Flow(s),veh/h/ln	1660	1656	1482	1660	1656	1467	1660	1586	1597	1660	1656	1443
Q Serve(g_s), s	7.4	11.1	0.0	8.9	15.1	0.7	4.9	8.1	8.3	1.1	8.9	2.3
Cycle Q Clear(g_c), s	7.4	11.1	0.0	8.9	15.1	0.7	4.9	8.1	8.3	1.1	8.9	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	184	762	341	214	823	365	124	1378	694	31	1252	546
V/C Ratio(X)	0.81	0.63	0.00	0.83	0.77	0.04	0.79	0.33	0.34	0.69	0.38	0.11
Avail Cap(c_a), veh/h	468	1672	748	351	1439	638	312	1378	694	117	1252	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	29.5	0.0	36.2	29.7	24.3	38.7	15.9	16.0	41.6	19.2	17.2
Incr Delay (d2), s/veh	8.0	0.9	0.0	8.4	1.6	0.0	10.5	0.6	1.3	24.0	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	5.2	0.0	4.6	7.0	0.3	2.6	3.7	3.9	0.7	4.2	1.0
LnGrp Delay(d), s/veh	45.0	30.4	0.0	44.6	31.3	24.3	49.3	16.5	17.3	65.5	20.1	17.6
LnGrp LOS	D	C		D	C	C	D	B	B	E	C	B
Approach Vol, veh/h		629			827			787			559	
Approach Delay, s/veh		33.8			34.0			20.8			21.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	41.0	15.0	23.6	10.4	36.2	13.4	25.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	37.0	18.0	43.0	16.0	27.0	24.0	37.0
Max Q Clear Time (g_c+I1), s	3.1	10.3	10.9	13.1	6.9	10.9	9.4	17.1
Green Ext Time (p_c), s	0.0	4.5	0.3	3.2	0.1	2.8	0.3	4.0

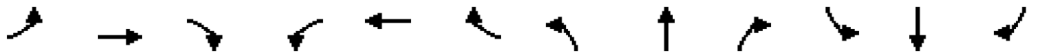
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	318	124	81	677	20	105	451	23	37	494	13
Future Volume (veh/h)	60	318	124	81	677	20	105	451	23	37	494	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1900
Adj Flow Rate, veh/h	63	335	131	85	713	21	111	475	24	39	520	14
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	80	871	383	109	928	414	141	2145	108	47	1935	52
Arrive On Green	0.05	0.26	0.26	0.06	0.28	0.28	0.08	0.46	0.46	0.03	0.40	0.40
Sat Flow, veh/h	1675	3343	1469	1675	3343	1489	1675	4680	235	1675	4806	129
Grp Volume(v), veh/h	63	335	131	85	713	21	111	324	175	39	346	188
Grp Sat Flow(s),veh/h/ln	1675	1671	1469	1675	1671	1489	1675	1601	1713	1675	1601	1733
Q Serve(g_s), s	3.2	7.0	6.2	4.3	16.7	0.9	5.5	5.2	5.3	2.0	6.2	6.2
Cycle Q Clear(g_c), s	3.2	7.0	6.2	4.3	16.7	0.9	5.5	5.2	5.3	2.0	6.2	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.07
Lane Grp Cap(c), veh/h	80	871	383	109	928	414	141	1468	785	47	1289	698
V/C Ratio(X)	0.79	0.38	0.34	0.78	0.77	0.05	0.79	0.22	0.22	0.82	0.27	0.27
Avail Cap(c_a), veh/h	236	1532	674	335	1729	770	394	1468	785	177	1289	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	25.9	25.5	39.2	28.2	22.5	38.2	13.9	13.9	41.1	17.0	17.0
Incr Delay (d2), s/veh	15.9	0.3	0.5	11.5	1.4	0.1	9.3	0.3	0.7	28.1	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	3.2	2.6	2.3	7.8	0.4	2.9	2.4	2.6	1.3	2.8	3.1
LnGrp Delay(d), s/veh	56.0	26.1	26.1	50.7	29.6	22.6	47.5	14.2	14.6	69.2	17.5	18.0
LnGrp LOS	E	C	C	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		529			819			610			573	
Approach Delay, s/veh		29.7			31.6			20.4			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	43.0	9.5	26.2	11.2	38.3	8.0	27.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.0	17.0	39.0	20.0	28.0	12.0	44.0
Max Q Clear Time (g_c+I1), s	4.0	7.3	6.3	9.0	7.5	8.2	5.2	18.7
Green Ext Time (p_c), s	0.0	3.1	0.1	2.6	0.2	3.0	0.1	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Future Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3574		1783	5136					3467		1599
Flt Permitted		1.00		0.41	1.00					0.95		1.00
Satd. Flow (perm)		3574		778	5136					3467		1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	119
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	101
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		32.2		32.2	32.2					51.2		51.2
Effective Green, g (s)		32.2		32.2	32.2					51.2		51.2
Actuated g/C Ratio		0.35		0.35	0.35					0.56		0.56
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1259		274	1809					1942		895
v/s Ratio Prot		0.13			c0.24							
v/s Ratio Perm				0.16						c0.18		0.06
v/c Ratio		0.36		0.45	0.68					0.32		0.11
Uniform Delay, d1		21.9		22.7	25.3					10.8		9.4
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		1.2	1.1					0.4		0.3
Delay (s)		22.1		23.9	26.3					11.2		9.7
Level of Service		C		C	C					B		A
Approach Delay (s/veh)		22.1			26.1			0.0			11.0	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	91.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Future Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	139	748	147	16	871	554	159	158	0	241	683	42
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	198	1132	222	25	1213	629	231	1082	484	276	1395	612
Arrive On Green	0.06	0.38	0.38	0.01	0.34	0.34	0.07	0.30	0.00	0.15	0.39	0.39
Sat Flow, veh/h	3476	2960	582	1792	3574	1540	3476	3574	1599	1792	3574	1567
Grp Volume(v), veh/h	139	452	443	16	871	554	159	158	0	241	683	42
Grp Sat Flow(s),veh/h/ln	1738	1787	1755	1792	1787	1540	1738	1787	1599	1792	1787	1567
Q Serve(g_s), s	4.3	22.8	22.8	1.0	23.2	36.4	4.9	3.5	0.0	14.3	15.7	1.8
Cycle Q Clear(g_c), s	4.3	22.8	22.8	1.0	23.2	36.4	4.9	3.5	0.0	14.3	15.7	1.8
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	683	671	25	1213	629	231	1082	484	276	1395	612
V/C Ratio(X)	0.70	0.66	0.66	0.63	0.72	0.88	0.69	0.15	0.00	0.87	0.49	0.07
Avail Cap(c_a), veh/h	223	683	671	66	1213	629	861	1082	484	444	1395	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	27.8	27.8	53.5	31.4	30.0	49.8	27.7	0.0	45.1	25.1	20.8
Incr Delay (d2), s/veh	8.2	2.4	2.4	23.4	2.1	13.6	3.6	0.3	0.0	10.7	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	11.6	11.4	0.6	11.8	17.7	2.5	1.8	0.0	7.9	7.9	0.8
LnGrp Delay(d), s/veh	58.7	30.2	30.2	76.8	33.5	43.7	53.4	28.0	0.0	55.8	26.3	21.0
LnGrp LOS	E	C	C	E	C	D	D	C		E	C	C
Approach Vol, veh/h		1034			1441			317			966	
Approach Delay, s/veh		34.0			37.9			40.7			33.4	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	46.5	5.5	45.7	20.8	37.0	10.2	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	33.0	4.0	40.0	27.0	33.0	7.0	37.0
Max Q Clear Time (g_c+I1), s	6.9	17.7	3.0	24.8	16.3	5.5	6.3	38.4
Green Ext Time (p_c), s	0.4	3.9	0.0	4.8	0.5	0.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	728	31	50	1015	134	188	1218	17	203	1284	277
Future Volume (veh/h)	142	728	31	50	1015	134	188	1218	17	203	1284	277
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	148	758	32	52	1057	140	196	1269	18	211	1338	289
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	164	1494	63	67	1107	146	209	1459	648	224	1489	800
Arrive On Green	0.09	0.30	0.30	0.04	0.24	0.24	0.12	0.41	0.41	0.13	0.42	0.42
Sat Flow, veh/h	1792	5050	213	1792	4579	606	1792	3574	1587	1792	3574	1568
Grp Volume(v), veh/h	148	513	277	52	790	407	196	1269	18	211	1338	289
Grp Sat Flow(s),veh/h/ln	1792	1712	1839	1792	1712	1761	1792	1787	1587	1792	1787	1568
Q Serve(g_s), s	9.8	14.9	15.0	3.5	27.3	27.4	13.0	39.1	0.8	14.0	41.9	13.3
Cycle Q Clear(g_c), s	9.8	14.9	15.0	3.5	27.3	27.4	13.0	39.1	0.8	14.0	41.9	13.3
Prop In Lane	1.00		0.12	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	1013	544	67	827	425	209	1459	648	224	1489	800
V/C Ratio(X)	0.90	0.51	0.51	0.77	0.95	0.96	0.94	0.87	0.03	0.94	0.90	0.36
Avail Cap(c_a), veh/h	164	1013	544	134	827	425	209	1459	648	224	1489	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	35.0	35.0	57.2	44.9	44.9	52.6	32.6	21.2	52.1	32.6	17.8
Incr Delay (d2), s/veh	43.0	0.4	0.8	16.9	21.0	32.6	44.9	7.3	0.1	44.2	8.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.1	7.7	2.0	15.2	17.2	9.0	20.7	0.4	9.7	22.5	6.1
LnGrp Delay(d), s/veh	96.9	35.4	35.8	74.1	65.8	77.5	97.5	39.9	21.3	96.2	41.6	19.1
LnGrp LOS	F	D	D	E	E	E	F	D	C	F	D	B
Approach Vol, veh/h		938			1249			1483			1838	
Approach Delay, s/veh		45.2			70.0			47.3			44.3	
Approach LOS		D			E			D			D	

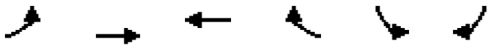
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	53.0	8.5	39.5	18.0	54.0	15.0	33.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	49.0	9.0	31.0	14.0	50.0	11.0	29.0
Max Q Clear Time (g_c+I1), s	16.0	41.1	5.5	17.0	15.0	43.9	11.8	29.4
Green Ext Time (p_c), s	0.0	4.9	0.0	4.1	0.0	4.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Future Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	90	883	149	145	1386	122	83	434	58	99	546	157
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1462	245	177	1758	155	304	1629	662	408	1220	349
Arrive On Green	0.06	0.33	0.33	0.10	0.37	0.37	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1792	4408	740	1792	4800	422	747	3574	1452	893	2677	765
Grp Volume(v), veh/h	90	685	347	145	989	519	83	434	58	99	363	340
Grp Sat Flow(s),veh/h/ln	1792	1712	1724	1792	1712	1799	747	1787	1452	893	1787	1655
Q Serve(g_s), s	5.2	17.6	17.8	8.4	27.1	27.1	9.0	7.9	2.4	8.1	14.6	14.8
Cycle Q Clear(g_c), s	5.2	17.6	17.8	8.4	27.1	27.1	23.8	7.9	2.4	16.1	14.6	14.8
Prop In Lane	1.00		0.43	1.00		0.23	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	115	1136	572	177	1254	659	304	1629	662	408	814	754
V/C Ratio(X)	0.78	0.60	0.61	0.82	0.79	0.79	0.27	0.27	0.09	0.24	0.45	0.45
Avail Cap(c_a), veh/h	221	1365	687	306	1528	803	304	1629	662	408	814	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	29.4	29.5	46.5	29.7	29.7	27.8	17.8	16.3	22.7	19.6	19.6
Incr Delay (d2), s/veh	10.9	0.5	1.1	9.0	2.3	4.4	2.2	0.4	0.3	1.4	1.8	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.4	8.7	4.6	13.2	14.2	2.1	4.0	1.0	2.2	7.6	7.1
LnGrp Delay(d), s/veh	59.5	29.9	30.5	55.5	32.1	34.1	30.0	18.2	16.5	24.1	21.4	21.6
LnGrp LOS	E	C	C	E	C	C	C	B	B	C	C	C
Approach Vol, veh/h		1122			1653			575			802	
Approach Delay, s/veh		32.5			34.8			19.7			21.8	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	14.4	38.9		52.0	10.8	42.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	18.0	42.0		48.0	13.0	47.0
Max Q Clear Time (g_c+I1), s		25.8	10.4	19.8		18.1	7.2	29.1
Green Ext Time (p_c), s		3.9	0.2	6.8		5.7	0.1	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.6
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	311	1047	32	29	178
Future Volume (veh/h)	25	311	1047	32	29	178
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	28	346	1163	36	32	198
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	165	1523	1523	666	726	648
Arrive On Green	0.46	0.46	0.46	0.46	0.44	0.44
Sat Flow, veh/h	435	3399	3399	1448	1660	1482
Grp Volume(v), veh/h	28	346	1163	36	32	198
Grp Sat Flow(s),veh/h/ln	435	1656	1656	1448	1660	1482
Q Serve(g_s), s	4.5	4.9	22.7	1.1	0.9	6.7
Cycle Q Clear(g_c), s	27.2	4.9	22.7	1.1	0.9	6.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	165	1523	1523	666	726	648
V/C Ratio(X)	0.17	0.23	0.76	0.05	0.04	0.31
Avail Cap(c_a), veh/h	402	3323	3323	1453	726	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	12.7	17.5	11.6	12.6	14.2
Incr Delay (d2), s/veh	0.5	0.1	0.8	0.0	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.2	10.5	0.4	0.4	3.0
LnGrp Delay(d), s/veh	29.3	12.7	18.3	11.7	12.7	15.4
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h		374	1199		230	
Approach Delay, s/veh		14.0	18.1		15.0	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				39.8		38.0		39.8
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				78.0		34.0		78.0
Max Q Clear Time (g_c+I1), s				29.2		8.7		24.7
Green Ext Time (p_c), s				2.8		0.8		11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	236	47	189	721	246	81	982	131	67	622	206
Future Volume (veh/h)	81	236	47	189	721	246	81	982	131	67	622	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	87	254	51	203	775	265	87	1056	0	72	669	222
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	109	1111	490	263	852	291	109	1367	612	91	1331	571
Arrive On Green	0.06	0.33	0.33	0.08	0.34	0.34	0.06	0.40	0.00	0.05	0.39	0.39
Sat Flow, veh/h	1707	3406	1503	3312	2492	852	1707	3406	1524	1707	3406	1461
Grp Volume(v), veh/h	87	254	51	203	530	510	87	1056	0	72	669	222
Grp Sat Flow(s),veh/h/ln	1707	1703	1503	1656	1703	1641	1707	1703	1524	1707	1703	1461
Q Serve(g_s), s	5.8	6.2	2.7	6.9	34.0	34.0	5.8	30.8	0.0	4.8	17.1	12.5
Cycle Q Clear(g_c), s	5.8	6.2	2.7	6.9	34.0	34.0	5.8	30.8	0.0	4.8	17.1	12.5
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	1111	490	263	582	561	109	1367	612	91	1331	571
V/C Ratio(X)	0.80	0.23	0.10	0.77	0.91	0.91	0.80	0.77	0.00	0.79	0.50	0.39
Avail Cap(c_a), veh/h	134	1130	499	376	624	601	194	1367	612	104	1331	571
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	28.1	26.9	51.7	36.0	36.0	52.9	29.7	0.0	53.6	26.5	25.1
Incr Delay (d2), s/veh	23.7	0.1	0.1	6.1	16.8	17.3	12.2	4.3	0.0	29.6	1.4	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.9	1.1	3.4	18.6	18.2	3.1	15.2	0.0	3.0	8.2	5.4
LnGrp Delay(d), s/veh	76.6	28.2	27.0	57.8	52.7	53.3	65.1	34.0	0.0	83.2	27.8	27.1
LnGrp LOS	E	C	C	E	D	D	E	C		F	C	C
Approach Vol, veh/h		392			1243			1143			963	
Approach Delay, s/veh		38.8			53.8			36.4			31.8	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	50.0	13.1	41.4	11.3	48.8	11.3	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	46.0	13.0	38.0	13.0	40.0	9.0	42.0
Max Q Clear Time (g_c+I1), s	6.8	32.8	8.9	8.2	7.8	19.1	7.8	36.0
Green Ext Time (p_c), s	0.0	5.8	0.2	1.7	0.1	5.1	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.2
HCM 2010 LOS	D

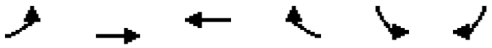
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	426	1278	46	12	15
Future Vol, veh/h	30	426	1278	46	12	15
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	31	444	1331	48	13	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1380	0	-	0	1616	667
Stage 1	-	-	-	-	1332	-
Stage 2	-	-	-	-	284	-
Critical Hdwy	4.28	-	-	-	6.98	7.08
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.29	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	458	-	-	-	88	385
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	718	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	458	-	-	-	82	385
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	717	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	33.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	458	-	-	-	82	385
HCM Lane V/C Ratio	0.068	-	-	-	0.152	0.041
HCM Control Delay (s/veh)	13.4	-	-	-	56.6	14.7
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5	0.1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	401	1332	76	49	20
Future Volume (veh/h)	37	401	1332	76	49	20
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712
Adj Flow Rate, veh/h	39	418	1388	79	51	21
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	48	2067	1802	789	424	379
Arrive On Green	0.03	0.64	0.55	0.55	0.26	0.26
Sat Flow, veh/h	1630	3338	3338	1424	1630	1455
Grp Volume(v), veh/h	39	418	1388	79	51	21
Grp Sat Flow(s),veh/h/ln	1630	1626	1626	1424	1630	1455
Q Serve(g_s), s	1.8	4.1	25.5	2.0	1.8	0.8
Cycle Q Clear(g_c), s	1.8	4.1	25.5	2.0	1.8	0.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	48	2067	1802	789	424	379
V/C Ratio(X)	0.81	0.20	0.77	0.10	0.12	0.06
Avail Cap(c_a), veh/h	191	3895	3344	1464	424	379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	5.9	13.3	8.1	21.7	21.3
Incr Delay (d2), s/veh	26.8	0.0	0.7	0.1	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.8	11.6	0.8	0.9	0.0
LnGrp Delay(d), s/veh	63.9	5.9	14.0	8.1	22.3	21.6
LnGrp LOS	E	A	B	A	C	C
Approach Vol, veh/h		457	1467		72	
Approach Delay, s/veh		10.8	13.7		22.1	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				52.8		24.0	6.3	46.6
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				92.0		20.0	9.0	79.0
Max Q Clear Time (g_c+I1), s				6.1		3.8	3.8	27.5
Green Ext Time (p_c), s				2.9		0.1	0.0	15.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	464	10	0	1393	166	0	0	42	0	0	13
Future Vol, veh/h	0	464	10	0	1393	166	0	0	42	0	0	13
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	0	473	10	0	1421	169	0	0	43	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	245	-	-	711
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.36	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.03	-	-	3.43
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	619	0	0	351
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	617	-	-	351
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	11.3	15.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	617	-	-	-	-	351
HCM Lane V/C Ratio	0.069	-	-	-	-	0.038
HCM Control Delay (s/veh)	11.3	-	-	-	-	15.7
HCM Lane LOS	B	-	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	90	78	631	118	82	384	106	93	179	986	71	845
Future Volume (vph)	90	78	631	118	82	384	106	93	179	986	71	845
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.96	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.99	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1424		4501	1422	1656	1743	1462	1583	1304	1482	1656	3213
Flt Permitted	0.95		0.66	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1424		2977	1422	1656	1743	1462	1583	1304	1482	1656	3213
Peak-hour factor, PHF	0.91	0.92	0.91	0.91	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.91
Adj. Flow (vph)	99	85	693	130	90	422	116	101	197	1084	78	929
RTOR Reduction (vph)	0	0	0	88	0	0	0	79	101	213	0	0
Lane Group Flow (vph)	89	0	788	42	90	422	116	22	540	427	78	929
Confl. Peds. (#/hr)				12	12							
Confl. Bikes (#/hr)				2			1					
Heavy Vehicles (%)	9%	2%	9%	9%	9%	9%	9%	2%	9%	9%	9%	9%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	pm+ov	Prot	Prot
Protected Phases	7	7	4		3	8				7!	5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	9.7		40.0	31.0	5.0	26.3	26.3	26.3	41.8	51.5	27.0	27.0
Effective Green, g (s)	9.7		40.0	31.0	5.0	26.3	26.3	26.3	41.8	51.5	27.0	27.0
Actuated g/C Ratio	0.08		0.33	0.26	0.04	0.22	0.22	0.22	0.35	0.43	0.22	0.22
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	114		1108	364	68	379	318	344	451	680	370	718
v/s Ratio Prot	0.06		c0.06		c0.05	c0.24				0.05	0.05	c0.29
v/s Ratio Perm			0.18	0.03			0.08	0.01	c0.41	0.24		
v/c Ratio	0.78		0.71	0.12	1.32	1.11	0.36	0.06	1.20	0.63	0.21	1.29
Uniform Delay, d1	54.5		35.3	34.4	57.9	47.3	40.2	37.5	39.5	27.1	38.2	46.9
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	28.4		2.2	0.1	217.9	80.6	0.7	0.1	108.3	1.8	0.3	142.5
Delay (s)	83.0		37.5	34.5	275.8	127.8	40.9	37.6	147.8	29.0	38.5	189.4
Level of Service	F		D	C	F	F	D	D	F	C	D	F
Approach Delay (s/veh)			41.2			119.8						
Approach LOS			D			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	78.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.18		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	108.2%	ICU Level of Service	G
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	410	745	109	77	696	69	64	334	341	85	641	98
Future Volume (veh/h)	410	745	109	77	696	69	64	334	341	85	641	98
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1759	1759	1759	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	461	837	122	87	782	0	72	375	383	96	720	110
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	540	1475	215	109	1351	604	91	1015	554	120	1097	422
Arrive On Green	0.17	0.51	0.51	0.07	0.40	0.00	0.05	0.21	0.21	0.07	0.23	0.23
Sat Flow, veh/h	3250	2920	426	1675	3343	1495	1675	4803	1445	1675	4803	1420
Grp Volume(v), veh/h	461	479	480	87	782	0	72	375	383	96	720	110
Grp Sat Flow(s),veh/h/ln	1625	1671	1674	1675	1671	1495	1675	1601	1445	1675	1601	1420
Q Serve(g_s), s	15.0	21.6	21.6	5.6	19.8	0.0	4.6	7.3	23.0	6.1	14.8	6.5
Cycle Q Clear(g_c), s	15.0	21.6	21.6	5.6	19.8	0.0	4.6	7.3	23.0	6.1	14.8	6.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	540	844	846	109	1351	604	91	1015	554	120	1097	422
V/C Ratio(X)	0.85	0.57	0.57	0.80	0.58	0.00	0.79	0.37	0.69	0.80	0.66	0.26
Avail Cap(c_a), veh/h	746	844	846	200	1351	604	169	1015	554	200	1103	424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	18.7	18.7	50.2	25.2	0.0	50.9	36.7	28.7	49.8	38.1	29.5
Incr Delay (d2), s/veh	7.0	2.8	2.8	12.3	1.8	0.0	14.1	0.2	3.7	11.7	1.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	10.6	10.6	3.0	9.5	0.0	2.5	3.3	10.3	3.2	6.7	2.6
LnGrp Delay(d), s/veh	51.1	21.4	21.4	62.5	27.0	0.0	65.0	37.0	32.4	61.5	39.5	29.8
LnGrp LOS	D	C	C	E	C		E	D	C	E	D	C
Approach Vol, veh/h		1420			869			830			926	
Approach Delay, s/veh		31.1			30.6			37.3			40.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	59.0	11.8	27.0	22.1	48.0	9.9	28.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	55.0	13.0	23.0	25.0	43.0	11.0	25.0
Max Q Clear Time (g_c+I1), s	7.6	23.6	8.1	25.0	17.0	21.8	6.6	16.8
Green Ext Time (p_c), s	0.1	6.7	0.1	0.0	1.1	5.2	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	128	179	47	133	184	230	94	1080	75	217	1146	571
Future Volume (veh/h)	128	179	47	133	184	230	94	1080	75	217	1146	571
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	128	179	47	133	184	0	94	1080	75	217	1146	571
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	157	288	125	163	299	134	119	1744	755	252	2010	882
Arrive On Green	0.09	0.08	0.08	0.10	0.09	0.00	0.07	0.51	0.51	0.15	0.59	0.59
Sat Flow, veh/h	1707	3406	1482	1707	3406	1524	1707	3406	1475	1707	3406	1493
Grp Volume(v), veh/h	128	179	47	133	184	0	94	1080	75	217	1146	571
Grp Sat Flow(s),veh/h/ln	1707	1703	1482	1707	1703	1524	1707	1703	1475	1707	1703	1493
Q Serve(g_s), s	7.4	5.1	3.0	7.6	5.2	0.0	5.4	22.6	2.6	12.4	20.8	25.3
Cycle Q Clear(g_c), s	7.4	5.1	3.0	7.6	5.2	0.0	5.4	22.6	2.6	12.4	20.8	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	288	125	163	299	134	119	1744	755	252	2010	882
V/C Ratio(X)	0.81	0.62	0.38	0.82	0.61	0.00	0.79	0.62	0.10	0.86	0.57	0.65
Avail Cap(c_a), veh/h	256	545	237	273	579	259	222	1744	755	410	2010	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	44.2	43.3	44.3	44.0	0.0	45.8	17.4	12.5	41.6	12.6	13.6
Incr Delay (d2), s/veh	9.7	2.2	1.9	9.5	2.0	0.0	11.1	1.7	0.3	9.9	1.2	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	2.5	1.3	4.0	2.5	0.0	2.9	10.9	1.1	6.5	10.0	11.2
LnGrp Delay(d), s/veh	54.2	46.4	45.1	53.8	46.0	0.0	56.9	19.1	12.8	51.5	13.8	17.3
LnGrp LOS	D	D	D	D	D		E	B	B	D	B	B
Approach Vol, veh/h		354			317			1249			1934	
Approach Delay, s/veh		49.0			49.3			21.6			19.1	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	55.2	13.5	12.5	10.9	63.0	13.2	12.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	48.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.4	24.6	9.6	7.1	7.4	27.3	9.4	7.2
Green Ext Time (p_c), s	0.4	8.2	0.2	0.7	0.1	13.0	0.1	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	42.3

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	442	60	256	0	114	399
Future Vol, veh/h	442	60	256	0	114	399
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	497	67	288	0	128	448

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	288	0	-	0	1349	-
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	1061	-
Critical Hdwy	4.19	-	-	-	6.49	-
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.281	-	-	-	3.581	-
Pot Cap-1 Maneuver	1235	-	-	-	160	0
Stage 1	-	-	-	-	745	0
Stage 2	-	-	-	-	323	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1235	-	-	-	~ 96	-
Mov Cap-2 Maneuver	-	-	-	-	~ 96	-
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	323	-

Approach	EB	WB	SW
HCM Control Delay, s/v	8.7	0	285.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1235	-	-	-	96	-
HCM Lane V/C Ratio	0.402	-	-	-	1.334	-
HCM Control Delay (s/veh)	9.9	-	-	-	285.6	0
HCM Lane LOS	A	-	-	-	F	A
HCM 95th %tile Q(veh)	2	-	-	-	9.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	95	41	28	267	119	216	1094	34	105	947	88
Future Volume (veh/h)	31	95	41	28	267	119	216	1094	34	105	947	88
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	32	99	43	29	278	124	225	1140	0	109	986	92
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	145	315	137	345	312	139	345	1726	772	277	1601	692
Arrive On Green	0.02	0.27	0.27	0.02	0.27	0.27	0.09	0.51	0.00	0.05	0.47	0.47
Sat Flow, veh/h	1707	1177	511	1707	1172	523	1707	3406	1524	1707	3406	1472
Grp Volume(v), veh/h	32	0	142	29	0	402	225	1140	0	109	986	92
Grp Sat Flow(s),veh/h/ln	1707	0	1688	1707	0	1695	1707	1703	1524	1707	1703	1472
Q Serve(g_s), s	1.4	0.0	7.0	1.3	0.0	23.8	6.7	25.9	0.0	3.4	22.6	3.7
Cycle Q Clear(g_c), s	1.4	0.0	7.0	1.3	0.0	23.8	6.7	25.9	0.0	3.4	22.6	3.7
Prop In Lane	1.00		0.30	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	452	345	0	452	345	1726	772	277	1601	692
V/C Ratio(X)	0.22	0.00	0.31	0.08	0.00	0.89	0.65	0.66	0.00	0.39	0.62	0.13
Avail Cap(c_a), veh/h	170	0	614	373	0	616	474	1726	772	338	1601	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	30.6	27.2	0.0	36.9	16.1	19.1	0.0	15.9	20.7	15.7
Incr Delay (d2), s/veh	0.8	0.0	0.4	0.1	0.0	11.8	2.1	2.0	0.0	0.9	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.3	0.6	0.0	12.7	3.3	12.7	0.0	1.6	10.9	1.6
LnGrp Delay(d), s/veh	30.5	0.0	31.0	27.3	0.0	48.7	18.1	21.1	0.0	16.8	22.5	16.1
LnGrp LOS	C		C	C		D	B	C		B	C	B
Approach Vol, veh/h		174			431			1365			1187	
Approach Delay, s/veh		30.9			47.3			20.6			21.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	57.0	6.3	32.0	13.1	53.1	6.4	31.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	53.0	4.0	38.0	17.0	45.0	4.0	38.0
Max Q Clear Time (g_c+I1), s	5.4	27.9	3.3	9.0	8.7	24.6	3.4	25.8
Green Ext Time (p_c), s	0.1	9.1	0.0	0.8	0.4	7.3	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	153	50	148	480	23	26
Future Vol, veh/h	153	50	148	480	23	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	14	14	14	14	14	14
Mvmt Flow	168	55	163	527	25	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	223	0	1021	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	853	-
Critical Hdwy	-	-	4.24	-	6.54	6.34
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.326	-	3.626	3.426
Pot Cap-1 Maneuver	-	-	1278	-	249	846
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	398	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1278	-	204	846
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	326	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.9	16.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	846	-	-	1278	-
HCM Lane V/C Ratio	0.124	0.034	-	-	0.127	-
HCM Control Delay (s/veh)	25.1	9.4	-	-	8.2	0
HCM Lane LOS	D	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.4	-

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	190	8	11	674	33	18
Future Vol, veh/h	190	8	11	674	33	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	198	8	11	702	34	19

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	206	0	922	198
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	724	-
Critical Hdwy	-	-	4.26	-	6.56	6.36
Critical Hdwy Stg 1	-	-	-	-	5.56	-
Critical Hdwy Stg 2	-	-	-	-	5.56	-
Follow-up Hdwy	-	-	2.344	-	3.644	3.444
Pot Cap-1 Maneuver	-	-	1286	-	283	809
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	456	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1286	-	280	809
Mov Cap-2 Maneuver	-	-	-	-	280	-
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	452	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	16.1
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	280	809	-	-	1286	-
HCM Lane V/C Ratio	0.123	0.023	-	-	0.009	-
HCM Control Delay (s/veh)	19.6	9.6	-	-	7.8	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	137	48	20	670	55	31
Future Volume (veh/h)	137	48	20	670	55	31
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1624	1624	1624	1624	1624	1624
Adj Flow Rate, veh/h	146	51	21	713	59	33
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	17	17	17	17	17	17
Cap, veh/h	840	714	608	840	533	476
Arrive On Green	0.52	0.52	0.52	0.52	0.34	0.34
Sat Flow, veh/h	1624	1380	1029	1624	1547	1380
Grp Volume(v), veh/h	146	51	21	713	59	33
Grp Sat Flow(s),veh/h/ln	1624	1380	1029	1624	1547	1380
Q Serve(g_s), s	2.8	1.1	0.6	21.9	1.5	0.9
Cycle Q Clear(g_c), s	2.8	1.1	3.4	21.9	1.5	0.9
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	840	714	608	840	533	476
V/C Ratio(X)	0.17	0.07	0.03	0.85	0.11	0.07
Avail Cap(c_a), veh/h	2574	2188	1707	2574	533	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.4	7.0	8.3	12.0	13.0	12.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.5	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.4	0.2	10.3	0.7	0.4
LnGrp Delay(d), s/veh	7.5	7.1	8.3	14.5	13.4	13.1
LnGrp LOS	A	A	A	B	B	B
Approach Vol, veh/h	197			734	92	
Approach Delay, s/veh	7.4			14.4	13.3	
Approach LOS	A			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		24.0		34.0				34.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		20.0		92.0				92.0
Max Q Clear Time (g_c+I1), s		3.5		4.8				23.9
Green Ext Time (p_c), s		0.2		1.0				6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	159	5	6	530	154	16
Future Vol, veh/h	159	5	6	530	154	16
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	167	5	6	558	162	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	173	0	738	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	570	-
Critical Hdwy	-	-	4.28	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	-	-	2.362	-	3.662	3.462
Pot Cap-1 Maneuver	-	-	1313	-	363	836
Stage 1	-	-	-	-	824	-
Stage 2	-	-	-	-	535	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1312	-	361	835
Mov Cap-2 Maneuver	-	-	-	-	361	-
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	532	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	21.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	361	835	-	-	1312	-
HCM Lane V/C Ratio	0.449	0.02	-	-	0.005	-
HCM Control Delay (s/veh)	22.9	9.4	-	-	7.8	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	2.2	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	292	43	188	810	208	36	1068	62	47	844	130
Future Volume (veh/h)	151	292	43	188	810	208	36	1068	62	47	844	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1900	1792	1792	1900
Adj Flow Rate, veh/h	157	304	45	196	844	217	38	1112	65	49	879	135
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	239	1032	148	420	996	254	47	1549	91	62	1420	218
Arrive On Green	0.09	0.24	0.24	0.10	0.26	0.26	0.03	0.47	0.47	0.04	0.48	0.48
Sat Flow, veh/h	1707	4303	616	1707	3882	992	1707	3267	191	1707	2942	452
Grp Volume(v), veh/h	157	228	121	196	708	353	38	579	598	49	509	505
Grp Sat Flow(s),veh/h/ln	1707	1631	1657	1707	1631	1612	1707	1703	1755	1707	1703	1692
Q Serve(g_s), s	7.5	6.3	6.6	9.3	22.6	22.8	2.4	29.7	29.8	3.1	24.2	24.2
Cycle Q Clear(g_c), s	7.5	6.3	6.6	9.3	22.6	22.8	2.4	29.7	29.8	3.1	24.2	24.2
Prop In Lane	1.00		0.37	1.00		0.62	1.00		0.11	1.00		0.27
Lane Grp Cap(c), veh/h	239	782	397	420	837	414	47	807	832	62	822	817
V/C Ratio(X)	0.66	0.29	0.30	0.47	0.85	0.85	0.80	0.72	0.72	0.79	0.62	0.62
Avail Cap(c_a), veh/h	308	952	483	445	922	456	109	807	832	109	822	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	34.1	34.2	26.9	38.7	38.8	53.0	23.0	23.0	52.4	20.9	20.9
Incr Delay (d2), s/veh	3.3	0.2	0.4	0.8	6.9	13.5	25.8	5.4	5.3	19.6	3.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.8	3.0	4.4	10.9	11.7	1.5	15.1	15.5	1.8	12.1	12.0
LnGrp Delay(d), s/veh	33.4	34.3	34.6	27.7	45.6	52.3	78.8	28.4	28.3	72.1	24.4	24.4
LnGrp LOS	C	C	C	C	D	D	E	C	C	E	C	C
Approach Vol, veh/h		506			1257			1215			1063	
Approach Delay, s/veh		34.1			44.7			29.9			26.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	56.0	15.4	30.3	7.0	56.9	13.5	32.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	52.0	13.0	32.0	7.0	52.0	14.0	31.0
Max Q Clear Time (g_c+I1), s	5.1	31.8	11.3	8.6	4.4	26.2	9.5	24.8
Green Ext Time (p_c), s	0.0	7.9	0.1	2.0	0.0	7.3	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	168	7	754	223	0	735
Future Volume (veh/h)	168	7	754	223	0	735
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	0	1810
Adj Flow Rate, veh/h	189	8	847	0	0	826
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	5	0	5
Cap, veh/h	272	125	2878	1412	0	2878
Arrive On Green	0.08	0.08	0.84	0.00	0.00	0.84
Sat Flow, veh/h	3343	1538	3529	1538	0	3619
Grp Volume(v), veh/h	189	8	847	0	0	826
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	1538	0	1719
Q Serve(g_s), s	5.4	0.5	5.2	0.0	0.0	5.1
Cycle Q Clear(g_c), s	5.4	0.5	5.2	0.0	0.0	5.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	272	125	2878	1412	0	2878
V/C Ratio(X)	0.69	0.06	0.29	0.00	0.00	0.29
Avail Cap(c_a), veh/h	1024	471	2878	1412	0	2878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	43.8	41.6	1.7	0.0	0.0	1.7
Incr Delay (d2), s/veh	3.2	0.2	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.2	2.5	0.0	0.0	2.4
LnGrp Delay(d), s/veh	47.0	41.8	2.0	0.0	0.0	2.0
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	197		847			826
Approach Delay, s/veh	46.8		2.0			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		86.0				86.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		82.0				82.0		30.0
Max Q Clear Time (g_c+I1), s		7.2				7.1		7.4
Green Ext Time (p_c), s		6.8				6.6		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.7
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Future Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	8	251	29	458	618	13	205	8	330	15	13	12
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	14	1590	492	502	3011	63	388	15	359	54	27	25
Arrive On Green	0.01	0.31	0.31	0.28	0.58	0.58	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1792	5136	1589	1792	5174	109	1727	67	1595	1792	895	826
Grp Volume(v), veh/h	8	251	29	458	408	223	213	0	330	15	0	25
Grp Sat Flow(s),veh/h/ln	1792	1712	1589	1792	1712	1859	1795	0	1595	1792	0	1720
Q Serve(g_s), s	0.5	3.7	1.3	25.5	5.8	5.9	10.8	0.0	20.9	0.8	0.0	1.5
Cycle Q Clear(g_c), s	0.5	3.7	1.3	25.5	5.8	5.9	10.8	0.0	20.9	0.8	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.06	0.96		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	14	1590	492	502	1992	1082	404	0	359	54	0	52
V/C Ratio(X)	0.56	0.16	0.06	0.91	0.21	0.21	0.53	0.00	0.92	0.28	0.00	0.48
Avail Cap(c_a), veh/h	70	1590	492	799	1992	1082	418	0	371	278	0	267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.0	25.8	25.0	35.9	10.2	10.2	35.2	0.0	39.1	48.9	0.0	49.2
Incr Delay (d2), s/veh	30.4	0.2	0.2	9.9	0.2	0.4	1.1	0.0	27.2	2.7	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.6	14.0	2.8	3.1	5.5	0.0	11.9	0.5	0.0	0.8
LnGrp Delay(d), s/veh	81.4	26.0	25.3	45.8	10.5	10.7	36.3	0.0	66.3	51.6	0.0	56.0
LnGrp LOS	F	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		288			1089			543			40	
Approach Delay, s/veh		27.5			25.4			54.5			54.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	64.0		27.2	32.9	35.9		7.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	60.0		24.0	46.0	18.0		16.0
Max Q Clear Time (g_c+I1), s	2.5	7.9		22.9	27.5	5.7		3.5
Green Ext Time (p_c), s	0.0	4.7		0.3	1.4	1.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.3
HCM 2010 LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	167	115	523	666	272	4	1131	281	87	1308	68
Future Volume (veh/h)	20	167	115	523	666	272	4	1131	281	87	1308	68
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	21	178	122	556	709	289	4	1203	299	93	1391	72
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	30	635	275	633	1226	644	35	1404	628	117	1798	789
Arrive On Green	0.02	0.18	0.18	0.19	0.35	0.35	0.41	0.41	0.41	0.07	0.52	0.52
Sat Flow, veh/h	1740	3471	1502	3375	3471	1528	2	3394	1517	1740	3471	1523
Grp Volume(v), veh/h	21	178	122	556	709	289	646	561	299	93	1391	72
Grp Sat Flow(s),veh/h/ln	1740	1736	1502	1688	1736	1528	1817	1579	1517	1740	1736	1523
Q Serve(g_s), s	1.3	4.8	7.8	17.2	17.9	14.6	0.0	34.7	15.5	5.7	34.7	2.6
Cycle Q Clear(g_c), s	1.3	4.8	7.8	17.2	17.9	14.6	34.5	34.7	15.5	5.7	34.7	2.6
Prop In Lane	1.00		1.00	1.00		1.00	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	30	635	275	633	1226	644	785	653	628	117	1798	789
V/C Ratio(X)	0.70	0.28	0.44	0.88	0.58	0.45	0.82	0.86	0.48	0.80	0.77	0.09
Avail Cap(c_a), veh/h	65	635	275	753	1226	644	909	763	733	162	2129	934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	37.9	39.1	42.5	28.3	22.3	28.6	28.7	23.0	49.5	20.9	13.1
Incr Delay (d2), s/veh	25.0	1.1	5.1	10.2	2.0	2.3	5.5	8.6	0.6	16.9	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.4	3.6	8.9	8.9	6.5	18.6	16.7	6.6	3.3	16.8	1.1
LnGrp Delay(d), s/veh	77.6	39.0	44.2	52.7	30.3	24.6	34.1	37.3	23.6	66.4	22.4	13.2
LnGrp LOS	E	D	D	D	C	C	C	D	C	E	C	B
Approach Vol, veh/h		321			1554			1506			1556	
Approach Delay, s/veh		43.5			37.2			33.2			24.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	42.0	11.2	48.5	24.2	23.7		59.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	38.0	10.0	52.0	24.0	18.0		66.0
Max Q Clear Time (g_c+I1), s	3.3	19.9	7.7	36.7	19.2	9.8		36.7
Green Ext Time (p_c), s	0.0	5.2	0.0	7.8	1.0	0.8		12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.4
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	324	211	396	800	661	16
Future Volume (vph)	324	211	396	800	661	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3471	1553	1736	3471	3367	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3471	1553	1736	3471	3367	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	331	215	404	816	674	16
RTOR Reduction (vph)	0	83	0	0	1	0
Lane Group Flow (vph)	331	132	404	816	689	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	40.5	69.1	31.7	76.2	28.6	
Effective Green, g (s)	40.5	69.1	31.7	76.2	28.6	
Actuated g/C Ratio	0.36	0.61	0.28	0.68	0.25	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1246	1006	487	2344	853	
v/s Ratio Prot	0.10	0.03	c0.23	c0.24	c0.20	
v/s Ratio Perm		0.05				
v/c Ratio	0.27	0.13	0.83	0.35	0.81	
Uniform Delay, d1	25.6	9.2	38.0	7.8	39.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.1	11.2	0.4	5.6	
Delay (s)	26.1	9.3	49.2	8.2	45.2	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	19.5			21.8	45.2	
Approach LOS	B			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	424	290	69	407	1072	266
Future Volume (veh/h)	424	290	69	407	1072	266
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	433	0	70	415	1094	271
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	825	380	280	2314	2314	1033
Arrive On Green	0.24	0.00	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3375	1553	389	3563	3563	1549
Grp Volume(v), veh/h	433	0	70	415	1094	271
Grp Sat Flow(s),veh/h/ln	1688	1553	389	1736	1736	1549
Q Serve(g_s), s	10.0	0.0	9.6	4.1	13.8	6.4
Cycle Q Clear(g_c), s	10.0	0.0	23.4	4.1	13.8	6.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	825	380	280	2314	2314	1033
V/C Ratio(X)	0.52	0.00	0.25	0.18	0.47	0.26
Avail Cap(c_a), veh/h	825	380	280	2314	2314	1033
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	13.0	5.7	7.3	6.1
Incr Delay (d2), s/veh	2.4	0.0	0.5	0.0	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	1.1	1.9	6.8	2.9
LnGrp Delay(d), s/veh	31.9	0.0	13.5	5.7	8.0	6.7
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	433			485	1365	
Approach Delay, s/veh	31.9			6.8	7.7	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		64.0				64.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		60.0				60.0
Max Q Clear Time (g_c+I1), s		12.0		25.4				15.8
Green Ext Time (p_c), s		1.1		4.1				10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	35

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	158	0	0	874	0	0	1062	3	0	2
Future Vol, veh/h	158	0	0	874	0	0	1062	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	163	0	0	901	0	0	1095	3	0	2

Major/Minor	Minor1			Major1			Major2			Minor2	
Conflicting Flow All	1449	451	1098	0	-	-	-	0	1548	549
Stage 1	901	-	-	-	-	-	-	-	1097	-
Stage 2	548	-	-	-	-	-	-	-	451	-
Critical Hdwy	7.6	7	4.2	-	-	-	-	-	7.6	7
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-	-	6.6	-
Critical Hdwy Stg 2	6.6	-	-	-	-	-	-	-	6.6	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-	-	-	3.55	3.35
Pot Cap-1 Maneuver	~ 89	547	614	-	0	0	-	-	75	472
Stage 1	293	-	-	-	0	0	-	-	222	-
Stage 2	481	-	-	-	0	0	-	-	550	-
Platoon blocked, %				-			-	-		
Mov Cap-1 Maneuver	~ 89	547	614	-	-	-	-	-	31	472
Mov Cap-2 Maneuver	~ 89	-	-	-	-	-	-	-	31	-
Stage 1	293	-	-	-	-	-	-	-	222	-
Stage 2	479	-	-	-	-	-	-	-	228	-

Approach	NB	SE	NW	SW
HCM Control Delay, s/v	179.8	0	0	12.7
HCM LOS	F			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	89	547	-	-	614	-	472
HCM Lane V/C Ratio	1.83	0.586	-	-	-	-	0.004
HCM Control Delay (s/veh)	$ 493.4	20.5	-	-	0	-	12.7
HCM Lane LOS	F	C	-	-	A	-	B
HCM 95th %tile Q(veh)	13.7	3.8	-	-	0	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	12	11	17	1071	1160	52
Future Vol, veh/h	12	11	17	1071	1160	52
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	12	11	17	1093	1184	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1813	640	1258	0	-	0
Stage 1	1232	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	6.9	7	4.2	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-
Pot Cap-1 Maneuver	67	411	533	-	-	-
Stage 1	233	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	63	404	524	-	-	-
Mov Cap-2 Maneuver	63	-	-	-	-	-
Stage 1	222	-	-	-	-	-
Stage 2	505	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	46.1	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	524	-	63	404
HCM Lane V/C Ratio	-	-	0.033	-	0.194	0.028
HCM Control Delay (s/veh)	-	-	12.1	-	75.4	14.2
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.7	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	210	986	280	10	1075	454	58	540	456	334	554	12
Future Volume (veh/h)	210	986	280	10	1075	454	58	540	456	334	554	12
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1690	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	226	1060	301	11	1156	488	62	581	0	359	596	13
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	250	1589	864	18	1215	594	80	844	378	396	1093	24
Arrive On Green	0.16	0.49	0.49	0.01	0.35	0.35	0.05	0.24	0.00	0.12	0.31	0.31
Sat Flow, veh/h	1609	3211	1405	1740	3471	1494	1740	3471	1553	3375	3470	76
Grp Volume(v), veh/h	226	1060	301	11	1156	488	62	581	0	359	298	311
Grp Sat Flow(s),veh/h/ln	1609	1605	1405	1740	1736	1494	1740	1736	1553	1688	1736	1810
Q Serve(g_s), s	16.5	29.7	12.6	0.8	38.7	34.9	4.2	18.1	0.0	12.5	16.9	17.0
Cycle Q Clear(g_c), s	16.5	29.7	12.6	0.8	38.7	34.9	4.2	18.1	0.0	12.5	16.9	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	250	1589	864	18	1215	594	80	844	378	396	546	570
V/C Ratio(X)	0.91	0.67	0.35	0.62	0.95	0.82	0.78	0.69	0.00	0.91	0.55	0.55
Avail Cap(c_a), veh/h	256	1589	864	58	1223	597	204	844	378	396	546	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	22.7	11.4	58.8	37.7	32.3	56.3	41.0	0.0	52.0	33.8	33.8
Incr Delay (d2), s/veh	32.1	1.1	0.2	30.0	15.5	8.9	14.9	4.6	0.0	23.8	3.9	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	13.3	4.9	0.5	21.1	15.8	2.3	9.2	0.0	7.1	8.7	9.1
LnGrp Delay(d), s/veh	81.6	23.8	11.6	88.7	53.2	41.2	71.2	45.6	0.0	75.8	37.7	37.5
LnGrp LOS	F	C	B	F	D	D	E	D		E	D	D
Approach Vol, veh/h		1587			1655			643			968	
Approach Delay, s/veh		29.7			49.9			48.0			51.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	41.5	5.2	63.0	18.0	33.0	22.5	45.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	4.0	57.0	14.0	29.0	19.0	42.0
Max Q Clear Time (g_c+I1), s	6.2	19.0	2.8	31.7	14.5	20.1	18.5	40.7
Green Ext Time (p_c), s	0.1	2.7	0.0	9.4	0.0	2.6	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.4
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	9	460	21	57	773
Future Vol, veh/h	17	9	460	21	57	773
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	18	9	479	22	59	805

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1002	242	0	0	503	0
Stage 1	481	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Critical Hdwy	6.94	7.04	-	-	4.24	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-
Follow-up Hdwy	3.57	3.37	-	-	2.27	-
Pot Cap-1 Maneuver	231	744	-	-	1023	-
Stage 1	573	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	217	743	-	-	1021	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	515	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	18.5	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	217	743	1021	-
HCM Lane V/C Ratio	-	-	0.082	0.013	0.058	-
HCM Control Delay (s/veh)	-	-	23.1	9.9	8.7	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0.2	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	37	88	393	38	77	708
Future Volume (veh/h)	37	88	393	38	77	708
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	39	92	409	40	80	738
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	139	124	2841	1271	808	2841
Arrive On Green	0.08	0.08	0.83	0.83	0.83	0.83
Sat Flow, veh/h	1707	1524	3495	1524	902	3495
Grp Volume(v), veh/h	39	92	409	40	80	738
Grp Sat Flow(s),veh/h/ln	1707	1524	1703	1524	902	1703
Q Serve(g_s), s	2.0	5.6	2.1	0.4	1.7	4.3
Cycle Q Clear(g_c), s	2.0	5.6	2.1	0.4	3.9	4.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	139	124	2841	1271	808	2841
V/C Ratio(X)	0.28	0.74	0.14	0.03	0.10	0.26
Avail Cap(c_a), veh/h	595	531	2841	1271	808	2841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	42.5	1.5	1.3	1.8	1.7
Incr Delay (d2), s/veh	1.1	8.4	0.1	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.6	1.0	0.2	0.5	2.0
LnGrp Delay(d), s/veh	42.0	50.9	1.6	1.4	2.1	1.9
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	131		449			818
Approach Delay, s/veh	48.2		1.6			1.9
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		11.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		4.1				6.3		7.6
Green Ext Time (p_c), s		2.9				6.3		0.4

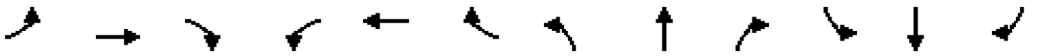
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.1
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	75	162	43	38	25
Future Vol, veh/h	23	75	162	43	38	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	19	19	19	19	19	19
Mvmt Flow	25	82	176	47	41	27
Number of Lanes	1	1	0	1	1	1

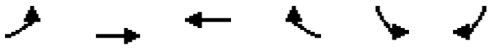
Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	8.4	10.5	8
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	79%	100%	0%	0%	0%
Vol Thru, %	21%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	205	23	75	38	25
LT Vol	162	23	0	0	0
Through Vol	43	0	0	38	0
RT Vol	0	0	75	0	25
Lane Flow Rate	223	25	82	41	27
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.318	0.042	0.11	0.061	0.035
Departure Headway (Hd)	5.138	6.084	4.878	5.3	4.597
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	702	590	736	677	780
Service Time	3.156	3.806	2.6	3.022	2.319
HCM Lane V/C Ratio	0.318	0.042	0.111	0.061	0.035
HCM Control Delay, s/veh	10.5	9.1	8.2	8.4	7.5
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	1.4	0.1	0.4	0.2	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	179	624	16	424	1250	152	15	242	510	335	36	26
Future Volume (vph)	179	624	16	424	1250	152	15	242	510	335	36	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.98			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1703	4873		1703	4799			3394	1524	1550	3133	1492
Flt Permitted	0.95	1.00		0.95	1.00			0.93	1.00	0.95	0.59	1.00
Satd. Flow (perm)	1703	4873		1703	4799			3169	1524	1550	1914	1492
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	188	657	17	446	1316	160	16	255	537	353	38	27
RTOR Reduction (vph)	0	2	0	0	13	0	0	0	388	0	0	15
Lane Group Flow (vph)	188	672	0	446	1463	0	0	271	149	176	215	12
Confl. Peds. (#/hr)	6					6	4					4
Confl. Bikes (#/hr)			2			4						
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	15.9	20.7		34.1	38.9			31.5	31.5	16.5	52.0	52.0
Effective Green, g (s)	15.9	20.7		34.1	38.9			31.5	31.5	16.5	52.0	52.0
Actuated g/C Ratio	0.13	0.17		0.29	0.33			0.27	0.27	0.14	0.44	0.44
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	227	849		488	1571			840	404	215	1007	653
v/s Ratio Prot	0.11	0.14		c0.26	c0.30					c0.11	0.03	
v/s Ratio Perm								0.09	c0.10		0.06	0.01
v/c Ratio	0.83	0.79		0.91	0.93			0.32	0.37	0.82	0.21	0.02
Uniform Delay, d1	50.1	47.0		40.9	38.7			35.1	35.6	49.7	20.7	18.9
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.3	5.1		21.5	10.3			1.0	2.6	20.9	0.1	0.1
Delay (s)	71.5	52.0		62.5	49.0			36.1	38.1	70.6	20.8	19.0
Level of Service	E	D		E	D			D	D	E	C	B
Approach Delay (s/veh)		56.3			52.1			37.4			41.7	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	118.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	77	979	1513	73	51	27
Future Volume (veh/h)	77	979	1513	73	51	27
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1658	1658	1792	1792	1792	1792
Adj Flow Rate, veh/h	89	1125	1739	84	59	31
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	186	2370	2562	1122	282	251
Arrive On Green	0.75	0.75	0.75	0.75	0.17	0.17
Sat Flow, veh/h	227	3233	3495	1491	1707	1524
Grp Volume(v), veh/h	89	1125	1739	84	59	31
Grp Sat Flow(s),veh/h/ln	227	1575	1703	1491	1707	1524
Q Serve(g_s), s	31.7	13.3	25.0	1.4	2.9	1.7
Cycle Q Clear(g_c), s	56.7	13.3	25.0	1.4	2.9	1.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	186	2370	2562	1122	282	251
V/C Ratio(X)	0.48	0.47	0.68	0.07	0.21	0.12
Avail Cap(c_a), veh/h	240	3120	3373	1477	282	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	4.6	6.1	3.1	35.0	34.5
Incr Delay (d2), s/veh	1.9	0.1	0.4	0.0	1.7	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.7	11.5	0.6	1.5	0.8
LnGrp Delay(d), s/veh	22.3	4.8	6.4	3.2	36.7	35.5
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		1214	1823		90	
Approach Delay, s/veh		6.1	6.3		36.3	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				76.9		20.0		76.9
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				96.0		16.0		96.0
Max Q Clear Time (g_c+I1), s				58.7		4.9		27.0
Green Ext Time (p_c), s				14.2		0.1		24.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	617	43	200	1385	117	45	539	101	66	665	198
Future Volume (veh/h)	211	617	43	200	1385	117	45	539	101	66	665	198
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	224	656	46	213	1473	124	48	573	107	70	707	211
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	256	1799	125	246	1747	147	61	973	429	89	1030	449
Arrive On Green	0.15	0.38	0.38	0.14	0.37	0.37	0.04	0.28	0.28	0.05	0.30	0.30
Sat Flow, veh/h	1740	4755	331	1740	4686	394	1740	3471	1531	1740	3471	1512
Grp Volume(v), veh/h	224	457	245	213	1045	552	48	573	107	70	707	211
Grp Sat Flow(s),veh/h/ln	1740	1663	1761	1740	1663	1755	1740	1736	1531	1740	1736	1512
Q Serve(g_s), s	13.6	10.7	10.8	12.9	31.0	31.0	3.0	15.3	5.8	4.3	19.4	12.3
Cycle Q Clear(g_c), s	13.6	10.7	10.8	12.9	31.0	31.0	3.0	15.3	5.8	4.3	19.4	12.3
Prop In Lane	1.00		0.19	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1258	666	246	1240	654	61	973	429	89	1030	449
V/C Ratio(X)	0.88	0.36	0.37	0.86	0.84	0.84	0.79	0.59	0.25	0.78	0.69	0.47
Avail Cap(c_a), veh/h	339	1264	670	387	1356	716	113	973	429	145	1030	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	24.2	24.2	45.3	30.9	30.9	51.6	33.4	30.0	50.6	33.5	31.0
Incr Delay (d2), s/veh	17.6	0.2	0.3	11.6	4.7	8.5	19.5	2.6	1.4	13.8	3.7	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	4.9	5.3	7.0	15.0	16.6	1.7	7.7	2.6	2.4	9.9	5.6
LnGrp Delay(d), s/veh	62.7	24.3	24.5	56.9	35.6	39.4	71.1	36.1	31.4	64.3	37.2	34.5
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		926			1810			728			988	
Approach Delay, s/veh		33.7			39.3			37.7			38.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	34.2	19.3	44.8	7.8	36.0	19.9	44.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	30.0	24.0	41.0	7.0	32.0	21.0	44.0
Max Q Clear Time (g_c+I1), s	6.3	17.3	14.9	12.8	5.0	21.4	15.6	33.0
Green Ext Time (p_c), s	0.0	3.1	0.4	4.6	0.0	3.8	0.3	7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	630	105	233	1455	104	104	1039	154	78	927	101
Future Volume (veh/h)	145	630	105	233	1455	104	104	1039	154	78	927	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	154	670	112	248	1548	111	111	1105	164	83	986	107
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	161	1121	185	278	1555	111	136	1222	181	88	1307	718
Arrive On Green	0.09	0.26	0.26	0.16	0.32	0.32	0.08	0.40	0.40	0.05	0.37	0.37
Sat Flow, veh/h	1757	4337	715	1757	4784	343	1757	3055	452	1757	3505	1540
Grp Volume(v), veh/h	154	517	265	248	1086	573	111	633	636	83	986	107
Grp Sat Flow(s),veh/h/ln	1757	1679	1695	1757	1679	1769	1757	1752	1755	1757	1752	1540
Q Serve(g_s), s	10.5	16.2	16.5	16.6	38.7	38.8	7.5	40.7	41.0	5.7	29.5	4.8
Cycle Q Clear(g_c), s	10.5	16.2	16.5	16.6	38.7	38.8	7.5	40.7	41.0	5.7	29.5	4.8
Prop In Lane	1.00		0.42	1.00		0.19	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	161	868	438	278	1091	575	136	701	702	88	1307	718
V/C Ratio(X)	0.96	0.60	0.61	0.89	1.00	1.00	0.82	0.90	0.91	0.94	0.75	0.15
Avail Cap(c_a), veh/h	161	868	438	366	1091	575	161	701	702	88	1307	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	39.0	39.1	49.5	40.4	40.4	54.5	33.8	33.9	56.8	32.8	18.5
Incr Delay (d2), s/veh	57.8	1.1	2.4	19.1	26.1	36.5	23.7	17.1	17.5	77.7	4.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	7.7	8.0	9.5	21.9	24.8	4.5	23.0	23.2	4.6	15.0	2.1
LnGrp Delay(d), s/veh	112.1	40.1	41.5	68.7	66.5	76.9	78.3	50.9	51.4	134.5	36.9	18.9
LnGrp LOS	F	D	D	E	E	E	E	D	D	F	D	B
Approach Vol, veh/h		936			1907			1380			1176	
Approach Delay, s/veh		52.3			69.9			53.3			42.2	
Approach LOS		D			E			D			D	

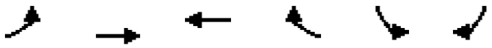
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	52.0	23.0	35.0	13.3	48.7	15.0	43.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	48.0	25.0	25.0	11.0	43.0	11.0	39.0
Max Q Clear Time (g_c+I1), s	7.7	43.0	18.6	18.5	9.5	31.5	12.5	40.8
Green Ext Time (p_c), s	0.0	3.2	0.4	2.6	0.0	5.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	789	44	133	1545	67	150	257	216	176	282	156
Future Volume (veh/h)	70	789	44	133	1545	67	150	257	216	176	282	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	73	822	46	139	1609	70	156	268	225	183	294	162
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	1803	101	170	2043	89	383	1009	440	434	654	350
Arrive On Green	0.05	0.37	0.37	0.10	0.41	0.41	0.08	0.29	0.29	0.09	0.30	0.30
Sat Flow, veh/h	1757	4876	272	1757	4944	215	1757	3505	1528	1757	2188	1171
Grp Volume(v), veh/h	73	565	303	139	1092	587	156	268	225	183	234	222
Grp Sat Flow(s),veh/h/ln	1757	1679	1790	1757	1679	1802	1757	1752	1528	1757	1752	1606
Q Serve(g_s), s	4.3	13.3	13.4	8.1	29.5	29.5	6.4	6.1	12.8	7.5	11.2	11.7
Cycle Q Clear(g_c), s	4.3	13.3	13.4	8.1	29.5	29.5	6.4	6.1	12.8	7.5	11.2	11.7
Prop In Lane	1.00		0.15	1.00		0.12	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	94	1241	662	170	1387	744	383	1009	440	434	524	480
V/C Ratio(X)	0.78	0.46	0.46	0.82	0.79	0.79	0.41	0.27	0.51	0.42	0.45	0.46
Avail Cap(c_a), veh/h	169	1450	773	287	1676	899	443	1009	440	475	524	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	24.9	24.9	46.1	26.6	26.6	23.4	28.6	31.0	22.6	29.5	29.7
Incr Delay (d2), s/veh	13.0	0.3	0.5	9.3	2.1	3.9	0.7	0.6	4.2	0.7	2.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.2	6.7	4.4	14.1	15.5	3.2	3.1	5.9	3.6	5.9	5.6
LnGrp Delay(d), s/veh	61.7	25.1	25.4	55.4	28.7	30.5	24.1	29.2	35.2	23.2	32.3	32.9
LnGrp LOS	E	C	C	E	C	C	C	C	D	C	C	C
Approach Vol, veh/h		941			1818			649			639	
Approach Delay, s/veh		28.1			31.3			30.1			29.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	34.0	14.1	42.5	12.4	35.1	9.5	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	30.0	17.0	45.0	12.0	30.0	10.0	52.0
Max Q Clear Time (g_c+I1), s	9.5	14.8	10.1	15.4	8.4	13.7	6.3	31.5
Green Ext Time (p_c), s	0.1	2.3	0.2	5.9	0.1	2.7	0.0	11.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	811	1713	0	434	376
Future Volume (veh/h)	0	811	1713	0	434	376
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	0	1706	1706
Adj Flow Rate, veh/h	0	836	1766	0	447	388
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	1955	1955	0	606	541
Arrive On Green	0.00	0.56	0.56	0.00	0.37	0.37
Sat Flow, veh/h	0	3689	3689	0	1625	1450
Grp Volume(v), veh/h	0	836	1766	0	447	388
Grp Sat Flow(s),veh/h/ln	0	1752	1752	0	1625	1450
Q Serve(g_s), s	0.0	16.0	51.8	0.0	27.4	26.4
Cycle Q Clear(g_c), s	0.0	16.0	51.8	0.0	27.4	26.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1955	1955	0	606	541
V/C Ratio(X)	0.00	0.43	0.90	0.00	0.74	0.72
Avail Cap(c_a), veh/h	0	2097	2097	0	606	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.8	22.7	0.0	31.3	31.0
Incr Delay (d2), s/veh	0.0	0.1	5.7	0.0	7.8	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	26.3	0.0	13.6	11.8
LnGrp Delay(d), s/veh	0.0	15.0	28.5	0.0	39.1	38.9
LnGrp LOS		B	C		D	D
Approach Vol, veh/h		836	1766		835	
Approach Delay, s/veh		15.0	28.5		39.0	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				68.3		47.0		68.3
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				69.0		43.0		69.0
Max Q Clear Time (g_c+I1), s				18.0		29.4		53.8
Green Ext Time (p_c), s				6.3		2.6		10.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	812	339	136	1213	369	191	355	134	226	507	252
Future Volume (veh/h)	211	812	339	136	1213	369	191	355	134	226	507	252
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	222	855	357	143	1277	388	201	374	141	238	534	265
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	248	1489	619	171	1355	602	227	626	272	265	702	306
Arrive On Green	0.14	0.43	0.43	0.10	0.39	0.39	0.13	0.18	0.18	0.15	0.20	0.20
Sat Flow, veh/h	1740	3427	1425	1740	3471	1543	1740	3471	1510	1740	3471	1513
Grp Volume(v), veh/h	222	829	383	143	1277	388	201	374	141	238	534	265
Grp Sat Flow(s),veh/h/ln	1740	1663	1527	1740	1736	1543	1740	1736	1510	1740	1736	1513
Q Serve(g_s), s	14.9	22.3	22.5	9.6	42.1	24.3	13.5	11.8	10.0	16.0	17.2	20.1
Cycle Q Clear(g_c), s	14.9	22.3	22.5	9.6	42.1	24.3	13.5	11.8	10.0	16.0	17.2	20.1
Prop In Lane	1.00		0.93	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1445	664	171	1355	602	227	626	272	265	702	306
V/C Ratio(X)	0.90	0.57	0.58	0.84	0.94	0.64	0.89	0.60	0.52	0.90	0.76	0.87
Avail Cap(c_a), veh/h	249	1445	664	264	1374	611	234	626	272	293	702	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	25.3	25.3	52.6	34.9	29.5	50.8	44.7	44.0	49.4	44.7	45.8
Incr Delay (d2), s/veh	31.3	0.6	1.2	13.0	12.9	2.3	30.0	4.2	6.9	26.7	7.6	26.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	10.4	9.7	5.2	22.5	10.7	8.4	6.0	4.7	9.6	9.0	10.6
LnGrp Delay(d), s/veh	81.4	25.8	26.6	65.6	47.8	31.8	80.8	48.9	50.9	76.1	52.3	72.4
LnGrp LOS	F	C	C	E	D	C	F	D	D	E	D	E
Approach Vol, veh/h		1434			1808			716			1037	
Approach Delay, s/veh		34.6			45.8			58.2			62.9	
Approach LOS		C			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	25.4	15.7	55.6	19.5	28.0	20.9	50.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	20.0	18.0	46.0	16.0	24.0	17.0	47.0
Max Q Clear Time (g_c+I1), s	18.0	13.8	11.6	24.5	15.5	22.1	16.9	44.1
Green Ext Time (p_c), s	0.1	1.6	0.2	8.1	0.0	0.9	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	818	129	86	1053	236	103	487	78	253	865	114
Future Volume (veh/h)	139	818	129	86	1053	236	103	487	78	253	865	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.94	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	153	899	142	95	1157	259	113	535	86	278	951	125
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	1582	249	120	1339	300	238	1056	443	425	1286	545
Arrive On Green	0.10	0.36	0.36	0.07	0.33	0.33	0.06	0.30	0.30	0.13	0.37	0.37
Sat Flow, veh/h	1757	4376	688	1757	4110	920	1757	3505	1470	1757	3505	1484
Grp Volume(v), veh/h	153	689	352	95	945	471	113	535	86	278	951	125
Grp Sat Flow(s),veh/h/ln	1757	1679	1706	1757	1679	1672	1757	1752	1470	1757	1752	1484
Q Serve(g_s), s	9.6	18.4	18.6	6.0	29.5	29.5	4.9	14.1	4.9	11.7	26.3	6.5
Cycle Q Clear(g_c), s	9.6	18.4	18.6	6.0	29.5	29.5	4.9	14.1	4.9	11.7	26.3	6.5
Prop In Lane	1.00		0.40	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	1214	617	120	1094	545	238	1056	443	425	1286	545
V/C Ratio(X)	0.84	0.57	0.57	0.79	0.86	0.86	0.47	0.51	0.19	0.65	0.74	0.23
Avail Cap(c_a), veh/h	252	1262	641	204	1172	584	258	1056	443	518	1286	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	28.7	28.7	51.3	35.3	35.3	26.4	32.2	29.0	22.2	30.7	24.4
Incr Delay (d2), s/veh	16.2	0.6	1.1	11.2	6.6	12.2	1.5	1.7	1.0	2.2	3.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	8.6	8.9	3.2	14.7	15.4	2.5	7.0	2.1	5.9	13.4	2.8
LnGrp Delay(d), s/veh	65.4	29.2	29.8	62.5	41.9	47.5	27.9	33.9	29.9	24.4	34.5	25.4
LnGrp LOS	E	C	C	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1194			1511			734			1354	
Approach Delay, s/veh		34.0			45.0			32.5			31.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	37.6	11.6	44.4	10.7	45.0	15.6	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	29.0	13.0	42.0	8.0	41.0	16.0	39.0
Max Q Clear Time (g_c+I1), s	13.7	16.1	8.0	20.6	6.9	28.3	11.6	31.5
Green Ext Time (p_c), s	0.4	3.0	0.1	6.8	0.0	5.4	0.1	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	846	139	25	1196	256	61	161	8	302	340	118
Future Volume (veh/h)	160	846	139	25	1196	256	61	161	8	302	340	118
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	891	146	26	1259	269	64	169	8	318	358	124
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	1945	317	35	1466	313	397	1479	70	546	1523	671
Arrive On Green	0.11	0.44	0.44	0.02	0.35	0.35	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1774	4397	717	1774	4186	894	909	3439	162	1201	3539	1560
Grp Volume(v), veh/h	168	686	351	26	1020	508	64	86	91	318	358	124
Grp Sat Flow(s),veh/h/ln	1774	1695	1724	1774	1695	1690	909	1770	1831	1201	1770	1560
Q Serve(g_s), s	10.4	15.8	15.9	1.6	31.2	31.2	5.4	3.3	3.3	24.1	7.2	5.5
Cycle Q Clear(g_c), s	10.4	15.8	15.9	1.6	31.2	31.2	12.5	3.3	3.3	27.4	7.2	5.5
Prop In Lane	1.00		0.42	1.00		0.53	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	199	1500	763	35	1188	592	397	761	788	546	1523	671
V/C Ratio(X)	0.85	0.46	0.46	0.74	0.86	0.86	0.16	0.11	0.11	0.58	0.24	0.18
Avail Cap(c_a), veh/h	286	1641	834	95	1276	636	397	761	788	546	1523	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	21.7	21.8	54.4	33.7	33.7	24.1	19.0	19.1	27.3	20.1	19.7
Incr Delay (d2), s/veh	14.5	0.2	0.4	25.7	5.8	10.8	0.9	0.3	0.3	4.5	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	7.4	7.6	1.0	15.5	16.3	1.4	1.6	1.7	8.6	3.6	2.5
LnGrp Delay(d), s/veh	63.1	22.0	22.2	80.1	39.5	44.5	25.0	19.3	19.3	31.8	20.5	20.3
LnGrp LOS	E	C	C	F	D	D	C	B	B	C	C	C
Approach Vol, veh/h		1205			1554			241			800	
Approach Delay, s/veh		27.8			41.8			20.8			24.9	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	6.2	53.4		52.0	16.5	43.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	6.0	54.0		48.0	18.0	42.0
Max Q Clear Time (g_c+I1), s		14.5	3.6	17.9		29.4	12.4	33.2
Green Ext Time (p_c), s		1.3	0.0	7.8		3.7	0.2	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	76	908	127	120	1166	106	96	312	33	99	602	214
Future Volume (vph)	76	908	127	120	1166	106	96	312	33	99	602	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5029		1787	5060		1785	3574	1568	1781	3574	1573
Flt Permitted	0.95	1.00		0.95	1.00		0.31	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)	1787	5029		1787	5060		580	3574	1568	962	3574	1573
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	81	966	135	128	1240	113	102	332	35	105	640	228
RTOR Reduction (vph)	0	15	0	0	9	0	0	0	21	0	0	134
Lane Group Flow (vph)	81	1086	0	128	1344	0	102	332	14	105	640	94
Confl. Peds. (#/hr)	6		3	3		6	2		3	3		2
Confl. Bikes (#/hr)			3			2			2			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7			7				2			2	
Permitted Phases		8			8		2		2	2		2
Actuated Green, G (s)	13.3	42.3		13.3	42.3		47.1	47.1	47.1	47.1	47.1	47.1
Effective Green, g (s)	13.3	42.3		13.3	42.3		47.1	47.1	47.1	47.1	47.1	47.1
Actuated g/C Ratio	0.12	0.37		0.12	0.37		0.41	0.41	0.41	0.41	0.41	0.41
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	1854		207	1866		238	1467	643	395	1467	645
v/s Ratio Prot	0.05			c0.07				0.09			c0.18	
v/s Ratio Perm		0.22			c0.27		0.18		0.01	0.11		0.06
v/c Ratio	0.39	0.59		0.62	0.72		0.43	0.23	0.02	0.27	0.44	0.15
Uniform Delay, d1	47.0	29.1		48.3	31.1		24.2	22.0	20.1	22.4	24.3	21.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.5		5.4	1.4		5.6	0.4	0.1	1.6	0.9	0.5
Delay (s)	48.2	29.6		53.7	32.5		29.7	22.3	20.2	24.0	25.2	21.7
Level of Service	D	C		D	C		C	C	C	C	C	C
Approach Delay (s/veh)		30.9			34.3			23.8			24.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	27.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	207	375	0	936	608	0
Future Vol, veh/h	207	375	0	936	608	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	233	421	0	1052	683	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1209	342	-	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	-	-
Pot Cap-1 Maneuver	~ 171	645	0	-	-	0
Stage 1	455	-	0	-	-	0
Stage 2	549	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 171	645	-	-	-	-
Mov Cap-2 Maneuver	~ 171	-	-	-	-	-
Stage 1	455	-	-	-	-	-
Stage 2	549	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	100.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	171	645	-
HCM Lane V/C Ratio	-	1.36	0.653	-
HCM Control Delay (s/veh)	-	246.6	20.5	-
HCM Lane LOS	-	F	C	-
HCM 95th %tile Q(veh)	-	14	4.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	4	14	284	1	222	9	462	121	223	816	5
Future Volume (veh/h)	10	4	14	284	1	222	9	462	121	223	816	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	12	5	17	351	1	274	11	570	149	275	1007	6
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	78	197	457	520	439	342	2253	991	482	2253	1002
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	422	278	700	1362	1845	1557	549	3505	1543	723	3505	1559
Grp Volume(v), veh/h	34	0	0	351	1	274	11	570	149	275	1007	6
Grp Sat Flow(s),veh/h/ln	1401	0	0	1362	1845	1557	549	1752	1543	723	1752	1559
Q Serve(g_s), s	0.0	0.0	0.0	24.2	0.0	16.2	1.1	7.3	4.0	27.7	15.2	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.0	25.8	0.0	16.2	16.3	7.3	4.0	35.1	15.2	0.1
Prop In Lane	0.35		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	441	0	0	457	520	439	342	2253	991	482	2253	1002
V/C Ratio(X)	0.08	0.00	0.00	0.77	0.00	0.62	0.03	0.25	0.15	0.57	0.45	0.01
Avail Cap(c_a), veh/h	624	0	0	640	767	647	342	2253	991	482	2253	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	0.0	36.4	27.3	33.1	13.6	8.1	7.5	15.5	9.5	6.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	3.7	0.0	1.5	0.2	0.3	0.3	4.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	10.3	0.0	7.2	0.2	3.6	1.8	6.1	7.5	0.1
LnGrp Delay(d), s/veh	27.9	0.0	0.0	40.0	27.3	34.6	13.7	8.3	7.8	20.4	10.1	6.8
LnGrp LOS	C			D	C	C	B	A	A	C	B	A
Approach Vol, veh/h		34			626			730			1288	
Approach Delay, s/veh		27.9			37.6			8.3			12.3	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		33.8		72.0		33.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		44.0		68.0		44.0
Max Q Clear Time (g_c+I1), s		18.3		3.6		37.1		27.8
Green Ext Time (p_c), s		5.0		0.2		11.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.1

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	370	29	250	814	57	144
Future Vol, veh/h	370	29	250	814	57	144
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	425	33	287	936	66	166

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	458	0	1484	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	1042	-
Critical Hdwy	-	-	4.12	-	6.82	-
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	-
Pot Cap-1 Maneuver	-	-	1106	-	117	0
Stage 1	-	-	-	-	618	0
Stage 2	-	-	-	-	303	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1106	-	87	-
Mov Cap-2 Maneuver	-	-	-	-	87	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	225	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	2.2	121.6
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	87	-	1106	-
HCM Lane V/C Ratio	-	-	0.753	-	0.26	-
HCM Control Delay (s/veh)	-	-	121.6	0	9.4	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	3.8	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	1242	171	121	1370	141	150	204	118	167	241	28
Future Volume (veh/h)	79	1242	171	121	1370	141	150	204	118	167	241	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	86	1350	186	132	1489	153	163	222	128	182	262	30
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	110	1761	243	164	1972	202	198	770	338	219	811	361
Arrive On Green	0.06	0.39	0.39	0.09	0.42	0.42	0.11	0.22	0.22	0.12	0.23	0.23
Sat Flow, veh/h	1757	4466	615	1757	4640	477	1757	3505	1540	1757	3505	1562
Grp Volume(v), veh/h	86	1015	521	132	1077	565	163	222	128	182	262	30
Grp Sat Flow(s),veh/h/ln	1757	1679	1725	1757	1679	1760	1757	1752	1540	1757	1752	1562
Q Serve(g_s), s	4.6	25.0	25.0	7.0	25.8	25.9	8.6	5.0	6.7	9.6	5.9	1.4
Cycle Q Clear(g_c), s	4.6	25.0	25.0	7.0	25.8	25.9	8.6	5.0	6.7	9.6	5.9	1.4
Prop In Lane	1.00		0.36	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	1323	680	164	1426	748	198	770	338	219	811	361
V/C Ratio(X)	0.78	0.77	0.77	0.80	0.76	0.76	0.82	0.29	0.38	0.83	0.32	0.08
Avail Cap(c_a), veh/h	222	1659	852	296	1800	944	351	770	338	388	811	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	25.0	25.0	42.3	23.2	23.2	41.3	30.9	31.6	40.7	30.4	28.6
Incr Delay (d2), s/veh	11.2	1.7	3.3	8.8	1.4	2.7	8.2	0.9	3.2	8.0	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	11.9	12.5	3.8	12.2	13.1	4.6	2.5	3.2	5.1	3.0	0.7
LnGrp Delay(d), s/veh	55.1	26.7	28.3	51.1	24.6	25.9	49.5	31.9	34.8	48.7	31.4	29.1
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1622			1774			513			474	
Approach Delay, s/veh		28.7			27.0			38.2			37.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	24.9	12.9	41.5	14.7	26.0	10.0	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	20.0	16.0	47.0	19.0	22.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	11.6	8.7	9.0	27.0	10.6	7.9	6.6	27.9
Green Ext Time (p_c), s	0.3	1.3	0.2	10.4	0.2	1.3	0.1	12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	228	151	52	330	116	53	361	59	138	739	82
Future Volume (veh/h)	56	228	151	52	330	116	53	361	59	138	739	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	57	233	154	53	337	118	54	368	60	141	754	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	73	363	230	68	446	154	428	1915	836	643	1999	881
Arrive On Green	0.04	0.18	0.18	0.04	0.18	0.18	0.03	0.55	0.55	0.06	0.58	0.58
Sat Flow, veh/h	1740	2027	1282	1740	2534	873	1740	3471	1515	1740	3471	1530
Grp Volume(v), veh/h	57	198	189	53	229	226	54	368	60	141	754	84
Grp Sat Flow(s),veh/h/ln	1740	1736	1574	1740	1736	1671	1740	1736	1515	1740	1736	1530
Q Serve(g_s), s	3.0	9.7	10.3	2.8	11.5	11.9	1.2	4.9	1.7	3.2	10.8	2.3
Cycle Q Clear(g_c), s	3.0	9.7	10.3	2.8	11.5	11.9	1.2	4.9	1.7	3.2	10.8	2.3
Prop In Lane	1.00		0.81	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	311	282	68	305	294	428	1915	836	643	1999	881
V/C Ratio(X)	0.78	0.64	0.67	0.78	0.75	0.77	0.13	0.19	0.07	0.22	0.38	0.10
Avail Cap(c_a), veh/h	246	584	530	246	584	563	504	1915	836	791	1999	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	35.0	35.3	43.9	36.0	36.1	8.7	10.3	9.6	7.8	10.6	8.8
Incr Delay (d2), s/veh	16.2	2.2	2.8	17.6	3.7	4.2	0.1	0.2	0.2	0.2	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.9	4.7	1.7	5.8	5.8	0.6	2.4	0.7	1.5	5.3	1.0
LnGrp Delay(d), s/veh	59.9	37.2	38.0	61.4	39.7	40.4	8.8	10.6	9.8	7.9	11.1	9.0
LnGrp LOS	E	D	D	E	D	D	A	B	A	A	B	A
Approach Vol, veh/h		444			508			482			979	
Approach Delay, s/veh		40.5			42.3			10.3			10.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	54.8	7.6	20.5	7.0	57.0	7.9	20.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	47.0	13.0	31.0	7.0	53.0	13.0	31.0
Max Q Clear Time (g_c+I1), s	5.2	6.9	4.8	12.3	3.2	12.8	5.0	13.9
Green Ext Time (p_c), s	0.2	2.9	0.0	2.0	0.0	6.6	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	29	305	85	154	490	157	80	509	57	212	770	105
Future Volume (veh/h)	29	305	85	154	490	157	80	509	57	212	770	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	33	343	96	173	551	176	90	572	64	238	865	118
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	134	679	568	273	679	562	299	1969	858	435	1969	860
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	718	1845	1543	937	1845	1528	565	3505	1528	781	3505	1530
Grp Volume(v), veh/h	33	343	96	173	551	176	90	572	64	238	865	118
Grp Sat Flow(s),veh/h/ln	718	1845	1543	937	1845	1528	565	1752	1528	781	1752	1530
Q Serve(g_s), s	4.9	16.4	4.8	20.0	30.7	9.4	12.6	9.7	2.2	26.2	16.4	4.2
Cycle Q Clear(g_c), s	35.6	16.4	4.8	36.5	30.7	9.4	28.9	9.7	2.2	35.9	16.4	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	134	679	568	273	679	562	299	1969	858	435	1969	860
V/C Ratio(X)	0.25	0.51	0.17	0.63	0.81	0.31	0.30	0.29	0.07	0.55	0.44	0.14
Avail Cap(c_a), veh/h	172	777	650	323	777	644	299	1969	858	435	1969	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	28.0	24.3	42.1	32.4	25.7	22.9	13.1	11.4	22.5	14.5	11.9
Incr Delay (d2), s/veh	0.9	0.6	0.1	3.1	5.8	0.3	2.6	0.4	0.2	4.9	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.5	2.0	5.4	16.7	4.0	2.2	4.8	1.0	6.2	8.1	1.8
LnGrp Delay(d), s/veh	49.4	28.5	24.4	45.2	38.3	26.0	25.5	13.4	11.6	27.4	15.2	12.2
LnGrp LOS	D	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		472			900			726			1221	
Approach Delay, s/veh		29.2			37.2			14.8			17.3	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		68.0		45.9		68.0		45.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		64.0		48.0		64.0		48.0
Max Q Clear Time (g_c+I1), s		30.9		37.6		37.9		38.5
Green Ext Time (p_c), s		5.2		1.8		8.6		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	6.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	7	345	264	424	761	27
Future Vol, veh/h	7	345	264	424	761	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	388	297	476	855	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1687	428	885	0	-	0
Stage 1	855	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	85	575	760	-	-	-
Stage 1	377	-	-	-	-	-
Stage 2	388	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	52	575	760	-	-	-
Mov Cap-2 Maneuver	52	-	-	-	-	-
Stage 1	230	-	-	-	-	-
Stage 2	388	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	24.5	4.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	760	-	52	575	-	-
HCM Lane V/C Ratio	0.39	-	0.151	0.674	-	-
HCM Control Delay (s/veh)	12.7	-	86.2	23.2	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	1.9	-	0.5	5.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	537	215	233	999	41	248	636	171	66	948	63
Future Volume (veh/h)	36	537	215	233	999	41	248	636	171	66	948	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	37	554	222	240	1030	42	256	656	176	68	977	65
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	628	244	270	1507	61	286	1675	736	87	1277	560
Arrive On Green	0.03	0.18	0.18	0.15	0.30	0.30	0.16	0.48	0.48	0.05	0.36	0.36
Sat Flow, veh/h	1757	3554	1382	1757	4959	202	1757	3505	1540	1757	3505	1537
Grp Volume(v), veh/h	37	522	254	240	697	375	256	656	176	68	977	65
Grp Sat Flow(s),veh/h/ln	1757	1679	1578	1757	1679	1804	1757	1752	1540	1757	1752	1537
Q Serve(g_s), s	2.4	17.1	17.7	15.1	20.5	20.6	16.1	13.5	7.6	4.3	27.6	3.2
Cycle Q Clear(g_c), s	2.4	17.1	17.7	15.1	20.5	20.6	16.1	13.5	7.6	4.3	27.6	3.2
Prop In Lane	1.00		0.88	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	47	593	279	270	1020	548	286	1675	736	87	1277	560
V/C Ratio(X)	0.79	0.88	0.91	0.89	0.68	0.68	0.89	0.39	0.24	0.78	0.76	0.12
Avail Cap(c_a), veh/h	94	597	281	328	1045	561	344	1675	736	156	1277	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	45.2	45.4	46.7	34.4	34.4	46.1	18.9	17.3	52.8	31.5	23.7
Incr Delay (d2), s/veh	25.1	14.3	31.2	21.5	1.8	3.3	21.9	0.7	0.8	13.9	4.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	9.1	10.2	8.9	9.7	10.7	9.6	6.7	3.4	2.4	14.1	1.4
LnGrp Delay(d), s/veh	79.5	59.4	76.7	68.2	36.2	37.8	68.0	19.6	18.1	66.7	35.9	24.1
LnGrp LOS	E	E	E	E	D	D	E	B	B	E	D	C
Approach Vol, veh/h		813			1312			1088			1110	
Approach Delay, s/veh		65.7			42.5			30.7			37.1	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	57.7	21.3	23.9	22.3	45.0	7.0	38.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	53.0	21.0	20.0	22.0	41.0	6.0	35.0
Max Q Clear Time (g_c+I1), s	6.3	15.5	17.1	19.7	18.1	29.6	4.4	22.6
Green Ext Time (p_c), s	0.0	5.4	0.2	0.1	0.3	4.9	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	71	178	83	109	61	144	932	40	27	1222	82
Future Volume (veh/h)	82	71	178	83	109	61	144	932	40	27	1222	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	89	77	193	90	118	66	157	1013	43	29	1328	89
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	27	417	44	42	417	186	2137	932	37	1840	799
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.11	0.61	0.61	0.02	0.52	0.52
Sat Flow, veh/h	0	103	1564	0	156	1564	1757	3505	1529	1757	3505	1522
Grp Volume(v), veh/h	166	0	193	208	0	66	157	1013	43	29	1328	89
Grp Sat Flow(s),veh/h/ln	103	0	1564	156	0	1564	1757	1752	1529	1757	1752	1522
Q Serve(g_s), s	0.0	0.0	12.0	0.0	0.0	3.8	10.2	18.5	1.3	1.9	33.7	3.4
Cycle Q Clear(g_c), s	31.0	0.0	12.0	31.0	0.0	3.8	10.2	18.5	1.3	1.9	33.7	3.4
Prop In Lane	0.54		1.00	0.43		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	417	86	0	417	186	2137	932	37	1840	799
V/C Ratio(X)	2.22	0.00	0.46	2.42	0.00	0.16	0.84	0.47	0.05	0.79	0.72	0.11
Avail Cap(c_a), veh/h	75	0	417	86	0	417	272	2137	932	91	1840	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	0.0	35.8	43.8	0.0	32.7	51.1	12.5	9.1	56.7	21.2	14.0
Incr Delay (d2), s/veh	588.0	0.0	0.8	674.4	0.0	0.2	14.7	0.8	0.1	30.1	2.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.6	0.0	5.3	18.8	0.0	1.6	5.7	9.1	0.6	1.2	16.9	1.5
LnGrp Delay(d), s/veh	635.2	0.0	36.6	718.2	0.0	32.9	65.9	13.2	9.2	86.9	23.6	14.2
LnGrp LOS	F		D	F		C	E	B	A	F	C	B
Approach Vol, veh/h		359			274			1213			1446	
Approach Delay, s/veh		313.3			553.1			19.9			24.3	
Approach LOS		F			F			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	75.0		35.0	16.3	65.1		35.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	71.0		31.0	18.0	59.0		31.0
Max Q Clear Time (g_c+I1), s	3.9	20.5		33.0	12.2	35.7		33.0
Green Ext Time (p_c), s	0.0	8.4		0.0	0.2	10.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	98.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	741	72	195	904	171	168	856	47	97	1299	84
Future Volume (veh/h)	91	741	72	195	904	171	168	856	47	97	1299	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	96	780	76	205	952	180	177	901	49	102	1367	88
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	102	789	343	220	1022	446	190	1559	683	126	1431	624
Arrive On Green	0.06	0.22	0.22	0.13	0.29	0.29	0.11	0.44	0.44	0.07	0.41	0.41
Sat Flow, veh/h	1757	3505	1526	1757	3505	1530	1757	3505	1535	1757	3505	1529
Grp Volume(v), veh/h	96	780	76	205	952	180	177	901	49	102	1367	88
Grp Sat Flow(s),veh/h/ln	1757	1752	1526	1757	1752	1530	1757	1752	1535	1757	1752	1529
Q Serve(g_s), s	6.5	26.6	4.9	13.9	31.7	11.3	12.0	23.1	2.2	6.9	45.4	4.3
Cycle Q Clear(g_c), s	6.5	26.6	4.9	13.9	31.7	11.3	12.0	23.1	2.2	6.9	45.4	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	102	789	343	220	1022	446	190	1559	683	126	1431	624
V/C Ratio(X)	0.94	0.99	0.22	0.93	0.93	0.40	0.93	0.58	0.07	0.81	0.96	0.14
Avail Cap(c_a), veh/h	102	789	343	220	1022	446	190	1559	683	190	1431	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	46.4	37.9	52.0	41.3	34.1	53.0	24.9	19.1	54.9	34.4	22.3
Incr Delay (d2), s/veh	68.7	29.2	0.3	42.6	14.5	0.6	45.7	1.6	0.2	13.9	15.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	16.1	2.1	9.3	17.4	4.9	8.2	11.5	1.0	3.8	24.9	1.9
LnGrp Delay(d), s/veh	124.9	75.6	38.2	94.6	55.8	34.7	98.7	26.5	19.3	68.8	49.7	22.8
LnGrp LOS	F	E	D	F	E	C	F	C	B	E	D	C
Approach Vol, veh/h		952			1337			1127			1557	
Approach Delay, s/veh		77.6			58.9			37.5			49.4	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	57.4	19.0	31.0	17.0	53.0	11.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	49.0	15.0	27.0	13.0	49.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	8.9	25.1	15.9	28.6	14.0	47.4	8.5	33.7
Green Ext Time (p_c), s	0.1	6.3	0.0	0.0	0.0	1.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	63	96	134	127	151	85	889	44	97	1463	16
Future Volume (veh/h)	4	63	96	134	127	151	85	889	44	97	1463	16
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	4	64	97	135	128	153	86	898	0	98	1478	16
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	7	150	135	168	311	278	110	1997	893	125	2968	32
Arrive On Green	0.00	0.09	0.09	0.10	0.18	0.18	0.06	0.58	0.00	0.07	0.58	0.58
Sat Flow, veh/h	1740	1736	1553	1740	1736	1553	1740	3471	1553	1740	5086	55
Grp Volume(v), veh/h	4	64	97	135	128	153	86	898	0	98	966	528
Grp Sat Flow(s),veh/h/ln	1740	1736	1553	1740	1736	1553	1740	1736	1553	1740	1663	1816
Q Serve(g_s), s	0.2	3.3	5.7	7.2	6.2	8.5	4.6	14.0	0.0	5.2	16.1	16.1
Cycle Q Clear(g_c), s	0.2	3.3	5.7	7.2	6.2	8.5	4.6	14.0	0.0	5.2	16.1	16.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	7	150	135	168	311	278	110	1997	893	125	1941	1060
V/C Ratio(X)	0.54	0.43	0.72	0.80	0.41	0.55	0.78	0.45	0.00	0.78	0.50	0.50
Avail Cap(c_a), veh/h	74	295	264	351	571	511	258	1997	893	277	1941	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	40.8	41.9	41.7	34.3	35.2	43.5	11.5	0.0	43.0	11.5	11.5
Incr Delay (d2), s/veh	50.8	1.9	7.1	8.6	0.9	1.7	11.2	0.7	0.0	10.2	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	2.7	3.9	3.0	3.7	2.5	6.8	0.0	2.9	7.5	8.4
LnGrp Delay(d), s/veh	97.6	42.7	49.0	50.3	35.2	36.9	54.7	12.2	0.0	53.3	12.4	13.2
LnGrp LOS	F	D	D	D	D	D	D	B		D	B	B
Approach Vol, veh/h		165			416			984			1592	
Approach Delay, s/veh		47.7			40.7			15.9			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	58.2	13.1	12.2	10.0	59.0	4.4	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	54.0	19.0	16.0	14.0	55.0	4.0	31.0
Max Q Clear Time (g_c+I1), s	7.2	16.0	9.2	7.7	6.6	18.1	2.2	10.5
Green Ext Time (p_c), s	0.1	6.8	0.2	0.4	0.1	12.4	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1	72	13	2	4	98	925	30	15	1516	44
Future Volume (veh/h)	7	1	72	13	2	4	98	925	30	15	1516	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	8	1	78	14	2	4	107	1005	33	16	1648	48
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	77	6	166	79	7	166	133	2629	1150	24	3457	101
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.08	0.76	0.76	0.01	0.70	0.70
Sat Flow, veh/h	121	55	1534	140	65	1534	1723	3438	1504	1723	4930	144
Grp Volume(v), veh/h	9	0	78	16	0	4	107	1005	33	16	1101	595
Grp Sat Flow(s),veh/h/ln	176	0	1534	205	0	1534	1723	1719	1504	1723	1647	1780
Q Serve(g_s), s	0.4	0.0	5.1	0.9	0.0	0.2	6.5	10.3	0.6	1.0	15.9	15.9
Cycle Q Clear(g_c), s	10.7	0.0	5.1	11.0	0.0	0.2	6.5	10.3	0.6	1.0	15.9	15.9
Prop In Lane	0.89		1.00	0.87		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	83	0	166	86	0	166	133	2629	1150	24	2309	1248
V/C Ratio(X)	0.11	0.00	0.47	0.19	0.00	0.02	0.80	0.38	0.03	0.66	0.48	0.48
Avail Cap(c_a), veh/h	196	0	290	193	0	290	325	2629	1150	114	2309	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	0.0	44.4	48.9	0.0	42.2	48.1	4.1	3.0	52.0	7.1	7.1
Incr Delay (d2), s/veh	0.6	0.0	2.1	1.0	0.0	0.1	10.6	0.4	0.0	26.5	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.3	0.5	0.0	0.1	3.5	4.9	0.2	0.6	7.4	8.2
LnGrp Delay(d), s/veh	47.7	0.0	46.5	49.9	0.0	42.3	58.7	4.6	3.0	78.5	7.8	8.4
LnGrp LOS	D		D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		87			20			1145			1712	
Approach Delay, s/veh		46.6			48.4			9.6			8.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	85.0		16.0	12.2	78.3		16.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	81.0		20.0	20.0	68.0		20.0
Max Q Clear Time (g_c+I1), s	3.0	12.3		12.7	8.5	17.9		13.0
Green Ext Time (p_c), s	0.0	8.4		0.1	0.2	16.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	724	105	149	1097	113	87
Future Volume (veh/h)	724	105	149	1097	113	87
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1900	1827	1827	1827	1827
Adj Flow Rate, veh/h	778	113	160	1180	122	94
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1224	176	207	2285	733	655
Arrive On Green	0.28	0.28	0.12	0.46	0.42	0.42
Sat Flow, veh/h	4552	632	1740	5152	1740	1553
Grp Volume(v), veh/h	588	303	160	1180	122	94
Grp Sat Flow(s),veh/h/ln	1663	1695	1740	1663	1740	1553
Q Serve(g_s), s	10.3	10.4	5.9	11.2	2.9	2.5
Cycle Q Clear(g_c), s	10.3	10.4	5.9	11.2	2.9	2.5
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	928	473	207	2285	733	655
V/C Ratio(X)	0.63	0.64	0.77	0.52	0.17	0.14
Avail Cap(c_a), veh/h	2352	1199	864	6307	733	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	21.0	28.4	12.8	12.0	11.8
Incr Delay (d2), s/veh	0.7	1.5	6.1	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	5.1	3.2	5.1	1.5	1.1
LnGrp Delay(d), s/veh	21.7	22.5	34.5	13.0	12.4	12.3
LnGrp LOS	C	C	C	B	B	B
Approach Vol, veh/h	891			1340	216	
Approach Delay, s/veh	22.0			15.5	12.4	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		32.0	11.9	22.5				34.4
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		28.0	33.0	47.0				84.0
Max Q Clear Time (g_c+I1), s		4.9	7.9	12.4				13.2
Green Ext Time (p_c), s		0.6	0.4	6.1				10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	165	25	18	159	80	24	108	74	87	126	21
Future Vol, veh/h	11	165	25	18	159	80	24	108	74	87	126	21
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	13	194	29	21	187	94	28	127	87	102	148	25
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	15.6	19	12.1	13
HCM LOS	C	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	7%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	87%	62%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	13%	31%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	108	74	11	190	257	87	126	21
LT Vol	24	0	0	11	0	18	87	0	0
Through Vol	0	108	0	0	165	159	0	126	0
RT Vol	0	0	74	0	25	80	0	0	21
Lane Flow Rate	28	127	87	13	224	302	102	148	25
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.063	0.267	0.165	0.028	0.451	0.583	0.226	0.306	0.046
Departure Headway (Hd)	8.076	7.561	6.84	7.866	7.267	6.945	7.958	7.443	6.723
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	443	475	523	455	496	520	451	483	532
Service Time	5.829	5.313	4.592	5.616	5.016	4.688	5.707	5.193	4.472
HCM Lane V/C Ratio	0.063	0.267	0.166	0.029	0.452	0.581	0.226	0.306	0.047
HCM Control Delay, s/veh	11.4	13.1	10.9	10.8	15.9	19	13	13.5	9.8
HCM Lane LOS	B	B	B	B	C	C	B	B	A
HCM 95th-tile Q	0.2	1.1	0.6	0.1	2.3	3.7	0.9	1.3	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	841	98	33	1083	79	29	24	11	64	39	66
Future Volume (veh/h)	85	841	98	33	1083	79	29	24	11	64	39	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	90	895	104	35	1152	84	31	26	12	68	41	70
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	117	1666	729	48	1528	670	73	40	533	77	29	526
Arrive On Green	0.07	0.48	0.48	0.03	0.44	0.44	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1757	3505	1534	1757	3505	1535	0	119	1565	0	86	1545
Grp Volume(v), veh/h	90	895	104	35	1152	84	57	0	12	109	0	70
Grp Sat Flow(s),veh/h/ln	1757	1752	1534	1757	1752	1535	119	0	1565	86	0	1545
Q Serve(g_s), s	3.9	13.8	2.9	1.5	21.1	2.5	0.0	0.0	0.4	0.0	0.0	2.4
Cycle Q Clear(g_c), s	3.9	13.8	2.9	1.5	21.1	2.5	26.0	0.0	0.4	26.0	0.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	0.54		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	117	1666	729	48	1528	670	113	0	533	106	0	526
V/C Ratio(X)	0.77	0.54	0.14	0.73	0.75	0.13	0.50	0.00	0.02	1.03	0.00	0.13
Avail Cap(c_a), veh/h	368	3395	1486	184	3028	1326	113	0	533	106	0	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.1	14.1	11.3	36.9	18.1	12.9	21.0	0.0	16.8	31.2	0.0	17.4
Incr Delay (d2), s/veh	10.1	0.3	0.1	18.6	0.8	0.1	15.1	0.0	0.1	96.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.7	1.2	1.0	10.2	1.1	1.7	0.0	0.2	5.0	0.0	1.1
LnGrp Delay(d), s/veh	45.2	14.4	11.4	55.4	18.9	12.9	36.1	0.0	16.8	128.1	0.0	17.9
LnGrp LOS	D	B	B	E	B	B	D		B	F		B
Approach Vol, veh/h		1089			1271			69			179	
Approach Delay, s/veh		16.7			19.5			32.8			85.0	
Approach LOS		B			B			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.1	40.3		30.0	9.1	37.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	8.0	74.0		26.0	16.0	66.0
Max Q Clear Time (g_c+I1), s		28.0	3.5	15.8		28.0	5.9	23.1
Green Ext Time (p_c), s		0.0	0.0	7.4		0.0	0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	2	3	182	0	134	12	1014	126	88	1115	8
Future Volume (veh/h)	5	2	3	182	0	134	12	1014	126	88	1115	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	6	2	3	202	0	149	13	1127	140	98	1239	9
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	129	46	46	308	0	291	21	2175	952	124	2381	1041
Arrive On Green	0.19	0.19	0.19	0.19	0.00	0.19	0.01	0.63	0.63	0.07	0.69	0.69
Sat Flow, veh/h	406	242	243	1377	0	1550	1740	3471	1518	1740	3471	1518
Grp Volume(v), veh/h	11	0	0	202	0	149	13	1127	140	98	1239	9
Grp Sat Flow(s),veh/h/ln	891	0	0	1377	0	1550	1740	1736	1518	1740	1736	1518
Q Serve(g_s), s	0.1	0.0	0.0	7.3	0.0	9.1	0.8	18.8	4.0	5.8	18.3	0.2
Cycle Q Clear(g_c), s	9.1	0.0	0.0	16.4	0.0	9.1	0.8	18.8	4.0	5.8	18.3	0.2
Prop In Lane	0.55		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	0	0	308	0	291	21	2175	952	124	2381	1041
V/C Ratio(X)	0.05	0.00	0.00	0.66	0.00	0.51	0.62	0.52	0.15	0.79	0.52	0.01
Avail Cap(c_a), veh/h	381	0	0	469	0	473	66	2175	952	249	2381	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	0.0	41.6	0.0	38.3	51.6	10.8	8.1	48.0	8.1	5.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.4	0.0	1.4	26.4	0.9	0.3	10.7	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	5.9	0.0	4.0	0.5	9.2	1.8	3.2	8.9	0.1
LnGrp Delay(d), s/veh	35.2	0.0	0.0	44.0	0.0	39.7	78.1	11.7	8.4	58.7	8.9	5.2
LnGrp LOS	D			D		D	E	B	A	E	A	A
Approach Vol, veh/h		11			351			1280			1346	
Approach Delay, s/veh		35.2			42.2			12.0			12.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.5	69.8		23.7	5.3	76.0		23.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	15.0	61.0		32.0	4.0	72.0		32.0
Max Q Clear Time (g_c+I1), s	7.8	20.8		11.1	2.8	20.3		18.4
Green Ext Time (p_c), s	0.1	10.1		0.0	0.0	11.3		1.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.9
HCM 2010 LOS		B

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	56	37	497	42	6	1221	77	0	0	5	37	115
Future Volume (vph)	56	37	497	42	6	1221	77	0	0	5	37	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%		15%				0%
Total Lost time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Lane Util. Factor		1.00	0.91		1.00	0.91					1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Frt		1.00	0.99		1.00	0.99					1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00					0.95	1.00
Satd. Flow (prot)		1787	5068		1787	5090					1787	1881
Flt Permitted		0.95	1.00		0.42	1.00					0.53	1.00
Satd. Flow (perm)		1787	5068		796	5090					1005	1881
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	60	40	534	45	6	1313	83	0	0	5	40	124
RTOR Reduction (vph)	0	0	6	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	100	573	0	6	1396	0	0	0	0	45	124
Confl. Peds. (#/hr)								2	3			
Confl. Bikes (#/hr)				1								
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Perm	Perm	Perm	NA
Protected Phases	7	7	4		3	8		9				6
Permitted Phases					8				10	6	6	
Actuated Green, G (s)		7.0	40.2		34.8	34.0					23.0	23.0
Effective Green, g (s)		7.0	40.2		34.8	34.0					23.0	23.0
Actuated g/C Ratio		0.09	0.53		0.46	0.45					0.30	0.30
Clearance Time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0					3.0	3.0
Lane Grp Cap (vph)		164	2680		374	2277					304	569
v/s Ratio Prot		c0.06	0.11		0.00	c0.27						0.07
v/s Ratio Perm					0.01						0.04	
v/c Ratio		0.61	0.21		0.02	0.61					0.15	0.22
Uniform Delay, d1		33.2	9.5		11.2	16.0					19.3	19.8
Progression Factor		1.00	1.00		1.00	1.00					1.00	1.00
Incremental Delay, d2		6.3	0.0		0.0	0.5					0.2	0.2
Delay (s)		39.5	9.5		11.2	16.5					19.6	20.0
Level of Service		D	A		B	B					B	B
Approach Delay (s/veh)			14.0			16.5		0.0				19.5
Approach LOS			B			B		A				B

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	76.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	225	1563	43	9	2427	142	84	11	241	80	41	12
Future Volume (veh/h)	225	1563	43	9	2427	142	84	11	241	80	41	12
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	245	1699	47	10	2638	154	91	12	262	87	45	13
Adj No. of Lanes	2	3	0	1	3	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	303	3589	99	17	3191	989	278	340	285	256	340	285
Arrive On Green	0.09	0.71	0.71	0.01	0.63	0.63	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	3442	5083	141	1774	5085	1576	1338	1863	1560	1100	1863	1558
Grp Volume(v), veh/h	245	1133	613	10	2638	154	91	12	262	87	45	13
Grp Sat Flow(s),veh/h/ln	1721	1695	1834	1774	1695	1576	1338	1863	1560	1100	1863	1558
Q Serve(g_s), s	8.2	17.4	17.4	0.7	47.3	4.8	7.2	0.6	19.5	8.3	2.4	0.8
Cycle Q Clear(g_c), s	8.2	17.4	17.4	0.7	47.3	4.8	9.6	0.6	19.5	9.0	2.4	0.8
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	303	2394	1295	17	3191	989	278	340	285	256	340	285
V/C Ratio(X)	0.81	0.47	0.47	0.59	0.83	0.16	0.33	0.04	0.92	0.34	0.13	0.05
Avail Cap(c_a), veh/h	350	2394	1295	60	3191	989	284	348	291	260	348	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	7.6	7.6	58.2	17.0	9.1	44.4	39.6	47.3	43.3	40.4	39.7
Incr Delay (d2), s/veh	11.7	0.7	1.2	29.3	2.6	0.3	0.7	0.0	32.2	0.8	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	8.2	9.1	0.5	22.8	2.1	2.7	0.3	10.9	2.6	1.2	0.4
LnGrp Delay(d), s/veh	64.5	8.3	8.9	87.5	19.6	9.4	45.1	39.7	79.6	44.1	40.5	39.8
LnGrp LOS	E	A	A	F	B	A	D	D	E	D	D	D
Approach Vol, veh/h		1991			2802			365			145	
Approach Delay, s/veh		15.4			19.3			69.7			42.6	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	87.3		25.5	14.4	78.0		25.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	82.0		22.0	12.0	74.0		22.0
Max Q Clear Time (g_c+I1), s	2.7	19.4		21.5	10.2	49.3		11.0
Green Ext Time (p_c), s	0.0	19.2		0.1	0.1	20.8		0.4

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		21.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	58	225	79	182	11	643	621	0	4	1005	477
Future Volume (veh/h)	217	58	225	79	182	11	643	621	0	4	1005	477
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	226	60	234	82	190	11	670	647	0	4	1047	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	288	302	256	105	240	14	759	2265	1013	7	1500	671
Arrive On Green	0.08	0.16	0.16	0.06	0.14	0.14	0.22	0.63	0.00	0.00	0.42	0.00
Sat Flow, veh/h	3476	1881	1596	1792	1761	102	3476	3574	1599	1792	3574	1599
Grp Volume(v), veh/h	226	60	234	82	0	201	670	647	0	4	1047	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1596	1792	0	1863	1738	1787	1599	1792	1787	1599
Q Serve(g_s), s	7.1	3.1	16.2	5.1	0.0	11.7	20.9	9.1	0.0	0.2	26.9	0.0
Cycle Q Clear(g_c), s	7.1	3.1	16.2	5.1	0.0	11.7	20.9	9.1	0.0	0.2	26.9	0.0
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	302	256	105	0	254	759	2265	1013	7	1500	671
V/C Ratio(X)	0.79	0.20	0.91	0.78	0.00	0.79	0.88	0.29	0.00	0.53	0.70	0.00
Avail Cap(c_a), veh/h	341	302	256	176	0	299	931	2265	1013	64	1500	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.4	40.8	46.2	52.0	0.0	46.8	42.4	9.2	0.0	55.7	26.7	0.0
Incr Delay (d2), s/veh	9.8	0.3	33.9	11.9	0.0	11.6	8.6	0.3	0.0	48.4	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	1.6	9.5	2.9	0.0	6.8	11.0	4.5	0.0	0.2	13.8	0.0
LnGrp Delay(d), s/veh	60.1	41.1	80.2	63.9	0.0	58.4	51.0	9.5	0.0	104.1	29.4	0.0
LnGrp LOS	E	D	F	E		E	D	A		F	C	
Approach Vol, veh/h		520			283			1317			1051	
Approach Delay, s/veh		67.0			60.0			30.6			29.7	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	75.0	10.6	22.0	28.5	51.0	13.3	19.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	71.0	11.0	18.0	30.0	45.0	11.0	18.0
Max Q Clear Time (g_c+I1), s	2.2	11.1	7.1	18.2	22.9	28.9	9.1	13.7
Green Ext Time (p_c), s	0.0	4.7	0.1	0.0	1.6	6.4	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.9
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	302	1280	196	185	1799	293	112	742	442	346	682	76
Future Volume (veh/h)	302	1280	196	185	1799	293	112	742	442	346	682	76
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	321	1362	209	197	1914	312	119	789	470	368	726	81
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	374	2093	639	225	2184	746	175	805	525	377	1326	147
Arrive On Green	0.11	0.41	0.41	0.13	0.43	0.43	0.05	0.23	0.23	0.11	0.28	0.28
Sat Flow, veh/h	3476	5136	1567	1792	5136	1565	3476	3574	1566	3476	4683	518
Grp Volume(v), veh/h	321	1362	209	197	1914	312	119	789	470	368	529	278
Grp Sat Flow(s),veh/h/ln	1738	1712	1567	1792	1712	1565	1738	1787	1566	1738	1712	1778
Q Serve(g_s), s	10.9	25.6	10.9	13.0	40.9	15.7	4.0	26.3	27.0	12.7	15.7	15.9
Cycle Q Clear(g_c), s	10.9	25.6	10.9	13.0	40.9	15.7	4.0	26.3	27.0	12.7	15.7	15.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	374	2093	639	225	2184	746	175	805	525	377	970	503
V/C Ratio(X)	0.86	0.65	0.33	0.88	0.88	0.42	0.68	0.98	0.90	0.98	0.55	0.55
Avail Cap(c_a), veh/h	377	2093	639	254	2184	746	319	805	525	377	970	503
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	28.6	24.3	51.5	31.6	20.6	56.0	46.2	38.1	53.3	36.4	36.5
Incr Delay (d2), s/veh	17.5	1.6	1.4	25.3	5.3	1.7	4.6	26.8	17.8	40.0	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	12.4	4.9	8.0	20.4	7.1	2.0	15.9	17.4	8.1	7.5	8.0
LnGrp Delay(d), s/veh	70.2	30.2	25.6	76.9	36.9	22.3	60.5	73.0	56.0	93.3	37.1	37.8
LnGrp LOS	E	C	C	E	D	C	E	E	E	F	D	D
Approach Vol, veh/h		1892			2423			1378			1175	
Approach Delay, s/veh		36.5			38.3			66.1			54.9	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	52.9	17.0	31.0	16.9	55.0	10.0	38.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	47.0	13.0	27.0	13.0	51.0	11.0	29.0
Max Q Clear Time (g_c+I1), s	15.0	27.6	14.7	29.0	12.9	42.9	6.0	17.9
Green Ext Time (p_c), s	0.1	9.5	0.0	0.0	0.0	6.8	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	10	16	1	2	44	13	1639	4	29	2495	203
Future Volume (veh/h)	103	10	16	1	2	44	13	1639	4	29	2495	203
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	107	10	17	1	2	46	14	1707	4	30	2599	211
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3	250	41	62	253	22	3744	9	38	3471	275
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.71	0.71	0.02	0.72	0.72
Sat Flow, veh/h	0	18	1545	0	384	1566	1774	5238	12	1774	4796	380
Grp Volume(v), veh/h	117	0	17	3	0	46	14	1105	606	30	1818	992
Grp Sat Flow(s),veh/h/ln	18	0	1545	384	0	1566	1774	1695	1860	1774	1695	1786
Q Serve(g_s), s	0.0	0.0	1.1	0.0	0.0	3.0	0.9	16.2	16.2	2.0	37.5	40.6
Cycle Q Clear(g_c), s	19.0	0.0	1.1	19.0	0.0	3.0	0.9	16.2	16.2	2.0	37.5	40.6
Prop In Lane	0.91		1.00	0.33		1.00	1.00		0.01	1.00		0.21
Lane Grp Cap(c), veh/h	62	0	250	103	0	253	22	2423	1330	38	2453	1292
V/C Ratio(X)	1.90	0.00	0.07	0.03	0.00	0.18	0.63	0.46	0.46	0.80	0.74	0.77
Avail Cap(c_a), veh/h	62	0	250	103	0	253	60	2423	1330	91	2453	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	0.0	41.7	42.3	0.0	42.5	57.7	7.1	7.1	57.2	9.7	10.1
Incr Delay (d2), s/veh	458.6	0.0	0.1	0.1	0.0	0.3	26.1	0.6	1.1	30.2	2.1	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.5	0.1	0.0	1.3	0.6	7.7	8.7	1.3	17.9	21.2
LnGrp Delay(d), s/veh	516.4	0.0	41.8	42.4	0.0	42.9	83.8	7.7	8.2	87.4	11.7	14.5
LnGrp LOS	F		D	D		D	F	A	A	F	B	B
Approach Vol, veh/h		134			49			1725			2840	
Approach Delay, s/veh		456.2			42.8			8.5			13.5	
Approach LOS		F			D			A			B	

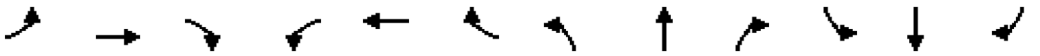
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	88.0		23.0	5.5	89.0		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	83.0		19.0	4.0	85.0		19.0
Max Q Clear Time (g_c+I1), s	4.0	18.2		21.0	2.9	42.6		21.0
Green Ext Time (p_c), s	0.0	18.5		0.0	0.0	34.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	326	523	55	62	580	113	77	1244	65	95	1877	376
Future Volume (veh/h)	326	523	55	62	580	113	77	1244	65	95	1877	376
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	333	534	56	63	592	115	79	1269	66	97	1915	384
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	389	962	427	106	671	293	117	2564	133	149	2243	439
Arrive On Green	0.11	0.27	0.27	0.03	0.19	0.19	0.03	0.52	0.52	0.04	0.53	0.53
Sat Flow, veh/h	3442	3539	1569	3442	3539	1543	3442	4949	257	3442	4254	833
Grp Volume(v), veh/h	333	534	56	63	592	115	79	869	466	97	1517	782
Grp Sat Flow(s),veh/h/ln	1721	1770	1569	1721	1770	1543	1721	1695	1816	1721	1695	1697
Q Serve(g_s), s	11.2	15.2	3.2	2.1	19.1	7.7	2.7	19.5	19.5	3.3	45.0	47.5
Cycle Q Clear(g_c), s	11.2	15.2	3.2	2.1	19.1	7.7	2.7	19.5	19.5	3.3	45.0	47.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.49
Lane Grp Cap(c), veh/h	389	962	427	106	671	293	117	1757	941	149	1788	895
V/C Ratio(X)	0.86	0.55	0.13	0.60	0.88	0.39	0.67	0.49	0.49	0.65	0.85	0.87
Avail Cap(c_a), veh/h	410	993	440	146	722	315	117	1757	941	205	1788	895
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	36.7	32.3	56.3	46.4	41.7	56.1	18.4	18.4	55.4	23.8	24.4
Incr Delay (d2), s/veh	15.7	0.6	0.1	5.3	11.8	0.9	14.2	1.0	1.9	4.8	5.2	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	7.5	1.4	1.1	10.5	3.3	1.5	9.3	10.2	1.6	22.2	25.0
LnGrp Delay(d), s/veh	66.9	37.3	32.5	61.6	58.1	42.6	70.4	19.4	20.2	60.2	29.0	36.0
LnGrp LOS	E	D	C	E	E	D	E	B	C	E	C	D
Approach Vol, veh/h		923			770			1414			2396	
Approach Delay, s/veh		47.7			56.1			22.5			32.5	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	64.9	7.6	36.0	8.0	66.0	17.3	26.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	59.0	5.0	33.0	4.0	62.0	14.0	24.0
Max Q Clear Time (g_c+I1), s	5.3	21.5	4.1	17.2	4.7	49.5	13.2	21.1
Green Ext Time (p_c), s	0.0	11.0	0.0	3.1	0.0	10.6	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	8	812	424	448	671	17	196	154	381	37	162	12
Future Volume (vph)	8	812	424	448	671	17	196	154	381	37	162	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.99	1.00		0.99	
Satd. Flow (prot)	1787	3574	1571	3467	3561		1698	1769	1579		1849	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.55	0.91	1.00		0.92	
Satd. Flow (perm)	1787	3574	1571	3467	3561		979	1618	1579		1715	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	8	855	446	472	706	18	206	162	401	39	171	13
RTOR Reduction (vph)	0	0	259	0	1	0	0	0	252	0	2	0
Lane Group Flow (vph)	8	855	187	472	723	0	165	203	149	0	221	0
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			2						1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	0.7	38.3	38.3	19.9	57.5		41.4	41.4	41.4		41.4	
Effective Green, g (s)	0.7	38.3	38.3	19.9	57.5		41.4	41.4	41.4		41.4	
Actuated g/C Ratio	0.01	0.34	0.34	0.18	0.52		0.37	0.37	0.37		0.37	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	11	1226	539	618	1834		363	600	585		636	
v/s Ratio Prot	0.00	c0.24		c0.14	0.20							
v/s Ratio Perm			0.12				c0.17	0.13	0.09		0.13	
v/c Ratio	0.73	0.70	0.35	0.76	0.39		0.45	0.34	0.25		0.35	
Uniform Delay, d1	55.4	31.6	27.3	43.6	16.5		26.6	25.2	24.4		25.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	123.5	1.8	0.4	5.6	0.1		4.1	1.5	1.0		1.5	
Delay (s)	178.9	33.4	27.7	49.2	16.6		30.6	26.8	25.4		26.8	
Level of Service	F	C	C	D	B		C	C	C		C	
Approach Delay (s/veh)		32.4			29.5			26.9			26.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	111.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1	57	88	3	24	35	646	17	4	982	60
Future Volume (veh/h)	70	1	57	88	3	24	35	646	17	4	982	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	76	1	62	96	3	26	38	702	18	4	1067	65
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	287	3	242	175	12	33	48	2557	1119	7	2476	1083
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.03	0.72	0.72	0.00	0.70	0.70
Sat Flow, veh/h	1402	22	1565	727	77	211	1774	3539	1549	1774	3539	1548
Grp Volume(v), veh/h	77	0	62	125	0	0	38	702	18	4	1067	65
Grp Sat Flow(s),veh/h/ln	1423	0	1565	1016	0	0	1774	1770	1549	1774	1770	1548
Q Serve(g_s), s	0.0	0.0	3.5	8.2	0.0	0.0	2.2	6.9	0.3	0.2	13.1	1.3
Cycle Q Clear(g_c), s	4.8	0.0	3.5	13.0	0.0	0.0	2.2	6.9	0.3	0.2	13.1	1.3
Prop In Lane	0.99		1.00	0.77		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	0	242	220	0	0	48	2557	1119	7	2476	1083
V/C Ratio(X)	0.26	0.00	0.26	0.57	0.00	0.00	0.79	0.27	0.02	0.54	0.43	0.06
Avail Cap(c_a), veh/h	472	0	449	402	0	0	176	2557	1119	105	2476	1083
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	37.6	43.2	0.0	0.0	48.9	4.9	3.9	50.2	6.5	4.8
Incr Delay (d2), s/veh	0.5	0.0	0.6	2.3	0.0	0.0	24.4	0.3	0.0	48.9	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.6	3.5	0.0	0.0	1.4	3.4	0.1	0.2	6.6	0.6
LnGrp Delay(d), s/veh	38.6	0.0	38.2	45.5	0.0	0.0	73.2	5.1	4.0	99.1	7.1	4.9
LnGrp LOS	D		D	D			E	A	A	F	A	A
Approach Vol, veh/h		139			125			758			1136	
Approach Delay, s/veh		38.4			45.5			8.5			7.3	
Approach LOS		D			D			A			A	

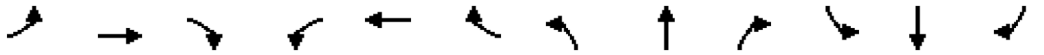
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	77.0		19.6	6.7	74.7		19.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	73.0		29.0	10.0	69.0		29.0
Max Q Clear Time (g_c+I1), s	2.2	8.9		6.8	4.2	15.1		15.0
Green Ext Time (p_c), s	0.0	5.3		0.6	0.0	9.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	341	329	125	29	229	8	65	295	71	22	564	484
Future Volume (veh/h)	341	329	125	29	229	8	65	295	71	22	564	484
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	375	362	137	32	252	9	71	324	78	24	620	532
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	486	729	271	211	362	13	307	2014	879	589	2014	888
Arrive On Green	0.21	0.29	0.29	0.02	0.10	0.10	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	1792	2538	945	1792	3520	125	491	3574	1560	987	3574	1575
Grp Volume(v), veh/h	375	253	246	32	128	133	71	324	78	24	620	532
Grp Sat Flow(s),veh/h/ln	1792	1787	1696	1792	1787	1858	491	1787	1560	987	1787	1575
Q Serve(g_s), s	16.9	11.3	11.6	1.5	6.6	6.7	8.6	4.2	2.2	1.1	8.8	21.3
Cycle Q Clear(g_c), s	16.9	11.3	11.6	1.5	6.6	6.7	17.3	4.2	2.2	5.3	8.8	21.3
Prop In Lane	1.00		0.56	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	486	513	487	211	184	191	307	2014	879	589	2014	888
V/C Ratio(X)	0.77	0.49	0.50	0.15	0.69	0.70	0.23	0.16	0.09	0.04	0.31	0.60
Avail Cap(c_a), veh/h	786	933	885	243	336	349	307	2014	879	589	2014	888
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	28.4	28.5	37.2	41.5	41.5	15.6	10.0	9.6	11.3	11.0	13.8
Incr Delay (d2), s/veh	2.6	0.7	0.8	0.3	4.6	4.6	1.8	0.2	0.2	0.1	0.4	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	5.7	5.5	0.8	3.5	3.7	1.3	2.1	1.0	0.3	4.4	9.9
LnGrp Delay(d), s/veh	30.2	29.1	29.3	37.5	46.2	46.1	17.4	10.2	9.8	11.4	11.4	16.8
LnGrp LOS	C	C	C	D	D	D	B	B	A	B	B	B
Approach Vol, veh/h		874			293			473			1176	
Approach Delay, s/veh		29.6			45.2			11.2			13.8	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	6.3	31.5		58.0	24.0	13.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	4.0	50.0		54.0	36.0	18.0
Max Q Clear Time (g_c+I1), s		19.3	3.5	13.6		23.3	18.9	8.7
Green Ext Time (p_c), s		3.4	0.0	3.1		6.9	1.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	563	103	186	606	4	161	26	125	28	53	13
Future Volume (veh/h)	6	563	103	186	606	4	161	26	125	28	53	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	7	633	116	209	681	4	181	29	140	31	60	15
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	833	152	344	1375	8	662	732	611	529	923	222
Arrive On Green	0.01	0.28	0.28	0.11	0.38	0.38	0.09	0.39	0.39	0.02	0.32	0.32
Sat Flow, veh/h	1792	3009	550	1792	3642	21	1792	1881	1570	1792	2847	684
Grp Volume(v), veh/h	7	375	374	209	334	351	181	29	140	31	37	38
Grp Sat Flow(s),veh/h/ln	1792	1787	1773	1792	1787	1877	1792	1881	1570	1792	1787	1744
Q Serve(g_s), s	0.2	15.3	15.4	6.2	11.4	11.4	5.0	0.8	4.8	0.9	1.1	1.2
Cycle Q Clear(g_c), s	0.2	15.3	15.4	6.2	11.4	11.4	5.0	0.8	4.8	0.9	1.1	1.2
Prop In Lane	1.00		0.31	1.00		0.01	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	281	495	491	344	675	709	662	732	611	529	579	565
V/C Ratio(X)	0.02	0.76	0.76	0.61	0.50	0.50	0.27	0.04	0.23	0.06	0.06	0.07
Avail Cap(c_a), veh/h	358	988	980	668	1414	1485	860	732	611	620	579	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	26.4	26.4	18.4	19.0	19.0	14.0	15.1	16.3	17.2	18.6	18.6
Incr Delay (d2), s/veh	0.0	2.4	2.5	1.7	0.6	0.5	0.2	0.1	0.9	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.8	7.8	3.2	5.7	6.0	2.5	0.4	2.2	0.5	0.6	0.6
LnGrp Delay(d), s/veh	20.6	28.8	28.8	20.1	19.5	19.5	14.2	15.2	17.2	17.2	18.8	18.8
LnGrp LOS	C	C	C	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		756			894			350			106	
Approach Delay, s/veh		28.7			19.7			15.5			18.3	
Approach LOS		C			B			B			B	

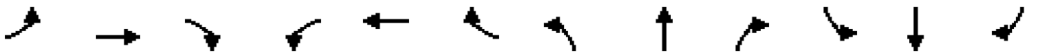
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	35.0	12.6	26.1	11.2	29.8	4.6	34.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	31.0	23.0	44.0	16.0	21.0	4.0	63.0
Max Q Clear Time (g_c+I1), s	2.9	6.8	8.2	17.4	7.0	3.2	2.2	13.4
Green Ext Time (p_c), s	0.0	0.5	0.5	4.7	0.3	0.2	0.0	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	333	80	40	380	139	49	157	23	225	360	125
Future Volume (veh/h)	111	333	80	40	380	139	49	157	23	225	360	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	378	91	45	432	158	56	178	26	256	409	142
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	982	429	57	555	201	72	1059	152	301	1212	416
Arrive On Green	0.09	0.28	0.28	0.03	0.22	0.22	0.04	0.34	0.34	0.17	0.47	0.47
Sat Flow, veh/h	1774	3539	1545	1774	2529	915	1774	3099	445	1774	2575	883
Grp Volume(v), veh/h	126	378	91	45	301	289	56	100	104	256	280	271
Grp Sat Flow(s),veh/h/ln	1774	1770	1545	1774	1770	1674	1774	1770	1775	1774	1770	1688
Q Serve(g_s), s	6.2	7.7	4.0	2.2	14.3	14.5	2.8	3.5	3.6	12.5	8.9	9.1
Cycle Q Clear(g_c), s	6.2	7.7	4.0	2.2	14.3	14.5	2.8	3.5	3.6	12.5	8.9	9.1
Prop In Lane	1.00		1.00	1.00		0.55	1.00		0.25	1.00		0.52
Lane Grp Cap(c), veh/h	160	982	429	57	388	367	72	605	606	301	833	794
V/C Ratio(X)	0.79	0.39	0.21	0.79	0.77	0.79	0.78	0.17	0.17	0.85	0.34	0.34
Avail Cap(c_a), veh/h	378	1626	710	199	634	600	219	605	606	656	833	794
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	26.1	24.8	42.9	32.8	32.9	42.4	20.5	20.5	36.0	14.9	14.9
Incr Delay (d2), s/veh	8.3	0.2	0.2	20.8	3.3	3.8	16.2	0.6	0.6	6.7	1.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.8	1.7	1.4	7.3	7.1	1.7	1.8	1.9	6.7	4.5	4.5
LnGrp Delay(d), s/veh	48.1	26.3	25.0	63.7	36.1	36.6	58.6	21.1	21.2	42.7	15.9	16.1
LnGrp LOS	D	C	C	E	D	D	E	C	C	D	B	B
Approach Vol, veh/h		595			635			260			807	
Approach Delay, s/veh		30.7			38.3			29.2			24.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	34.5	6.9	28.8	7.6	46.0	12.0	23.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	33.0	20.0	10.0	41.0	11.0	42.0	19.0	32.0
Max Q Clear Time (g_c+I1), s	14.5	5.6	4.2	9.7	4.8	11.1	8.2	16.5
Green Ext Time (p_c), s	0.7	0.8	0.0	2.7	0.0	3.4	0.2	3.0

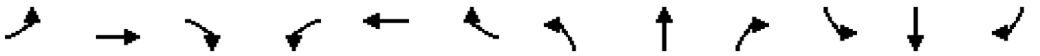
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	442	412	20	55	240	206	27	422	72	437	252	670
Future Volume (vph)	442	412	20	55	240	206	27	422	72	437	252	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		0.99		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1610	3324		1770	3539	1571		3435		1681	1745	2739
Flt Permitted	0.95	0.67		0.95	1.00	1.00		0.91		0.95	0.42	1.00
Satd. Flow (perm)	1610	2258		1770	3539	1571		3147		1681	743	2739
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	480	448	22	60	261	224	29	459	78	475	274	728
RTOR Reduction (vph)	0	2	0	0	0	47	0	10	0	0	0	76
Lane Group Flow (vph)	312	636	0	60	261	177	0	556	0	366	383	652
Confl. Peds. (#/hr)	2		2	2		2	1		12	12		1
Confl. Bikes (#/hr)			3			2			9			2
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	26.2	53.0		5.0	22.8	51.4		26.4		28.6	59.0	85.2
Effective Green, g (s)	26.2	53.0		5.0	22.8	51.4		26.4		28.6	59.0	85.2
Actuated g/C Ratio	0.22	0.44		0.04	0.19	0.43		0.22		0.24	0.49	0.71
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	351	1230		73	672	725		692		400	604	2035
v/s Ratio Prot	c0.19	0.11		0.03	0.07	0.06				c0.22	0.15	0.07
v/s Ratio Perm		c0.12				0.05		c0.18			0.16	0.17
v/c Ratio	0.89	0.52		0.82	0.39	0.24		0.80		0.92	0.63	0.32
Uniform Delay, d1	45.5	24.2		57.1	42.5	21.9		44.3		44.5	22.5	6.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	22.8	0.4		49.9	0.4	0.2		9.6		25.1	2.2	0.1
Delay (s)	68.3	24.6		107.0	42.9	22.1		53.9		69.6	24.7	6.6
Level of Service	E	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		38.9			41.4			53.9			26.9	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	516	489	521	351	7	297	4	484	2	7	1
Future Volume (vph)	1	516	489	521	351	7	297	4	484	2	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1753	3539	1566	1770	3526		1681	1687	1553	1739	1828	
Flt Permitted	0.53	1.00	1.00	0.19	1.00		0.95	0.64	1.00	0.95	1.00	
Satd. Flow (perm)	978	3539	1566	348	3526		1681	1126	1553	1739	1828	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	538	509	543	366	7	309	4	504	2	7	1
RTOR Reduction (vph)	0	0	294	0	1	0	0	0	62	0	1	0
Lane Group Flow (vph)	1	538	215	543	372	0	158	155	442	2	7	0
Confl. Peds. (#/hr)	9		2	2		9			11	11		
Confl. Bikes (#/hr)			3			4			4			
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	24.2	23.5	38.5	59.6	54.9		15.0	42.2	69.6	0.7	23.2	
Effective Green, g (s)	24.2	23.5	38.5	59.6	54.9		15.0	42.2	69.6	0.7	23.2	
Actuated g/C Ratio	0.22	0.21	0.35	0.54	0.50		0.14	0.38	0.63	0.01	0.21	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	220	757	606	604	1763		229	509	1040	11	386	
v/s Ratio Prot	0.00	0.15	c0.05	c0.26	0.11		c0.09	0.04	c0.12	0.00	0.00	
v/s Ratio Perm	0.00		0.09	c0.22				0.08	0.16			
v/c Ratio	0.00	0.71	0.35	0.90	0.21		0.69	0.30	0.43	0.18	0.02	
Uniform Delay, d1	33.4	40.0	26.4	25.8	15.3		45.2	23.6	10.1	54.3	34.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	3.2	0.4	16.1	0.1		8.4	0.3	0.3	7.8	0.1	
Delay (s)	33.4	43.2	26.8	41.9	15.4		53.6	23.9	10.4	62.1	34.4	
Level of Service	C	D	C	D	B		D	C	B	E	C	
Approach Delay (s/veh)		35.2			31.1			21.3			39.9	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	109.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	305	126	174	171	106	66	555	130	134	814	50
Future Volume (veh/h)	127	305	126	174	171	106	66	555	130	134	814	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.94	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	137	328	135	187	184	114	71	597	140	144	875	54
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	422	169	298	417	241	349	1429	334	442	1782	110
Arrive On Green	0.08	0.17	0.17	0.11	0.20	0.20	0.03	0.50	0.50	0.06	0.53	0.53
Sat Flow, veh/h	1774	2434	978	1774	2107	1218	1774	2846	666	1774	3382	209
Grp Volume(v), veh/h	137	236	227	187	152	146	71	371	366	144	458	471
Grp Sat Flow(s),veh/h/ln	1774	1770	1642	1774	1770	1555	1774	1770	1742	1774	1770	1822
Q Serve(g_s), s	6.3	12.8	13.3	8.5	7.6	8.3	1.9	13.3	13.3	3.9	16.6	16.6
Cycle Q Clear(g_c), s	6.3	12.8	13.3	8.5	7.6	8.3	1.9	13.3	13.3	3.9	16.6	16.6
Prop In Lane	1.00		0.60	1.00		0.78	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	338	307	285	298	351	308	349	888	875	442	933	960
V/C Ratio(X)	0.41	0.77	0.80	0.63	0.43	0.47	0.20	0.42	0.42	0.33	0.49	0.49
Avail Cap(c_a), veh/h	405	475	441	427	581	510	394	888	875	584	933	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	39.7	39.9	30.0	35.4	35.7	12.4	15.8	15.8	11.5	15.2	15.2
Incr Delay (d2), s/veh	0.8	4.1	5.6	2.2	0.9	1.1	0.3	1.4	1.5	0.4	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.6	6.5	4.3	3.8	3.7	1.0	6.8	6.8	1.9	8.5	8.7
LnGrp Delay(d), s/veh	31.2	43.8	45.4	32.1	36.2	36.8	12.7	17.2	17.3	11.9	17.0	17.0
LnGrp LOS	C	D	D	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		600			485			808			1073	
Approach Delay, s/veh		41.5			34.8			16.8			16.3	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	54.5	14.7	21.4	7.4	57.0	12.2	23.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	45.0	18.0	27.0	6.0	53.0	12.0	33.0
Max Q Clear Time (g_c+I1), s	5.9	15.3	10.5	15.3	3.9	18.6	8.3	10.3
Green Ext Time (p_c), s	0.2	4.9	0.3	2.1	0.0	6.7	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	1031	118	162	431	129	78	945	176	219	1134	136
Future Volume (veh/h)	225	1031	118	162	431	129	78	945	176	219	1134	136
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	242	1109	127	174	463	139	84	1016	189	235	1219	146
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	305	1227	140	230	951	275	106	1383	703	264	1699	881
Arrive On Green	0.09	0.26	0.26	0.07	0.24	0.24	0.06	0.39	0.39	0.15	0.48	0.48
Sat Flow, veh/h	3476	4659	533	3476	3932	1136	1792	3574	1544	1792	3574	1558
Grp Volume(v), veh/h	242	815	421	174	401	201	84	1016	189	235	1219	146
Grp Sat Flow(s),veh/h/ln	1738	1712	1768	1738	1712	1643	1792	1787	1544	1792	1787	1558
Q Serve(g_s), s	8.0	27.1	27.1	5.8	11.8	12.5	5.5	28.7	9.0	15.2	32.0	5.3
Cycle Q Clear(g_c), s	8.0	27.1	27.1	5.8	11.8	12.5	5.5	28.7	9.0	15.2	32.0	5.3
Prop In Lane	1.00		0.30	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	902	466	230	828	398	106	1383	703	264	1699	881
V/C Ratio(X)	0.79	0.90	0.90	0.76	0.48	0.51	0.79	0.73	0.27	0.89	0.72	0.17
Avail Cap(c_a), veh/h	413	930	480	236	828	398	122	1383	703	319	1699	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	41.9	42.0	54.1	38.3	38.6	54.7	30.9	20.1	49.3	24.6	12.4
Incr Delay (d2), s/veh	7.4	11.8	20.1	12.9	0.4	1.0	25.9	3.5	0.9	22.1	2.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	14.3	15.8	3.2	5.7	5.8	3.5	14.8	4.0	9.1	16.4	2.4
LnGrp Delay(d), s/veh	60.1	53.7	62.1	67.0	38.8	39.6	80.6	34.4	21.0	71.3	27.2	12.8
LnGrp LOS	E	D	E	E	D	D	F	C	C	E	C	B
Approach Vol, veh/h		1478			776			1289			1600	
Approach Delay, s/veh		57.2			45.3			35.5			32.4	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.4	49.6	11.8	35.0	11.0	60.0	14.3	32.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	43.0	8.0	32.0	8.0	56.0	14.0	26.0
Max Q Clear Time (g_c+I1), s	17.2	30.7	7.8	29.1	7.5	34.0	10.0	14.5
Green Ext Time (p_c), s	0.2	6.0	0.0	1.9	0.0	9.9	0.3	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	930	227	525	760	69	86	742	414	98	813	244
Future Volume (veh/h)	237	930	227	525	760	69	86	742	414	98	813	244
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	255	1000	244	565	817	74	92	798	445	105	874	262
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	758	2472	602	531	3081	957	60	1191	524	124	723	216
Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.03	0.33	0.33	0.27	0.27	0.27
Sat Flow, veh/h	1217	4121	1004	872	5136	1594	1792	3574	1572	450	2711	811
Grp Volume(v), veh/h	255	831	413	565	817	74	92	798	445	105	576	560
Grp Sat Flow(s),veh/h/ln	609	1712	1701	436	1712	1594	1792	1787	1572	450	1787	1735
Q Serve(g_s), s	15.1	15.4	15.4	56.6	9.1	2.3	4.0	23.0	31.6	17.0	32.0	32.0
Cycle Q Clear(g_c), s	24.2	15.4	15.4	72.0	9.1	2.3	4.0	23.0	31.6	32.0	32.0	32.0
Prop In Lane	1.00		0.59	1.00		1.00	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	758	2054	1020	531	3081	957	60	1191	524	124	477	463
V/C Ratio(X)	0.34	0.40	0.41	1.06	0.27	0.08	1.54	0.67	0.85	0.85	1.21	1.21
Avail Cap(c_a), veh/h	758	2054	1020	531	3081	957	60	1191	524	124	477	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	12.7	12.7	38.1	11.4	10.1	58.0	34.3	37.2	54.8	44.0	44.0
Incr Delay (d2), s/veh	0.3	0.1	0.3	57.0	0.0	0.0	310.5	3.0	15.7	47.8	112.0	113.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	7.3	7.3	13.0	4.2	1.0	7.1	11.8	16.0	5.1	30.6	29.9
LnGrp Delay(d), s/veh	17.4	12.8	12.9	95.1	11.5	10.1	368.5	37.3	52.9	102.7	156.0	157.6
LnGrp LOS	B	B	B	F	B	B	F	D	D	F	F	F
Approach Vol, veh/h		1499			1456			1335			1241	
Approach Delay, s/veh		13.6			43.8			65.3			152.2	
Approach LOS		B			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		44.0		76.0	8.0	36.0		76.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0	4.0	32.0		72.0
Max Q Clear Time (g_c+I1), s		33.6		26.2	6.0	34.0		74.0
Green Ext Time (p_c), s		3.5		14.5	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	65.2
HCM 2010 LOS	E



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	279	65	52	1015	1357	214
Future Volume (veh/h)	279	65	52	1015	1357	214
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	291	68	54	1057	1414	223
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	294	70	2623	2036	317
Arrive On Green	0.19	0.19	0.04	0.74	0.67	0.67
Sat Flow, veh/h	1774	1583	1774	3632	3153	476
Grp Volume(v), veh/h	291	68	54	1057	809	828
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1767
Q Serve(g_s), s	17.5	4.0	3.3	12.1	30.8	32.3
Cycle Q Clear(g_c), s	17.5	4.0	3.3	12.1	30.8	32.3
Prop In Lane	1.00	1.00	1.00			0.27
Lane Grp Cap(c), veh/h	329	294	70	2623	1177	1175
V/C Ratio(X)	0.88	0.23	0.78	0.40	0.69	0.70
Avail Cap(c_a), veh/h	503	449	146	2623	1177	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.9	52.0	5.2	11.3	11.5
Incr Delay (d2), s/veh	11.5	0.4	16.6	0.5	3.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	0.0	1.9	6.0	15.9	16.6
LnGrp Delay(d), s/veh	54.8	38.3	68.6	5.7	14.6	15.1
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	359			1111	1637	
Approach Delay, s/veh	51.7			8.7	14.8	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		85.0		24.3	8.3	76.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		81.0		31.0	9.0	68.0		
Max Q Clear Time (g_c+I1), s		14.1		19.5	5.3	34.3		
Green Ext Time (p_c), s		9.3		0.8	0.0	15.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	717	0	0	619	10	6	135	13	541	0	273
Future Volume (veh/h)	192	717	0	0	619	10	6	135	13	541	0	273
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	209	779	0	0	673	0	7	147	14	588	0	297
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	412	1642	0	0	995	445	30	636	61	0	0	0
Arrive On Green	0.11	0.46	0.00	0.00	0.28	0.00	0.40	0.40	0.40	0.00	0.00	0.00
Sat Flow, veh/h	1774	3632	0	0	3632	1583	76	1598	152		0	
Grp Volume(v), veh/h	209	779	0	0	673	0	168	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1827	0	0			
Q Serve(g_s), s	4.4	8.7	0.0	0.0	9.8	0.0	3.5	0.0	0.0			
Cycle Q Clear(g_c), s	4.4	8.7	0.0	0.0	9.8	0.0	3.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.04		0.08			
Lane Grp Cap(c), veh/h	412	1642	0	0	995	445	726	0	0			
V/C Ratio(X)	0.51	0.47	0.00	0.00	0.68	0.00	0.23	0.00	0.00			
Avail Cap(c_a), veh/h	732	3304	0	0	2019	903	726	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	12.3	10.7	0.0	0.0	18.5	0.0	11.6	0.0	0.0			
Incr Delay (d2), s/veh	1.0	0.2	0.0	0.0	0.8	0.0	0.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.2	4.3	0.0	0.0	4.9	0.0	1.9	0.0	0.0			
LnGrp Delay(d), s/veh	13.3	10.9	0.0	0.0	19.3	0.0	12.3	0.0	0.0			
LnGrp LOS	B	B			B		B					
Approach Vol, veh/h		988			673			168				
Approach Delay, s/veh		11.4			19.3			12.3				
Approach LOS		B			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		27.0		30.8			10.6	20.3
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		23.0		54.0			17.0	33.0
Max Q Clear Time (g_c+I1), s		5.5		10.7			6.4	11.8
Green Ext Time (p_c), s		0.8		6.2			0.4	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	714	186	114	1334	49	427	487	84	87	650	343
Future Volume (veh/h)	144	714	186	114	1334	49	427	487	84	87	650	343
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	148	736	192	118	1375	51	440	502	87	90	670	354
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	173	1213	313	144	1439	53	479	1507	672	139	728	384
Arrive On Green	0.10	0.31	0.31	0.08	0.29	0.29	0.14	0.43	0.43	0.04	0.33	0.33
Sat Flow, veh/h	1740	3932	1013	1740	4935	183	3375	3471	1546	3375	2182	1152
Grp Volume(v), veh/h	148	621	307	118	926	500	440	502	87	90	533	491
Grp Sat Flow(s),veh/h/ln	1740	1663	1620	1740	1663	1793	1688	1736	1546	1688	1736	1599
Q Serve(g_s), s	10.0	19.0	19.4	8.0	32.8	32.8	15.4	11.5	4.0	3.1	35.4	35.4
Cycle Q Clear(g_c), s	10.0	19.0	19.4	8.0	32.8	32.8	15.4	11.5	4.0	3.1	35.4	35.4
Prop In Lane	1.00		0.63	1.00		0.10	1.00		1.00	1.00		0.72
Lane Grp Cap(c), veh/h	173	1026	500	144	969	523	479	1507	672	139	579	533
V/C Ratio(X)	0.85	0.61	0.61	0.82	0.96	0.96	0.92	0.33	0.13	0.65	0.92	0.92
Avail Cap(c_a), veh/h	174	1026	500	218	971	523	479	1507	672	197	579	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	35.2	35.4	54.1	41.7	41.7	50.8	22.4	20.3	56.6	38.4	38.4
Incr Delay (d2), s/veh	31.4	1.0	2.2	13.8	19.0	28.4	23.0	0.6	0.4	5.0	22.2	23.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	8.9	9.0	4.4	17.6	20.4	8.7	5.6	1.8	1.6	20.6	19.2
LnGrp Delay(d), s/veh	84.5	36.3	37.6	67.9	60.7	70.1	73.7	23.0	20.7	61.7	60.6	62.0
LnGrp LOS	F	D	D	E	E	E	E	C	C	E	E	E
Approach Vol, veh/h		1076			1544			1029			1114	
Approach Delay, s/veh		43.3			64.3			44.5			61.3	
Approach LOS		D			E			D			E	

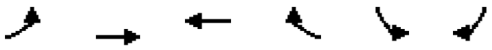
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	56.1	13.9	41.0	21.0	44.0	16.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	50.0	15.0	32.0	17.0	40.0	12.0	35.0
Max Q Clear Time (g_c+I1), s	5.1	13.5	10.0	21.4	17.4	37.4	12.0	34.8
Green Ext Time (p_c), s	0.0	3.6	0.1	4.3	0.0	1.5	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	658	164	225	1297	85	232	753	270	208	832	121
Future Volume (veh/h)	67	658	164	225	1297	85	232	753	270	208	832	121
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	71	693	173	237	1365	89	244	793	284	219	876	127
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	90	1100	566	266	1535	100	273	1224	770	248	1174	598
Arrive On Green	0.05	0.22	0.22	0.15	0.32	0.32	0.16	0.35	0.35	0.14	0.33	0.33
Sat Flow, veh/h	1757	5036	1473	1757	4821	314	1757	3505	1525	1757	3505	1545
Grp Volume(v), veh/h	71	693	173	237	951	503	244	793	284	219	876	127
Grp Sat Flow(s),veh/h/ln	1757	1679	1473	1757	1679	1778	1757	1752	1525	1757	1752	1545
Q Serve(g_s), s	4.6	14.3	9.5	15.2	30.8	30.8	15.6	21.8	13.1	14.0	25.4	6.3
Cycle Q Clear(g_c), s	4.6	14.3	9.5	15.2	30.8	30.8	15.6	21.8	13.1	14.0	25.4	6.3
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	90	1100	566	266	1069	566	273	1224	770	248	1174	598
V/C Ratio(X)	0.79	0.63	0.31	0.89	0.89	0.89	0.89	0.65	0.37	0.88	0.75	0.21
Avail Cap(c_a), veh/h	107	1100	566	307	1114	590	322	1224	770	291	1174	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	40.5	25.4	47.7	37.1	37.1	47.4	31.3	17.5	48.2	33.8	23.5
Incr Delay (d2), s/veh	26.8	1.2	0.3	24.0	8.8	15.1	23.0	2.7	1.4	23.2	4.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	6.7	3.9	9.1	15.6	17.5	9.3	11.0	5.7	8.4	13.0	2.8
LnGrp Delay(d), s/veh	80.4	41.7	25.7	71.6	46.0	52.2	70.4	34.0	18.9	71.5	38.1	24.3
LnGrp LOS	F	D	C	E	D	D	E	C	B	E	D	C
Approach Vol, veh/h		937			1691			1321			1222	
Approach Delay, s/veh		41.7			51.4			37.5			42.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.2	44.0	21.3	29.0	21.8	42.3	9.9	40.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	40.0	20.0	25.0	21.0	38.0	7.0	38.0
Max Q Clear Time (g_c+I1), s	16.0	23.8	17.2	16.3	17.6	27.4	6.6	32.8
Green Ext Time (p_c), s	0.2	5.7	0.2	3.3	0.2	4.5	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	46	845	614	500	99	51
Future Volume (vph)	46	845	614	500	99	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.96	1.00	1.00
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	0.99	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1587	3195	3195	1376	3092	1301
Flt Permitted	0.34	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	575	3195	3195	1376	3092	1301
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	49	899	653	532	105	54
RTOR Reduction (vph)	0	0	0	313	2	28
Lane Group Flow (vph)	49	899	653	219	108	21
Confl. Peds. (#/hr)	11			11	1	
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	21.2	21.2	21.2	21.2	22.2	22.2
Effective Green, g (s)	21.2	21.2	21.2	21.2	22.2	22.2
Actuated g/C Ratio	0.41	0.41	0.41	0.41	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	237	1317	1317	567	1335	561
v/s Ratio Prot		c0.28	0.20		c0.03	
v/s Ratio Perm	0.09			0.16		0.02
v/c Ratio	0.21	0.68	0.50	0.39	0.08	0.04
Uniform Delay, d1	9.7	12.3	11.2	10.6	8.6	8.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	1.5	0.3	0.4	0.1	0.1
Delay (s)	10.1	13.8	11.4	11.0	8.7	8.6
Level of Service	B	B	B	B	A	A
Approach Delay (s/veh)		13.6	11.2		8.7	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	780	47	66	1677	81	98	85	75	59	30	11
Future Volume (veh/h)	17	780	47	66	1677	81	98	85	75	59	30	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	18	830	50	70	1784	86	104	90	80	63	32	12
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	2728	164	381	2766	133	528	628	525	454	628	525
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	241	4850	291	622	4916	237	1339	1845	1543	1196	1845	1543
Grp Volume(v), veh/h	18	574	306	70	1217	653	104	90	80	63	32	12
Grp Sat Flow(s),veh/h/ln	241	1679	1784	622	1679	1796	1339	1845	1543	1196	1845	1543
Q Serve(g_s), s	4.6	7.4	7.5	5.5	20.5	20.5	4.7	2.8	3.0	3.2	1.0	0.4
Cycle Q Clear(g_c), s	25.1	7.4	7.5	13.0	20.5	20.5	5.6	2.8	3.0	6.0	1.0	0.4
Prop In Lane	1.00		0.16	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	1889	1004	381	1889	1010	528	628	525	454	628	525
V/C Ratio(X)	0.11	0.30	0.31	0.18	0.64	0.65	0.20	0.14	0.15	0.14	0.05	0.02
Avail Cap(c_a), veh/h	273	3427	1821	666	3427	1833	528	628	525	454	628	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	9.5	9.5	12.9	12.4	12.4	20.1	18.8	18.9	20.9	18.2	18.0
Incr Delay (d2), s/veh	0.3	0.1	0.2	0.2	0.4	0.7	0.8	0.5	0.6	0.6	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.4	3.7	1.0	9.4	10.2	1.8	1.5	1.4	1.1	0.5	0.2
LnGrp Delay(d), s/veh	21.3	9.6	9.7	13.2	12.7	13.1	20.9	19.3	19.5	21.5	18.4	18.1
LnGrp LOS	C	A	A	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		898			1940			274			107	
Approach Delay, s/veh		9.9			12.9			20.0			20.2	
Approach LOS		A			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		50.3		32.0		50.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		7.6		27.1		8.0		22.5
Green Ext Time (p_c), s		1.0		7.3		0.3		23.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	3	92	48	7	4	37	322	30	2	475	8
Future Volume (veh/h)	1	3	92	48	7	4	37	322	30	2	475	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.97	0.98		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	1	3	105	55	8	5	42	366	34	2	540	9
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	156	157	177	22	149	150	1286	1264	35	1531	1267
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.82	0.82	0.82	0.82	0.82	0.82
Sat Flow, veh/h	239	1533	1541	1109	212	1467	137	1564	1536	1	1861	1541
Grp Volume(v), veh/h	4	0	105	63	0	5	408	0	34	542	0	9
Grp Sat Flow(s),veh/h/ln	1772	0	1541	1321	0	1467	1701	0	1536	1862	0	1541
Q Serve(g_s), s	0.0	0.0	6.9	4.4	0.0	0.3	0.0	0.0	0.4	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.2	0.0	6.9	4.7	0.0	0.3	5.3	0.0	0.4	7.7	0.0	0.1
Prop In Lane	0.25		1.00	0.87		1.00	0.10		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	223	0	157	198	0	149	1436	0	1264	1566	0	1267
V/C Ratio(X)	0.02	0.00	0.67	0.32	0.00	0.03	0.28	0.00	0.03	0.35	0.00	0.01
Avail Cap(c_a), veh/h	452	0	364	374	0	347	1436	0	1264	1566	0	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.8	0.0	45.8	44.7	0.0	42.8	2.1	0.0	1.7	2.4	0.0	1.7
Incr Delay (d2), s/veh	0.0	0.0	4.8	0.9	0.0	0.1	0.5	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.2	1.8	0.0	0.1	2.8	0.0	0.2	4.2	0.0	0.0
LnGrp Delay(d), s/veh	42.8	0.0	50.6	45.6	0.0	42.9	2.6	0.0	1.7	3.0	0.0	1.7
LnGrp LOS	D		D	D		D	A		A	A		A
Approach Vol, veh/h		109			68			442			551	
Approach Delay, s/veh		50.3			45.4			2.6			2.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.0		14.8		91.0		14.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		87.0		25.0		87.0		25.0
Max Q Clear Time (g_c+I1), s		7.3		8.9		9.7		6.7
Green Ext Time (p_c), s		3.4		0.3		4.5		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	31	41	107	181	55	169	1154	22	27	978	96
Future Volume (veh/h)	34	31	41	107	181	55	169	1154	22	27	978	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	37	34	45	118	199	60	186	1268	24	30	1075	105
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	46	213	292	147	233	70	253	2193	41	39	2004	884
Arrive On Green	0.03	0.12	0.12	0.08	0.17	0.17	0.07	0.62	0.62	0.02	0.57	0.57
Sat Flow, veh/h	1757	1845	1523	1757	1350	407	3408	3517	67	1757	3505	1546
Grp Volume(v), veh/h	37	34	45	118	0	259	186	632	660	30	1075	105
Grp Sat Flow(s),veh/h/ln	1757	1845	1523	1757	0	1757	1704	1752	1831	1757	1752	1546
Q Serve(g_s), s	2.2	1.7	2.5	6.8	0.0	14.8	5.5	21.9	21.9	1.8	19.6	3.2
Cycle Q Clear(g_c), s	2.2	1.7	2.5	6.8	0.0	14.8	5.5	21.9	21.9	1.8	19.6	3.2
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	46	213	292	147	0	303	253	1093	1142	39	2004	884
V/C Ratio(X)	0.80	0.16	0.15	0.80	0.00	0.85	0.74	0.58	0.58	0.76	0.54	0.12
Avail Cap(c_a), veh/h	102	340	397	255	0	477	363	1093	1142	102	2004	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	41.1	34.9	46.4	0.0	41.4	46.8	11.4	11.4	50.2	13.7	10.2
Incr Delay (d2), s/veh	25.8	0.3	0.2	9.7	0.0	8.7	4.5	2.2	2.1	25.8	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.9	1.1	3.7	0.0	7.9	2.8	11.2	11.7	1.1	9.7	1.4
LnGrp Delay(d), s/veh	75.7	41.5	35.2	56.2	0.0	50.1	51.3	13.7	13.6	75.9	14.7	10.4
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	B
Approach Vol, veh/h		116			377			1478			1210	
Approach Delay, s/veh		49.9			52.0			18.4			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	68.3	12.6	15.9	11.7	63.0	6.7	21.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	64.0	15.0	19.0	11.0	59.0	6.0	28.0
Max Q Clear Time (g_c+I1), s	3.8	23.9	8.8	4.5	7.5	21.6	4.2	16.8
Green Ext Time (p_c), s	0.0	10.8	0.1	0.2	0.2	9.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	20.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	40	86	97	120	8	86	239	35	5	301	57
Future Vol, veh/h	28	40	86	97	120	8	86	239	35	5	301	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	32	45	98	110	136	9	98	272	40	6	342	65
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	12.1	18.8	24.9	21.1
HCM LOS	B	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	26%	0%	41%	0%	45%	0%	2%	0%
Vol Thru, %	74%	0%	59%	0%	55%	0%	98%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	325	35	68	86	217	8	306	57
LT Vol	86	0	28	0	97	0	5	0
Through Vol	239	0	40	0	120	0	301	0
RT Vol	0	35	0	86	0	8	0	57
Lane Flow Rate	369	40	77	98	247	9	348	65
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.727	0.069	0.174	0.194	0.533	0.017	0.675	0.113
Departure Headway (Hd)	7.086	6.235	8.094	7.159	7.779	6.829	6.987	6.262
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	510	573	442	499	464	522	515	571
Service Time	4.846	3.994	5.869	4.934	5.543	4.593	4.747	4.022
HCM Lane V/C Ratio	0.724	0.07	0.174	0.196	0.532	0.017	0.676	0.114
HCM Control Delay, s/veh	26.6	9.5	12.6	11.7	19.1	9.7	23.2	9.8
HCM Lane LOS	D	A	B	B	C	A	C	A
HCM 95th-tile Q	5.9	0.2	0.6	0.7	3.1	0.1	5	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	634	116	61	858	217	155	524	68	174	725	281
Future Volume (veh/h)	201	634	116	61	858	217	155	524	68	174	725	281
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	218	689	126	66	933	236	168	570	74	189	788	305
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	232	1876	817	337	1876	837	185	1300	168	280	1459	653
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	483	3574	1557	674	3574	1594	519	3183	412	791	3574	1599
Grp Volume(v), veh/h	218	689	126	66	933	236	168	319	325	189	788	305
Grp Sat Flow(s),veh/h/ln	483	1787	1557	674	1787	1594	519	1787	1808	791	1787	1599
Q Serve(g_s), s	42.9	13.6	5.0	7.7	20.1	9.9	28.9	15.4	15.5	27.2	20.1	16.7
Cycle Q Clear(g_c), s	63.0	13.6	5.0	21.3	20.1	9.9	49.0	15.4	15.5	42.7	20.1	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	232	1876	817	337	1876	837	185	730	738	280	1459	653
V/C Ratio(X)	0.94	0.37	0.15	0.20	0.50	0.28	0.91	0.44	0.44	0.67	0.54	0.47
Avail Cap(c_a), veh/h	232	1876	817	337	1876	837	185	730	738	280	1459	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	16.8	14.7	23.0	18.3	15.9	49.2	25.6	25.6	41.0	26.9	26.0
Incr Delay (d2), s/veh	42.0	0.1	0.1	0.3	0.2	0.2	45.6	1.9	1.9	12.2	1.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	6.7	2.2	1.5	9.9	4.4	7.9	8.0	8.1	6.9	10.1	7.8
LnGrp Delay(d), s/veh	85.1	16.9	14.8	23.3	18.5	16.1	94.8	27.5	27.5	53.2	28.4	28.3
LnGrp LOS	F	B	B	C	B	B	F	C	C	D	C	C
Approach Vol, veh/h		1033			1235			812			1282	
Approach Delay, s/veh		31.0			18.3			41.4			32.0	
Approach LOS		C			B			D			C	

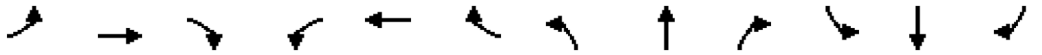
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		67.0		53.0		67.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		63.0		49.0		63.0
Max Q Clear Time (g_c+I1), s		51.0		65.0		44.7		23.3
Green Ext Time (p_c), s		0.0		0.0		2.7		9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	635	94	269	1085	82	177	839	204	72	1050	364
Future Volume (veh/h)	195	635	94	269	1085	82	177	839	204	72	1050	364
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1810
Adj Flow Rate, veh/h	205	668	99	283	1142	86	186	883	215	76	1105	383
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	233	990	145	311	1279	96	241	1085	264	96	1310	574
Arrive On Green	0.14	0.23	0.23	0.18	0.27	0.27	0.07	0.40	0.40	0.06	0.38	0.38
Sat Flow, veh/h	1723	4346	637	1723	4679	352	3343	2732	665	1723	3438	1507
Grp Volume(v), veh/h	205	504	263	283	804	424	186	555	543	76	1105	383
Grp Sat Flow(s),veh/h/ln	1723	1647	1689	1723	1647	1737	1672	1719	1677	1723	1719	1507
Q Serve(g_s), s	13.5	16.1	16.4	18.6	27.1	27.1	6.3	33.2	33.3	5.0	33.9	24.4
Cycle Q Clear(g_c), s	13.5	16.1	16.4	18.6	27.1	27.1	6.3	33.2	33.3	5.0	33.9	24.4
Prop In Lane	1.00		0.38	1.00		0.20	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	233	750	385	311	900	475	241	683	666	96	1310	574
V/C Ratio(X)	0.88	0.67	0.68	0.91	0.89	0.89	0.77	0.81	0.81	0.79	0.84	0.67
Avail Cap(c_a), veh/h	269	770	395	358	941	496	260	683	666	119	1310	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	40.7	40.8	46.4	40.3	40.3	52.7	31.0	31.0	53.9	32.6	29.7
Incr Delay (d2), s/veh	24.6	2.2	4.6	24.3	10.5	17.9	12.4	10.2	10.5	24.4	6.8	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	7.6	8.2	11.0	13.6	15.3	3.3	17.7	17.3	3.1	17.3	11.1
LnGrp Delay(d), s/veh	73.7	42.9	45.4	70.7	50.8	58.2	65.1	41.2	41.5	78.3	39.4	35.7
LnGrp LOS	E	D	D	E	D	E	E	D	D	E	D	D
Approach Vol, veh/h		972			1511			1284			1564	
Approach Delay, s/veh		50.1			56.6			44.8			40.4	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	49.9	24.9	30.3	12.3	48.0	19.6	35.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	24.0	27.0	9.0	44.0	18.0	33.0
Max Q Clear Time (g_c+I1), s	7.0	35.3	20.6	18.4	8.3	35.9	15.5	29.1
Green Ext Time (p_c), s	0.0	4.6	0.3	3.0	0.0	5.3	0.1	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	228	36	159	244	97	23	1268	193	47	1866	75
Future Volume (veh/h)	66	228	36	159	244	97	23	1268	193	47	1866	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	70	243	38	169	260	103	24	1349	205	50	1985	80
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	90	429	216	235	343	132	34	2770	421	64	3204	129
Arrive On Green	0.05	0.12	0.12	0.07	0.14	0.14	0.02	0.62	0.62	0.04	0.64	0.64
Sat Flow, veh/h	1774	3539	1529	3442	2476	950	1774	4455	677	1774	5015	202
Grp Volume(v), veh/h	70	243	38	169	183	180	24	1026	528	50	1340	725
Grp Sat Flow(s),veh/h/ln	1774	1770	1529	1721	1770	1657	1774	1695	1742	1774	1695	1827
Q Serve(g_s), s	4.1	6.8	2.3	5.0	10.4	11.0	1.4	17.2	17.2	2.9	24.8	24.9
Cycle Q Clear(g_c), s	4.1	6.8	2.3	5.0	10.4	11.0	1.4	17.2	17.2	2.9	24.8	24.9
Prop In Lane	1.00		1.00	1.00		0.57	1.00		0.39	1.00		0.11
Lane Grp Cap(c), veh/h	90	429	216	235	245	230	34	2108	1083	64	2166	1167
V/C Ratio(X)	0.78	0.57	0.18	0.72	0.75	0.78	0.71	0.49	0.49	0.78	0.62	0.62
Avail Cap(c_a), veh/h	169	675	322	361	354	332	101	2108	1083	152	2166	1167
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	43.5	39.7	47.9	43.4	43.6	51.1	10.8	10.8	50.1	11.3	11.3
Incr Delay (d2), s/veh	13.2	1.2	0.4	4.1	5.1	7.3	23.3	0.8	1.6	18.0	1.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.4	1.0	2.5	5.4	5.5	0.9	8.2	8.7	1.8	11.9	13.3
LnGrp Delay(d), s/veh	62.4	44.7	40.1	52.0	48.5	51.0	74.4	11.6	12.3	68.1	12.7	13.8
LnGrp LOS	E	D	D	D	D	D	E	B	B	E	B	B
Approach Vol, veh/h		351			532			1578			2115	
Approach Delay, s/veh		47.7			50.4			12.8			14.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.8	69.2	11.2	16.7	6.0	71.0	9.3	18.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	64.0	11.0	20.0	6.0	67.0	10.0	21.0
Max Q Clear Time (g_c+I1), s	4.9	19.2	7.0	8.8	3.4	26.9	6.1	13.0
Green Ext Time (p_c), s	0.0	15.5	0.2	1.1	0.0	22.8	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	176	8	12	559	44	7	0	15	51	0	3
Future Volume (veh/h)	6	176	8	12	559	44	7	0	15	51	0	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	7	191	9	13	608	48	8	0	16	55	0	3
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	827	38	51	811	63	1023	0	1048	960	2	48
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.66	0.00	0.66	0.66	0.00	0.66
Sat Flow, veh/h	33	3312	153	28	3251	254	1430	0	1599	1338	4	73
Grp Volume(v), veh/h	108	0	99	354	0	315	8	0	16	58	0	0
Grp Sat Flow(s),veh/h/ln	1814	0	1685	1865	0	1667	1430	0	1599	1415	0	0
Q Serve(g_s), s	0.0	0.0	3.9	2.2	0.0	14.7	0.0	0.0	0.3	1.1	0.0	0.0
Cycle Q Clear(g_c), s	14.7	0.0	3.9	14.6	0.0	14.7	0.1	0.0	0.3	1.2	0.0	0.0
Prop In Lane	0.06		0.09	0.04		0.15	1.00		1.00	0.95		0.05
Lane Grp Cap(c), veh/h	498	0	421	510	0	416	1023	0	1048	1010	0	0
V/C Ratio(X)	0.22	0.00	0.24	0.69	0.00	0.76	0.01	0.00	0.02	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1239	0	1144	1301	0	1132	1023	0	1048	1010	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.1	0.0	25.1	29.1	0.0	29.2	5.0	0.0	5.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	1.7	0.0	2.9	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.8	7.8	0.0	7.1	0.1	0.0	0.1	0.5	0.0	0.0
LnGrp Delay(d), s/veh	25.3	0.0	25.4	30.8	0.0	32.0	5.0	0.0	5.1	5.3	0.0	0.0
LnGrp LOS	C		C	C		C	A		A	A		
Approach Vol, veh/h		207			669			24			58	
Approach Delay, s/veh		25.3			31.4			5.1			5.3	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		25.0		59.0		25.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		2.3		16.7		3.2		16.7
Green Ext Time (p_c), s		0.1		1.2		0.3		4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	238	1	5	601	27	1	0	2	13	0	6
Future Volume (veh/h)	4	238	1	5	601	27	1	0	2	13	0	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	4	259	1	5	653	29	1	0	2	14	0	7
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	47	900	3	45	864	38	366	27	671	701	14	322
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.65	0.00	0.65	0.65	0.00	0.65
Sat Flow, veh/h	13	3546	14	7	3405	150	474	41	1029	967	22	494
Grp Volume(v), veh/h	138	0	126	362	0	325	3	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1863	0	1709	1877	0	1685	1544	0	0	1483	0	0
Q Serve(g_s), s	0.0	0.0	5.0	0.0	0.0	15.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.0	0.0	5.0	15.0	0.0	15.1	0.1	0.0	0.0	0.4	0.0	0.0
Prop In Lane	0.03		0.01	0.01		0.09	0.33		0.67	0.67		0.33
Lane Grp Cap(c), veh/h	516	0	434	519	0	428	1063	0	0	1037	0	0
V/C Ratio(X)	0.27	0.00	0.29	0.70	0.00	0.76	0.00	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	1277	0	1154	1305	0	1138	1063	0	0	1037	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.4	0.0	25.4	29.1	0.0	29.1	5.1	0.0	0.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.4	1.7	0.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	2.4	8.0	0.0	7.3	0.0	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	25.6	0.0	25.7	30.8	0.0	31.9	5.1	0.0	0.0	5.2	0.0	0.0
LnGrp LOS	C		C	C		C	A			A		
Approach Vol, veh/h		264			687			3			21	
Approach Delay, s/veh		25.7			31.3			5.1			5.2	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		25.4		59.0		25.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		2.1		7.0		2.4		17.1
Green Ext Time (p_c), s		0.0		1.5		0.1		4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	240	20	8	567	16	98	10	2	1	0	1
Future Volume (veh/h)	2	240	20	8	567	16	98	10	2	1	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	2	261	22	9	616	17	107	11	2	1	0	1
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	45	781	65	49	827	23	942	94	16	545	21	501
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.66	0.66	0.66	0.66	0.00	0.66
Sat Flow, veh/h	5	3262	272	17	3453	94	1296	141	24	723	32	754
Grp Volume(v), veh/h	150	0	135	337	0	305	120	0	0	2	0	0
Grp Sat Flow(s),veh/h/ln	1875	0	1664	1869	0	1695	1461	0	0	1509	0	0
Q Serve(g_s), s	0.0	0.0	5.6	0.9	0.0	13.8	2.2	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	5.5	0.0	5.6	13.8	0.0	13.8	2.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.01		0.16	0.03		0.06	0.89		0.02	0.50		0.50
Lane Grp Cap(c), veh/h	493	0	399	492	0	406	1052	0	0	1067	0	0
V/C Ratio(X)	0.30	0.00	0.34	0.68	0.00	0.75	0.11	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	1322	0	1145	1320	0	1166	1052	0	0	1067	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.0	0.0	26.1	29.2	0.0	29.2	5.1	0.0	0.0	4.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.5	1.7	0.0	2.8	0.2	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	2.6	7.3	0.0	6.8	1.1	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	26.4	0.0	26.6	30.9	0.0	32.0	5.3	0.0	0.0	4.7	0.0	0.0
LnGrp LOS	C		C	C		C	A			A		
Approach Vol, veh/h		285			642			120			2	
Approach Delay, s/veh		26.5			31.4			5.3			4.7	
Approach LOS		C			C			A			A	

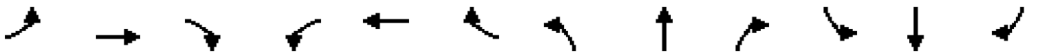
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		23.8		59.0		23.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		16.0		57.0
Max Q Clear Time (g_c+I1), s		4.4		7.6		2.0		15.8
Green Ext Time (p_c), s		0.8		1.6		0.0		4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	226	12	41	602	10	12	5	19	27	6	3
Future Volume (veh/h)	8	226	12	41	602	10	12	5	19	27	6	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	9	246	13	45	654	11	13	5	21	29	7	3
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	53	854	45	86	868	14	366	156	543	769	182	73
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	33	3228	169	148	3282	54	482	243	846	1084	283	114
Grp Volume(v), veh/h	139	0	129	366	0	344	39	0	0	39	0	0
Grp Sat Flow(s),veh/h/ln	1748	0	1682	1782	0	1702	1572	0	0	1481	0	0
Q Serve(g_s), s	0.1	0.0	5.2	9.1	0.0	16.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.1	0.0	5.2	16.1	0.0	16.0	0.7	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.06		0.10	0.12		0.03	0.33		0.54	0.74		0.08
Lane Grp Cap(c), veh/h	507	0	445	519	0	450	1065	0	0	1024	0	0
V/C Ratio(X)	0.27	0.00	0.29	0.71	0.00	0.76	0.04	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	1197	0	1119	1215	0	1133	1065	0	0	1024	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.0	0.0	25.1	28.9	0.0	29.0	5.6	0.0	0.0	5.6	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.4	1.8	0.0	2.7	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.0	2.5	8.2	0.0	7.8	0.4	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	25.3	0.0	25.5	30.7	0.0	31.8	5.7	0.0	0.0	5.7	0.0	0.0
LnGrp LOS	C		C	C		C	A			A		
Approach Vol, veh/h		268			710			39			39	
Approach Delay, s/veh		25.4			31.2			5.7			5.7	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		26.7		59.0		26.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		2.7		18.1		2.7		18.1
Green Ext Time (p_c), s		0.2		1.5		0.2		4.6

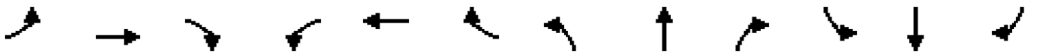
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	240	1	1	522	224	0	0	0	280	0	140
Future Volume (vph)	52	240	1	1	522	224	0	0	0	280	0	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					0.95	0.91	0.95
Frt		1.00		1.00	0.96					1.00	0.99	0.85
Flt Protected		0.99		0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3541		1787	3413					1698	1614	1519
Flt Permitted		0.66		0.95	1.00					0.95	0.77	1.00
Satd. Flow (perm)		2340		1787	3413					1698	1293	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	57	261	1	1	567	243	0	0	0	304	0	152
RTOR Reduction (vph)	0	0	0	0	51	0	0	0	0	0	33	55
Lane Group Flow (vph)	0	319	0	1	759	0	0	0	0	161	125	82
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		24.6		1.1	29.7					13.6	56.2	56.2
Effective Green, g (s)		24.6		1.1	29.7					13.6	56.2	56.2
Actuated g/C Ratio		0.26		0.01	0.32					0.14	0.60	0.60
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		613		20	1079					245	820	909
v/s Ratio Prot				0.00	c0.22					c0.09	0.02	0.05
v/s Ratio Perm		0.14									c0.07	
v/c Ratio		0.52		0.05	0.70					0.66	0.15	0.09
Uniform Delay, d1		29.6		45.9	28.2					37.9	8.3	8.0
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.8		1.0	2.1					6.2	0.1	0.2
Delay (s)		30.4		46.9	30.3					44.2	8.4	8.2
Level of Service		C		D	C					D	A	A
Approach Delay (s/veh)		30.4			30.3			0.0			21.0	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	93.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	48.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	89	462	10	8	572	224	3	2	11	205	3	163
Future Volume (vph)	89	462	10	8	572	224	3	2	11	205	3	163
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.90		1.00	0.94	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.97	1.00
Satd. Flow (prot)	1787	3574	1599	1787	3574	1599		1687		1698	1570	1519
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.75	0.84	1.00
Satd. Flow (perm)	1787	3574	1599	1787	3574	1599		1661		1334	1354	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	97	502	11	9	622	243	3	2	12	223	3	177
RTOR Reduction (vph)	0	0	7	0	0	120	0	6	0	0	14	66
Lane Group Flow (vph)	97	502	4	9	622	123	0	11	0	140	122	61
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	8.4	31.3	31.3	1.2	24.1	24.1		40.8		40.8	40.8	40.8
Effective Green, g (s)	8.4	31.3	31.3	1.2	24.1	24.1		40.8		40.8	40.8	40.8
Actuated g/C Ratio	0.10	0.37	0.37	0.01	0.28	0.28		0.48		0.48	0.48	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	175	1311	586	25	1009	451		794		638	647	726
v/s Ratio Prot	c0.05	0.14		0.01	c0.17							
v/s Ratio Perm			0.00			0.08		0.01		c0.10	0.09	0.04
v/c Ratio	0.55	0.38	0.01	0.36	0.62	0.27		0.01		0.22	0.19	0.08
Uniform Delay, d1	36.7	19.9	17.1	41.7	26.6	23.8		11.7		13.0	12.8	12.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	3.8	0.2	0.0	8.7	1.1	0.3		0.0		0.8	0.6	0.2
Delay (s)	40.4	20.1	17.1	50.3	27.7	24.1		11.7		13.8	13.4	12.3
Level of Service	D	C	B	D	C	C		B		B	B	B
Approach Delay (s/veh)		23.3			26.9			11.7			13.2	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.39		
Actuated Cycle Length (s)	85.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	44.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	15	37	20	90	119	7	139	674	101	11	684	109
Future Volume (veh/h)	15	37	20	90	119	7	139	674	101	11	684	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	16	40	22	98	129	8	151	733	110	12	743	118
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	44	91	747	50	50	747	256	1663	744	279	1438	228
Arrive On Green	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	9	194	1599	14	108	1599	646	3574	1599	657	3091	491
Grp Volume(v), veh/h	56	0	22	227	0	8	151	733	110	12	429	432
Grp Sat Flow(s),veh/h/ln	204	0	1599	122	0	1599	646	1787	1599	657	1787	1795
Q Serve(g_s), s	1.1	0.0	0.9	1.1	0.0	0.3	25.2	16.3	4.7	1.5	20.0	20.0
Cycle Q Clear(g_c), s	55.2	0.0	0.9	55.2	0.0	0.3	44.5	16.3	4.7	17.2	20.0	20.0
Prop In Lane	0.29		1.00	0.43		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	134	0	747	101	0	747	256	1663	744	279	832	835
V/C Ratio(X)	0.42	0.00	0.03	2.26	0.00	0.01	0.59	0.44	0.15	0.04	0.52	0.52
Avail Cap(c_a), veh/h	160	0	771	125	0	771	256	1663	744	279	832	835
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	0.0	17.0	36.6	0.0	16.9	37.6	21.2	18.1	26.8	22.2	22.2
Incr Delay (d2), s/veh	2.1	0.0	0.0	595.5	0.0	0.0	9.6	0.8	0.4	0.3	2.3	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.4	19.9	0.0	0.1	5.2	8.2	2.1	0.3	10.3	10.4
LnGrp Delay(d), s/veh	29.9	0.0	17.0	632.1	0.0	16.9	47.2	22.1	18.6	27.1	24.5	24.5
LnGrp LOS	C		B	F		B	D	C	B	C	C	C
Approach Vol, veh/h		78			235			994			873	
Approach Delay, s/veh		26.2			611.2			25.5			24.6	
Approach LOS		C			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		60.1		59.0		60.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		46.5		57.2		22.0		57.2
Green Ext Time (p_c), s		4.0		0.0		6.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	88.3
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	1.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	16	28	1224	12	52	795
Future Vol, veh/h	16	28	1224	12	52	795
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	17	29	1275	13	54	828

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1805	645	0	0	1289	0
Stage 1	1283	-	-	-	-	-
Stage 2	522	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	71	417	-	-	539	-
Stage 1	226	-	-	-	-	-
Stage 2	563	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	64	417	-	-	539	-
Mov Cap-2 Maneuver	64	-	-	-	-	-
Stage 1	226	-	-	-	-	-
Stage 2	507	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	38.2	0	0.8
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	64	417	539	-
HCM Lane V/C Ratio	-	-	0.26	0.07	0.1	-
HCM Control Delay (s/veh)	-	-	80	14.3	12.4	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.9	0.2	0.3	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	147	162	1163	214	81	650
Future Volume (vph)	147	162	1163	214	81	650
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	1599	3472		1787	3574
Flt Permitted	0.95	1.00	1.00		0.12	1.00
Satd. Flow (perm)	1787	1599	3472		232	3574
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	155	171	1224	225	85	684
RTOR Reduction (vph)	0	54	11	0	0	0
Lane Group Flow (vph)	155	117	1438	0	85	684
Confl. Peds. (#/hr)	11			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)	14.7	25.4	72.2		82.9	86.9
Effective Green, g (s)	14.7	25.4	72.2		82.9	86.9
Actuated g/C Ratio	0.13	0.23	0.66		0.76	0.79
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	239	428	2287		327	2833
v/s Ratio Prot	c0.09	c0.03	c0.41		0.03	0.19
v/s Ratio Perm		0.05			0.17	
v/c Ratio	0.65	0.27	0.63		0.26	0.24
Uniform Delay, d1	45.0	34.5	10.9		15.3	2.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	5.9	0.3	1.3		0.4	0.0
Delay (s)	50.9	34.9	12.2		15.7	3.0
Level of Service	D	C	B		B	A
Approach Delay (s/veh)	42.5		12.2			4.4
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	109.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	61.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	19	2	22	0	0	4	13	1174	2	4	532	55
Future Vol, veh/h	19	2	22	0	0	4	13	1174	2	4	532	55
Conflicting Peds, #/hr	0	0	5	5	0	0	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	20	2	24	0	0	4	14	1262	2	4	572	59

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1153	1918	331	1540	1946	638	641	0	0	1270	0	0
Stage 1	620	620	-	1297	1297	-	-	-	-	-	-	-
Stage 2	533	1298	-	243	649	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	208	67	567	122	64	359	581	-	-	289	-	-
Stage 1	363	478	-	123	230	-	-	-	-	-	-	-
Stage 2	455	230	-	678	464	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	198	64	560	110	61	357	576	-	-	288	-	-
Mov Cap-2 Maneuver	198	64	-	110	61	-	-	-	-	-	-	-
Stage 1	351	467	-	119	223	-	-	-	-	-	-	-
Stage 2	439	223	-	635	454	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22	15.2	0.1	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	576	-	-	258	357	288	-	-
HCM Lane V/C Ratio	0.024	-	-	0.179	0.012	0.015	-	-
HCM Control Delay (s/veh)	11.4	-	-	22	15.2	17.7	-	-
HCM Lane LOS	B	-	-	C	C	C	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.6	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	267	13	122	268	149	21	870	99	61	327	129
Future Volume (veh/h)	184	267	13	122	268	149	21	870	99	61	327	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.97	0.99		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	192	278	14	127	279	155	22	906	103	64	341	134
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	554	28	416	319	177	425	1769	200	281	1456	534
Arrive On Green	0.10	0.32	0.32	0.07	0.29	0.29	0.02	0.38	0.38	0.04	0.40	0.40
Sat Flow, veh/h	1774	1757	88	1774	1114	619	1774	4614	522	1774	3628	1329
Grp Volume(v), veh/h	192	0	292	127	0	434	22	665	344	64	317	158
Grp Sat Flow(s),veh/h/ln	1774	0	1846	1774	0	1733	1774	1695	1746	1774	1695	1567
Q Serve(g_s), s	6.2	0.0	10.7	4.1	0.0	19.9	0.6	12.5	12.6	1.8	5.2	5.6
Cycle Q Clear(g_c), s	6.2	0.0	10.7	4.1	0.0	19.9	0.6	12.5	12.6	1.8	5.2	5.6
Prop In Lane	1.00		0.05	1.00		0.36	1.00		0.30	1.00		0.85
Lane Grp Cap(c), veh/h	312	0	582	416	0	496	425	1300	670	281	1361	629
V/C Ratio(X)	0.62	0.00	0.50	0.31	0.00	0.87	0.05	0.51	0.51	0.23	0.23	0.25
Avail Cap(c_a), veh/h	557	0	708	713	0	665	816	1300	670	640	1361	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.3	0.0	23.2	18.9	0.0	28.3	15.2	19.7	19.8	15.6	16.5	16.6
Incr Delay (d2), s/veh	2.0	0.0	0.7	0.4	0.0	9.8	0.1	1.4	2.8	0.4	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	5.5	2.0	0.0	10.9	0.3	6.1	6.5	0.9	2.5	2.6
LnGrp Delay(d), s/veh	22.3	0.0	23.9	19.4	0.0	38.1	15.2	21.2	22.6	16.0	16.9	17.6
LnGrp LOS	C		C	B		D	B	C	C	B	B	B
Approach Vol, veh/h		484			561			1031			539	
Approach Delay, s/veh		23.3			33.9			21.5			17.0	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	36.0	10.0	30.3	5.6	37.5	12.4	27.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	20.0	32.0	20.0	32.0	20.0	32.0
Max Q Clear Time (g_c+I1), s	3.8	14.6	6.1	12.7	2.6	7.6	8.2	21.9
Green Ext Time (p_c), s	0.1	6.0	0.2	1.6	0.0	2.9	0.4	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	144	22	259	745	17	14
Future Vol, veh/h	144	22	259	745	17	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	150	23	270	776	18	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	173	0	1478	162
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	1316	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1416	-	140	888
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	253	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1416	-	93	888
Mov Cap-2 Maneuver	-	-	-	-	93	-
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	168	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.1	33
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	93	888	-	-	1416	-
HCM Lane V/C Ratio	0.19	0.016	-	-	0.191	-
HCM Control Delay (s/veh)	52.6	9.1	-	-	8.1	0
HCM Lane LOS	F	A	-	-	A	A
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.7	-

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Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	13	651	462	134	948	16	659	0	138	0	0
Future Volume (vph)	0	13	651	462	134	948	16	659	0	138	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.94	1.00	1.00		1.00		0.96		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.98	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3327	1373	1787	3564		3467		1533		
Flt Permitted			0.93	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3089	1373	1787	3564		3467		1533		
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	14	715	508	147	1042	18	724	0	152	0	0
RTOR Reduction (vph)	0	0	10	266	0	1	0	0	0	84	0	0
Lane Group Flow (vph)	0	0	831	130	147	1059	0	724	0	68	0	0
Confl. Peds. (#/hr)		2		18	18		2			13	13	
Confl. Bikes (#/hr)				11						5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases		4		4						2		
Actuated Green, G (s)			37.4	37.4	13.2	54.6		27.5		51.3		
Effective Green, g (s)			37.4	37.4	13.2	54.6		27.5		51.3		
Actuated g/C Ratio			0.33	0.33	0.12	0.48		0.24		0.45		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1014	450	207	1708		837		690		
v/s Ratio Prot					c0.08	0.30		c0.21				
v/s Ratio Perm			c0.27	0.09						c0.04		
v/c Ratio			0.82	0.29	0.71	0.62		0.86		0.10		
Uniform Delay, d1			35.1	28.4	48.5	22.0		41.4		18.0		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			5.3	0.4	10.9	0.7		9.3		0.3		
Delay (s)			40.4	28.7	59.4	22.6		50.7		18.3		
Level of Service			D	C	E	C		D		B		
Approach Delay (s/veh)			36.7			27.1			45.1			38.9
Approach LOS			D			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	113.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	6
Future Volume (vph)	6
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1627
Flt Permitted	1.00
Satd. Flow (perm)	1627
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	7
RTOR Reduction (vph)	6
Lane Group Flow (vph)	1
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	19.8
Effective Green, g (s)	19.8
Actuated g/C Ratio	0.17
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	282
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.00
Uniform Delay, d1	38.9
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	38.9
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	52	96	2	94	15	0	913	63	63	540
Future Volume (vph)	0	0	52	96	2	94	15	0	913	63	63	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.94	1.00	0.94		1.00		1.00	0.95	1.00	1.00
Flpb, ped/bikes			1.00	0.96	1.00		1.00		1.00	1.00	0.99	1.00
Frt			0.87	1.00	0.85		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1525	1716	1506		1787		3574	1511	1774	3574
Flt Permitted			1.00	0.95	1.00		0.44		1.00	1.00	0.28	1.00
Satd. Flow (perm)			1525	1716	1506		820		3574	1511	527	3574
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	55	102	2	100	16	0	971	67	67	574
RTOR Reduction (vph)	0	0	49	0	89	0	0	0	0	12	0	0
Lane Group Flow (vph)	0	0	6	102	13	0	16	0	971	55	67	574
Confl. Peds. (#/hr)	25		20	20		25		8		10	10	
Confl. Bikes (#/hr)			6			1				5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			11.6	11.6	11.6		86.9		86.9	86.9	86.9	86.9
Effective Green, g (s)			11.6	11.6	11.6		86.9		86.9	86.9	86.9	86.9
Actuated g/C Ratio			0.11	0.11	0.11		0.82		0.82	0.82	0.82	0.82
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			166	186	164		669		2916	1232	430	2916
v/s Ratio Prot					0.01				c0.27			0.16
v/s Ratio Perm			0.00	c0.06			0.02			0.04	0.13	
v/c Ratio			0.04	0.55	0.08		0.02		0.33	0.04	0.16	0.20
Uniform Delay, d1			42.4	45.0	42.6		1.8		2.5	1.9	2.1	2.1
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	3.3	0.2		0.1		0.3	0.1	0.8	0.2
Delay (s)			42.5	48.3	42.9		1.9		2.8	1.9	2.8	2.3
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		42.5			45.6				2.7			2.3
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	106.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	49.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	739	121	148	1007	129	140	741	120	118	458	76
Future Volume (veh/h)	119	739	121	148	1007	129	140	741	120	118	458	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	125	778	127	156	1060	136	147	780	126	124	482	80
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	155	1221	197	188	1349	173	441	1424	623	318	1396	748
Arrive On Green	0.09	0.28	0.28	0.11	0.30	0.30	0.07	0.40	0.40	0.06	0.39	0.39
Sat Flow, veh/h	1774	4391	710	1774	4546	582	1774	3539	1547	1774	3539	1547
Grp Volume(v), veh/h	125	599	306	156	790	406	147	780	126	124	482	80
Grp Sat Flow(s),veh/h/ln	1774	1695	1711	1774	1695	1738	1774	1770	1547	1774	1770	1547
Q Serve(g_s), s	7.2	16.1	16.3	9.0	22.2	22.3	5.1	17.6	5.5	4.3	9.9	2.9
Cycle Q Clear(g_c), s	7.2	16.1	16.3	9.0	22.2	22.3	5.1	17.6	5.5	4.3	9.9	2.9
Prop In Lane	1.00		0.42	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	943	476	188	1006	516	441	1424	623	318	1396	748
V/C Ratio(X)	0.81	0.64	0.64	0.83	0.79	0.79	0.33	0.55	0.20	0.39	0.35	0.11
Avail Cap(c_a), veh/h	273	1174	592	307	1239	635	475	1424	623	383	1396	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	32.9	33.0	45.5	33.5	33.5	17.0	23.8	20.2	18.4	22.1	14.7
Incr Delay (d2), s/veh	9.4	0.8	1.6	9.4	2.7	5.3	0.4	1.5	0.7	0.8	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	7.7	7.9	4.9	10.8	11.5	2.5	8.9	2.5	2.1	5.0	1.3
LnGrp Delay(d), s/veh	56.0	33.7	34.6	54.9	36.3	38.8	17.4	25.3	20.9	19.1	22.8	15.0
LnGrp LOS	E	C	C	D	D	D	B	C	C	B	C	B
Approach Vol, veh/h		1030			1352			1053			686	
Approach Delay, s/veh		36.7			39.2			23.7			21.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	45.8	15.0	32.9	11.0	45.0	13.1	34.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	40.0	18.0	36.0	9.0	41.0	16.0	38.0
Max Q Clear Time (g_c+I1), s	6.3	19.6	11.0	18.3	7.1	11.9	9.2	24.3
Green Ext Time (p_c), s	0.1	5.7	0.2	5.6	0.1	3.6	0.1	6.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	156	40	38	158	50	73	997	55	42	753	48
Future Volume (veh/h)	37	156	40	38	158	50	73	997	55	42	753	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	39	164	42	40	166	53	77	1049	58	44	793	51
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	255	65	155	241	77	500	2626	1139	391	2500	161
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1150	1419	363	1162	1340	428	649	3539	1534	507	3369	217
Grp Volume(v), veh/h	39	0	206	40	0	219	77	1049	58	44	416	428
Grp Sat Flow(s),veh/h/ln	1150	0	1782	1162	0	1768	649	1770	1534	507	1770	1816
Q Serve(g_s), s	3.4	0.0	11.0	3.4	0.0	11.9	4.7	11.1	1.0	3.6	8.1	8.1
Cycle Q Clear(g_c), s	15.2	0.0	11.0	14.4	0.0	11.9	12.8	11.1	1.0	14.7	8.1	8.1
Prop In Lane	1.00		0.20	1.00		0.24	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	144	0	320	155	0	318	500	2626	1139	391	1313	1348
V/C Ratio(X)	0.27	0.00	0.64	0.26	0.00	0.69	0.15	0.40	0.05	0.11	0.32	0.32
Avail Cap(c_a), veh/h	341	0	626	354	0	622	500	2626	1139	391	1313	1348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	0.0	39.0	45.6	0.0	39.3	6.6	4.8	3.5	7.5	4.5	4.5
Incr Delay (d2), s/veh	1.0	0.0	2.2	0.9	0.0	2.7	0.7	0.5	0.1	0.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	5.6	1.1	0.0	6.0	0.9	5.6	0.5	0.6	4.2	4.3
LnGrp Delay(d), s/veh	47.5	0.0	41.1	46.5	0.0	42.0	7.3	5.3	3.6	8.1	5.1	5.1
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		245			259			1184			888	
Approach Delay, s/veh		42.1			42.7			5.3			5.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		22.4		80.0		22.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		14.8		17.2		16.7		16.4
Green Ext Time (p_c), s		11.3		1.2		7.0		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	103	27	89	167	58	43	1098	104	58	757	18
Future Volume (veh/h)	29	103	27	89	167	58	43	1098	104	58	757	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.98		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	30	107	28	93	174	60	45	1144	108	60	789	19
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	251	66	206	233	80	519	2630	1141	345	2623	63
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1131	1407	368	1226	1306	450	671	3539	1535	442	3529	85
Grp Volume(v), veh/h	30	0	135	93	0	234	45	1144	108	60	396	412
Grp Sat Flow(s),veh/h/ln	1131	0	1775	1226	0	1757	671	1770	1535	442	1770	1845
Q Serve(g_s), s	2.6	0.0	6.9	7.5	0.0	12.9	2.4	12.5	2.0	6.1	7.6	7.6
Cycle Q Clear(g_c), s	15.5	0.0	6.9	14.4	0.0	12.9	10.0	12.5	2.0	18.6	7.6	7.6
Prop In Lane	1.00		0.21	1.00		0.26	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	130	0	317	206	0	314	519	2630	1141	345	1315	1371
V/C Ratio(X)	0.23	0.00	0.43	0.45	0.00	0.75	0.09	0.43	0.09	0.17	0.30	0.30
Avail Cap(c_a), veh/h	326	0	625	419	0	618	519	2630	1141	345	1315	1371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	0.0	37.3	43.7	0.0	39.8	6.0	5.0	3.6	8.5	4.3	4.3
Incr Delay (d2), s/veh	0.9	0.0	0.9	1.5	0.0	3.5	0.3	0.5	0.2	1.1	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	3.5	2.6	0.0	6.5	0.5	6.2	0.9	0.8	3.8	4.0
LnGrp Delay(d), s/veh	48.1	0.0	38.2	45.3	0.0	43.3	6.3	5.5	3.8	9.6	4.9	4.9
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		165			327			1297			868	
Approach Delay, s/veh		40.0			43.9			5.4			5.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		22.3		80.0		22.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		14.5		17.5		20.6		16.4
Green Ext Time (p_c), s		12.6		0.7		7.1		1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	149	51	127	154	58	75	1148	113	43	763	26
Future Volume (veh/h)	35	149	51	127	154	58	75	1148	113	43	763	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	38	160	55	137	166	62	81	1234	122	46	820	28
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	269	329	113	237	468	378	439	2385	1024	267	2385	1023
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	1134	1308	450	1153	1863	1504	646	3539	1519	400	3539	1518
Grp Volume(v), veh/h	38	0	215	137	166	62	81	1234	122	46	820	28
Grp Sat Flow(s),veh/h/ln	1134	0	1758	1153	1863	1504	646	1770	1519	400	1770	1518
Q Serve(g_s), s	3.0	0.0	11.1	12.3	7.8	3.4	6.5	18.6	3.0	6.9	10.5	0.7
Cycle Q Clear(g_c), s	10.9	0.0	11.1	23.4	7.8	3.4	17.0	18.6	3.0	25.6	10.5	0.7
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	0	442	237	468	378	439	2385	1024	267	2385	1023
V/C Ratio(X)	0.14	0.00	0.49	0.58	0.35	0.16	0.18	0.52	0.12	0.17	0.34	0.03
Avail Cap(c_a), veh/h	409	0	658	379	697	563	439	2385	1024	267	2385	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	34.1	44.1	32.9	31.2	11.0	8.7	6.2	15.1	7.4	5.8
Incr Delay (d2), s/veh	0.2	0.0	0.8	2.2	0.5	0.2	0.9	0.8	0.2	1.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	5.5	4.1	4.1	1.5	1.3	9.4	1.3	0.9	5.3	0.3
LnGrp Delay(d), s/veh	37.6	0.0	35.0	46.4	33.3	31.4	11.9	9.5	6.4	16.5	7.8	5.8
LnGrp LOS	D		C	D	C	C	B	A	A	B	A	A
Approach Vol, veh/h		253			365			1437			894	
Approach Delay, s/veh		35.4			37.9			9.4			8.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		30.8		76.0		30.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		20.6		13.1		27.6		25.4
Green Ext Time (p_c), s		14.7		1.4		7.9		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Future Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	191	936	132	222	1438	222	290	1137	132	103	942	156
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1301	183	250	1570	461	354	1380	586	146	1676	489
Arrive On Green	0.12	0.29	0.29	0.14	0.31	0.31	0.10	0.39	0.39	0.04	0.33	0.33
Sat Flow, veh/h	1774	4471	628	1774	5085	1494	3442	3539	1502	3442	5085	1485
Grp Volume(v), veh/h	191	709	359	222	1438	222	290	1137	132	103	942	156
Grp Sat Flow(s),veh/h/ln	1774	1695	1708	1774	1695	1494	1721	1770	1502	1721	1695	1485
Q Serve(g_s), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Cycle Q Clear(g_c), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	986	497	250	1570	461	354	1380	586	146	1676	489
V/C Ratio(X)	0.87	0.72	0.72	0.89	0.92	0.48	0.82	0.82	0.23	0.71	0.56	0.32
Avail Cap(c_a), veh/h	241	986	497	286	1595	469	467	1380	586	146	1676	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	37.5	37.5	49.7	39.3	33.1	51.8	32.3	24.1	55.7	32.5	29.6
Incr Delay (d2), s/veh	26.4	2.6	5.1	24.8	8.6	0.8	8.5	5.7	0.9	14.4	1.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	10.7	11.2	8.8	16.3	6.0	5.0	17.7	3.0	2.0	8.6	4.0
LnGrp Delay(d), s/veh	77.2	40.0	42.7	74.5	47.9	33.9	60.3	38.0	24.9	70.1	33.9	31.3
LnGrp LOS	E	D	D	E	D	C	E	D	C	E	C	C
Approach Vol, veh/h		1259			1882			1559			1201	
Approach Delay, s/veh		46.4			49.4			41.1			36.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	50.0	20.6	38.3	16.1	42.9	18.5	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	46.0	19.0	34.0	16.0	35.0	16.0	37.0
Max Q Clear Time (g_c+I1), s	5.5	36.1	16.5	24.3	11.7	20.0	14.5	34.1
Green Ext Time (p_c), s	0.0	5.5	0.1	4.6	0.4	6.2	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	603	88	220	923	129	91	692	208	156	603	251
Future Volume (veh/h)	165	603	88	220	923	129	91	692	208	156	603	251
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	170	622	91	227	952	133	94	713	214	161	622	259
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	199	1081	472	260	1056	148	118	1090	475	190	841	350
Arrive On Green	0.11	0.30	0.30	0.15	0.34	0.34	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1792	3574	1560	1792	3139	438	1792	3574	1557	1792	2438	1014
Grp Volume(v), veh/h	170	622	91	227	542	543	94	713	214	161	456	425
Grp Sat Flow(s),veh/h/ln	1792	1787	1560	1792	1787	1791	1792	1787	1557	1792	1787	1665
Q Serve(g_s), s	10.5	16.6	4.9	14.0	32.6	32.7	5.8	19.6	12.5	10.0	25.4	25.4
Cycle Q Clear(g_c), s	10.5	16.6	4.9	14.0	32.6	32.7	5.8	19.6	12.5	10.0	25.4	25.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	199	1081	472	260	601	603	118	1090	475	190	616	574
V/C Ratio(X)	0.85	0.58	0.19	0.87	0.90	0.90	0.80	0.65	0.45	0.85	0.74	0.74
Avail Cap(c_a), veh/h	238	1081	472	396	648	649	143	1090	475	222	616	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	33.3	29.2	47.3	35.7	35.7	52.1	34.1	31.7	49.7	32.6	32.6
Incr Delay (d2), s/veh	21.8	0.8	0.2	12.8	15.1	15.2	22.2	3.1	3.1	22.7	7.8	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.3	2.1	7.9	18.6	18.7	3.6	10.2	5.8	6.2	13.9	13.0
LnGrp Delay(d), s/veh	71.2	34.1	29.4	60.1	50.8	50.9	74.3	37.2	34.7	72.3	40.4	40.9
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		883			1312			1021			1042	
Approach Delay, s/veh		40.7			52.5			40.1			45.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	38.5	20.4	38.2	11.5	43.0	16.6	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	34.0	25.0	31.0	9.0	39.0	15.0	41.0
Max Q Clear Time (g_c+I1), s	12.0	21.6	16.0	18.6	7.8	27.4	12.5	34.7
Green Ext Time (p_c), s	0.1	4.4	0.4	3.5	0.0	4.2	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	62	70	80	129	51	145	741	78	33	641	74
Future Volume (veh/h)	84	62	70	80	129	51	145	741	78	33	641	74
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.92	0.97		0.92	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	90	67	75	86	139	55	156	797	84	35	689	80
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	187	157	175	221	253	100	529	2381	251	474	2358	274
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1183	783	877	1229	1263	500	710	3281	346	639	3251	377
Grp Volume(v), veh/h	90	0	142	86	0	194	156	438	443	35	382	387
Grp Sat Flow(s),veh/h/ln	1183	0	1660	1229	0	1763	710	1805	1822	639	1805	1823
Q Serve(g_s), s	8.0	0.0	8.0	7.1	0.0	10.6	10.6	9.5	9.5	2.3	7.9	7.9
Cycle Q Clear(g_c), s	18.6	0.0	8.0	15.1	0.0	10.6	18.5	9.5	9.5	11.7	7.9	7.9
Prop In Lane	1.00		0.53	1.00		0.28	1.00		0.19	1.00		0.21
Lane Grp Cap(c), veh/h	187	0	332	221	0	353	529	1310	1322	474	1310	1322
V/C Ratio(X)	0.48	0.00	0.43	0.39	0.00	0.55	0.29	0.33	0.33	0.07	0.29	0.29
Avail Cap(c_a), veh/h	324	0	525	364	0	558	529	1310	1322	474	1310	1322
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	0.0	37.6	44.2	0.0	38.7	8.4	5.3	5.3	7.5	5.1	5.1
Incr Delay (d2), s/veh	1.9	0.0	0.9	1.1	0.0	1.3	1.4	0.7	0.7	0.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	3.7	2.5	0.0	5.3	2.2	4.9	4.9	0.4	4.1	4.2
LnGrp Delay(d), s/veh	48.9	0.0	38.5	45.4	0.0	40.0	9.8	6.0	6.0	7.8	5.7	5.7
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		232			280			1037			804	
Approach Delay, s/veh		42.5			41.6			6.6			5.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		82.0		25.5		82.0		25.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		78.0		34.0		78.0		34.0
Max Q Clear Time (g_c+I1), s		20.5		20.6		13.7		17.1
Green Ext Time (p_c), s		8.6		0.9		5.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	241	828	121	104	1043	196	175	607	86	160	471	210
Future Volume (veh/h)	241	828	121	104	1043	196	175	607	86	160	471	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	265	910	133	114	1146	215	192	667	95	176	518	231
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	296	1375	591	142	1285	241	360	969	138	302	1083	464
Arrive On Green	0.17	0.38	0.38	0.08	0.30	0.30	0.09	0.31	0.31	0.08	0.30	0.30
Sat Flow, veh/h	1792	3574	1535	1792	4306	807	1792	3126	445	1792	3574	1533
Grp Volume(v), veh/h	265	910	133	114	911	450	192	381	381	176	518	231
Grp Sat Flow(s),veh/h/ln	1792	1787	1535	1792	1712	1689	1792	1787	1783	1792	1787	1533
Q Serve(g_s), s	16.4	23.7	6.6	7.1	28.7	28.8	8.2	21.1	21.2	7.5	13.3	14.0
Cycle Q Clear(g_c), s	16.4	23.7	6.6	7.1	28.7	28.8	8.2	21.1	21.2	7.5	13.3	14.0
Prop In Lane	1.00		1.00	1.00		0.48	1.00		0.25	1.00		1.00
Lane Grp Cap(c), veh/h	296	1375	591	142	1021	504	360	554	553	302	1083	464
V/C Ratio(X)	0.89	0.66	0.23	0.81	0.89	0.89	0.53	0.69	0.69	0.58	0.48	0.50
Avail Cap(c_a), veh/h	365	1375	591	238	1061	524	418	554	553	325	1083	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	28.7	23.4	51.2	37.9	37.9	24.3	34.2	34.2	25.9	32.1	32.3
Incr Delay (d2), s/veh	20.5	1.2	0.2	10.2	9.5	17.1	1.2	6.8	6.9	2.3	1.5	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	11.9	2.8	3.9	14.9	15.8	4.1	11.4	11.4	3.9	6.8	6.4
LnGrp Delay(d), s/veh	66.6	29.9	23.6	61.3	47.4	55.0	25.5	41.0	41.1	28.3	33.6	36.1
LnGrp LOS	E	C	C	E	D	D	C	D	D	C	C	D
Approach Vol, veh/h		1308			1475			954			925	
Approach Delay, s/veh		36.7			50.8			37.9			33.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	39.0	12.9	47.5	14.4	38.2	22.7	37.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	35.0	15.0	43.0	14.0	32.0	23.0	35.0
Max Q Clear Time (g_c+I1), s	9.5	23.2	9.1	25.7	10.2	16.0	18.4	30.8
Green Ext Time (p_c), s	0.1	3.7	0.1	6.3	0.2	3.8	0.3	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	114	54	41	178	60	61	607	52	56	350	54
Future Volume (veh/h)	74	114	54	41	178	60	61	607	52	56	350	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	76	118	56	42	184	62	63	626	54	58	361	56
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	193	268	127	247	300	101	708	2287	197	549	2136	328
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1135	1195	567	1208	1341	452	972	3322	286	763	3103	477
Grp Volume(v), veh/h	76	0	174	42	0	246	63	336	344	58	207	210
Grp Sat Flow(s),veh/h/ln	1135	0	1761	1208	0	1793	972	1787	1821	763	1787	1793
Q Serve(g_s), s	5.9	0.0	7.8	2.8	0.0	11.3	2.2	6.6	6.6	2.9	3.7	3.8
Cycle Q Clear(g_c), s	17.2	0.0	7.8	10.6	0.0	11.3	6.0	6.6	6.6	9.5	3.7	3.8
Prop In Lane	1.00		0.32	1.00		0.25	1.00		0.16	1.00		0.27
Lane Grp Cap(c), veh/h	193	0	395	247	0	402	708	1230	1254	549	1230	1234
V/C Ratio(X)	0.39	0.00	0.44	0.17	0.00	0.61	0.09	0.27	0.27	0.11	0.17	0.17
Avail Cap(c_a), veh/h	546	0	943	623	0	960	708	1230	1254	549	1230	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	0.0	30.6	35.1	0.0	31.9	6.1	5.5	5.5	7.3	5.0	5.0
Incr Delay (d2), s/veh	1.3	0.0	0.8	0.3	0.0	1.5	0.2	0.5	0.5	0.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	3.9	1.0	0.0	5.8	0.6	3.4	3.5	0.7	1.9	2.0
LnGrp Delay(d), s/veh	41.0	0.0	31.3	35.5	0.0	33.4	6.3	6.0	6.0	7.7	5.3	5.3
LnGrp LOS	D		C	D		C	A	A	A	A	A	A
Approach Vol, veh/h		250			288			743			475	
Approach Delay, s/veh		34.3			33.7			6.0			5.6	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		67.0		24.5		67.0		24.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		63.0		49.0		63.0		49.0
Max Q Clear Time (g_c+I1), s		8.6		19.2		11.5		13.3
Green Ext Time (p_c), s		5.0		1.3		3.1		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	41	135	50	32	175	50	71	540	47	54	361	120
Future Volume (veh/h)	41	135	50	32	175	50	71	540	47	54	361	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	44	144	53	34	186	53	76	574	50	57	384	128
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	146	249	92	177	268	76	661	1376	1142	564	1376	1142
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1143	1300	479	1186	1398	398	893	1881	1561	805	1881	1561
Grp Volume(v), veh/h	44	0	197	34	0	239	76	574	50	57	384	128
Grp Sat Flow(s),veh/h/ln	1143	0	1779	1186	0	1797	893	1881	1561	805	1881	1561
Q Serve(g_s), s	3.9	0.0	10.5	2.8	0.0	12.9	3.3	12.2	0.9	3.1	7.1	2.5
Cycle Q Clear(g_c), s	16.8	0.0	10.5	13.3	0.0	12.9	10.4	12.2	0.9	15.3	7.1	2.5
Prop In Lane	1.00		0.27	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	0	340	177	0	344	661	1376	1142	564	1376	1142
V/C Ratio(X)	0.30	0.00	0.58	0.19	0.00	0.70	0.11	0.42	0.04	0.10	0.28	0.11
Avail Cap(c_a), veh/h	324	0	617	361	0	623	661	1376	1142	564	1376	1142
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	0.0	38.2	44.2	0.0	39.2	6.5	5.4	3.9	8.3	4.7	4.1
Incr Delay (d2), s/veh	1.1	0.0	1.6	0.5	0.0	2.5	0.4	0.9	0.1	0.4	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.0	5.3	0.9	0.0	6.6	0.9	6.6	0.4	0.7	3.8	1.1
LnGrp Delay(d), s/veh	48.1	0.0	39.8	44.7	0.0	41.7	6.8	6.3	3.9	8.7	5.2	4.3
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		241			273			700			569	
Approach Delay, s/veh		41.3			42.1			6.2			5.3	
Approach LOS		D			D			A			A	

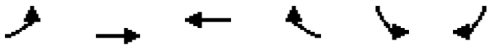
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		23.9		80.0		23.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		14.2		18.8		17.3		15.3
Green Ext Time (p_c), s		4.9		1.1		3.4		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	214	72	21	159	33	54	623	66	42	289	33
Future Volume (veh/h)	78	214	72	21	159	33	54	623	66	42	289	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	82	225	76	22	167	35	57	656	69	44	304	35
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	183	375	311	164	299	63	797	1368	1137	492	2345	268
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1183	1881	1560	1083	1499	314	1046	1881	1563	733	3226	368
Grp Volume(v), veh/h	82	225	76	22	0	202	57	656	69	44	167	172
Grp Sat Flow(s),veh/h/ln	1183	1881	1560	1083	0	1813	1046	1881	1563	733	1787	1806
Q Serve(g_s), s	7.3	11.8	4.5	2.0	0.0	10.9	1.9	15.9	1.4	2.9	3.1	3.1
Cycle Q Clear(g_c), s	18.2	11.8	4.5	13.9	0.0	10.9	5.0	15.9	1.4	18.8	3.1	3.1
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	183	375	311	164	0	361	797	1368	1137	492	1300	1313
V/C Ratio(X)	0.45	0.60	0.24	0.13	0.00	0.56	0.07	0.48	0.06	0.09	0.13	0.13
Avail Cap(c_a), veh/h	307	571	474	277	0	551	797	1368	1137	492	1300	1313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	39.6	36.6	45.9	0.0	39.2	5.2	6.2	4.2	10.1	4.5	4.5
Incr Delay (d2), s/veh	1.7	1.5	0.4	0.4	0.0	1.4	0.2	1.2	0.1	0.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	6.3	2.0	0.6	0.0	5.6	0.6	8.7	0.6	0.6	1.6	1.6
LnGrp Delay(d), s/veh	49.1	41.1	37.0	46.2	0.0	40.6	5.4	7.4	4.3	10.5	4.7	4.7
LnGrp LOS	D	D	D	D		D	A	A	A	B	A	A
Approach Vol, veh/h		383			224			782			383	
Approach Delay, s/veh		42.0			41.1			7.0			5.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		25.6		83.0		25.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		17.9		20.2		20.8		15.9
Green Ext Time (p_c), s		5.4		1.4		2.5		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.5
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	355	1086	1258	300	285	263
Future Volume (veh/h)	355	1086	1258	300	285	263
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	374	1143	1324	316	300	277
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	417	3479	1668	397	841	387
Arrive On Green	0.23	0.68	0.40	0.40	0.24	0.24
Sat Flow, veh/h	1792	5305	4290	982	3476	1599
Grp Volume(v), veh/h	374	1143	1100	540	300	277
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1679	1738	1599
Q Serve(g_s), s	20.1	9.2	28.0	28.0	7.1	15.8
Cycle Q Clear(g_c), s	20.1	9.2	28.0	28.0	7.1	15.8
Prop In Lane	1.00			0.59	1.00	1.00
Lane Grp Cap(c), veh/h	417	3479	1386	679	841	387
V/C Ratio(X)	0.90	0.33	0.79	0.80	0.36	0.72
Avail Cap(c_a), veh/h	668	4555	1622	795	841	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	6.6	25.9	25.9	31.2	34.5
Incr Delay (d2), s/veh	9.7	0.1	2.4	4.9	1.2	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	4.3	13.6	13.8	3.6	14.6
LnGrp Delay(d), s/veh	46.7	6.7	28.3	30.8	32.4	45.3
LnGrp LOS	D	A	C	C	C	D
Approach Vol, veh/h		1517	1640		577	
Approach Delay, s/veh		16.5	29.1		38.6	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				71.2		28.0	27.1	44.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				88.0		24.0	37.0	47.0
Max Q Clear Time (g_c+I1), s				11.2		17.8	22.1	30.0
Green Ext Time (p_c), s				10.2		1.2	1.0	10.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	390	106	86	394	90	139	882	67	116	624	93
Future Volume (veh/h)	149	390	106	86	394	90	139	882	67	116	624	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	162	424	115	93	428	98	151	959	73	126	678	101
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	258	666	285	227	528	224	466	2194	167	347	1760	262
Arrive On Green	0.09	0.19	0.19	0.05	0.15	0.15	0.05	0.65	0.65	0.57	0.57	0.57
Sat Flow, veh/h	1792	3574	1528	1792	3574	1517	1792	3361	256	549	3111	463
Grp Volume(v), veh/h	162	424	115	93	428	98	151	510	522	126	389	390
Grp Sat Flow(s),veh/h/ln	1792	1787	1528	1792	1787	1517	1792	1787	1830	549	1787	1786
Q Serve(g_s), s	8.3	12.2	7.4	4.9	13.0	6.6	3.8	15.5	15.5	16.2	13.5	13.6
Cycle Q Clear(g_c), s	8.3	12.2	7.4	4.9	13.0	6.6	3.8	15.5	15.5	22.0	13.5	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.26
Lane Grp Cap(c), veh/h	258	666	285	227	528	224	466	1166	1194	347	1011	1011
V/C Ratio(X)	0.63	0.64	0.40	0.41	0.81	0.44	0.32	0.44	0.44	0.36	0.38	0.39
Avail Cap(c_a), veh/h	317	927	396	227	671	285	470	1166	1194	347	1011	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	42.0	40.0	37.9	46.1	43.4	9.5	9.4	9.4	17.1	13.5	13.5
Incr Delay (d2), s/veh	2.7	1.0	0.9	1.2	5.9	1.3	0.4	1.2	1.2	2.9	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.2	3.2	2.5	6.9	2.8	1.9	8.0	8.2	2.7	6.9	6.9
LnGrp Delay(d), s/veh	37.8	43.0	41.0	39.1	52.0	44.8	9.9	10.6	10.6	20.1	14.6	14.6
LnGrp LOS	D	D	D	D	D	D	A	B	B	C	B	B
Approach Vol, veh/h		701			619			1183			905	
Approach Delay, s/veh		41.5			48.9			10.5			15.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		77.0	10.0	24.8	9.7	67.3	14.3	20.5
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		73.0	6.0	29.0	6.0	63.0	14.0	21.0
Max Q Clear Time (g_c+I1), s		17.5	6.9	14.2	5.8	24.0	10.3	15.0
Green Ext Time (p_c), s		8.3	0.0	2.7	0.0	7.5	0.1	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	72	97	17	169	77	100	593	23	84	418	222
Future Volume (veh/h)	235	72	97	17	169	77	100	593	23	84	418	222
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	247	76	102	18	178	81	105	624	24	88	440	234
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	380	465	385	247	292	126	462	2181	84	498	1171	1202
Arrive On Green	0.14	0.24	0.24	0.02	0.12	0.12	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	1810	1900	1571	1810	2419	1045	776	3540	136	794	1900	1584
Grp Volume(v), veh/h	247	76	102	18	130	129	105	318	330	88	440	234
Grp Sat Flow(s),veh/h/ln	1810	1900	1571	1810	1805	1659	776	1805	1871	794	1900	1584
Q Serve(g_s), s	11.1	3.1	5.1	0.8	6.7	7.2	7.6	8.0	8.0	5.7	11.3	4.1
Cycle Q Clear(g_c), s	11.1	3.1	5.1	0.8	6.7	7.2	18.9	8.0	8.0	13.7	11.3	4.1
Prop In Lane	1.00		1.00	1.00		0.63	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	380	465	385	247	218	200	462	1112	1153	498	1171	1202
V/C Ratio(X)	0.65	0.16	0.27	0.07	0.60	0.64	0.23	0.29	0.29	0.18	0.38	0.19
Avail Cap(c_a), veh/h	628	819	678	330	389	358	462	1112	1153	498	1171	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	28.9	29.7	36.7	40.6	40.8	14.1	8.7	8.7	11.9	9.3	3.4
Incr Delay (d2), s/veh	1.9	0.2	0.4	0.1	2.6	3.4	1.1	0.6	0.6	0.8	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	1.6	2.2	0.4	3.5	3.5	1.8	4.2	4.3	1.3	6.2	1.9
LnGrp Delay(d), s/veh	31.6	29.1	30.1	36.8	43.2	44.2	15.2	9.4	9.3	12.7	10.3	3.8
LnGrp LOS	C	C	C	D	D	D	B	A	A	B	B	A
Approach Vol, veh/h		425			277			753			762	
Approach Delay, s/veh		30.8			43.3			10.2			8.5	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		64.0	5.5	27.8		64.0	17.6	15.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		60.0	6.0	42.0		60.0	27.0	21.0
Max Q Clear Time (g_c+I1), s		20.9	2.8	7.1		15.7	13.1	9.2
Green Ext Time (p_c), s		5.2	0.0	0.7		4.6	0.6	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Future Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	267	645	94	186	824	98	101	1060	53	126	846	286
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	309	1143	486	351	923	110	258	1335	67	229	1414	603
Arrive On Green	0.12	0.32	0.32	0.09	0.29	0.29	0.05	0.39	0.39	0.06	0.40	0.40
Sat Flow, veh/h	1792	3574	1521	1792	3196	380	1792	3455	173	1792	3574	1525
Grp Volume(v), veh/h	267	645	94	186	461	461	101	548	565	126	846	286
Grp Sat Flow(s),veh/h/ln	1792	1787	1521	1792	1787	1789	1792	1787	1841	1792	1787	1525
Q Serve(g_s), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Cycle Q Clear(g_c), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	309	1143	486	351	516	517	258	691	711	229	1414	603
V/C Ratio(X)	0.87	0.56	0.19	0.53	0.89	0.89	0.39	0.79	0.79	0.55	0.60	0.47
Avail Cap(c_a), veh/h	380	1253	533	413	562	563	314	691	711	252	1414	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	31.4	27.4	24.9	37.9	37.9	21.0	30.2	30.2	23.9	26.6	25.0
Incr Delay (d2), s/veh	15.8	0.5	0.2	1.2	15.7	15.7	1.0	9.1	8.9	2.1	1.9	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	8.3	2.1	4.0	15.8	15.8	1.9	16.7	17.1	2.4	10.6	7.0
LnGrp Delay(d), s/veh	42.4	31.9	27.6	26.2	53.6	53.6	21.9	39.4	39.1	25.9	28.5	27.7
LnGrp LOS	D	C	C	C	D	D	C	D	D	C	C	C
Approach Vol, veh/h		1006			1108			1214			1258	
Approach Delay, s/veh		34.3			49.0			37.8			28.1	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	47.0	14.1	39.6	9.5	48.0	17.6	36.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	14.0	39.0	9.0	42.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	6.7	32.2	10.0	18.7	5.7	22.9	13.2	29.5
Green Ext Time (p_c), s	0.0	5.2	0.2	4.6	0.1	6.8	0.3	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Future Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	174	818	74	156	1141	190	190	924	165	125	756	141
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	205	1245	113	187	1323	525	327	1310	233	243	1412	408
Arrive On Green	0.11	0.38	0.38	0.10	0.37	0.37	0.09	0.30	0.30	0.07	0.28	0.28
Sat Flow, veh/h	1792	3275	296	1792	3574	1419	1792	4333	770	1792	5136	1483
Grp Volume(v), veh/h	174	446	446	156	1141	190	190	729	360	125	756	141
Grp Sat Flow(s),veh/h/ln	1792	1787	1785	1792	1787	1419	1792	1712	1679	1792	1712	1483
Q Serve(g_s), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Cycle Q Clear(g_c), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	205	679	678	187	1323	525	327	1035	507	243	1412	408
V/C Ratio(X)	0.85	0.66	0.66	0.83	0.86	0.36	0.58	0.70	0.71	0.51	0.54	0.35
Avail Cap(c_a), veh/h	279	720	719	295	1473	585	406	1035	507	272	1412	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	28.0	28.0	47.9	31.8	25.0	25.1	33.8	33.8	27.4	33.6	31.7
Incr Delay (d2), s/veh	16.2	2.0	2.0	10.8	5.1	0.4	1.6	4.0	8.2	1.7	1.5	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	11.4	11.4	5.2	16.8	4.2	4.1	10.3	10.7	2.8	6.6	3.7
LnGrp Delay(d), s/veh	63.6	30.0	30.0	58.8	36.9	25.4	26.7	37.8	42.0	29.0	35.1	34.0
LnGrp LOS	E	C	C	E	D	C	C	D	D	C	D	C
Approach Vol, veh/h		1066			1487			1279			1022	
Approach Delay, s/veh		35.5			37.7			37.3			34.2	
Approach LOS		D			D			D			C	

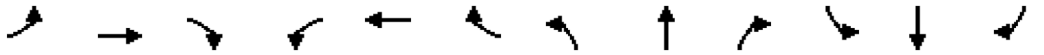
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	37.0	15.4	45.5	14.2	34.0	16.5	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	33.0	18.0	44.0	15.0	27.0	17.0	45.0
Max Q Clear Time (g_c+I1), s	7.4	22.8	11.3	24.5	10.1	15.7	12.4	34.3
Green Ext Time (p_c), s	0.0	5.0	0.2	5.5	0.2	4.2	0.2	6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Future Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.91	1.00		0.89	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	192	449	201	316	1018	347	351	944	115	275	796	136
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	853	340	349	1111	450	380	1184	143	304	938	158
Arrive On Green	0.12	0.24	0.24	0.19	0.31	0.31	0.21	0.26	0.26	0.17	0.22	0.22
Sat Flow, veh/h	1792	3574	1426	1792	3574	1449	1792	4573	554	1792	4331	730
Grp Volume(v), veh/h	192	449	201	316	1018	347	351	705	354	275	627	305
Grp Sat Flow(s),veh/h/ln	1792	1787	1426	1792	1787	1449	1792	1712	1704	1792	1712	1638
Q Serve(g_s), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Cycle Q Clear(g_c), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.45
Lane Grp Cap(c), veh/h	220	853	340	349	1111	450	380	886	441	304	741	355
V/C Ratio(X)	0.87	0.53	0.59	0.91	0.92	0.77	0.92	0.80	0.80	0.91	0.85	0.86
Avail Cap(c_a), veh/h	232	853	340	464	1141	463	417	886	441	340	741	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	38.4	39.1	45.6	38.5	36.2	44.7	40.1	40.2	47.2	43.5	43.7
Incr Delay (d2), s/veh	27.8	0.6	2.7	17.5	11.4	7.6	25.0	7.3	14.2	24.9	11.4	22.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	6.3	6.0	11.6	17.4	11.0	13.7	11.4	12.3	10.7	10.8	11.7
LnGrp Delay(d), s/veh	77.7	39.0	41.8	63.1	49.8	43.8	69.8	47.4	54.4	72.1	55.0	66.6
LnGrp LOS	E	D	D	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		842			1681			1410			1207	
Approach Delay, s/veh		48.5			51.1			54.7			61.8	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	34.0	26.6	31.7	28.6	29.1	18.2	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	30.0	30.0	22.0	27.0	25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	19.4	24.5	22.0	16.5	24.2	22.8	14.2	33.8
Green Ext Time (p_c), s	0.2	3.0	0.6	1.7	0.3	1.2	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Future Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	226	815	87	368	1101	253	333	919	136	317	763	112
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	294	1516	161	447	1315	551	410	1457	425	391	1248	181
Arrive On Green	0.08	0.32	0.32	0.13	0.37	0.37	0.12	0.28	0.28	0.11	0.28	0.28
Sat Flow, veh/h	3476	4682	496	3476	3574	1498	3476	5136	1497	3476	4489	652
Grp Volume(v), veh/h	226	594	308	368	1101	253	333	919	136	317	580	295
Grp Sat Flow(s),veh/h/ln	1738	1712	1754	1738	1787	1498	1738	1712	1497	1738	1712	1717
Q Serve(g_s), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Cycle Q Clear(g_c), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	294	1109	568	447	1315	551	410	1457	425	391	952	477
V/C Ratio(X)	0.77	0.54	0.54	0.82	0.84	0.46	0.81	0.63	0.32	0.81	0.61	0.62
Avail Cap(c_a), veh/h	395	1263	647	625	1555	652	592	1457	425	526	952	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	29.2	29.3	44.9	30.5	25.4	45.5	33.0	29.8	45.8	33.2	33.3
Incr Delay (d2), s/veh	6.3	0.4	0.8	6.2	3.6	0.6	5.6	2.1	2.0	6.9	2.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	7.2	7.5	5.6	15.3	5.7	5.1	8.1	3.4	4.9	7.7	8.3
LnGrp Delay(d), s/veh	53.7	29.6	30.1	51.1	34.2	26.0	51.0	35.1	31.8	52.7	36.1	39.2
LnGrp LOS	D	C	C	D	C	C	D	D	C	D	D	D
Approach Vol, veh/h		1128			1722			1388			1192	
Approach Delay, s/veh		34.6			36.6			38.6			41.3	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	34.0	17.6	38.2	16.5	33.4	12.9	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	19.0	39.0	18.0	28.0	12.0	46.0
Max Q Clear Time (g_c+I1), s	11.4	18.5	12.9	17.2	11.9	17.8	8.7	31.7
Green Ext Time (p_c), s	0.5	5.0	0.7	5.8	0.6	3.9	0.2	7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Future Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	180	19	161	10	22	27	168	1230	13	26	759	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	562	41	72	572	201	2705	29	35	1853	326
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.52	0.52	0.02	0.42	0.42
Sat Flow, veh/h	0	0	1567	0	202	1595	1792	5238	55	1792	4368	769
Grp Volume(v), veh/h	199	0	161	32	0	27	168	804	439	26	593	301
Grp Sat Flow(s),veh/h/ln	0	0	1567	202	0	1595	1792	1712	1869	1792	1712	1714
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Cycle Q Clear(g_c), s	41.0	0.0	8.4	41.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Prop In Lane	0.90		1.00	0.31		1.00	1.00		0.03	1.00		0.45
Lane Grp Cap(c), veh/h	60	0	562	114	0	572	201	1768	965	35	1452	727
V/C Ratio(X)	3.32	0.00	0.29	0.28	0.00	0.05	0.84	0.45	0.45	0.74	0.41	0.41
Avail Cap(c_a), veh/h	60	0	562	114	0	572	439	1768	965	125	1452	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	26.2	29.8	0.0	23.9	49.7	17.5	17.5	55.7	22.9	23.0
Incr Delay (d2), s/veh	1083.5	0.0	0.3	1.3	0.0	0.0	8.9	0.8	1.5	25.5	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	0.0	3.7	0.7	0.0	0.6	5.7	8.1	9.1	1.1	6.7	7.0
LnGrp Delay(d), s/veh	1140.6	0.0	26.4	31.1	0.0	23.9	58.6	18.3	19.0	81.2	23.8	24.7
LnGrp LOS	F		C	C		C	E	B	B	F	C	C
Approach Vol, veh/h		360			59			1411			920	
Approach Delay, s/veh		642.3			27.8			23.3			25.7	
Approach LOS		F			C			C			C	

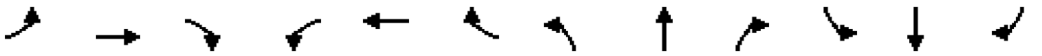
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	63.0		45.0	16.8	52.4		45.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	59.0		41.0	28.0	39.0		41.0
Max Q Clear Time (g_c+I1), s	3.6	19.0		43.0	12.5	16.0		43.0
Green Ext Time (p_c), s	0.0	10.0		0.0	0.4	5.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		105.2
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Future Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.90	0.94		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	20	47	82	118	90	55	114	983	84	56	857	32
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	296	227	235	296	229	507	2464	1056	434	2391	89
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.69	0.69	0.03	0.68	0.68
Sat Flow, veh/h	1181	1881	1443	1191	1881	1453	1792	3574	1533	1792	3507	131
Grp Volume(v), veh/h	20	47	82	118	90	55	114	983	84	56	437	452
Grp Sat Flow(s),veh/h/ln	1181	1881	1443	1191	1881	1453	1792	1787	1533	1792	1787	1851
Q Serve(g_s), s	1.5	2.1	5.0	9.4	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Cycle Q Clear(g_c), s	5.7	2.1	5.0	11.5	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	209	296	227	235	296	229	507	2464	1056	434	1219	1262
V/C Ratio(X)	0.10	0.16	0.36	0.50	0.30	0.24	0.22	0.40	0.08	0.13	0.36	0.36
Avail Cap(c_a), veh/h	394	591	454	422	591	457	709	2464	1056	540	1219	1262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	35.9	37.1	40.9	36.8	36.4	4.7	6.6	5.0	4.8	6.6	6.6
Incr Delay (d2), s/veh	0.2	0.2	1.0	1.7	0.6	0.5	0.2	0.5	0.1	0.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	2.0	3.2	2.2	1.4	0.9	5.8	0.8	0.5	5.3	5.4
LnGrp Delay(d), s/veh	39.5	36.2	38.1	42.6	37.4	36.9	5.0	7.1	5.2	5.0	7.4	7.4
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		149			263			1181			945	
Approach Delay, s/veh		37.7			39.6			6.7			7.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	72.0		19.5	7.9	71.3		19.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	68.0		31.0	15.0	62.0		31.0
Max Q Clear Time (g_c+I1), s	2.9	13.6		7.7	3.9	12.1		13.5
Green Ext Time (p_c), s	0.0	9.1		0.6	0.2	7.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	197	1293	408	31	502	55	115	1077	22	142	1075	115
Future Volume (vph)	197	1293	408	31	502	55	115	1077	22	142	1075	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		1.00	0.95		1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00		1.00	1.00		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00		1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00		0.95	1.00	
Satd. Flow (prot)	1752	3505	1509	1752	3446		1752	3492		1752	3444	
Flt Permitted	0.24	1.00	1.00	0.12	1.00		0.08	1.00		0.09	1.00	
Satd. Flow (perm)	446	3505	1509	213	3446		153	3492		160	3444	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	205	1347	425	32	523	57	120	1122	23	148	1120	120
RTOR Reduction (vph)	0	0	12	0	7	0	0	1	0	0	7	0
Lane Group Flow (vph)	205	1347	413	32	573	0	120	1144	0	148	1233	0
Confl. Peds. (#/hr)	2		14	14		2	6		11	11		6
Confl. Bikes (#/hr)			6			6			4			7
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	pm+pt	NA	pm+ov	Perm	NA		pm+pt	NA		pm+pt	NA	
Protected Phases	7	4	5		8		5	2		1	6	
Permitted Phases	4		4	8			2			6		
Actuated Green, G (s)	48.6	48.6	58.1	34.6	34.6		57.6	48.1		57.6	48.1	
Effective Green, g (s)	48.6	48.6	58.1	34.6	34.6		57.6	48.1		57.6	48.1	
Actuated g/C Ratio	0.41	0.41	0.49	0.29	0.29		0.49	0.41		0.49	0.41	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	293	1441	792	62	1008		203	1421		205	1401	
v/s Ratio Prot	0.06	c0.38	0.04		0.17		0.05	0.33		c0.06	c0.36	
v/s Ratio Perm	0.23		0.23	0.15			0.24			0.29		
v/c Ratio	0.70	0.93	0.52	0.52	0.57		0.59	0.80		0.72	0.88	
Uniform Delay, d1	24.9	33.3	20.6	34.8	35.5		23.5	30.9		23.1	32.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00	
Incremental Delay, d2	7.1	11.4	0.6	7.1	0.7		4.6	4.9		11.8	8.2	
Delay (s)	32.0	44.7	21.2	41.9	36.2		28.0	35.9		34.9	40.6	
Level of Service	C	D	C	D	D		C	D		C	D	
Approach Delay (s/veh)		38.3			36.5			35.1			40.0	
Approach LOS		D			D			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	37.8	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.93				
Actuated Cycle Length (s)	118.2	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	92.2%	ICU Level of Service	F		
Analysis Period (min)	15				
c Critical Lane Group					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	773	496	34	360	43	208	900	23	96	1133	105
Future Volume (veh/h)	185	773	496	34	360	43	208	900	23	96	1133	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	193	805	517	35	375	45	217	938	0	100	1180	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	996	439	44	642	283	246	1689	756	125	1449	648
Arrive On Green	0.13	0.28	0.28	0.03	0.18	0.18	0.14	0.48	0.00	0.07	0.41	0.00
Sat Flow, veh/h	1757	3505	1543	1757	3505	1542	1757	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	193	805	517	35	375	45	217	938	0	100	1180	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1543	1757	1752	1542	1757	1752	1568	1757	1752	1568
Q Serve(g_s), s	12.5	24.8	33.0	2.3	11.4	2.9	14.1	22.0	0.0	6.5	34.6	0.0
Cycle Q Clear(g_c), s	12.5	24.8	33.0	2.3	11.4	2.9	14.1	22.0	0.0	6.5	34.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	996	439	44	642	283	246	1689	756	125	1449	648
V/C Ratio(X)	0.87	0.81	1.18	0.79	0.58	0.16	0.88	0.56	0.00	0.80	0.81	0.00
Avail Cap(c_a), veh/h	257	996	439	61	642	283	287	1689	756	197	1449	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.8	38.6	41.6	56.3	43.4	39.9	49.0	21.3	0.0	53.1	30.1	0.0
Incr Delay (d2), s/veh	24.0	5.0	101.9	38.0	1.4	0.3	23.7	1.3	0.0	11.8	5.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	12.7	26.4	1.6	5.6	1.2	8.4	10.9	0.0	3.6	17.8	0.0
LnGrp Delay(d), s/veh	73.8	43.7	143.4	94.4	44.7	40.2	72.7	22.6	0.0	65.0	35.3	0.0
LnGrp LOS	E	D	F	F	D	D	E	C		E	D	
Approach Vol, veh/h		1515			455			1155			1280	
Approach Delay, s/veh		81.6			48.1			32.0			37.6	
Approach LOS		F			D			C			D	

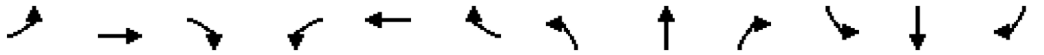
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	60.0	6.9	37.0	20.2	52.0	18.6	25.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	4.0	33.0	19.0	48.0	17.0	20.0
Max Q Clear Time (g_c+I1), s	8.5	24.0	4.3	35.0	16.1	36.6	14.5	13.4
Green Ext Time (p_c), s	0.1	7.1	0.0	0.0	0.2	6.0	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	103	609	52	115	746	35	85	589	141	62	878	176
Future Volume (veh/h)	103	609	52	115	746	35	85	589	141	62	878	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1759
Adj Flow Rate, veh/h	105	621	0	117	761	36	87	601	144	63	896	180
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	131	891	398	145	918	398	110	1701	399	80	1410	616
Arrive On Green	0.08	0.27	0.00	0.09	0.27	0.27	0.07	0.44	0.44	0.05	0.42	0.42
Sat Flow, veh/h	1675	3343	1495	1675	3343	1450	1675	3868	907	1675	3343	1459
Grp Volume(v), veh/h	105	621	0	117	761	36	87	495	250	63	896	180
Grp Sat Flow(s),veh/h/ln	1675	1671	1495	1675	1671	1450	1675	1601	1574	1675	1671	1459
Q Serve(g_s), s	6.2	16.8	0.0	6.9	21.4	1.8	5.1	10.3	10.6	3.7	21.2	8.1
Cycle Q Clear(g_c), s	6.2	16.8	0.0	6.9	21.4	1.8	5.1	10.3	10.6	3.7	21.2	8.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	131	891	398	145	918	398	110	1408	692	80	1410	616
V/C Ratio(X)	0.80	0.70	0.00	0.81	0.83	0.09	0.79	0.35	0.36	0.79	0.64	0.29
Avail Cap(c_a), veh/h	234	1136	508	268	1202	522	201	1408	692	167	1410	616
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	33.1	0.0	44.9	34.1	27.0	46.1	18.6	18.7	47.2	22.9	19.1
Incr Delay (d2), s/veh	10.7	1.3	0.0	10.1	3.8	0.1	12.1	0.7	1.5	15.8	2.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	7.9	0.0	3.6	10.3	0.7	2.7	4.7	4.9	2.1	10.1	3.5
LnGrp Delay(d), s/veh	56.1	34.4	0.0	55.0	37.9	27.1	58.2	19.3	20.1	63.0	25.1	20.3
LnGrp LOS	E	C		D	D	C	E	B	C	E	C	C
Approach Vol, veh/h		726			914			832			1139	
Approach Delay, s/veh		37.5			39.7			23.6			26.4	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	48.0	12.7	30.7	10.5	46.2	11.8	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	44.0	16.0	34.0	12.0	42.0	14.0	36.0
Max Q Clear Time (g_c+I1), s	5.7	12.6	8.9	18.8	7.1	23.2	8.2	23.4
Green Ext Time (p_c), s	0.0	5.1	0.1	3.5	0.1	6.5	0.1	4.1

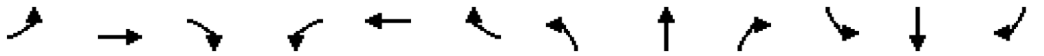
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	726	88	104	597	38	98	545	47	52	463	17
Future Volume (veh/h)	52	726	88	104	597	38	98	545	47	52	463	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	57	789	96	113	649	41	107	592	51	57	503	18
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Cap, veh/h	72	1033	453	144	1177	524	136	1697	145	72	1611	57
Arrive On Green	0.04	0.31	0.31	0.08	0.35	0.35	0.08	0.37	0.37	0.04	0.34	0.34
Sat Flow, veh/h	1691	3374	1480	1691	3374	1502	1691	4541	387	1691	4802	171
Grp Volume(v), veh/h	57	789	96	113	649	41	107	420	223	57	338	183
Grp Sat Flow(s),veh/h/ln	1691	1687	1480	1691	1687	1502	1691	1616	1696	1691	1616	1741
Q Serve(g_s), s	2.8	17.6	4.0	5.4	12.9	1.5	5.2	7.8	7.9	2.8	6.4	6.5
Cycle Q Clear(g_c), s	2.8	17.6	4.0	5.4	12.9	1.5	5.2	7.8	7.9	2.8	6.4	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.10
Lane Grp Cap(c), veh/h	72	1033	453	144	1177	524	136	1207	634	72	1084	584
V/C Ratio(X)	0.79	0.76	0.21	0.79	0.55	0.08	0.79	0.35	0.35	0.79	0.31	0.31
Avail Cap(c_a), veh/h	224	1789	785	367	2074	923	346	1207	634	224	1084	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	26.1	21.4	37.2	21.8	18.1	37.4	18.7	18.7	39.4	20.5	20.5
Incr Delay (d2), s/veh	17.6	1.2	0.2	9.1	0.4	0.1	9.5	0.8	1.5	17.6	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.3	1.6	2.9	6.0	0.6	2.8	3.6	3.9	1.6	3.0	3.3
LnGrp Delay(d), s/veh	57.0	27.3	21.6	46.3	22.2	18.2	46.9	19.5	20.3	57.0	21.2	21.9
LnGrp LOS	E	C	C	D	C	B	D	B	C	E	C	C
Approach Vol, veh/h		942			803			750			578	
Approach Delay, s/veh		28.5			25.4			23.6			25.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	35.0	11.0	29.4	10.7	31.8	7.5	32.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	31.0	18.0	44.0	17.0	25.0	11.0	51.0
Max Q Clear Time (g_c+I1), s	4.8	9.9	7.4	19.6	7.2	8.5	4.8	14.9
Green Ext Time (p_c), s	0.0	3.9	0.2	5.8	0.2	2.8	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1072	0	307	717	0	0	0	0	213	0	17
Future Volume (vph)	0	1072	0	307	717	0	0	0	0	213	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3574		1787	5136					3467		1599
Flt Permitted		1.00		0.13	1.00					0.95		1.00
Satd. Flow (perm)		3574		252	5136					3467		1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1178	0	337	788	0	0	0	0	234	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	1178	0	337	788	0	0	0	0	234	0	8
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		61.0		61.0	61.0					51.0		51.0
Effective Green, g (s)		61.0		61.0	61.0					51.0		51.0
Actuated g/C Ratio		0.51		0.51	0.51					0.43		0.43
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1816		128	2610					1473		679
v/s Ratio Prot		0.33			0.15							
v/s Ratio Perm				c1.34						c0.07		0.01
v/c Ratio		0.65		2.63	0.30					0.16		0.01
Uniform Delay, d1		21.6		29.5	17.1					21.3		19.9
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.8		756.8	0.1					0.2		0.0
Delay (s)		22.4		786.3	17.2					21.5		20.0
Level of Service		C		F	B					C		B
Approach Delay (s/veh)		22.4			247.6			0.0			21.4	
Approach LOS		C			F			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	121.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	131	927	233	50	553	498	285	537	262	228	323	41
Future Volume (veh/h)	131	927	233	50	553	498	285	537	262	228	323	41
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	138	976	245	53	582	524	300	565	0	240	340	43
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	197	1021	255	65	1226	705	383	1076	481	275	1230	539
Arrive On Green	0.06	0.36	0.36	0.04	0.34	0.34	0.11	0.30	0.00	0.15	0.34	0.34
Sat Flow, veh/h	3476	2811	703	1792	3574	1541	3476	3574	1599	1792	3574	1565
Grp Volume(v), veh/h	138	619	602	53	582	524	300	565	0	240	340	43
Grp Sat Flow(s),veh/h/ln	1738	1787	1727	1792	1787	1541	1738	1787	1599	1792	1787	1565
Q Serve(g_s), s	4.3	37.0	37.3	3.2	14.0	30.9	9.2	14.4	0.0	14.4	7.6	2.0
Cycle Q Clear(g_c), s	4.3	37.0	37.3	3.2	14.0	30.9	9.2	14.4	0.0	14.4	7.6	2.0
Prop In Lane	1.00		0.41	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	649	627	65	1226	705	383	1076	481	275	1230	539
V/C Ratio(X)	0.70	0.95	0.96	0.81	0.47	0.74	0.78	0.53	0.00	0.87	0.28	0.08
Avail Cap(c_a), veh/h	222	652	630	65	1226	705	856	1076	481	441	1230	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	34.0	34.1	52.4	28.3	24.8	47.5	31.8	0.0	45.4	26.1	24.2
Incr Delay (d2), s/veh	8.2	24.4	26.0	51.7	0.3	4.3	3.5	1.8	0.0	10.8	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	22.6	22.2	2.5	6.9	13.9	4.6	7.3	0.0	8.0	3.8	0.9
LnGrp Delay(d), s/veh	59.0	58.4	60.1	104.1	28.5	29.1	51.0	33.6	0.0	56.2	26.6	24.5
LnGrp LOS	E	E	E	F	C	C	D	C		E	C	C
Approach Vol, veh/h		1359			1159			865			623	
Approach Delay, s/veh		59.2			32.3			39.7			37.9	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	41.7	8.0	43.8	20.8	37.0	10.2	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	33.0	4.0	40.0	27.0	33.0	7.0	37.0
Max Q Clear Time (g_c+I1), s	11.2	9.6	5.2	39.3	16.4	16.4	6.3	32.9
Green Ext Time (p_c), s	0.9	2.1	0.0	0.5	0.5	3.1	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	949	44	41	817	141	35	1193	62	275	1054	257
Future Volume (veh/h)	205	949	44	41	817	141	35	1193	62	275	1054	257
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	214	989	46	43	851	147	36	1243	65	286	1098	268
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	168	1452	67	55	996	171	46	1489	661	228	1853	963
Arrive On Green	0.09	0.29	0.29	0.03	0.23	0.23	0.03	0.42	0.42	0.13	0.52	0.52
Sat Flow, veh/h	1792	5025	233	1792	4399	755	1792	3574	1587	1792	3574	1570
Grp Volume(v), veh/h	214	673	362	43	661	337	36	1243	65	286	1098	268
Grp Sat Flow(s),veh/h/ln	1792	1712	1835	1792	1712	1730	1792	1787	1587	1792	1787	1570
Q Serve(g_s), s	11.0	20.5	20.5	2.8	21.8	22.0	2.3	36.6	2.9	15.0	25.1	9.4
Cycle Q Clear(g_c), s	11.0	20.5	20.5	2.8	21.8	22.0	2.3	36.6	2.9	15.0	25.1	9.4
Prop In Lane	1.00		0.13	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	989	530	55	775	392	46	1489	661	228	1853	963
V/C Ratio(X)	1.28	0.68	0.68	0.78	0.85	0.86	0.78	0.83	0.10	1.25	0.59	0.28
Avail Cap(c_a), veh/h	168	989	530	137	844	427	213	1489	661	228	1853	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	37.0	37.0	56.6	43.6	43.7	57.0	30.7	20.9	51.3	19.7	10.7
Incr Delay (d2), s/veh	162.7	1.9	3.6	20.2	7.9	15.2	24.1	5.7	0.3	144.1	1.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	9.9	10.9	1.7	11.1	12.1	1.5	19.1	1.3	16.5	12.7	4.3
LnGrp Delay(d), s/veh	216.0	38.9	40.6	76.8	51.6	58.9	81.1	36.4	21.2	195.4	21.1	11.4
LnGrp LOS	F	D	D	E	D	E	F	D	C	F	C	B
Approach Vol, veh/h		1249			1041			1344			1652	
Approach Delay, s/veh		69.8			55.0			36.8			49.7	
Approach LOS		E			D			D			D	

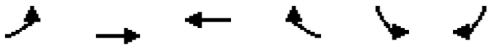
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	53.0	7.6	38.0	7.0	65.0	15.0	30.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	49.0	9.0	31.0	14.0	50.0	11.0	29.0
Max Q Clear Time (g_c+I1), s	17.0	38.6	4.8	22.5	4.3	27.1	13.0	24.0
Green Ext Time (p_c), s	0.0	6.0	0.0	4.0	0.0	9.1	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	1187	195	108	600	120	73	564	90	126	763	104
Future Volume (veh/h)	234	1187	195	108	600	120	73	564	90	126	763	104
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.99		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	252	1276	210	116	645	129	78	606	97	135	820	112
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	1553	256	146	1328	262	225	1623	659	323	1415	193
Arrive On Green	0.12	0.35	0.35	0.08	0.31	0.31	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1792	4423	728	1792	4292	845	604	3574	1451	743	3117	426
Grp Volume(v), veh/h	252	988	498	116	512	262	78	606	97	135	470	462
Grp Sat Flow(s),veh/h/ln	1792	1712	1728	1792	1712	1713	604	1787	1451	743	1787	1755
Q Serve(g_s), s	13.0	27.8	27.8	6.7	12.8	13.2	11.6	11.8	4.1	15.4	20.6	20.6
Cycle Q Clear(g_c), s	13.0	27.8	27.8	6.7	12.8	13.2	32.2	11.8	4.1	27.2	20.6	20.6
Prop In Lane	1.00		0.42	1.00		0.49	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	220	1202	607	146	1060	530	225	1623	659	323	811	797
V/C Ratio(X)	1.14	0.82	0.82	0.80	0.48	0.49	0.35	0.37	0.15	0.42	0.58	0.58
Avail Cap(c_a), veh/h	220	1360	686	305	1522	762	225	1623	659	323	811	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	31.3	31.3	47.7	29.6	29.7	33.3	19.0	16.9	27.9	21.4	21.4
Incr Delay (d2), s/veh	104.9	3.8	7.1	9.5	0.3	0.7	4.2	0.7	0.5	4.0	3.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	13.8	14.5	3.7	6.1	6.3	2.2	6.0	1.7	3.5	10.9	10.7
LnGrp Delay(d), s/veh	151.2	35.0	38.4	57.2	30.0	30.5	37.5	19.6	17.4	31.9	24.4	24.4
LnGrp LOS	F	D	D	E	C	C	D	B	B	C	C	C
Approach Vol, veh/h		1738			890			781			1067	
Approach Delay, s/veh		52.8			33.7			21.1			25.4	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	12.6	41.1		52.0	17.0	36.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	18.0	42.0		48.0	13.0	47.0
Max Q Clear Time (g_c+I1), s		34.2	8.7	29.8		29.2	15.0	15.2
Green Ext Time (p_c), s		4.6	0.2	7.3		7.1	0.0	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	91	802	404	26	65	47
Future Volume (veh/h)	91	802	404	26	65	47
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	96	844	425	27	68	49
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	372	1251	1251	547	822	733
Arrive On Green	0.37	0.37	0.37	0.37	0.49	0.49
Sat Flow, veh/h	883	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	96	844	425	27	68	49
Grp Sat Flow(s),veh/h/ln	883	1671	1671	1461	1675	1495
Q Serve(g_s), s	5.2	12.5	5.4	0.7	1.3	1.0
Cycle Q Clear(g_c), s	10.6	12.5	5.4	0.7	1.3	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	372	1251	1251	547	822	733
V/C Ratio(X)	0.26	0.67	0.34	0.05	0.08	0.07
Avail Cap(c_a), veh/h	1281	4692	4692	2051	822	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	15.5	13.3	11.8	8.0	7.9
Incr Delay (d2), s/veh	0.4	0.6	0.2	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.9	2.5	0.3	0.6	0.5
LnGrp Delay(d), s/veh	17.4	16.1	13.4	11.8	8.2	8.1
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h		940	452		117	
Approach Delay, s/veh		16.3	13.3		8.2	
Approach LOS		B	B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				26.1		33.0		26.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s				14.5		3.3		7.4
Green Ext Time (p_c), s				7.6		0.3		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	668	130	136	308	146	34	888	227	303	1236	83
Future Volume (veh/h)	130	668	130	136	308	146	34	888	227	303	1236	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	137	703	137	143	324	154	36	935	0	319	1301	87
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	164	802	353	198	445	206	45	1279	572	351	1888	788
Arrive On Green	0.09	0.23	0.23	0.06	0.20	0.20	0.03	0.37	0.00	0.20	0.54	0.54
Sat Flow, veh/h	1740	3471	1527	3375	2277	1055	1740	3471	1553	1740	3471	1449
Grp Volume(v), veh/h	137	703	137	143	245	233	36	935	0	319	1301	87
Grp Sat Flow(s),veh/h/ln	1740	1736	1527	1688	1736	1596	1740	1736	1553	1740	1736	1449
Q Serve(g_s), s	8.8	22.3	8.6	4.7	15.1	15.7	2.3	26.5	0.0	20.4	31.2	3.3
Cycle Q Clear(g_c), s	8.8	22.3	8.6	4.7	15.1	15.7	2.3	26.5	0.0	20.4	31.2	3.3
Prop In Lane	1.00		1.00	1.00		0.66	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	802	353	198	339	312	45	1279	572	351	1888	788
V/C Ratio(X)	0.84	0.88	0.39	0.72	0.72	0.75	0.80	0.73	0.00	0.91	0.69	0.11
Avail Cap(c_a), veh/h	198	883	389	207	350	322	92	1279	572	443	1888	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	42.2	37.0	52.7	43.0	43.2	55.2	31.1	0.0	44.5	19.0	12.6
Incr Delay (d2), s/veh	22.1	9.3	0.7	11.2	6.9	8.9	26.2	3.7	0.0	19.7	2.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	11.7	3.7	2.5	7.9	7.7	1.5	13.4	0.0	11.7	15.4	1.4
LnGrp Delay(d), s/veh	72.8	51.5	37.7	63.9	49.9	52.1	81.5	34.8	0.0	64.2	21.0	12.9
LnGrp LOS	E	D	D	E	D	D	F	C		E	C	B
Approach Vol, veh/h		977			621			971			1707	
Approach Delay, s/veh		52.6			53.9			36.6			28.7	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	46.0	10.7	30.3	7.0	66.0	14.7	26.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	39.0	7.0	29.0	6.0	62.0	13.0	23.0
Max Q Clear Time (g_c+I1), s	22.4	28.5	6.7	24.3	4.3	33.2	10.8	17.7
Green Ext Time (p_c), s	0.5	4.4	0.0	2.1	0.0	11.4	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.6
HCM 2010 LOS	D

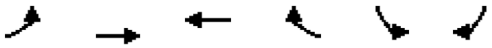
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	1244	644	10	28	18
Future Vol, veh/h	22	1244	644	10	28	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	23	1309	678	11	29	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	689	0	-	0	1379	339
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	701	-
Critical Hdwy	4.26	-	-	-	6.96	7.06
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	2.28	-	-	-	3.58	3.38
Pot Cap-1 Maneuver	862	-	-	-	128	640
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	438	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	862	-	-	-	125	640
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	438	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.2	0	30.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	862	-	-	-	125	640
HCM Lane V/C Ratio	0.027	-	-	-	0.236	0.03
HCM Control Delay (s/veh)	9.3	-	-	-	42.5	10.8
HCM Lane LOS	A	-	-	-	E	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	0.1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	1227	567	29	151	29
Future Volume (veh/h)	47	1227	567	29	151	29
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	50	1305	603	31	161	31
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	62	1703	1407	616	649	579
Arrive On Green	0.04	0.51	0.42	0.42	0.39	0.39
Sat Flow, veh/h	1675	3431	3431	1463	1675	1495
Grp Volume(v), veh/h	50	1305	603	31	161	31
Grp Sat Flow(s),veh/h/ln	1675	1671	1671	1463	1675	1495
Q Serve(g_s), s	2.3	24.3	9.9	1.0	5.0	1.0
Cycle Q Clear(g_c), s	2.3	24.3	9.9	1.0	5.0	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	62	1703	1407	616	649	579
V/C Ratio(X)	0.81	0.77	0.43	0.05	0.25	0.05
Avail Cap(c_a), veh/h	281	3538	2804	1227	649	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	15.3	15.8	13.3	16.1	14.9
Incr Delay (d2), s/veh	21.3	0.7	0.2	0.0	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	11.2	4.6	0.4	2.5	1.1
LnGrp Delay(d), s/veh	58.3	16.0	16.1	13.3	17.0	15.0
LnGrp LOS	E	B	B	B	B	B
Approach Vol, veh/h		1355	634		192	
Approach Delay, s/veh		17.6	15.9		16.7	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				43.5		34.0	6.9	36.6
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				82.0		30.0	13.0	65.0
Max Q Clear Time (g_c+I1), s				26.3		7.0	4.3	11.9
Green Ext Time (p_c), s				13.1		0.5	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1343	3	0	567	34	0	0	32	0	0	14
Future Vol, veh/h	0	1343	3	0	567	34	0	0	32	0	0	14
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	1370	3	0	579	35	0	0	33	0	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	690	-	-	290
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.02	-	-	3.42
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	315	0	0	678
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	314	-	-	678
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	17.8	10.4
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	314	-	-	-	-	678
HCM Lane V/C Ratio	0.104	-	-	-	-	0.021
HCM Control Delay (s/veh)	17.8	-	-	-	-	10.4
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.1

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	278	173	589	510	368	221	340	212	235	418	42	872
Future Volume (vph)	278	173	589	510	368	221	340	212	235	418	42	872
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.99	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1451		4524	1466	1687	1776	1488	1509	1328	1509	1687	3273
Flt Permitted	0.95		0.73	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1451		3341	1466	1687	1776	1488	1509	1328	1509	1687	3273
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	284	177	601	520	376	226	347	216	240	427	43	890
RTOR Reduction (vph)	0	0	0	151	0	0	0	170	87	190	0	0
Lane Group Flow (vph)	256	0	806	369	376	226	347	46	247	143	43	890
Confl. Peds. (#/hr)				7	7							
Confl. Bikes (#/hr)				1			2					
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	pm+ov	Prot	Prot
Protected Phases	7	7	4		3	8				7!	5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	20.0		44.0	24.0	22.0	26.0	26.0	26.0	31.8	51.8	27.0	27.0
Effective Green, g (s)	20.0		44.0	24.0	22.0	26.0	26.0	26.0	31.8	51.8	27.0	27.0
Actuated g/C Ratio	0.17		0.36	0.20	0.18	0.22	0.22	0.22	0.26	0.43	0.22	0.22
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	240		1412	291	307	382	320	324	349	697	377	731
v/s Ratio Prot	0.18		0.09		c0.22	0.13				0.03	0.03	c0.27
v/s Ratio Perm			0.11	c0.25			0.23	0.03	0.19	0.06		
v/c Ratio	1.07		0.57	1.27	1.22	0.59	1.08	0.14	0.71	0.20	0.11	1.22
Uniform Delay, d1	50.4		30.8	48.4	49.4	42.6	47.4	38.4	40.3	21.6	37.4	46.9
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	76.8		0.6	145.5	126.7	2.5	74.7	0.2	11.5	0.1	0.1	110.1
Delay (s)	127.2		31.4	193.9	176.1	45.1	122.1	38.6	51.8	21.8	37.5	157.0
Level of Service	F		C	F	F	D	F	D	D	C	D	F
Approach Delay (s/veh)			100.3			109.1						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	87.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.16		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	113.3%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	355	779	77	126	760	70	64	334	341	85	641	98
Future Volume (veh/h)	355	779	77	126	760	70	64	334	341	85	641	98
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	362	795	79	129	776	0	65	341	348	87	654	100
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	445	1404	139	159	1390	622	83	1141	559	110	1218	510
Arrive On Green	0.13	0.45	0.45	0.09	0.41	0.00	0.05	0.23	0.23	0.06	0.25	0.25
Sat Flow, veh/h	3312	3123	310	1707	3406	1524	1707	4893	1518	1707	4893	1480
Grp Volume(v), veh/h	362	433	441	129	776	0	65	341	348	87	654	100
Grp Sat Flow(s),veh/h/ln	1656	1703	1730	1707	1703	1524	1707	1631	1518	1707	1631	1480
Q Serve(g_s), s	10.6	18.8	18.8	7.4	17.5	0.0	3.8	5.8	18.8	5.0	11.6	4.8
Cycle Q Clear(g_c), s	10.6	18.8	18.8	7.4	17.5	0.0	3.8	5.8	18.8	5.0	11.6	4.8
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	445	766	778	159	1390	622	83	1141	559	110	1218	510
V/C Ratio(X)	0.81	0.57	0.57	0.81	0.56	0.00	0.78	0.30	0.62	0.79	0.54	0.20
Avail Cap(c_a), veh/h	695	766	778	273	1390	622	256	1515	675	205	1369	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	20.3	20.3	44.5	22.7	0.0	47.1	31.6	26.0	46.1	32.6	23.3
Incr Delay (d2), s/veh	4.2	3.0	3.0	9.6	1.6	0.0	14.5	0.1	1.3	11.8	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	9.4	9.6	3.9	8.5	0.0	2.1	2.6	8.1	2.7	5.2	2.0
LnGrp Delay(d), s/veh	46.3	23.4	23.3	54.1	24.3	0.0	61.6	31.8	27.2	57.9	33.0	23.4
LnGrp LOS	D	C	C	D	C		E	C	C	E	C	C
Approach Vol, veh/h		1236			905			754			841	
Approach Delay, s/veh		30.1			28.6			32.3			34.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	49.0	10.5	27.3	17.5	44.8	8.9	28.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	45.0	12.0	31.0	21.0	40.0	15.0	28.0
Max Q Clear Time (g_c+I1), s	9.4	20.8	7.0	20.8	12.6	19.5	5.8	13.6
Green Ext Time (p_c), s	0.1	5.5	0.1	2.5	0.8	5.1	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	196	817	71	40	251	101	197	955	139	259	1116	219
Future Volume (veh/h)	196	817	71	40	251	101	197	955	139	259	1116	219
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	206	860	75	42	264	0	207	1005	146	273	1175	231
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	227	707	310	54	361	162	197	1570	682	303	1782	782
Arrive On Green	0.13	0.20	0.20	0.03	0.10	0.00	0.11	0.45	0.45	0.17	0.51	0.51
Sat Flow, veh/h	1740	3471	1521	1740	3471	1553	1740	3471	1507	1740	3471	1523
Grp Volume(v), veh/h	206	860	75	42	264	0	207	1005	146	273	1175	231
Grp Sat Flow(s),veh/h/ln	1740	1736	1521	1740	1736	1553	1740	1736	1507	1740	1736	1523
Q Serve(g_s), s	13.4	23.4	4.7	2.8	8.5	0.0	13.0	25.7	6.8	17.7	28.6	10.0
Cycle Q Clear(g_c), s	13.4	23.4	4.7	2.8	8.5	0.0	13.0	25.7	6.8	17.7	28.6	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	707	310	54	361	162	197	1570	682	303	1782	782
V/C Ratio(X)	0.91	1.22	0.24	0.78	0.73	0.00	1.05	0.64	0.21	0.90	0.66	0.30
Avail Cap(c_a), veh/h	227	707	310	242	513	230	197	1570	682	363	1782	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	45.8	38.3	55.3	49.9	0.0	51.0	24.3	19.1	46.5	20.6	16.1
Incr Delay (d2), s/veh	35.7	110.0	0.4	21.5	3.2	0.0	78.6	2.0	0.7	22.3	1.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	22.0	2.0	1.7	4.2	0.0	10.5	12.7	2.9	10.4	14.2	4.4
LnGrp Delay(d), s/veh	85.0	155.8	38.7	76.8	53.1	0.0	129.5	26.3	19.8	68.8	22.5	17.0
LnGrp LOS	F	F	D	E	D		F	C	B	E	C	B
Approach Vol, veh/h		1141			306			1358			1679	
Approach Delay, s/veh		135.3			56.4			41.3			29.3	
Approach LOS		F			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	56.0	7.5	27.4	17.0	63.0	19.0	16.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	48.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	19.7	27.7	4.8	25.4	15.0	30.6	15.4	10.5
Green Ext Time (p_c), s	0.3	7.4	0.0	0.0	0.0	10.6	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	61.8
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	108.2

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	846	331	333	0	39	84
Future Vol, veh/h	846	331	333	0	39	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	920	360	362	0	42	91

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	362	0	-	0	2562	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	2200	-
Critical Hdwy	4.15	-	-	-	6.45	-
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	-
Pot Cap-1 Maneuver	1180	-	-	-	~ 28	0
Stage 1	-	-	-	-	698	0
Stage 2	-	-	-	-	89	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1180	-	-	-	~ 6	-
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	89	-

Approach	EB	WB	SW
HCM Control Delay, s/v	12.8	0	$ 3911.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1180	-	-	-	6	-
HCM Lane V/C Ratio	0.779	-	-	-	7.065	-
HCM Control Delay (s/veh)	17.9	-	-	-	$ 3911.3	0
HCM Lane LOS	C	-	-	-	F	A
HCM 95th %tile Q(veh)	8.4	-	-	-	6.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	421	84	37	141	161	50	976	45	266	1124	49
Future Volume (veh/h)	62	421	84	37	141	161	50	976	45	266	1124	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	64	434	87	38	145	166	52	1006	0	274	1159	51
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	279	468	94	135	235	269	217	1413	632	343	1692	736
Arrive On Green	0.04	0.32	0.32	0.02	0.31	0.31	0.03	0.41	0.00	0.11	0.49	0.49
Sat Flow, veh/h	1740	1473	295	1740	770	881	1740	3471	1553	1740	3471	1510
Grp Volume(v), veh/h	64	0	521	38	0	311	52	1006	0	274	1159	51
Grp Sat Flow(s),veh/h/ln	1740	0	1768	1740	0	1651	1740	1736	1553	1740	1736	1510
Q Serve(g_s), s	2.8	0.0	32.2	1.7	0.0	18.2	2.0	27.3	0.0	9.8	29.0	2.0
Cycle Q Clear(g_c), s	2.8	0.0	32.2	1.7	0.0	18.2	2.0	27.3	0.0	9.8	29.0	2.0
Prop In Lane	1.00		0.17	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	279	0	562	135	0	504	217	1413	632	343	1692	736
V/C Ratio(X)	0.23	0.00	0.93	0.28	0.00	0.62	0.24	0.71	0.00	0.80	0.69	0.07
Avail Cap(c_a), veh/h	291	0	627	154	0	570	245	1413	632	432	1692	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	37.2	30.3	0.0	33.6	20.5	27.9	0.0	21.7	22.3	15.4
Incr Delay (d2), s/veh	0.4	0.0	19.0	1.1	0.0	1.6	0.6	3.1	0.0	8.1	2.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	18.6	0.8	0.0	8.5	1.0	13.6	0.0	5.4	14.4	0.9
LnGrp Delay(d), s/veh	27.3	0.0	56.3	31.4	0.0	35.2	21.1	31.0	0.0	29.8	24.5	15.5
LnGrp LOS	C		E	C		D	C	C		C	C	B
Approach Vol, veh/h		585			349			1058			1484	
Approach Delay, s/veh		53.1			34.8			30.5			25.2	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	50.0	6.8	39.9	7.2	59.0	8.2	38.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	42.0	4.0	40.0	5.0	55.0	5.0	39.0
Max Q Clear Time (g_c+I1), s	11.8	29.3	3.7	34.2	4.0	31.0	4.8	20.2
Green Ext Time (p_c), s	0.4	5.6	0.0	1.7	0.0	9.3	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	733	44	34	207	28	116
Future Vol, veh/h	733	44	34	207	28	116
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	780	47	36	220	30	123

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	827	0	1072	781
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	779	-	238	385
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	744	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	779	-	225	385
Mov Cap-2 Maneuver	-	-	-	-	225	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	705	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.4	19.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	225	385	-	-	779	-
HCM Lane V/C Ratio	0.132	0.321	-	-	0.046	-
HCM Control Delay (s/veh)	23.4	18.7	-	-	9.8	0
HCM Lane LOS	C	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	1.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	0.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	877	33	3	258	22	19
Future Vol, veh/h	877	33	3	258	22	19
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	914	34	3	269	23	20

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	948	0	1189	914
Stage 1	-	-	-	-	914	-
Stage 2	-	-	-	-	275	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	693	-	200	320
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	753	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	693	-	199	320
Mov Cap-2 Maneuver	-	-	-	-	199	-
Stage 1	-	-	-	-	378	-
Stage 2	-	-	-	-	750	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	21.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	199	320	-	-	693	-
HCM Lane V/C Ratio	0.115	0.062	-	-	0.005	-
HCM Control Delay (s/veh)	25.4	17	-	-	10.2	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	0.4	0.2	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	828	120	33	238	30	67
Future Volume (veh/h)	828	120	33	238	30	67
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	872	126	35	251	32	71
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	1019	866	200	1019	485	433
Arrive On Green	0.58	0.58	0.58	0.58	0.29	0.29
Sat Flow, veh/h	1743	1482	526	1743	1660	1482
Grp Volume(v), veh/h	872	126	35	251	32	71
Grp Sat Flow(s),veh/h/ln	1743	1482	526	1743	1660	1482
Q Serve(g_s), s	27.0	2.5	3.9	4.5	0.9	2.3
Cycle Q Clear(g_c), s	27.0	2.5	30.9	4.5	0.9	2.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1019	866	200	1019	485	433
V/C Ratio(X)	0.86	0.15	0.18	0.25	0.07	0.16
Avail Cap(c_a), veh/h	2494	2119	645	2494	485	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	11.2	6.1	24.0	6.5	16.6	17.1
Incr Delay (d2), s/veh	2.2	0.1	0.4	0.1	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	1.0	0.6	2.2	0.4	1.0
LnGrp Delay(d), s/veh	13.4	6.2	24.5	6.7	16.9	17.9
LnGrp LOS	B	A	C	A	B	B
Approach Vol, veh/h	998			286	103	
Approach Delay, s/veh	12.5			8.9	17.6	
Approach LOS	B			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		23.0		42.0				42.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		19.0		93.0				93.0
Max Q Clear Time (g_c+I1), s		4.3		29.0				32.9
Green Ext Time (p_c), s		0.2		9.0				2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	903	2	3	239	32	10
Future Vol, veh/h	903	2	3	239	32	10
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	961	2	3	254	34	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	964	0	1222	962
Stage 1	-	-	-	-	962	-
Stage 2	-	-	-	-	260	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	691	-	193	302
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	770	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	690	-	192	302
Mov Cap-2 Maneuver	-	-	-	-	192	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	767	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	25.2
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	192	302	-	-	690	-
HCM Lane V/C Ratio	0.177	0.035	-	-	0.005	-
HCM Control Delay (s/veh)	27.7	17.4	-	-	10.2	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	593	83	89	312	37	37	909	116	156	1096	68
Future Volume (veh/h)	159	593	83	89	312	37	37	909	116	156	1096	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	166	618	86	93	325	39	39	947	121	162	1142	71
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	307	782	107	200	633	74	49	1531	196	193	1915	119
Arrive On Green	0.10	0.18	0.18	0.06	0.14	0.14	0.03	0.50	0.50	0.11	0.58	0.58
Sat Flow, veh/h	1723	4361	597	1723	4474	524	1723	3061	391	1723	3282	204
Grp Volume(v), veh/h	166	464	240	93	237	127	39	532	536	162	598	615
Grp Sat Flow(s),veh/h/ln	1723	1647	1665	1723	1647	1705	1723	1719	1733	1723	1719	1767
Q Serve(g_s), s	8.5	14.5	14.9	4.9	7.2	7.5	2.4	24.2	24.2	9.9	24.0	24.0
Cycle Q Clear(g_c), s	8.5	14.5	14.9	4.9	7.2	7.5	2.4	24.2	24.2	9.9	24.0	24.0
Prop In Lane	1.00		0.36	1.00		0.31	1.00		0.23	1.00		0.12
Lane Grp Cap(c), veh/h	307	591	299	200	466	241	49	860	867	193	1003	1031
V/C Ratio(X)	0.54	0.79	0.80	0.46	0.51	0.53	0.80	0.62	0.62	0.84	0.60	0.60
Avail Cap(c_a), veh/h	377	732	370	256	580	300	112	860	867	303	1003	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	42.3	42.5	37.0	42.9	43.0	52.1	19.5	19.5	47.0	14.3	14.4
Incr Delay (d2), s/veh	1.5	4.6	9.9	1.7	0.9	1.8	24.8	3.3	3.3	11.4	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	6.9	7.7	2.4	3.3	3.6	1.5	12.2	12.3	5.3	12.0	12.4
LnGrp Delay(d), s/veh	34.8	46.9	52.4	38.6	43.7	44.8	76.9	22.9	22.8	58.4	17.0	16.9
LnGrp LOS	C	D	D	D	D	D	E	C	C	E	B	B
Approach Vol, veh/h		870			457			1107			1375	
Approach Delay, s/veh		46.1			43.0			24.8			21.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	58.0	10.5	23.4	7.1	67.0	14.6	19.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	51.0	10.0	24.0	7.0	63.0	15.0	19.0
Max Q Clear Time (g_c+I1), s	11.9	26.2	6.9	16.9	4.4	26.0	10.5	9.5
Green Ext Time (p_c), s	0.2	7.6	0.0	2.5	0.0	10.2	0.2	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	208	9	731	253	0	724
Future Volume (veh/h)	208	9	731	253	0	724
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	0	1827
Adj Flow Rate, veh/h	224	10	786	0	0	778
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	0	4
Cap, veh/h	314	145	2858	1423	0	2858
Arrive On Green	0.09	0.09	0.82	0.00	0.00	0.82
Sat Flow, veh/h	3375	1553	3563	1553	0	3654
Grp Volume(v), veh/h	224	10	786	0	0	778
Grp Sat Flow(s),veh/h/ln	1688	1553	1736	1553	0	1736
Q Serve(g_s), s	6.2	0.6	5.0	0.0	0.0	4.9
Cycle Q Clear(g_c), s	6.2	0.6	5.0	0.0	0.0	4.9
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	314	145	2858	1423	0	2858
V/C Ratio(X)	0.71	0.07	0.27	0.00	0.00	0.27
Avail Cap(c_a), veh/h	1161	534	2858	1423	0	2858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	39.7	1.9	0.0	0.0	1.9
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.2	2.4	0.0	0.0	2.4
LnGrp Delay(d), s/veh	45.3	39.9	2.2	0.0	0.0	2.2
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	234		786			778
Approach Delay, s/veh	45.0		2.2			2.2
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		12.9
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		7.0				6.9		8.2
Green Ext Time (p_c), s		6.1				6.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.7
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	24	886	61	598	470	57	88	12	195	33	71	10
Future Volume (veh/h)	24	886	61	598	470	57	88	12	195	33	71	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	26	963	66	650	511	62	96	13	212	36	77	11
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	37	1172	362	691	2752	328	250	34	251	126	113	16
Arrive On Green	0.02	0.23	0.23	0.39	0.59	0.59	0.16	0.16	0.16	0.07	0.07	0.07
Sat Flow, veh/h	1792	5136	1585	1792	4638	553	1587	215	1593	1792	1609	230
Grp Volume(v), veh/h	26	963	66	650	375	198	109	0	212	36	0	88
Grp Sat Flow(s),veh/h/ln	1792	1712	1585	1792	1712	1767	1802	0	1593	1792	0	1838
Q Serve(g_s), s	1.5	18.0	3.4	35.4	5.1	5.2	5.5	0.0	13.1	1.9	0.0	4.7
Cycle Q Clear(g_c), s	1.5	18.0	3.4	35.4	5.1	5.2	5.5	0.0	13.1	1.9	0.0	4.7
Prop In Lane	1.00		1.00	1.00		0.31	0.88		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	37	1172	362	691	2032	1049	284	0	251	126	0	129
V/C Ratio(X)	0.71	0.82	0.18	0.94	0.18	0.19	0.38	0.00	0.84	0.29	0.00	0.68
Avail Cap(c_a), veh/h	71	1172	362	815	2032	1049	428	0	378	284	0	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.2	37.1	31.4	29.9	9.4	9.4	38.2	0.0	41.4	44.6	0.0	45.9
Incr Delay (d2), s/veh	22.0	6.6	1.1	17.1	0.2	0.4	0.8	0.0	10.5	1.2	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.2	1.6	20.8	2.5	2.6	2.8	0.0	6.5	1.0	0.0	2.6
LnGrp Delay(d), s/veh	71.2	43.6	32.5	47.0	9.6	9.8	39.0	0.0	51.8	45.9	0.0	52.2
LnGrp LOS	E	D	C	D	A	A	D		D	D		D
Approach Vol, veh/h		1055			1223			321			124	
Approach Delay, s/veh		43.6			29.5			47.5			50.3	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	64.0		20.0	43.0	27.1		11.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	60.0		24.0	46.0	18.0		16.0
Max Q Clear Time (g_c+I1), s	3.5	7.2		15.1	37.4	20.0		6.7
Green Ext Time (p_c), s	0.0	4.2		0.9	1.6	0.0		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.0
HCM 2010 LOS	D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	23	638	290	315	294	372	2	895	355	111	968	41
Future Volume (veh/h)	23	638	290	315	294	372	2	895	355	111	968	41
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	24	665	302	328	306	388	2	932	370	116	1008	43
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	34	1077	469	398	1419	754	35	1136	505	144	1581	693
Arrive On Green	0.02	0.31	0.31	0.12	0.41	0.41	0.33	0.33	0.33	0.08	0.46	0.46
Sat Flow, veh/h	1740	3471	1510	3375	3471	1529	1	3402	1513	1740	3471	1522
Grp Volume(v), veh/h	24	665	302	328	306	388	501	433	370	116	1008	43
Grp Sat Flow(s),veh/h/ln	1740	1736	1510	1688	1736	1529	1824	1579	1513	1740	1736	1522
Q Serve(g_s), s	1.4	16.9	17.8	9.8	5.9	17.8	0.0	26.0	22.2	6.8	23.0	1.6
Cycle Q Clear(g_c), s	1.4	16.9	17.8	9.8	5.9	17.8	25.9	26.0	22.2	6.8	23.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	1077	469	398	1419	754	644	527	505	144	1581	693
V/C Ratio(X)	0.72	0.62	0.64	0.82	0.22	0.51	0.78	0.82	0.73	0.81	0.64	0.06
Avail Cap(c_a), veh/h	84	1077	469	491	1419	754	812	674	646	219	2054	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	30.3	30.6	44.4	19.8	17.9	31.5	31.5	30.3	46.5	21.5	15.7
Incr Delay (d2), s/veh	24.4	2.7	6.7	9.1	0.3	2.5	3.7	6.4	3.1	12.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.4	8.3	5.1	2.9	8.0	13.7	12.3	9.7	3.7	11.0	0.7
LnGrp Delay(d), s/veh	74.7	33.0	37.3	53.6	20.1	20.4	35.3	37.9	33.4	58.4	22.0	15.8
LnGrp LOS	E	C	D	D	C	C	D	D	C	E	C	B
Approach Vol, veh/h		991			1022			1304			1167	
Approach Delay, s/veh		35.3			30.9			35.6			25.4	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	46.2	12.5	38.4	16.1	36.0		51.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	42.0	13.0	44.0	15.0	32.0		61.0
Max Q Clear Time (g_c+I1), s	3.4	19.8	8.8	28.0	11.8	19.8		25.0
Green Ext Time (p_c), s	0.0	3.2	0.1	6.5	0.4	4.2		8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.8
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	863	241	387	518	463	25
Future Volume (vph)	863	241	387	518	463	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3505	1568	1752	3505	3391	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3505	1568	1752	3505	3391	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	908	254	407	545	487	26
RTOR Reduction (vph)	0	87	0	0	3	0
Lane Group Flow (vph)	908	167	407	545	510	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	50.9	72.9	32.2	87.1	22.0	
Effective Green, g (s)	50.9	72.9	32.2	87.1	22.0	
Actuated g/C Ratio	0.43	0.62	0.27	0.74	0.19	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1523	1029	481	2607	637	
v/s Ratio Prot	c0.26	0.03	c0.23	0.16	c0.15	
v/s Ratio Perm		0.08				
v/c Ratio	0.60	0.16	0.85	0.21	0.80	
Uniform Delay, d1	25.3	9.3	40.1	4.6	45.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	0.1	12.9	0.2	7.1	
Delay (s)	27.0	9.4	53.0	4.7	52.6	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	23.1			25.4	52.6	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	670	316	189	761	546	449
Future Volume (veh/h)	670	316	189	761	546	449
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	698	0	197	793	569	468
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1136	523	345	2035	2035	910
Arrive On Green	0.33	0.00	0.58	0.58	0.58	0.58
Sat Flow, veh/h	3408	1568	537	3597	3597	1568
Grp Volume(v), veh/h	698	0	197	793	569	468
Grp Sat Flow(s),veh/h/ln	1704	1568	537	1752	1752	1568
Q Serve(g_s), s	16.0	0.0	27.0	11.4	7.6	16.6
Cycle Q Clear(g_c), s	16.0	0.0	34.6	11.4	7.6	16.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1136	523	345	2035	2035	910
V/C Ratio(X)	0.61	0.00	0.57	0.39	0.28	0.51
Avail Cap(c_a), veh/h	1136	523	345	2035	2035	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	18.4	10.6	9.8	11.7
Incr Delay (d2), s/veh	2.5	0.0	2.2	0.1	0.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	4.2	5.5	3.7	7.7
LnGrp Delay(d), s/veh	28.5	0.0	20.7	10.7	10.1	13.7
LnGrp LOS	C		C	B	B	B
Approach Vol, veh/h	698			990	1037	
Approach Delay, s/veh	28.5			12.7	11.7	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		35.0		58.0				58.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		31.0		54.0				54.0
Max Q Clear Time (g_c+I1), s		18.0		36.6				18.6
Green Ext Time (p_c), s		2.2		6.9				5.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	147

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	200	0	4	1436	0	0	787	2	0	6
Future Vol, veh/h	200	0	4	1436	0	0	787	2	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	204	0	4	1465	0	0	803	2	0	6

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	1875	733	805	0	-	-	-	0	1545	403
Stage 1	1473	-	-	-	-	-	-	-	804	-
Stage 2	402	-	-	-	-	-	-	-	741	-
Critical Hdwy	7.56	6.96	4.16	-	-	-	-	-	7.56	6.96
Critical Hdwy Stg 1	6.56	-	-	-	-	-	-	-	6.56	-
Critical Hdwy Stg 2	6.56	-	-	-	-	-	-	-	6.56	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	~ 43	361	809	-	0	0	-	-	77	594
Stage 1	~ 132	-	-	-	0	0	-	-	341	-
Stage 2	593	-	-	-	0	0	-	-	372	-
Platoon blocked, %				-			-	-		
Mov Cap-1 Maneuver	~ 42	361	809	-	-	-	-	-	21	594
Mov Cap-2 Maneuver	~ 42	-	-	-	-	-	-	-	21	-
Stage 1	~ 128	-	-	-	-	-	-	-	332	-
Stage 2	587	-	-	-	-	-	-	-	100	-

Approach	NB	SE	NW	SW
HCM Control Delay, s/v$	867	0.1	0	11.1
HCM LOS	F			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SETSWLn1	
Capacity (veh/h)	42	361	-	-	809	-	594
HCM Lane V/C Ratio	4.859	0.724	-	-	0.005	-	0.01
HCM Control Delay (s/veh)	$ 1929.2	37.1	-	-	9.5	0.1	11.1
HCM Lane LOS	F	E	-	-	A	A	B
HCM 95th %tile Q(veh)	23.5	5.5	-	-	0	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.3

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	70	29	19	1689	732	31
Future Vol, veh/h	70	29	19	1689	732	31
Conflicting Peds, #/hr	0	0	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	73	30	20	1759	763	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1714	413	810	0	-	0
Stage 1	794	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	80	585	805	-	-	-
Stage 1	403	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	76	578	795	-	-	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	388	-	-	-	-	-
Stage 2	342	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	135.3	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	795	-	76	578
HCM Lane V/C Ratio	-	-	0.025	-	0.959	0.052
HCM Control Delay (s/veh)	-	-	9.6	-	186.5	11.6
HCM Lane LOS	-	-	A	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	-	5	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	138	1154	499	104	926	223	165	972	548	282	413	22
Future Volume (veh/h)	138	1154	499	104	926	223	165	972	548	282	413	22
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1706	1706	1706	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	145	1215	525	109	975	235	174	1023	0	297	435	23
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	169	1216	678	102	1155	692	203	1168	523	341	1075	57
Arrive On Green	0.10	0.38	0.38	0.06	0.33	0.33	0.12	0.33	0.00	0.10	0.32	0.32
Sat Flow, veh/h	1625	3242	1422	1757	3505	1549	1757	3505	1568	3408	3383	178
Grp Volume(v), veh/h	145	1215	525	109	975	235	174	1023	0	297	225	233
Grp Sat Flow(s),veh/h/ln	1625	1621	1422	1757	1752	1549	1757	1752	1568	1704	1752	1809
Q Serve(g_s), s	10.5	45.0	36.9	7.0	31.0	11.9	11.7	33.0	0.0	10.3	12.0	12.1
Cycle Q Clear(g_c), s	10.5	45.0	36.9	7.0	31.0	11.9	11.7	33.0	0.0	10.3	12.0	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	169	1216	678	102	1155	692	203	1168	523	341	557	575
V/C Ratio(X)	0.86	1.00	0.77	1.06	0.84	0.34	0.86	0.88	0.00	0.87	0.40	0.41
Avail Cap(c_a), veh/h	176	1216	678	102	1155	692	293	1168	523	341	557	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	37.5	26.2	56.5	37.4	21.8	52.1	37.7	0.0	53.2	32.0	32.1
Incr Delay (d2), s/veh	31.6	25.7	5.6	107.1	5.9	0.3	15.6	9.3	0.0	21.0	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	24.4	15.5	6.4	16.0	5.1	6.5	17.4	0.0	5.9	6.1	6.4
LnGrp Delay(d), s/veh	84.5	63.1	31.8	164.1	43.2	22.1	67.7	47.0	0.0	74.2	34.2	34.2
LnGrp LOS	F	E	C	F	D	C	E	D		E	C	C
Approach Vol, veh/h		1885			1319			1197			755	
Approach Delay, s/veh		56.0			49.5			50.0			49.9	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	42.1	11.0	49.0	16.0	44.0	16.5	43.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	7.0	45.0	12.0	40.0	13.0	39.0
Max Q Clear Time (g_c+I1), s	13.7	14.1	9.0	47.0	12.3	35.0	12.5	33.0
Green Ext Time (p_c), s	0.2	2.5	0.0	0.0	0.0	2.9	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.1
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	37	689	11	22	1268
Future Vol, veh/h	30	37	689	11	22	1268
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	38	710	11	23	1307

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1413	358	0	0	724	0
Stage 1	713	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	128	636	-	-	868	-
Stage 1	444	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	124	634	-	-	866	-
Mov Cap-2 Maneuver	124	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	439	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	25.5	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	124	634	866	-
HCM Lane V/C Ratio	-	-	0.249	0.06	0.026	-
HCM Control Delay (s/veh)	-	-	43.4	11	9.3	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.9	0.2	0.1	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	73	94	600	49	370	915
Future Volume (veh/h)	73	94	600	49	370	915
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	75	97	619	51	381	943
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	141	126	2945	1312	674	2945
Arrive On Green	0.08	0.08	0.85	0.85	0.85	0.85
Sat Flow, veh/h	1740	1553	3563	1546	749	3563
Grp Volume(v), veh/h	75	97	619	51	381	943
Grp Sat Flow(s),veh/h/ln	1740	1553	1736	1546	749	1736
Q Serve(g_s), s	4.7	6.9	3.7	0.6	21.6	6.4
Cycle Q Clear(g_c), s	4.7	6.9	3.7	0.6	25.4	6.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	141	126	2945	1312	674	2945
V/C Ratio(X)	0.53	0.77	0.21	0.04	0.57	0.32
Avail Cap(c_a), veh/h	246	220	2945	1312	674	2945
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	51.0	1.6	1.3	3.9	1.8
Incr Delay (d2), s/veh	3.1	9.6	0.2	0.1	3.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.3	1.8	0.3	5.0	3.1
LnGrp Delay(d), s/veh	53.1	60.6	1.7	1.4	7.3	2.1
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	172		670			1324
Approach Delay, s/veh	57.3		1.7			3.6
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		100.0				100.0		13.2
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		96.0				96.0		16.0
Max Q Clear Time (g_c+I1), s		5.7				27.4		8.9
Green Ext Time (p_c), s		4.7				13.7		0.3

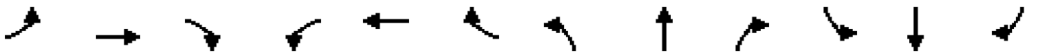
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.3
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	492	47	39	42	20
Future Vol, veh/h	20	492	47	39	42	20
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	24	579	55	46	49	24
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	17.7	10.5	9.2
HCM LOS	C	B	A

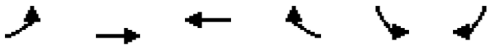
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	55%	100%	0%	0%	0%
Vol Thru, %	45%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	86	20	492	42	20
LT Vol	47	20	0	0	0
Through Vol	39	0	0	42	0
RT Vol	0	0	492	0	20
Lane Flow Rate	101	24	579	49	24
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.172	0.037	0.723	0.086	0.036
Departure Headway (Hd)	6.103	5.703	4.499	6.245	5.536
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	584	628	805	569	641
Service Time	4.182	3.441	2.237	4.03	3.32
HCM Lane V/C Ratio	0.173	0.038	0.719	0.086	0.037
HCM Control Delay, s/veh	10.5	8.7	18.1	9.6	8.5
HCM Lane LOS	B	A	C	A	A
HCM 95th-tile Q	0.6	0.1	6.4	0.3	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	354	1080	3	728	625	427	11	263	577	149	25	6
Future Volume (vph)	354	1080	3	728	625	427	11	263	577	149	25	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.94			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1752	5034		1752	4680			3497	1568	1595	3237	1537
Flt Permitted	0.95	1.00		0.95	1.00			0.94	1.00	0.95	0.60	1.00
Satd. Flow (perm)	1752	5034		1752	4680			3307	1568	1595	2026	1537
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	361	1102	3	743	638	436	11	268	589	152	26	6
RTOR Reduction (vph)	0	0	0	0	93	0	0	0	486	0	0	4
Lane Group Flow (vph)	361	1105	0	743	981	0	0	279	103	76	102	2
Confl. Peds. (#/hr)	6					6	3					3
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	29.6	26.0		51.0	47.4			21.0	21.0	6.0	31.0	31.0
Effective Green, g (s)	29.6	26.0		51.0	47.4			21.0	21.0	6.0	31.0	31.0
Actuated g/C Ratio	0.25	0.22		0.43	0.39			0.18	0.18	0.05	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	432	1090		744	1848			578	274	79	583	397
v/s Ratio Prot	0.21	c0.22		c0.42	0.21					c0.05	0.01	
v/s Ratio Perm								c0.08	0.07		0.04	0.00
v/c Ratio	0.84	1.01		1.00	0.53			0.48	0.38	0.96	0.92dl	0.00
Uniform Delay, d1	42.9	47.0		34.5	27.8			44.6	43.7	56.9	34.6	33.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.1	30.7		32.4	0.3			2.9	3.9	87.9	0.1	0.0
Delay (s)	56.0	77.7		66.9	28.1			47.5	47.6	144.8	34.7	33.1
Level of Service	E	E		E	C			D	D	F	C	C
Approach Delay (s/veh)		72.4			43.9			47.6			80.1	
Approach LOS		E			D			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.5%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	43	1295	1063	40	317	189
Future Volume (veh/h)	43	1295	1063	40	317	189
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1827	1827	1827	1827
Adj Flow Rate, veh/h	46	1378	1131	43	337	201
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	196	1667	1802	805	697	622
Arrive On Green	0.52	0.52	0.52	0.52	0.40	0.40
Sat Flow, veh/h	432	3295	3563	1551	1740	1553
Grp Volume(v), veh/h	46	1378	1131	43	337	201
Grp Sat Flow(s),veh/h/ln	432	1605	1736	1551	1740	1553
Q Serve(g_s), s	8.5	36.1	23.2	1.4	14.4	8.9
Cycle Q Clear(g_c), s	31.7	36.1	23.2	1.4	14.4	8.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	196	1667	1802	805	697	622
V/C Ratio(X)	0.23	0.83	0.63	0.05	0.48	0.32
Avail Cap(c_a), veh/h	283	2316	2504	1119	697	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	20.2	17.1	11.9	22.2	20.6
Incr Delay (d2), s/veh	0.6	1.8	0.4	0.0	2.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	16.3	11.1	0.6	7.4	4.0
LnGrp Delay(d), s/veh	29.0	22.1	17.5	11.9	24.6	22.0
LnGrp LOS	C	C	B	B	C	C
Approach Vol, veh/h		1424	1174		538	
Approach Delay, s/veh		22.3	17.3		23.6	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				55.8		44.0		55.8
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s				38.1		16.4		25.2
Green Ext Time (p_c), s				13.7		1.8		10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	1307	145	159	723	104	34	1008	157	174	852	241
Future Volume (veh/h)	229	1307	145	159	723	104	34	1008	157	174	852	241
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	244	1390	154	169	769	111	36	1072	167	185	906	256
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1430	158	192	1183	170	46	1180	522	207	1501	657
Arrive On Green	0.15	0.31	0.31	0.11	0.26	0.26	0.03	0.33	0.33	0.12	0.42	0.42
Sat Flow, veh/h	1774	4638	514	1774	4492	644	1774	3539	1565	1774	3539	1548
Grp Volume(v), veh/h	244	1016	528	169	579	301	36	1072	167	185	906	256
Grp Sat Flow(s),veh/h/ln	1774	1695	1761	1774	1695	1746	1774	1770	1565	1774	1770	1548
Q Serve(g_s), s	16.2	35.5	35.5	11.3	18.2	18.4	2.4	34.8	9.6	12.3	23.8	13.7
Cycle Q Clear(g_c), s	16.2	35.5	35.5	11.3	18.2	18.4	2.4	34.8	9.6	12.3	23.8	13.7
Prop In Lane	1.00		0.29	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	1045	543	192	893	460	46	1180	522	207	1501	657
V/C Ratio(X)	0.90	0.97	0.97	0.88	0.65	0.65	0.79	0.91	0.32	0.89	0.60	0.39
Avail Cap(c_a), veh/h	310	1045	543	192	893	460	89	1180	522	207	1501	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	41.0	41.0	52.7	39.3	39.3	58.1	38.3	29.9	52.3	26.7	23.8
Incr Delay (d2), s/veh	25.0	21.3	31.5	34.0	1.6	3.3	25.0	11.8	1.6	35.2	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	19.7	22.1	7.4	8.7	9.3	1.5	18.9	4.4	8.1	12.0	6.2
LnGrp Delay(d), s/veh	74.9	62.3	72.5	86.8	40.9	42.7	83.1	50.0	31.5	87.4	28.5	25.6
LnGrp LOS	E	E	E	F	D	D	F	D	C	F	C	C
Approach Vol, veh/h		1788			1049			1275			1347	
Approach Delay, s/veh		67.0			48.8			48.5			36.1	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	44.0	17.0	41.0	7.1	54.9	22.4	35.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	40.0	13.0	37.0	6.0	48.0	21.0	29.0
Max Q Clear Time (g_c+I1), s	14.3	36.8	13.3	37.5	4.4	25.8	18.2	20.4
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	7.0	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	1293	165	220	815	126	72	906	109	130	1035	95
Future Volume (veh/h)	203	1293	165	220	815	126	72	906	109	130	1035	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	209	1333	170	227	840	130	74	934	112	134	1067	98
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1400	179	252	1390	214	94	1060	127	148	1289	773
Arrive On Green	0.13	0.31	0.31	0.14	0.31	0.31	0.05	0.33	0.33	0.08	0.36	0.36
Sat Flow, veh/h	1774	4549	580	1774	4416	678	1774	3176	381	1774	3539	1536
Grp Volume(v), veh/h	209	993	510	227	643	327	74	520	526	134	1067	98
Grp Sat Flow(s),veh/h/ln	1774	1695	1739	1774	1695	1704	1774	1770	1788	1774	1770	1536
Q Serve(g_s), s	13.9	34.4	34.4	15.1	19.2	19.5	4.9	33.3	33.3	9.0	32.9	4.1
Cycle Q Clear(g_c), s	13.9	34.4	34.4	15.1	19.2	19.5	4.9	33.3	33.3	9.0	32.9	4.1
Prop In Lane	1.00		0.33	1.00		0.40	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	239	1043	535	252	1067	536	94	590	596	148	1289	773
V/C Ratio(X)	0.87	0.95	0.95	0.90	0.60	0.61	0.79	0.88	0.88	0.91	0.83	0.13
Avail Cap(c_a), veh/h	340	1046	537	252	1067	536	104	590	596	148	1289	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	40.6	40.6	50.6	34.7	34.8	56.1	37.7	37.7	54.5	34.7	16.1
Incr Delay (d2), s/veh	16.1	17.5	27.3	32.3	1.0	2.0	29.8	17.1	17.0	47.1	6.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	18.5	20.5	9.6	9.2	9.5	3.2	19.0	19.2	6.3	17.1	1.8
LnGrp Delay(d), s/veh	67.0	58.1	67.9	82.9	35.7	36.8	85.9	54.8	54.7	101.6	40.9	16.4
LnGrp LOS	E	E	E	F	D	D	F	D	D	F	D	B
Approach Vol, veh/h		1712			1197			1120			1299	
Approach Delay, s/veh		62.1			45.0			56.8			45.3	
Approach LOS		E			D			E			D	

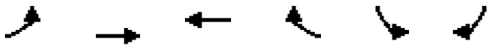
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	44.0	21.0	40.9	10.4	47.6	20.2	41.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	40.0	17.0	37.0	7.0	43.0	23.0	31.0
Max Q Clear Time (g_c+I1), s	11.0	35.3	17.1	36.4	6.9	34.9	15.9	21.5
Green Ext Time (p_c), s	0.0	2.6	0.0	0.5	0.0	4.4	0.3	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1340	89	281	892	173	144	217	153	122	243	144
Future Volume (veh/h)	149	1340	89	281	892	173	144	217	153	122	243	144
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	0.99		0.95	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	152	1367	91	287	910	177	147	221	156	124	248	147
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	1698	113	326	1819	352	334	841	359	381	484	274
Arrive On Green	0.10	0.35	0.35	0.18	0.43	0.43	0.08	0.24	0.24	0.07	0.23	0.23
Sat Flow, veh/h	1774	4861	324	1774	4242	821	1774	3539	1510	1774	2138	1211
Grp Volume(v), veh/h	152	953	505	287	726	361	147	221	156	124	203	192
Grp Sat Flow(s),veh/h/ln	1774	1695	1795	1774	1695	1673	1774	1770	1510	1774	1770	1579
Q Serve(g_s), s	8.5	25.7	25.7	15.9	15.7	15.9	6.3	5.1	8.9	5.3	10.1	10.8
Cycle Q Clear(g_c), s	8.5	25.7	25.7	15.9	15.7	15.9	6.3	5.1	8.9	5.3	10.1	10.8
Prop In Lane	1.00		0.18	1.00		0.49	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	185	1184	627	326	1454	717	334	841	359	381	401	358
V/C Ratio(X)	0.82	0.80	0.80	0.88	0.50	0.50	0.44	0.26	0.43	0.33	0.51	0.54
Avail Cap(c_a), veh/h	316	1377	729	527	1779	878	382	841	359	414	401	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	29.7	29.7	40.1	21.0	21.0	27.0	31.3	32.7	26.9	34.1	34.4
Incr Delay (d2), s/veh	8.7	3.1	5.8	9.8	0.3	0.5	0.9	0.8	3.8	0.5	4.5	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	12.6	13.8	8.7	7.4	7.4	3.2	2.6	4.1	2.7	5.5	5.2
LnGrp Delay(d), s/veh	53.0	32.9	35.5	50.0	21.2	21.6	27.9	32.1	36.5	27.4	38.6	40.0
LnGrp LOS	D	C	D	D	C	C	C	C	D	C	D	D
Approach Vol, veh/h		1610			1374			524			519	
Approach Delay, s/veh		35.6			27.3			32.2			36.5	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	28.0	22.5	39.3	12.3	26.9	14.5	47.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	24.0	30.0	41.0	11.0	22.0	18.0	53.0
Max Q Clear Time (g_c+I1), s	7.3	10.9	17.9	27.7	8.3	12.8	10.5	17.9
Green Ext Time (p_c), s	0.0	1.6	0.6	7.6	0.1	1.7	0.2	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.4
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	1392	1192	0	340	267
Future Volume (veh/h)	0	1392	1192	0	340	267
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1723	1723
Adj Flow Rate, veh/h	0	1465	1255	0	358	281
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1757	1757	0	699	624
Arrive On Green	0.00	0.50	0.50	0.00	0.43	0.43
Sat Flow, veh/h	0	3725	3725	0	1641	1465
Grp Volume(v), veh/h	0	1465	1255	0	358	281
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1641	1465
Q Serve(g_s), s	0.0	36.7	28.6	0.0	16.5	14.1
Cycle Q Clear(g_c), s	0.0	36.7	28.6	0.0	16.5	14.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1757	1757	0	699	624
V/C Ratio(X)	0.00	0.83	0.71	0.00	0.51	0.45
Avail Cap(c_a), veh/h	0	2331	2331	0	699	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	22.3	20.3	0.0	21.7	21.0
Incr Delay (d2), s/veh	0.0	2.1	0.7	0.0	2.7	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.4	14.1	0.0	8.0	6.1
LnGrp Delay(d), s/veh	0.0	24.4	21.0	0.0	24.4	23.4
LnGrp LOS		C	C		C	C
Approach Vol, veh/h		1465	1255		639	
Approach Delay, s/veh		24.4	21.0		24.0	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				55.3		48.0		55.3
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				68.0		44.0		68.0
Max Q Clear Time (g_c+I1), s				38.7		18.5		30.6
Green Ext Time (p_c), s				12.5		2.1		10.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	1122	387	201	855	257	192	550	142	241	534	177
Future Volume (veh/h)	221	1122	387	201	855	257	192	550	142	241	534	177
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	226	1145	395	205	872	262	196	561	145	246	545	181
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1275	440	235	1169	505	226	808	351	276	909	397
Arrive On Green	0.14	0.34	0.34	0.13	0.33	0.33	0.13	0.23	0.23	0.16	0.26	0.26
Sat Flow, veh/h	1774	3726	1285	1774	3539	1528	1774	3539	1539	1774	3539	1545
Grp Volume(v), veh/h	226	1042	498	205	872	262	196	561	145	246	545	181
Grp Sat Flow(s),veh/h/ln	1774	1695	1620	1774	1770	1528	1774	1770	1539	1774	1770	1545
Q Serve(g_s), s	14.1	33.0	33.0	12.8	24.7	15.6	12.2	16.4	9.1	15.4	15.3	11.1
Cycle Q Clear(g_c), s	14.1	33.0	33.0	12.8	24.7	15.6	12.2	16.4	9.1	15.4	15.3	11.1
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1160	554	235	1169	505	226	808	351	276	909	397
V/C Ratio(X)	0.88	0.90	0.90	0.87	0.75	0.52	0.87	0.69	0.41	0.89	0.60	0.46
Avail Cap(c_a), veh/h	298	1201	574	283	1222	528	267	808	351	330	909	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	35.3	35.3	48.1	33.6	30.6	48.4	40.0	37.1	46.7	36.9	35.3
Incr Delay (d2), s/veh	23.1	9.1	16.7	21.8	2.4	0.8	22.4	4.9	3.6	22.0	2.9	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	16.8	17.2	7.7	12.5	6.7	7.4	8.6	4.2	9.2	7.9	5.2
LnGrp Delay(d), s/veh	70.5	44.3	52.0	69.9	36.0	31.4	70.8	44.9	40.7	68.8	39.8	39.1
LnGrp LOS	E	D	D	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1766			1339			902			972	
Approach Delay, s/veh		49.8			40.3			49.8			47.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	29.8	18.9	42.6	18.4	33.0	20.3	41.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	25.0	18.0	40.0	17.0	29.0	19.0	39.0
Max Q Clear Time (g_c+I1), s	17.4	18.4	14.8	35.0	14.2	17.3	16.1	26.7
Green Ext Time (p_c), s	0.2	2.4	0.2	3.7	0.1	3.3	0.2	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	988	98	118	694	264	110	850	86	189	761	141
Future Volume (veh/h)	163	988	98	118	694	264	110	850	86	189	761	141
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	170	1029	102	123	723	275	115	885	90	197	793	147
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	201	1234	122	151	850	319	329	1473	640	338	1571	683
Arrive On Green	0.11	0.27	0.27	0.09	0.24	0.24	0.05	0.42	0.42	0.08	0.45	0.45
Sat Flow, veh/h	1757	4651	460	1757	3585	1345	1757	3505	1523	1757	3505	1524
Grp Volume(v), veh/h	170	742	389	123	676	322	115	885	90	197	793	147
Grp Sat Flow(s),veh/h/ln	1757	1679	1753	1757	1679	1572	1757	1752	1523	1757	1752	1524
Q Serve(g_s), s	10.4	22.8	22.9	7.5	21.0	21.4	4.0	21.4	4.0	6.7	17.6	6.4
Cycle Q Clear(g_c), s	10.4	22.8	22.9	7.5	21.0	21.4	4.0	21.4	4.0	6.7	17.6	6.4
Prop In Lane	1.00		0.26	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	891	465	151	796	373	329	1473	640	338	1571	683
V/C Ratio(X)	0.85	0.83	0.84	0.81	0.85	0.86	0.35	0.60	0.14	0.58	0.50	0.22
Avail Cap(c_a), veh/h	289	983	513	225	860	403	379	1473	640	435	1571	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	37.9	37.9	49.1	39.8	40.0	17.4	24.6	19.5	18.2	21.5	18.4
Incr Delay (d2), s/veh	14.4	5.8	10.6	13.1	7.7	16.4	0.6	1.8	0.5	1.6	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	11.2	12.4	4.2	10.6	11.0	2.0	10.7	1.7	3.3	8.7	2.8
LnGrp Delay(d), s/veh	61.9	43.6	48.5	62.2	47.5	56.4	18.0	26.4	20.0	19.8	22.7	19.1
LnGrp LOS	E	D	D	E	D	E	B	C	B	B	C	B
Approach Vol, veh/h		1301			1121			1090			1137	
Approach Delay, s/veh		47.5			51.7			25.0			21.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	49.9	13.4	33.0	9.9	53.0	16.5	29.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	43.0	14.0	32.0	9.0	49.0	18.0	28.0
Max Q Clear Time (g_c+I1), s	8.7	23.4	9.5	24.9	6.0	19.6	12.4	23.4
Green Ext Time (p_c), s	0.3	6.1	0.1	3.9	0.1	6.3	0.2	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	1133	70	31	763	256	122	352	22	314	241	150
Future Volume (veh/h)	184	1133	70	31	763	256	122	352	22	314	241	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	188	1156	71	32	779	261	124	359	22	320	246	153
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	1667	102	40	903	300	550	1797	110	537	1878	840
Arrive On Green	0.12	0.34	0.34	0.02	0.24	0.24	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1774	4895	300	1774	3763	1249	981	3386	207	998	3539	1582
Grp Volume(v), veh/h	188	800	427	32	701	339	124	187	194	320	246	153
Grp Sat Flow(s),veh/h/ln	1774	1695	1805	1774	1695	1621	981	1770	1823	998	1770	1582
Q Serve(g_s), s	11.8	23.0	23.1	2.0	22.4	22.7	8.2	6.3	6.3	28.0	4.0	5.7
Cycle Q Clear(g_c), s	11.8	23.0	23.1	2.0	22.4	22.7	12.2	6.3	6.3	34.4	4.0	5.7
Prop In Lane	1.00		0.17	1.00		0.77	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	219	1155	615	40	814	389	550	939	967	537	1878	840
V/C Ratio(X)	0.86	0.69	0.69	0.80	0.86	0.87	0.23	0.20	0.20	0.60	0.13	0.18
Avail Cap(c_a), veh/h	298	1259	670	94	870	416	550	939	967	537	1878	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	32.2	32.2	55.0	41.2	41.3	16.5	13.9	13.9	23.0	13.4	13.8
Incr Delay (d2), s/veh	16.8	1.5	2.8	28.9	8.5	17.1	0.9	0.5	0.5	4.8	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	11.0	12.0	1.3	11.5	12.0	2.4	3.2	3.3	8.4	2.0	2.6
LnGrp Delay(d), s/veh	65.4	33.7	35.0	83.9	49.6	58.4	17.4	14.4	14.4	27.8	13.5	14.3
LnGrp LOS	E	C	C	F	D	E	B	B	B	C	B	B
Approach Vol, veh/h		1415			1072			505			719	
Approach Delay, s/veh		38.3			53.4			15.1			20.0	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		64.0	6.6	42.5		64.0	17.9	31.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		60.0	6.0	42.0		60.0	19.0	29.0
Max Q Clear Time (g_c+I1), s		14.2	4.0	25.1		36.4	13.8	24.7
Green Ext Time (p_c), s		2.9	0.0	7.3		3.7	0.2	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	166	1247	85	62	808	95	116	553	164	126	462	123
Future Volume (vph)	166	1247	85	62	808	95	116	553	164	126	462	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5081		1787	5055		1784	3574	1576	1786	3574	1574
Flt Permitted	0.95	1.00		0.95	1.00		0.44	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1787	5081		1787	5055		834	3574	1576	733	3574	1574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	173	1299	89	65	842	99	121	576	171	131	481	128
RTOR Reduction (vph)	0	7	0	0	12	0	0	0	21	0	0	60
Lane Group Flow (vph)	173	1381	0	65	929	0	121	576	150	131	481	68
Confl. Peds. (#/hr)			1	1			2		1	1		2
Confl. Bikes (#/hr)			4						1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4!			7!	8!			2			6	
Permitted Phases		4!					2		2	6		6
Actuated Green, G (s)	39.6	39.6		7.8	27.8		54.3	54.3	54.3	54.3	54.3	54.3
Effective Green, g (s)	39.6	39.6		7.8	27.8		54.3	54.3	54.3	54.3	54.3	54.3
Actuated g/C Ratio	0.39	0.39		0.08	0.27		0.53	0.53	0.53	0.53	0.53	0.53
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	694	1974		136	1379		444	1904	839	390	1904	838
v/s Ratio Prot	0.10			0.04	0.18			0.16			0.13	
v/s Ratio Perm		c0.27					0.15		0.10	c0.18		0.04
v/c Ratio	0.25	0.70		0.48	0.67		0.27	0.30	0.18	0.34	0.25	0.08
Uniform Delay, d1	21.1	26.2		45.1	33.0		13.0	13.3	12.3	13.5	12.8	11.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.1		2.6	1.3		1.5	0.4	0.5	2.3	0.3	0.2
Delay (s)	21.3	27.3		47.7	34.3		14.5	13.7	12.8	15.9	13.2	11.8
Level of Service	C	C		D	C		B	B	B	B	B	B
Approach Delay (s/veh)		26.6			35.2			13.6			13.4	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	101.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Intersection	
Int Delay, s/veh	21.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	175	297	0	1056	674	0
Future Vol, veh/h	175	297	0	1056	674	0
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	192	326	0	1160	741	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1321	371	-	0	-	0
Stage 1	741	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	-	-
Pot Cap-1 Maneuver	~ 147	623	0	-	-	0
Stage 1	429	-	0	-	-	0
Stage 2	520	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 147	623	-	-	-	-
Mov Cap-2 Maneuver	~ 147	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	520	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	98.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	147	623	-
HCM Lane V/C Ratio	-	1.308	0.524	-
HCM Control Delay (s/veh)	-	237.5	17	-
HCM Lane LOS	-	F	C	-
HCM 95th %tile Q(veh)	-	11.8	3.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	3	8	326	0	230	9	645	79	224	928	5
Future Volume (veh/h)	1	3	8	326	0	230	9	645	79	224	928	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1	3	9	354	0	250	10	701	86	243	1009	5
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	124	314	456	526	439	344	2279	1006	447	2279	1018
Arrive On Green	0.28	0.28	0.28	0.28	0.00	0.28	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	54	440	1111	1371	1863	1553	554	3539	1562	685	3539	1581
Grp Volume(v), veh/h	13	0	0	354	0	250	10	701	86	243	1009	5
Grp Sat Flow(s),veh/h/ln	1604	0	0	1371	1863	1553	554	1770	1562	685	1770	1581
Q Serve(g_s), s	0.0	0.0	0.0	26.3	0.0	15.0	1.0	9.6	2.3	26.5	15.4	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0	26.9	0.0	15.0	16.4	9.6	2.3	36.1	15.4	0.1
Prop In Lane	0.08		0.69	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	489	0	0	456	526	439	344	2279	1006	447	2279	1018
V/C Ratio(X)	0.03	0.00	0.00	0.78	0.00	0.57	0.03	0.31	0.09	0.54	0.44	0.00
Avail Cap(c_a), veh/h	651	0	0	598	720	600	344	2279	1006	447	2279	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	0.0	0.0	37.6	0.0	33.3	13.7	8.6	7.3	16.6	9.6	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.7	0.0	1.2	0.2	0.4	0.2	4.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	10.8	0.0	6.5	0.2	4.8	1.0	5.6	7.6	0.1
LnGrp Delay(d), s/veh	28.2	0.0	0.0	42.3	0.0	34.5	13.9	9.0	7.5	21.3	10.3	6.9
LnGrp LOS	C			D		C	B	A	A	C	B	A
Approach Vol, veh/h		13			604			797			1257	
Approach Delay, s/veh		28.2			39.1			8.9			12.4	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		34.7		74.0		34.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		18.4		2.6		38.1		28.9
Green Ext Time (p_c), s		6.0		0.0		11.4		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.3

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	552	17	194	1150	62	219
Future Vol, veh/h	552	17	194	1150	62	219
Conflicting Peds, #/hr	0	7	7	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	587	18	206	1223	66	233

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	612	0	1627	-
Stage 1	-	-	-	-	603	-
Stage 2	-	-	-	-	1024	-
Critical Hdwy	-	-	4.1	-	6.8	-
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	-
Pot Cap-1 Maneuver	-	-	977	-	95	0
Stage 1	-	-	-	-	515	0
Stage 2	-	-	-	-	312	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	971	-	74	-
Mov Cap-2 Maneuver	-	-	-	-	74	-
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	246	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	1.4	171
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	74	-	971	-
HCM Lane V/C Ratio	-	-	0.891	-	0.213	-
HCM Control Delay (s/veh)	-	-	171	0	9.7	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4.5	-	0.8	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	1149	163	129	1336	105	164	133	96	105	207	95
Future Volume (veh/h)	46	1149	163	129	1336	105	164	133	96	105	207	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	52	1306	185	147	1518	119	186	151	109	119	235	108
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	1690	239	181	2117	166	223	958	427	150	812	356
Arrive On Green	0.04	0.38	0.38	0.10	0.44	0.44	0.13	0.27	0.27	0.08	0.23	0.23
Sat Flow, veh/h	1774	4491	636	1774	4803	376	1774	3539	1578	1774	3539	1554
Grp Volume(v), veh/h	52	986	505	147	1071	566	186	151	109	119	235	108
Grp Sat Flow(s),veh/h/ln	1774	1695	1737	1774	1695	1790	1774	1770	1578	1774	1770	1554
Q Serve(g_s), s	2.8	24.6	24.6	7.8	24.8	24.8	9.8	3.1	5.2	6.3	5.3	5.5
Cycle Q Clear(g_c), s	2.8	24.6	24.6	7.8	24.8	24.8	9.8	3.1	5.2	6.3	5.3	5.5
Prop In Lane	1.00		0.37	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	1276	654	181	1494	789	223	958	427	150	812	356
V/C Ratio(X)	0.78	0.77	0.77	0.81	0.72	0.72	0.83	0.16	0.26	0.80	0.29	0.30
Avail Cap(c_a), veh/h	166	1588	814	332	1906	1006	388	958	427	277	812	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	26.3	26.3	42.2	22.0	22.0	41.0	26.7	27.4	43.2	30.5	30.6
Incr Delay (d2), s/veh	17.5	1.9	3.7	8.4	0.9	1.8	8.0	0.4	1.4	9.2	0.9	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	11.8	12.5	4.3	11.8	12.7	5.3	1.6	2.4	3.5	2.7	2.6
LnGrp Delay(d), s/veh	63.3	28.3	30.0	50.6	22.9	23.8	49.0	27.0	28.9	52.3	31.4	32.8
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1543			1784			446			462	
Approach Delay, s/veh		30.0			25.5			36.6			37.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	30.0	13.8	40.1	16.1	26.0	7.6	46.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	26.0	18.0	45.0	21.0	20.0	9.0	54.0
Max Q Clear Time (g_c+I1), s	8.3	7.2	9.8	26.6	11.8	7.5	4.8	26.8
Green Ext Time (p_c), s	0.1	1.1	0.2	9.6	0.3	1.3	0.0	13.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	155	74	126	390	171	120	819	118	128	698	115
Future Volume (veh/h)	38	155	74	126	390	171	120	819	118	128	698	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	41	168	80	137	424	186	130	890	128	139	759	125
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	52	359	163	169	523	227	418	1873	835	375	1884	830
Arrive On Green	0.03	0.15	0.15	0.10	0.22	0.22	0.05	0.53	0.53	0.06	0.54	0.54
Sat Flow, veh/h	1757	2331	1058	1757	2368	1027	1757	3505	1562	1757	3505	1544
Grp Volume(v), veh/h	41	124	124	137	313	297	130	890	128	139	759	125
Grp Sat Flow(s),veh/h/ln	1757	1752	1636	1757	1752	1643	1757	1752	1562	1757	1752	1544
Q Serve(g_s), s	2.3	6.5	7.0	7.7	17.0	17.3	3.3	15.9	4.2	3.5	12.8	4.1
Cycle Q Clear(g_c), s	2.3	6.5	7.0	7.7	17.0	17.3	3.3	15.9	4.2	3.5	12.8	4.1
Prop In Lane	1.00		0.65	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	270	252	169	387	363	418	1873	835	375	1884	830
V/C Ratio(X)	0.79	0.46	0.49	0.81	0.81	0.82	0.31	0.48	0.15	0.37	0.40	0.15
Avail Cap(c_a), veh/h	122	349	326	332	558	523	518	1873	835	504	1884	830
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	38.7	38.9	44.5	37.1	37.2	10.2	14.6	11.9	10.8	13.7	11.7
Incr Delay (d2), s/veh	23.0	1.2	1.5	8.9	5.7	6.7	0.4	0.9	0.4	0.6	0.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.2	3.2	4.1	8.9	8.5	1.6	7.9	1.9	1.8	6.4	1.8
LnGrp Delay(d), s/veh	71.5	39.9	40.4	53.4	42.8	43.9	10.6	15.5	12.2	11.5	14.4	12.1
LnGrp LOS	E	D	D	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		289			747			1148			1023	
Approach Delay, s/veh		44.6			45.2			14.6			13.7	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	57.7	13.7	19.5	9.3	58.0	7.0	26.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	52.0	19.0	20.0	11.0	54.0	7.0	32.0
Max Q Clear Time (g_c+I1), s	5.5	17.9	9.7	9.0	5.3	14.8	4.3	19.3
Green Ext Time (p_c), s	0.2	8.1	0.2	0.9	0.1	6.8	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	94	388	62	70	416	218	93	791	65	206	623	92
Future Volume (veh/h)	94	388	62	70	416	218	93	791	65	206	623	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	99	408	65	74	438	229	98	833	68	217	656	97
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	164	630	528	200	630	524	409	2074	927	343	2074	927
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	759	1845	1546	908	1845	1533	700	3505	1567	610	3505	1567
Grp Volume(v), veh/h	99	408	65	74	438	229	98	833	68	217	656	97
Grp Sat Flow(s),veh/h/ln	759	1845	1546	908	1845	1533	700	1752	1567	610	1752	1567
Q Serve(g_s), s	15.5	22.4	3.5	9.0	24.6	13.9	9.8	15.3	2.2	35.5	11.3	3.2
Cycle Q Clear(g_c), s	40.1	22.4	3.5	31.4	24.6	13.9	21.1	15.3	2.2	50.8	11.3	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	630	528	200	630	524	409	2074	927	343	2074	927
V/C Ratio(X)	0.60	0.65	0.12	0.37	0.69	0.44	0.24	0.40	0.07	0.63	0.32	0.10
Avail Cap(c_a), veh/h	164	630	528	200	630	524	409	2074	927	343	2074	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	33.4	27.1	46.7	34.1	30.6	17.6	13.1	10.5	26.7	12.3	10.7
Incr Delay (d2), s/veh	6.2	2.3	0.1	1.1	3.3	0.6	1.4	0.6	0.2	8.6	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	11.9	1.5	2.3	13.1	5.9	2.0	7.5	1.0	6.8	5.6	1.5
LnGrp Delay(d), s/veh	57.6	35.7	27.2	47.8	37.4	31.1	19.0	13.7	10.6	35.3	12.7	10.9
LnGrp LOS	E	D	C	D	D	C	B	B	B	D	B	B
Approach Vol, veh/h		572			741			999			970	
Approach Delay, s/veh		38.5			36.5			14.0			17.6	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		45.0		75.0		45.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		41.0		71.0		41.0
Max Q Clear Time (g_c+I1), s		23.1		42.1		52.8		33.4
Green Ext Time (p_c), s		7.7		0.0		6.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	8.3

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	28	334	360	815	593	18
Future Vol, veh/h	28	334	360	815	593	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	367	396	896	652	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1892	326	672	0	-	0
Stage 1	652	-	-	-	-	-
Stage 2	1240	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	62	670	915	-	-	-
Stage 1	480	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	35	670	915	-	-	-
Mov Cap-2 Maneuver	35	-	-	-	-	-
Stage 1	272	-	-	-	-	-
Stage 2	236	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	37.4	3.6	0
HCM LOS	E		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	915	-	35	670	-	-
HCM Lane V/C Ratio	0.432	-	0.879	0.548	-	-
HCM Control Delay (s/veh)	11.9	-	284.2	16.7	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.2	-	3.1	3.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	938	262	241	550	65	258	967	188	80	733	57
Future Volume (veh/h)	110	938	262	241	550	65	258	967	188	80	733	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	111	947	265	243	556	66	261	977	190	81	740	58
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1041	290	273	1569	184	291	1360	595	103	985	427
Arrive On Green	0.08	0.26	0.26	0.15	0.34	0.34	0.16	0.38	0.38	0.06	0.28	0.28
Sat Flow, veh/h	1774	3935	1098	1774	4607	539	1774	3539	1549	1774	3539	1534
Grp Volume(v), veh/h	111	815	397	243	407	215	261	977	190	81	740	58
Grp Sat Flow(s),veh/h/ln	1774	1695	1643	1774	1695	1756	1774	1770	1549	1774	1770	1534
Q Serve(g_s), s	7.0	26.7	26.8	15.4	10.3	10.5	16.5	26.9	9.9	5.2	21.8	3.2
Cycle Q Clear(g_c), s	7.0	26.7	26.8	15.4	10.3	10.5	16.5	26.9	9.9	5.2	21.8	3.2
Prop In Lane	1.00		0.67	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	896	434	273	1154	598	291	1360	595	103	985	427
V/C Ratio(X)	0.81	0.91	0.91	0.89	0.35	0.36	0.90	0.72	0.32	0.79	0.75	0.14
Avail Cap(c_a), veh/h	232	918	445	325	1154	598	341	1360	595	124	985	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	40.8	40.8	47.5	28.3	28.4	46.9	30.0	24.7	53.2	37.7	31.0
Incr Delay (d2), s/veh	10.5	12.7	22.8	22.4	0.2	0.4	23.0	3.3	1.4	23.9	5.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.0	14.9	9.3	4.8	5.2	10.0	13.8	4.4	3.2	11.4	1.5
LnGrp Delay(d), s/veh	62.4	53.5	63.6	69.9	28.5	28.7	69.9	33.3	26.2	77.2	43.0	31.7
LnGrp LOS	E	D	E	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		1323			865			1428			879	
Approach Delay, s/veh		57.3			40.2			39.0			45.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	48.0	21.6	34.3	22.8	35.9	12.9	43.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	21.0	31.0	22.0	30.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.2	28.9	17.4	28.8	18.5	23.8	9.0	12.5
Green Ext Time (p_c), s	0.0	6.4	0.2	1.5	0.3	2.5	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	39	111	41	87	38	114	1303	48	39	1114	76
Future Volume (veh/h)	63	39	111	41	87	38	114	1303	48	39	1114	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	66	41	116	43	91	40	119	1357	50	41	1160	79
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	20	332	42	68	326	147	2321	1013	52	2132	930
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.66	0.66	0.03	0.60	0.60
Sat Flow, veh/h	0	96	1581	0	325	1555	1774	3539	1545	1774	3539	1545
Grp Volume(v), veh/h	107	0	116	134	0	40	119	1357	50	41	1160	79
Grp Sat Flow(s),veh/h/ln	96	0	1581	325	0	1555	1774	1770	1545	1774	1770	1545
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	2.4	7.5	24.5	1.3	2.6	22.2	2.5
Cycle Q Clear(g_c), s	24.0	0.0	7.2	24.0	0.0	2.4	7.5	24.5	1.3	2.6	22.2	2.5
Prop In Lane	0.62		1.00	0.32		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	332	110	0	326	147	2321	1013	52	2132	930
V/C Ratio(X)	1.50	0.00	0.35	1.22	0.00	0.12	0.81	0.58	0.05	0.78	0.54	0.08
Avail Cap(c_a), veh/h	71	0	332	110	0	326	295	2321	1013	140	2132	930
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	0.0	38.5	43.6	0.0	36.7	51.6	11.0	7.0	55.1	13.5	9.5
Incr Delay (d2), s/veh	286.8	0.0	0.6	156.5	0.0	0.2	10.0	1.1	0.1	21.8	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	3.2	8.2	0.0	1.0	4.1	12.2	0.6	1.6	11.1	1.1
LnGrp Delay(d), s/veh	337.3	0.0	39.2	200.1	0.0	36.8	61.6	12.1	7.1	76.9	14.5	9.7
LnGrp LOS	F		D	F		D	E	B	A	E	B	A
Approach Vol, veh/h		223			174			1526			1280	
Approach Delay, s/veh		182.2			162.5			15.8			16.2	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	79.0		28.0	13.5	72.9		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	75.0		24.0	19.0	65.0		24.0
Max Q Clear Time (g_c+I1), s	4.6	26.5		26.0	9.5	24.2		26.0
Green Ext Time (p_c), s	0.0	13.3		0.0	0.2	10.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	867	88	177	734	188	96	1121	43	184	1031	50
Future Volume (veh/h)	150	867	88	177	734	188	96	1121	43	184	1031	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	885	90	181	749	192	98	1144	44	188	1052	51
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	938	410	207	993	436	122	1301	570	207	1472	647
Arrive On Green	0.10	0.27	0.27	0.12	0.28	0.28	0.07	0.37	0.37	0.12	0.42	0.42
Sat Flow, veh/h	1774	3539	1548	1774	3539	1554	1774	3539	1552	1774	3539	1556
Grp Volume(v), veh/h	153	885	90	181	749	192	98	1144	44	188	1052	51
Grp Sat Flow(s),veh/h/ln	1774	1770	1548	1774	1770	1554	1774	1770	1552	1774	1770	1556
Q Serve(g_s), s	10.2	29.3	5.4	12.0	23.1	12.1	6.5	36.2	2.2	12.5	29.6	2.4
Cycle Q Clear(g_c), s	10.2	29.3	5.4	12.0	23.1	12.1	6.5	36.2	2.2	12.5	29.6	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	938	410	207	993	436	122	1301	570	207	1472	647
V/C Ratio(X)	0.85	0.94	0.22	0.87	0.75	0.44	0.81	0.88	0.08	0.91	0.71	0.08
Avail Cap(c_a), veh/h	207	946	414	207	993	436	133	1301	570	207	1472	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	43.1	34.3	52.0	39.3	35.4	55.0	35.4	24.6	52.2	29.1	21.1
Incr Delay (d2), s/veh	24.5	17.1	0.3	31.1	3.3	0.7	27.4	8.7	0.3	37.7	3.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	16.6	2.4	7.7	11.8	5.3	4.1	19.2	1.0	8.3	15.1	1.1
LnGrp Delay(d), s/veh	77.4	60.3	34.6	83.1	42.6	36.1	82.4	44.1	24.9	89.9	32.0	21.3
LnGrp LOS	E	E	C	F	D	D	F	D	C	F	C	C
Approach Vol, veh/h		1128			1122			1286			1291	
Approach Delay, s/veh		60.5			48.0			46.3			40.1	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	48.0	18.0	35.7	12.2	53.8	16.1	37.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	44.0	14.0	32.0	9.0	49.0	14.0	32.0
Max Q Clear Time (g_c+I1), s	14.5	38.2	14.0	31.3	8.5	31.6	12.2	25.1
Green Ext Time (p_c), s	0.0	3.5	0.0	0.4	0.0	6.7	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	139	152	75	116	109	81	1163	140	109	1165	12
Future Volume (veh/h)	9	139	152	75	116	109	81	1163	140	109	1165	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	9	145	158	78	121	114	84	1211	0	114	1214	12
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	15	223	194	100	312	268	107	2021	904	142	3067	30
Arrive On Green	0.01	0.13	0.13	0.06	0.18	0.18	0.06	0.58	0.00	0.08	0.60	0.60
Sat Flow, veh/h	1740	1736	1514	1740	1764	1516	1740	3471	1553	1740	5093	50
Grp Volume(v), veh/h	9	145	158	78	119	116	84	1211	0	114	793	433
Grp Sat Flow(s),veh/h/ln	1740	1736	1514	1740	1736	1544	1740	1736	1553	1740	1663	1818
Q Serve(g_s), s	0.5	8.4	10.8	4.7	6.4	7.1	5.1	23.8	0.0	6.8	13.2	13.2
Cycle Q Clear(g_c), s	0.5	8.4	10.8	4.7	6.4	7.1	5.1	23.8	0.0	6.8	13.2	13.2
Prop In Lane	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	15	223	194	100	307	273	107	2021	904	142	2003	1095
V/C Ratio(X)	0.59	0.65	0.81	0.78	0.39	0.42	0.79	0.60	0.00	0.80	0.40	0.40
Avail Cap(c_a), veh/h	65	261	228	196	392	349	196	2021	904	246	2003	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	44.0	45.1	49.4	38.6	38.9	49.2	14.2	0.0	48.0	11.0	11.0
Incr Delay (d2), s/veh	31.2	4.4	17.3	12.5	0.8	1.0	11.9	1.3	0.0	10.2	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.3	5.5	2.6	3.1	3.1	2.8	11.6	0.0	3.7	6.2	6.9
LnGrp Delay(d), s/veh	83.7	48.4	62.3	61.9	39.4	40.0	61.1	15.6	0.0	58.1	11.6	12.1
LnGrp LOS	F	D	E	E	D	D	E	B		E	B	B
Approach Vol, veh/h		312			313			1295			1340	
Approach Delay, s/veh		56.5			45.2			18.5			15.7	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	65.9	10.1	17.7	10.5	68.0	4.9	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	61.0	12.0	16.0	12.0	64.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	8.8	25.8	6.7	12.8	7.1	15.2	2.5	9.1
Green Ext Time (p_c), s	0.1	10.1	0.1	0.5	0.1	9.6	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	88	35	0	17	44	1310	11	5	1353	30
Future Volume (veh/h)	40	0	88	35	0	17	44	1310	11	5	1353	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	42	0	92	36	0	18	46	1365	11	5	1409	31
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	63	0	265	63	0	269	59	2484	1084	9	3450	76
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.03	0.72	0.72	0.01	0.69	0.69
Sat Flow, veh/h	0	0	1519	0	0	1540	1740	3471	1514	1740	5022	110
Grp Volume(v), veh/h	42	0	92	36	0	18	46	1365	11	5	933	507
Grp Sat Flow(s),veh/h/ln	0	0	1519	0	0	1540	1740	1736	1514	1740	1663	1807
Q Serve(g_s), s	0.0	0.0	6.1	0.0	0.0	1.1	3.0	21.1	0.2	0.3	14.0	14.0
Cycle Q Clear(g_c), s	20.0	0.0	6.1	20.0	0.0	1.1	3.0	21.1	0.2	0.3	14.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	63	0	265	63	0	269	59	2484	1084	9	2284	1241
V/C Ratio(X)	0.67	0.00	0.35	0.57	0.00	0.07	0.78	0.55	0.01	0.56	0.41	0.41
Avail Cap(c_a), veh/h	63	0	265	63	0	269	182	2484	1084	91	2284	1241
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	0.0	41.6	57.3	0.0	39.5	54.9	7.6	4.7	56.9	7.8	7.8
Incr Delay (d2), s/veh	23.9	0.0	0.8	12.0	0.0	0.1	19.8	0.9	0.0	45.0	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.6	1.3	0.0	0.5	1.8	10.4	0.1	0.3	6.5	7.2
LnGrp Delay(d), s/veh	81.2	0.0	42.3	69.2	0.0	39.6	74.7	8.5	4.7	101.9	8.3	8.8
LnGrp LOS	F		D	E		D	E	A	A	F	A	A
Approach Vol, veh/h		134			54			1422			1445	
Approach Delay, s/veh		54.5			59.4			10.6			8.8	
Approach LOS		D			E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	86.0		24.0	7.9	82.7		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	82.0		20.0	12.0	76.0		20.0
Max Q Clear Time (g_c+I1), s	2.3	23.1		22.0	5.0	16.0		22.0
Green Ext Time (p_c), s	0.0	13.6		0.0	0.0	12.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.6
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	961	136	63	822	155	186
Future Volume (veh/h)	961	136	63	822	155	186
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1900	1845	1845	1845	1845
Adj Flow Rate, veh/h	1092	155	72	934	176	211
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1576	223	93	2303	780	696
Arrive On Green	0.35	0.35	0.05	0.46	0.44	0.44
Sat Flow, veh/h	4609	630	1757	5202	1757	1568
Grp Volume(v), veh/h	825	422	72	934	176	211
Grp Sat Flow(s),veh/h/ln	1679	1715	1757	1679	1757	1568
Q Serve(g_s), s	17.0	17.1	3.3	10.0	5.0	7.0
Cycle Q Clear(g_c), s	17.0	17.1	3.3	10.0	5.0	7.0
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1191	608	93	2303	780	696
V/C Ratio(X)	0.69	0.69	0.77	0.41	0.23	0.30
Avail Cap(c_a), veh/h	2319	1185	347	4721	780	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	22.4	37.9	14.7	13.9	14.5
Incr Delay (d2), s/veh	0.7	1.4	12.5	0.1	0.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	8.3	1.9	4.6	2.6	3.2
LnGrp Delay(d), s/veh	23.1	23.8	50.4	14.8	14.6	15.6
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	1247			1006	387	
Approach Delay, s/veh	23.3			17.3	15.1	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		40.0	8.3	32.8				41.1
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		36.0	16.0	56.0				76.0
Max Q Clear Time (g_c+I1), s		9.0	5.3	19.1				12.0
Green Ext Time (p_c), s		1.2	0.1	9.7				7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.8
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	131	13	54	141	102	29	128	28	79	159	24
Future Vol, veh/h	11	131	13	54	141	102	29	128	28	79	159	24
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	136	14	56	147	106	30	133	29	82	166	25
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	12.5	16.8	11.7	12.1
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	18%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	91%	47%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	9%	34%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	128	28	11	144	297	79	159	24
LT Vol	29	0	0	11	0	54	79	0	0
Through Vol	0	128	0	0	131	141	0	159	0
RT Vol	0	0	28	0	13	102	0	0	24
Lane Flow Rate	30	133	29	11	150	309	82	166	25
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.064	0.264	0.051	0.024	0.292	0.55	0.168	0.314	0.042
Departure Headway (Hd)	7.635	7.123	6.416	7.573	7.004	6.398	7.441	6.93	6.213
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	471	507	561	476	516	560	485	522	580
Service Time	5.345	4.833	4.116	5.273	4.704	4.194	5.141	4.63	3.913
HCM Lane V/C Ratio	0.064	0.262	0.052	0.023	0.291	0.552	0.169	0.318	0.043
HCM Control Delay, s/veh	10.9	12.4	9.5	10.5	12.6	16.8	11.6	12.8	9.2
HCM Lane LOS	B	B	A	B	B	C	B	B	A
HCM 95th-tile Q	0.2	1.1	0.2	0.1	1.2	3.3	0.6	1.3	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	1024	45	6	916	80	60	35	28	88	14	68
Future Volume (veh/h)	72	1024	45	6	916	80	60	35	28	88	14	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	75	1067	47	6	954	83	62	36	29	92	15	71
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	97	1468	641	11	1296	566	80	29	643	92	8	635
Arrive On Green	0.06	0.42	0.42	0.01	0.37	0.37	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1757	3505	1530	1757	3505	1531	0	71	1567	0	20	1547
Grp Volume(v), veh/h	75	1067	47	6	954	83	98	0	29	107	0	71
Grp Sat Flow(s),veh/h/ln	1757	1752	1530	1757	1752	1531	71	0	1567	20	0	1547
Q Serve(g_s), s	3.1	18.6	1.3	0.2	17.2	2.6	0.0	0.0	0.8	0.0	0.0	2.1
Cycle Q Clear(g_c), s	3.1	18.6	1.3	0.2	17.2	2.6	30.0	0.0	0.8	30.0	0.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	0.63		1.00	0.86		1.00
Lane Grp Cap(c), veh/h	97	1468	641	11	1296	566	110	0	643	100	0	635
V/C Ratio(X)	0.77	0.73	0.07	0.54	0.74	0.15	0.89	0.00	0.05	1.07	0.00	0.11
Avail Cap(c_a), veh/h	409	3454	1508	144	2927	1278	110	0	643	100	0	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	17.7	12.7	36.2	19.9	15.3	27.7	0.0	12.9	34.1	0.0	13.3
Incr Delay (d2), s/veh	12.0	0.7	0.0	35.8	0.8	0.1	60.5	0.0	0.1	110.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	9.0	0.6	0.2	8.4	1.1	3.8	0.0	0.4	5.1	0.0	1.0
LnGrp Delay(d), s/veh	46.1	18.4	12.8	72.0	20.8	15.5	88.3	0.0	13.1	145.0	0.0	13.7
LnGrp LOS	D	B	B	E	C	B	F		B	F		B
Approach Vol, veh/h		1189			1043			127			178	
Approach Delay, s/veh		20.0			20.6			71.1			92.6	
Approach LOS		B			C			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	4.5	34.6		34.0	8.0	31.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0	6.0	72.0		30.0	17.0	61.0
Max Q Clear Time (g_c+I1), s		32.0	2.2	20.6		32.0	5.1	19.2
Green Ext Time (p_c), s		0.0	0.0	9.1		0.0	0.1	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	7	13	107	0	79	4	1358	167	119	1121	7
Future Volume (veh/h)	5	7	13	107	0	79	4	1358	167	119	1121	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	5	8	14	118	0	87	4	1492	184	131	1232	8
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	54	68	88	216	0	164	7	2426	1059	161	2732	1193
Arrive On Green	0.10	0.10	0.10	0.10	0.00	0.10	0.00	0.69	0.69	0.09	0.78	0.78
Sat Flow, veh/h	135	645	840	1367	0	1563	1757	3505	1529	1757	3505	1531
Grp Volume(v), veh/h	27	0	0	118	0	87	4	1492	184	131	1232	8
Grp Sat Flow(s),veh/h/ln	1619	0	0	1367	0	1563	1757	1752	1529	1757	1752	1531
Q Serve(g_s), s	0.0	0.0	0.0	7.0	0.0	5.7	0.2	24.6	4.5	7.9	12.9	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.0	8.6	0.0	5.7	0.2	24.6	4.5	7.9	12.9	0.1
Prop In Lane	0.19		0.52	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	0	0	216	0	164	7	2426	1059	161	2732	1193
V/C Ratio(X)	0.13	0.00	0.00	0.55	0.00	0.53	0.54	0.61	0.17	0.82	0.45	0.01
Avail Cap(c_a), veh/h	335	0	0	326	0	290	65	2426	1059	277	2732	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	0.0	0.0	46.9	0.0	45.7	53.6	8.9	5.8	48.1	4.0	2.6
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.1	0.0	2.6	50.5	1.2	0.4	9.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	3.6	0.0	2.6	0.2	12.2	2.0	4.2	6.4	0.1
LnGrp Delay(d), s/veh	44.1	0.0	0.0	49.0	0.0	48.3	104.1	10.1	6.2	57.7	4.6	2.6
LnGrp LOS	D			D		D	F	B	A	E	A	A
Approach Vol, veh/h		27			205			1680			1371	
Approach Delay, s/veh		44.1			48.7			9.9			9.6	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	78.6		15.3	4.5	88.0		15.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	71.0		20.0	4.0	84.0		20.0
Max Q Clear Time (g_c+I1), s	9.9	26.6		3.6	2.2	14.9		10.6
Green Ext Time (p_c), s	0.2	16.2		0.1	0.0	11.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.5
HCM 2010 LOS	B

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	236	161	1378	236	5	511	49	0	0	3	59	220
Future Volume (vph)	236	161	1378	236	5	511	49	0	0	3	59	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%		15%				0%
Total Lost time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Lane Util. Factor		1.00	0.91		1.00	0.91					1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Frt		1.00	0.98		1.00	0.99					1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00					0.95	1.00
Satd. Flow (prot)		1805	5055		1805	5119					1805	1900
Flt Permitted		0.95	1.00		0.21	1.00					0.52	1.00
Satd. Flow (perm)		1805	5055		400	5119					997	1900
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	254	173	1482	254	5	549	53	0	0	3	63	237
RTOR Reduction (vph)	0	0	16	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	427	1720	0	5	602	0	0	0	0	66	237
Confl. Peds. (#/hr)				1	1			5				
Confl. Bikes (#/hr)				2								
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Perm	Perm	Perm	NA
Protected Phases	7	7	4		3	8		9				6
Permitted Phases					8				10	6	6	
Actuated Green, G (s)		24.7	43.0		19.7	19.0					28.3	28.3
Effective Green, g (s)		24.7	43.0		19.7	19.0					28.3	28.3
Actuated g/C Ratio		0.29	0.51		0.23	0.23					0.34	0.34
Clearance Time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0					3.0	3.0
Lane Grp Cap (vph)		530	2587		105	1157					335	640
v/s Ratio Prot		c0.24	c0.34		0.00	0.12						c0.12
v/s Ratio Perm					0.01						0.07	
v/c Ratio		0.81	0.66		0.05	0.52					0.20	0.37
Uniform Delay, d1		27.4	15.2		24.7	28.5					19.8	21.1
Progression Factor		1.00	1.00		1.00	1.00					1.00	1.00
Incremental Delay, d2		8.7	0.7		0.2	0.4					0.3	0.4
Delay (s)		36.1	15.8		24.9	28.9					20.1	21.5
Level of Service		D	B		C	C					C	C
Approach Delay (s/veh)			19.8			28.9		0.0				20.7
Approach LOS			B			C		A				C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	20.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	61	108	214	20	16
Future Volume (vph)	61	108	214	20	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Grade (%)			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	1.00	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1615	1805	1900	1615	
Flt Permitted	1.00	0.52	1.00	1.00	
Satd. Flow (perm)	1615	979	1900	1615	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	66	116	230	22	17
RTOR Reduction (vph)	44	0	0	26	0
Lane Group Flow (vph)	22	116	230	13	0
Confl. Peds. (#/hr)					
Confl. Bikes (#/hr)					
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			2		
Permitted Phases	6	2		2	
Actuated Green, G (s)	28.3	28.3	28.3	28.3	
Effective Green, g (s)	28.3	28.3	28.3	28.3	
Actuated g/C Ratio	0.34	0.34	0.34	0.34	
Clearance Time (s)	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	544	329	640	544	
v/s Ratio Prot			0.12		
v/s Ratio Perm	0.01	0.12		0.01	
v/c Ratio	0.04	0.35	0.36	0.02	
Uniform Delay, d1	18.7	21.0	21.0	18.6	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	2.9	1.6	0.1	
Delay (s)	18.8	23.9	22.6	18.7	
Level of Service	B	C	C	B	
Approach Delay (s/veh)			22.6		
Approach LOS			C		

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	244	2504	47	30	1967	90	195	29	274	92	37	19
Future Volume (veh/h)	244	2504	47	30	1967	90	195	29	274	92	37	19
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	262	2692	51	32	2115	97	210	31	295	99	40	20
Adj No. of Lanes	2	3	0	1	3	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	327	3455	65	40	3053	926	318	390	325	267	390	322
Arrive On Green	0.09	0.67	0.67	0.02	0.59	0.59	0.21	0.21	0.21	0.21	0.21	0.21
Sat Flow, veh/h	3476	5187	98	1792	5136	1557	1342	1881	1567	1056	1881	1553
Grp Volume(v), veh/h	262	1772	971	32	2115	97	210	31	295	99	40	20
Grp Sat Flow(s),veh/h/ln	1738	1712	1861	1792	1712	1557	1342	1881	1567	1056	1881	1553
Q Serve(g_s), s	8.5	41.4	42.1	2.1	32.8	3.1	17.4	1.5	21.2	9.6	2.0	1.2
Cycle Q Clear(g_c), s	8.5	41.4	42.1	2.1	32.8	3.1	19.3	1.5	21.2	11.2	2.0	1.2
Prop In Lane	1.00		0.05	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	2281	1240	40	3053	926	318	390	325	267	390	322
V/C Ratio(X)	0.80	0.78	0.78	0.79	0.69	0.10	0.66	0.08	0.91	0.37	0.10	0.06
Avail Cap(c_a), veh/h	451	2281	1240	62	3053	926	353	439	366	295	439	363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	13.3	13.5	56.2	16.2	10.1	44.9	36.9	44.7	41.4	37.1	36.8
Incr Delay (d2), s/veh	7.0	2.7	5.0	31.0	1.3	0.2	3.9	0.1	24.0	0.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	20.0	23.0	1.4	15.8	1.4	6.8	0.8	11.4	2.9	1.0	0.5
LnGrp Delay(d), s/veh	58.3	16.0	18.5	87.2	17.5	10.4	48.9	37.0	68.7	42.3	37.2	36.9
LnGrp LOS	E	B	B	F	B	B	D	D	E	D	D	D
Approach Vol, veh/h		3005			2244			536			159	
Approach Delay, s/veh		20.5			18.2			59.1			40.3	
Approach LOS		C			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	81.0		28.0	14.9	72.7		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	77.0		27.0	15.0	66.0		27.0
Max Q Clear Time (g_c+I1), s	4.1	44.1		23.2	10.5	34.8		13.2
Green Ext Time (p_c), s	0.0	26.8		0.7	0.4	19.9		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	727	199	329	34	49	10	274	1070	0	9	829	166
Future Volume (veh/h)	727	199	329	34	49	10	274	1070	0	9	829	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	757	207	343	35	51	10	285	1115	0	9	864	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	884	545	462	46	93	18	366	1857	831	16	1513	677
Arrive On Green	0.25	0.29	0.29	0.03	0.06	0.06	0.10	0.51	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3510	1900	1612	1810	1541	302	3510	3610	1615	1810	3610	1615
Grp Volume(v), veh/h	757	207	343	35	0	61	285	1115	0	9	864	0
Grp Sat Flow(s),veh/h/ln	1755	1900	1612	1810	0	1843	1755	1805	1615	1810	1805	1615
Q Serve(g_s), s	20.0	8.5	18.7	1.9	0.0	3.1	7.7	21.1	0.0	0.5	17.8	0.0
Cycle Q Clear(g_c), s	20.0	8.5	18.7	1.9	0.0	3.1	7.7	21.1	0.0	0.5	17.8	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	884	545	462	46	0	111	366	1857	831	16	1513	677
V/C Ratio(X)	0.86	0.38	0.74	0.77	0.00	0.55	0.78	0.60	0.00	0.56	0.57	0.00
Avail Cap(c_a), veh/h	1228	860	730	112	0	303	542	1857	831	74	1513	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.7	27.7	31.4	47.1	0.0	44.4	42.4	16.6	0.0	48.0	21.6	0.0
Incr Delay (d2), s/veh	4.5	0.4	2.4	23.2	0.0	4.2	4.3	1.4	0.0	27.1	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	4.5	8.6	1.2	0.0	1.7	3.9	10.7	0.0	0.4	9.1	0.0
LnGrp Delay(d), s/veh	39.2	28.2	33.8	70.3	0.0	48.6	46.7	18.0	0.0	75.1	23.1	0.0
LnGrp LOS	D	C	C	E		D	D	B		E	C	
Approach Vol, veh/h		1307			96			1400			873	
Approach Delay, s/veh		36.0			56.5			23.9			23.7	
Approach LOS		D			E			C			C	

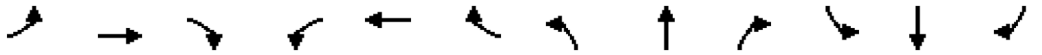
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	54.0	6.4	31.9	14.1	44.7	28.5	9.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	50.0	6.0	44.0	15.0	39.0	34.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	23.1	3.9	20.7	9.7	19.8	22.0	5.1
Green Ext Time (p_c), s	0.0	8.7	0.0	2.5	0.4	5.6	2.5	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.0
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	590	1898	214	187	1392	94	290	586	265	244	701	156
Future Volume (veh/h)	590	1898	214	187	1392	94	290	586	265	244	701	156
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	615	1977	223	195	1450	98	302	610	276	254	730	162
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	682	2261	691	224	1896	744	360	743	636	311	814	178
Arrive On Green	0.20	0.44	0.44	0.12	0.37	0.37	0.10	0.21	0.21	0.09	0.19	0.19
Sat Flow, veh/h	3476	5136	1569	1792	5136	1566	3476	3574	1548	3476	4195	919
Grp Volume(v), veh/h	615	1977	223	195	1450	98	302	610	276	254	594	298
Grp Sat Flow(s),veh/h/ln	1738	1712	1569	1792	1712	1566	1738	1787	1548	1738	1712	1691
Q Serve(g_s), s	20.1	40.8	10.8	12.5	28.9	4.1	9.9	19.0	15.1	8.4	19.7	20.1
Cycle Q Clear(g_c), s	20.1	40.8	10.8	12.5	28.9	4.1	9.9	19.0	15.1	8.4	19.7	20.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	682	2261	691	224	1896	744	360	743	636	311	664	328
V/C Ratio(X)	0.90	0.87	0.32	0.87	0.76	0.13	0.84	0.82	0.43	0.82	0.89	0.91
Avail Cap(c_a), veh/h	746	2261	691	261	1896	744	388	767	646	328	676	334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	29.7	21.3	50.1	32.3	17.3	51.3	44.1	25.2	52.1	45.8	45.9
Incr Delay (d2), s/veh	13.5	5.1	1.2	23.4	3.0	0.4	14.3	6.9	0.5	14.2	14.3	27.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	20.3	4.9	7.6	14.2	1.9	5.5	10.1	6.5	4.6	10.6	11.8
LnGrp Delay(d), s/veh	59.2	34.7	22.5	73.4	35.3	17.7	65.5	51.0	25.6	66.4	60.1	73.2
LnGrp LOS	E	C	C	E	D	B	E	D	C	E	E	E
Approach Vol, veh/h		2815			1743			1188			1146	
Approach Delay, s/veh		39.1			38.6			48.8			64.9	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	55.3	14.4	28.2	26.8	47.0	16.1	26.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	51.0	11.0	25.0	25.0	43.0	13.0	23.0
Max Q Clear Time (g_c+I1), s	14.5	42.8	10.4	21.0	22.1	30.9	11.9	22.1
Green Ext Time (p_c), s	0.1	6.8	0.1	1.8	0.7	7.5	0.1	0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	11	25	18	13	102	14	2487	8	64	2026	137
Future Volume (veh/h)	135	11	25	18	13	102	14	2487	8	64	2026	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	136	11	25	18	13	103	14	2512	8	65	2046	138
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	59	0	305	48	23	305	22	3463	11	84	3384	227
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.66	0.66	0.05	0.69	0.69
Sat Flow, veh/h	0	0	1559	0	118	1557	1792	5285	17	1792	4907	329
Grp Volume(v), veh/h	147	0	25	31	0	103	14	1627	893	65	1424	760
Grp Sat Flow(s),veh/h/ln	0	0	1559	118	0	1557	1792	1712	1878	1792	1712	1812
Q Serve(g_s), s	0.0	0.0	1.5	0.0	0.0	6.7	0.9	36.7	36.7	4.2	26.0	26.4
Cycle Q Clear(g_c), s	23.0	0.0	1.5	23.0	0.0	6.7	0.9	36.7	36.7	4.2	26.0	26.4
Prop In Lane	0.93		1.00	0.58		1.00	1.00		0.01	1.00		0.18
Lane Grp Cap(c), veh/h	59	0	305	72	0	305	22	2243	1231	84	2361	1250
V/C Ratio(X)	2.49	0.00	0.08	0.43	0.00	0.34	0.63	0.73	0.73	0.78	0.60	0.61
Avail Cap(c_a), veh/h	59	0	305	72	0	305	61	2243	1231	153	2361	1250
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	0.0	38.6	42.1	0.0	40.7	57.7	13.3	13.3	55.4	9.7	9.8
Incr Delay (d2), s/veh	718.8	0.0	0.1	4.1	0.0	0.6	25.3	2.1	3.8	14.0	1.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	0.7	1.1	0.0	2.9	0.6	17.8	20.1	2.4	12.4	13.9
LnGrp Delay(d), s/veh	777.5	0.0	38.7	46.2	0.0	41.3	83.0	15.4	17.1	69.4	10.8	12.0
LnGrp LOS	F		D	D		D	F	B	B	E	B	B
Approach Vol, veh/h		172			134			2534			2249	
Approach Delay, s/veh		670.1			42.5			16.4			12.9	
Approach LOS		F			D			B			B	

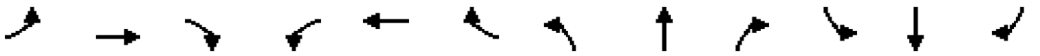
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	81.0		27.0	5.5	85.0		27.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	75.0		23.0	4.0	81.0		23.0
Max Q Clear Time (g_c+I1), s	6.2	38.7		25.0	2.9	28.4		25.0
Green Ext Time (p_c), s	0.0	26.6		0.0	0.0	28.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	574	610	73	101	478	223	73	1694	41	120	1638	313
Future Volume (veh/h)	574	610	73	101	478	223	73	1694	41	120	1638	313
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	611	649	78	107	509	237	78	1802	44	128	1743	333
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	677	1135	494	161	604	260	118	2317	57	177	2017	380
Arrive On Green	0.19	0.32	0.32	0.05	0.17	0.17	0.03	0.45	0.45	0.05	0.47	0.47
Sat Flow, veh/h	3476	3574	1556	3476	3574	1537	3476	5153	126	3476	4322	815
Grp Volume(v), veh/h	611	649	78	107	509	237	78	1197	649	128	1376	700
Grp Sat Flow(s),veh/h/ln	1738	1787	1556	1738	1787	1537	1738	1712	1855	1738	1712	1713
Q Serve(g_s), s	20.2	17.9	4.2	3.6	16.3	17.9	2.6	34.9	34.9	4.3	42.3	43.4
Cycle Q Clear(g_c), s	20.2	17.9	4.2	3.6	16.3	17.9	2.6	34.9	34.9	4.3	42.3	43.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.07	1.00		0.48
Lane Grp Cap(c), veh/h	677	1135	494	161	604	260	118	1539	834	177	1598	799
V/C Ratio(X)	0.90	0.57	0.16	0.66	0.84	0.91	0.66	0.78	0.78	0.72	0.86	0.88
Avail Cap(c_a), veh/h	737	1135	494	236	606	261	118	1539	834	177	1598	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	33.6	28.9	55.3	47.5	48.1	56.3	27.4	27.5	55.1	28.0	28.3
Incr Delay (d2), s/veh	13.8	0.7	0.1	4.7	10.4	33.4	12.9	3.9	7.1	13.6	6.4	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	8.9	1.9	1.8	8.9	10.0	1.5	17.3	19.5	2.4	21.3	23.3
LnGrp Delay(d), s/veh	60.1	34.2	29.1	60.0	57.9	81.6	69.2	31.4	34.5	68.7	34.4	41.2
LnGrp LOS	E	C	C	E	E	F	E	C	C	E	C	D
Approach Vol, veh/h		1338			853			1924			2204	
Approach Delay, s/veh		45.8			64.7			34.0			38.6	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	57.0	9.5	41.4	8.0	59.0	26.9	23.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	53.0	8.0	37.0	4.0	55.0	25.0	20.0
Max Q Clear Time (g_c+I1), s	6.3	36.9	5.6	19.9	4.6	45.4	22.2	19.9
Green Ext Time (p_c), s	0.0	10.8	0.1	4.1	0.0	7.9	0.7	0.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		42.2
HCM 2010 LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	3	752	253	359	808	25	424	118	526	23	56	7
Future Volume (vph)	3	752	253	359	808	25	424	118	526	23	56	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00		0.99	
Satd. Flow (prot)	1805	3610	1587	3502	3592		1715	1754	1588		1854	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.71	0.78	1.00		0.89	
Satd. Flow (perm)	1805	3610	1587	3502	3592		1284	1413	1588		1663	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	3	792	266	378	851	26	446	124	554	24	59	7
RTOR Reduction (vph)	0	0	185	0	2	0	0	0	205	0	2	0
Lane Group Flow (vph)	3	792	81	378	875	0	277	293	349	0	88	0
Confl. Peds. (#/hr)			2	2					2	2		
Confl. Bikes (#/hr)			2			2			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	0.7	34.9	34.9	16.9	51.1		50.3	50.3	50.3		50.3	
Effective Green, g (s)	0.7	34.9	34.9	16.9	51.1		50.3	50.3	50.3		50.3	
Actuated g/C Ratio	0.01	0.31	0.31	0.15	0.45		0.44	0.44	0.44		0.44	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	11	1104	485	518	1608		566	622	700		733	
v/s Ratio Prot	0.00	c0.22		c0.11	0.24							
v/s Ratio Perm			0.05				0.22	0.21	c0.22		0.05	
v/c Ratio	0.27	0.72	0.17	0.73	0.54		0.49	0.47	0.50		0.12	
Uniform Delay, d1	56.4	35.2	29.0	46.4	23.0		22.7	22.5	22.9		18.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	13.0	2.3	0.2	5.1	0.4		3.0	2.5	2.5		0.3	
Delay (s)	69.4	37.5	29.1	51.5	23.4		25.8	25.1	25.4		19.2	
Level of Service	E	D	C	D	C		C	C	C		B	
Approach Delay (s/veh)		35.5			31.9			25.4			19.2	
Approach LOS		D			C			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	0	83	29	2	22	47	966	62	11	572	77
Future Volume (veh/h)	114	0	83	29	2	22	47	966	62	11	572	77
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	125	0	91	32	2	24	52	1062	68	12	629	85
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	245	0	238	89	18	37	67	2559	1120	20	2465	1078
Arrive On Green	0.15	0.00	0.15	0.15	0.15	0.15	0.04	0.72	0.72	0.01	0.69	0.69
Sat Flow, veh/h	1132	0	1553	221	120	241	1792	3574	1565	1792	3574	1564
Grp Volume(v), veh/h	125	0	91	58	0	0	52	1062	68	12	629	85
Grp Sat Flow(s),veh/h/ln	1132	0	1553	582	0	0	1792	1787	1565	1792	1787	1564
Q Serve(g_s), s	0.0	0.0	5.3	2.1	0.0	0.0	2.9	12.1	1.3	0.7	6.7	1.8
Cycle Q Clear(g_c), s	11.1	0.0	5.3	13.1	0.0	0.0	2.9	12.1	1.3	0.7	6.7	1.8
Prop In Lane	1.00		1.00	0.55		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	245	0	238	145	0	0	67	2559	1120	20	2465	1078
V/C Ratio(X)	0.51	0.00	0.38	0.40	0.00	0.00	0.77	0.42	0.06	0.59	0.26	0.08
Avail Cap(c_a), veh/h	445	0	463	349	0	0	249	2559	1120	107	2465	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	38.3	41.6	0.0	0.0	48.0	5.8	4.2	49.5	5.9	5.1
Incr Delay (d2), s/veh	1.6	0.0	1.0	1.8	0.0	0.0	16.7	0.5	0.1	24.5	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	2.3	1.7	0.0	0.0	1.7	6.1	0.6	0.5	3.3	0.8
LnGrp Delay(d), s/veh	42.4	0.0	39.3	43.3	0.0	0.0	64.7	6.3	4.3	73.9	6.1	5.3
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		216			58			1182			726	
Approach Delay, s/veh		41.1			43.3			8.7			7.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	76.0		19.4	7.8	73.4		19.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	72.0		30.0	14.0	64.0		30.0
Max Q Clear Time (g_c+I1), s	2.7	14.1		13.1	4.9	8.7		15.1
Green Ext Time (p_c), s	0.0	9.7		0.9	0.0	4.9		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	446	275	106	49	225	36	84	581	33	14	341	327
Future Volume (veh/h)	446	275	106	49	225	36	84	581	33	14	341	327
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	474	293	113	52	239	38	89	618	35	15	363	348
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	593	856	323	262	353	55	401	1723	750	380	1723	757
Arrive On Green	0.26	0.34	0.34	0.03	0.11	0.11	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1792	2530	953	1792	3088	483	742	3574	1555	783	3574	1570
Grp Volume(v), veh/h	474	205	201	52	137	140	89	618	35	15	363	348
Grp Sat Flow(s),veh/h/ln	1792	1787	1696	1792	1787	1784	742	1787	1555	783	1787	1570
Q Serve(g_s), s	18.0	7.1	7.4	2.1	6.1	6.3	6.5	9.0	1.0	1.0	4.9	12.2
Cycle Q Clear(g_c), s	18.0	7.1	7.4	2.1	6.1	6.3	11.4	9.0	1.0	10.0	4.9	12.2
Prop In Lane	1.00		0.56	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	593	605	574	262	204	204	401	1723	750	380	1723	757
V/C Ratio(X)	0.80	0.34	0.35	0.20	0.67	0.69	0.22	0.36	0.05	0.04	0.21	0.46
Avail Cap(c_a), veh/h	1166	1314	1247	350	431	430	401	1723	750	380	1723	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	20.5	20.6	30.9	35.2	35.3	15.7	13.5	11.4	16.6	12.4	14.3
Incr Delay (d2), s/veh	2.5	0.3	0.4	0.4	3.7	4.1	1.3	0.6	0.1	0.2	0.3	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	3.5	3.5	1.1	3.2	3.3	1.5	4.5	0.4	0.2	2.4	5.6
LnGrp Delay(d), s/veh	23.7	20.8	21.0	31.3	39.0	39.4	16.9	14.0	11.5	16.8	12.7	16.3
LnGrp LOS	C	C	C	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		880			329			742			726	
Approach Delay, s/veh		22.4			37.9			14.3			14.5	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	6.9	32.1		44.0	25.5	13.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	7.0	61.0		40.0	48.0	20.0
Max Q Clear Time (g_c+I1), s		13.4	4.1	9.4		14.2	20.0	8.3
Green Ext Time (p_c), s		5.0	0.0	2.5		3.7	1.5	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	593	133	126	484	10	293	93	223	23	47	7
Future Volume (veh/h)	9	593	133	126	484	10	293	93	223	23	47	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	631	141	134	515	11	312	99	237	24	50	7
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	291	793	177	256	1201	26	786	889	744	489	1132	155
Arrive On Green	0.01	0.27	0.27	0.07	0.33	0.33	0.13	0.47	0.47	0.02	0.36	0.36
Sat Flow, veh/h	1810	2932	654	1810	3611	77	1810	1900	1590	1810	3184	436
Grp Volume(v), veh/h	10	388	384	134	257	269	312	99	237	24	28	29
Grp Sat Flow(s),veh/h/ln	1810	1805	1781	1810	1805	1884	1810	1900	1590	1810	1805	1814
Q Serve(g_s), s	0.4	18.8	18.9	4.8	10.4	10.5	9.6	2.8	8.8	0.8	0.9	1.0
Cycle Q Clear(g_c), s	0.4	18.8	18.9	4.8	10.4	10.5	9.6	2.8	8.8	0.8	0.9	1.0
Prop In Lane	1.00		0.37	1.00		0.04	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	291	488	482	256	600	626	786	889	744	489	642	645
V/C Ratio(X)	0.03	0.79	0.80	0.52	0.43	0.43	0.40	0.11	0.32	0.05	0.04	0.05
Avail Cap(c_a), veh/h	350	806	795	396	998	1041	1105	889	744	530	642	645
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	31.9	31.9	23.4	24.4	24.4	13.8	14.0	15.6	18.6	19.8	19.9
Incr Delay (d2), s/veh	0.0	3.0	3.1	1.7	0.5	0.5	0.3	0.3	1.1	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	9.8	9.7	2.5	5.3	5.5	4.8	1.5	4.1	0.4	0.5	0.5
LnGrp Delay(d), s/veh	24.7	34.9	35.0	25.1	24.9	24.9	14.1	14.3	16.8	18.6	20.0	20.0
LnGrp LOS	C	C	C	C	C	C	B	B	B	B	B	B
Approach Vol, veh/h		782			660			648			81	
Approach Delay, s/veh		34.8			25.0			15.1			19.6	
Approach LOS		C			C			B			B	

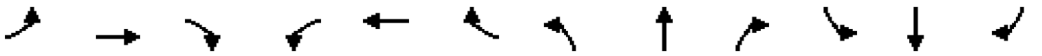
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	48.0	10.7	29.4	16.4	37.4	4.9	35.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	44.0	14.0	42.0	29.0	19.0	4.0	52.0
Max Q Clear Time (g_c+I1), s	2.8	10.8	6.8	20.9	11.6	3.0	2.4	12.5
Green Ext Time (p_c), s	0.0	1.3	0.2	4.6	0.8	0.2	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	342	59	43	466	250	42	305	46	147	247	76
Future Volume (veh/h)	114	342	59	43	466	250	42	305	46	147	247	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	116	349	60	44	476	255	43	311	47	150	252	78
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	148	1147	504	56	603	321	55	1131	169	188	1180	356
Arrive On Green	0.08	0.32	0.32	0.03	0.27	0.27	0.03	0.36	0.36	0.10	0.44	0.44
Sat Flow, veh/h	1792	3574	1571	1792	2240	1193	1792	3112	465	1792	2695	813
Grp Volume(v), veh/h	116	349	60	44	379	352	43	177	181	150	165	165
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1646	1792	1787	1790	1792	1787	1721
Q Serve(g_s), s	5.7	6.5	2.4	2.2	17.5	17.7	2.1	6.2	6.4	7.3	5.1	5.3
Cycle Q Clear(g_c), s	5.7	6.5	2.4	2.2	17.5	17.7	2.1	6.2	6.4	7.3	5.1	5.3
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.26	1.00		0.47
Lane Grp Cap(c), veh/h	148	1147	504	56	481	443	55	650	651	188	782	753
V/C Ratio(X)	0.78	0.30	0.12	0.79	0.79	0.79	0.79	0.27	0.28	0.80	0.21	0.22
Avail Cap(c_a), veh/h	342	1886	829	181	782	721	181	650	651	443	782	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	22.8	21.4	42.8	30.2	30.2	42.9	20.0	20.1	39.0	15.5	15.6
Incr Delay (d2), s/veh	8.6	0.1	0.1	21.0	2.9	3.3	21.6	1.0	1.1	7.6	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	3.2	1.1	1.4	9.0	8.4	1.4	3.2	3.3	4.0	2.7	2.7
LnGrp Delay(d), s/veh	48.7	22.9	21.5	63.8	33.1	33.5	64.5	21.1	21.1	46.5	16.1	16.2
LnGrp LOS	D	C	C	E	C	C	E	C	C	D	B	B
Approach Vol, veh/h		525			775			401			480	
Approach Delay, s/veh		28.4			35.0			25.7			25.7	
Approach LOS		C			D			C			C	

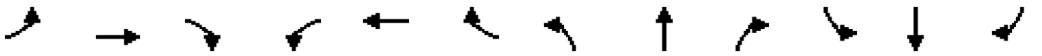
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	36.4	6.8	32.6	6.7	43.0	11.4	28.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	26.0	9.0	47.0	9.0	39.0	17.0	39.0
Max Q Clear Time (g_c+I1), s	9.3	8.4	4.2	8.5	4.1	7.3	7.7	19.7
Green Ext Time (p_c), s	0.3	1.7	0.0	2.5	0.0	1.9	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C



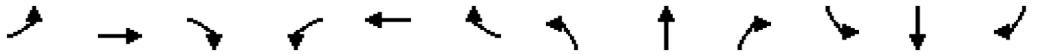
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	542	310	26	81	402	351	33	339	53	359	287	622
Future Volume (vph)	542	310	26	81	402	351	33	339	53	359	287	622
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.98		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1626	3324		1787	3574	1584		3479		1698	1774	2743
Flt Permitted	0.95	0.55		0.95	1.00	1.00		0.90		0.95	0.93	1.00
Satd. Flow (perm)	1626	1866		1787	3574	1584		3136		1698	1660	2743
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	565	323	27	84	419	366	34	353	55	374	299	648
RTOR Reduction (vph)	0	3	0	0	0	48	0	9	0	0	0	26
Lane Group Flow (vph)	299	613	0	84	419	318	0	433	0	329	344	622
Confl. Peds. (#/hr)	3		2	2		3	5		7	7		5
Confl. Bikes (#/hr)			2			2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	26.3	52.9		6.1	22.6	47.0		25.2		24.4	53.6	79.9
Effective Green, g (s)	26.3	52.9		6.1	22.6	47.0		25.2		24.4	53.6	79.9
Actuated g/C Ratio	0.23	0.46		0.05	0.20	0.41		0.22		0.21	0.47	0.70
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	373	1197		95	705	705		690		361	801	2009
v/s Ratio Prot	c0.18	0.12		0.05	c0.12	0.10				c0.19	0.09	0.07
v/s Ratio Perm		0.12				0.10		c0.14			0.11	0.16
v/c Ratio	0.80	0.51		0.88	0.59	0.45		0.63		0.91	0.43	0.31
Uniform Delay, d1	41.6	21.7		53.8	41.8	24.4		40.4		44.0	20.3	6.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	11.7	0.4		56.2	1.4	0.5		4.3		26.4	0.4	0.1
Delay (s)	53.4	22.1		110.1	43.1	24.9		44.7		70.4	20.6	6.8
Level of Service	D	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		32.3			41.9			44.7			26.2	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	114.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	329	414	441	394	3	445	3	383	3	6	1
Future Volume (vph)	1	329	414	441	394	3	445	3	383	3	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1760	3574	1577	1784	3568		1698	1703	1561	1756	1841	
Flt Permitted	0.51	1.00	1.00	0.30	1.00		0.95	0.63	1.00	0.95	1.00	
Satd. Flow (perm)	948	3574	1577	573	3568		1698	1125	1561	1756	1841	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1	339	427	455	406	3	459	3	395	3	6	1
RTOR Reduction (vph)	0	0	279	0	1	0	0	0	71	0	1	0
Lane Group Flow (vph)	1	339	148	455	408	0	229	233	324	3	6	0
Confl. Peds. (#/hr)	17		8	8		17			13	13		
Confl. Bikes (#/hr)			2			3			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	18.0	17.4	35.8	46.7	42.1		18.4	48.9	69.6	0.6	26.5	
Effective Green, g (s)	18.0	17.4	35.8	46.7	42.1		18.4	48.9	69.6	0.6	26.5	
Actuated g/C Ratio	0.17	0.17	0.35	0.45	0.41		0.18	0.47	0.67	0.01	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	169	600	605	554	1449		301	633	1108	10	470	
v/s Ratio Prot	0.00	0.09	0.04	c0.20	0.11		c0.13	0.07	0.07	0.00	0.00	
v/s Ratio Perm	0.00		0.05	c0.17				c0.11	0.14			
v/c Ratio	0.01	0.56	0.24	0.82	0.28		0.76	0.37	0.29	0.30	0.01	
Uniform Delay, d1	35.4	39.6	24.2	21.8	20.6		40.5	17.5	6.9	51.3	28.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.2	0.2	9.5	0.1		10.8	0.4	0.1	16.1	0.1	
Delay (s)	35.4	40.8	24.4	31.3	20.7		51.3	17.8	7.1	67.4	28.8	
Level of Service	D	D	C	C	C		D	B	A	E	C	
Approach Delay (s/veh)		31.7			26.3			21.8			40.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	103.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	199	91	118	198	92	85	706	87	59	768	45
Future Volume (veh/h)	69	199	91	118	198	92	85	706	87	59	768	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.95	0.99		0.93	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	207	95	123	206	96	89	735	91	61	800	47
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	241	320	140	261	386	171	450	1924	238	454	2050	120
Arrive On Green	0.05	0.13	0.13	0.08	0.16	0.16	0.04	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	1810	2403	1051	1810	2380	1051	1810	3227	399	1810	3461	203
Grp Volume(v), veh/h	72	153	149	123	154	148	89	411	415	61	417	430
Grp Sat Flow(s),veh/h/ln	1810	1805	1648	1810	1805	1626	1810	1805	1821	1810	1805	1859
Q Serve(g_s), s	3.4	7.9	8.5	5.6	7.7	8.3	1.9	11.8	11.8	1.3	12.1	12.1
Cycle Q Clear(g_c), s	3.4	7.9	8.5	5.6	7.7	8.3	1.9	11.8	11.8	1.3	12.1	12.1
Prop In Lane	1.00		0.64	1.00		0.65	1.00		0.22	1.00		0.11
Lane Grp Cap(c), veh/h	241	240	219	261	293	264	450	1076	1086	454	1069	1101
V/C Ratio(X)	0.30	0.64	0.68	0.47	0.52	0.56	0.20	0.38	0.38	0.13	0.39	0.39
Avail Cap(c_a), veh/h	302	401	366	416	547	493	584	1076	1086	522	1069	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	40.6	40.9	32.9	38.0	38.2	8.0	10.4	10.4	7.9	10.7	10.7
Incr Delay (d2), s/veh	0.7	2.8	3.7	1.3	1.5	1.9	0.2	1.0	1.0	0.1	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	4.1	4.1	2.9	4.0	3.9	1.0	6.1	6.2	0.7	6.3	6.5
LnGrp Delay(d), s/veh	35.5	43.4	44.6	34.3	39.4	40.1	8.2	11.5	11.5	8.1	11.8	11.7
LnGrp LOS	D	D	D	C	D	D	A	B	B	A	B	B
Approach Vol, veh/h		374			425			915			908	
Approach Delay, s/veh		42.4			38.2			11.2			11.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	63.0	11.5	17.2	7.7	62.6	8.6	20.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	59.0	16.0	22.0	11.0	55.0	8.0	30.0
Max Q Clear Time (g_c+I1), s	3.3	13.8	7.6	10.5	3.9	14.1	5.4	10.3
Green Ext Time (p_c), s	0.0	5.9	0.2	1.3	0.1	6.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	699	103	187	865	197	216	1236	210	144	832	225
Future Volume (veh/h)	169	699	103	187	865	197	216	1236	210	144	832	225
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	171	706	104	189	874	199	218	1248	212	145	840	227
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	231	1062	155	251	1005	227	251	1617	817	174	1464	739
Arrive On Green	0.07	0.24	0.24	0.07	0.24	0.24	0.14	0.45	0.45	0.10	0.41	0.41
Sat Flow, veh/h	3476	4498	654	3476	4151	939	1792	3574	1549	1792	3574	1545
Grp Volume(v), veh/h	171	535	275	189	720	353	218	1248	212	145	840	227
Grp Sat Flow(s),veh/h/ln	1738	1712	1729	1738	1712	1667	1792	1787	1549	1792	1787	1545
Q Serve(g_s), s	5.4	16.0	16.3	6.0	22.7	23.0	13.4	33.1	8.5	9.0	20.4	10.2
Cycle Q Clear(g_c), s	5.4	16.0	16.3	6.0	22.7	23.0	13.4	33.1	8.5	9.0	20.4	10.2
Prop In Lane	1.00		0.38	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	808	408	251	829	403	251	1617	817	174	1464	739
V/C Ratio(X)	0.74	0.66	0.67	0.75	0.87	0.88	0.87	0.77	0.26	0.83	0.57	0.31
Avail Cap(c_a), veh/h	277	820	414	339	881	429	381	1617	817	238	1464	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	39.0	39.1	51.3	41.0	41.1	47.5	26.0	14.8	50.0	25.7	18.1
Incr Delay (d2), s/veh	8.3	2.0	4.2	6.3	8.9	17.4	12.8	3.6	0.8	16.2	1.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.7	8.3	3.1	11.7	12.5	7.6	17.1	3.8	5.2	10.4	4.5
LnGrp Delay(d), s/veh	60.0	41.0	43.3	57.6	49.9	58.5	60.2	29.6	15.5	66.2	27.3	19.2
LnGrp LOS	E	D	D	E	D	E	E	C	B	E	C	B
Approach Vol, veh/h		981			1262			1678			1212	
Approach Delay, s/veh		44.9			53.5			31.8			30.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	55.0	12.1	30.6	19.8	50.2	11.5	31.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	51.0	11.0	27.0	24.0	42.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	11.0	35.1	8.0	18.3	15.4	22.4	7.4	25.0
Green Ext Time (p_c), s	0.1	8.7	0.2	3.2	0.4	6.5	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	379	828	101	491	920	124	193	912	445	80	503	202
Future Volume (veh/h)	379	828	101	491	920	124	193	912	445	80	503	202
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	391	854	104	506	948	128	199	940	459	82	519	208
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	593	2605	316	648	2888	883	197	1358	597	122	589	235
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.11	0.38	0.38	0.23	0.23	0.23
Sat Flow, veh/h	1033	4679	567	1155	5187	1587	1810	3610	1587	391	2515	1004
Grp Volume(v), veh/h	391	630	328	506	948	128	199	940	459	82	372	355
Grp Sat Flow(s),veh/h/ln	516	1729	1788	577	1729	1587	1810	1805	1587	391	1805	1714
Q Serve(g_s), s	39.5	11.8	11.9	50.6	11.9	4.7	13.0	26.3	30.3	18.7	23.8	23.9
Cycle Q Clear(g_c), s	51.4	11.8	11.9	62.6	11.9	4.7	13.0	26.3	30.3	28.0	23.8	23.9
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	593	1925	996	648	2888	883	197	1358	597	122	423	401
V/C Ratio(X)	0.66	0.33	0.33	0.78	0.33	0.14	1.01	0.69	0.77	0.67	0.88	0.89
Avail Cap(c_a), veh/h	597	1937	1002	652	2906	889	197	1358	597	122	423	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	14.4	14.4	31.4	14.4	12.8	53.3	31.4	32.7	52.8	44.2	44.2
Incr Delay (d2), s/veh	2.7	0.1	0.2	6.0	0.1	0.1	67.2	2.9	9.2	26.1	22.1	23.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	5.6	5.9	8.6	5.6	2.0	10.1	13.6	14.8	3.6	14.5	14.0
LnGrp Delay(d), s/veh	30.9	14.5	14.6	37.4	14.4	12.9	120.6	34.4	41.9	78.8	66.3	67.9
LnGrp LOS	C	B	B	D	B	B	F	C	D	E	E	E
Approach Vol, veh/h		1349			1582			1598			809	
Approach Delay, s/veh		19.3			21.7			47.3			68.3	
Approach LOS		B			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		49.0		70.6	17.0	32.0		70.6
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0	13.0	28.0		67.0
Max Q Clear Time (g_c+I1), s		32.3		53.4	15.0	30.0		64.6
Green Ext Time (p_c), s		6.4		8.3	0.0	0.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.8
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	258	79	69	1164	1037	209
Future Volume (veh/h)	258	79	69	1164	1037	209
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	79	69	1164	1037	209
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	300	267	89	2706	1975	397
Arrive On Green	0.17	0.17	0.05	0.76	0.67	0.67
Sat Flow, veh/h	1792	1599	1792	3668	3045	593
Grp Volume(v), veh/h	258	79	69	1164	627	619
Grp Sat Flow(s),veh/h/ln	1792	1599	1792	1787	1787	1756
Q Serve(g_s), s	14.8	4.6	4.0	12.4	18.9	19.0
Cycle Q Clear(g_c), s	14.8	4.6	4.0	12.4	18.9	19.0
Prop In Lane	1.00	1.00	1.00			0.34
Lane Grp Cap(c), veh/h	300	267	89	2706	1196	1176
V/C Ratio(X)	0.86	0.30	0.77	0.43	0.52	0.53
Avail Cap(c_a), veh/h	543	484	203	2706	1196	1176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	38.5	49.6	4.6	8.9	8.9
Incr Delay (d2), s/veh	7.2	0.6	13.1	0.5	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	4.3	2.3	6.2	9.8	9.7
LnGrp Delay(d), s/veh	50.0	39.2	62.7	5.1	10.5	10.6
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	337			1233	1246	
Approach Delay, s/veh	47.5			8.3	10.6	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.0		21.7	9.3	74.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		80.0		32.0	12.0	64.0		
Max Q Clear Time (g_c+I1), s		14.4		16.8	6.0	21.0		
Green Ext Time (p_c), s		10.9		0.9	0.1	10.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	572	0	0	826	10	9	141	14	512	0	329
Future Volume (veh/h)	147	572	0	0	826	10	9	141	14	512	0	329
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1900	1881	1900	1881	0	1881
Adj Flow Rate, veh/h	155	602	0	0	869	0	9	148	15	539	0	346
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1	1	0	1
Cap, veh/h	357	1783	0	0	1255	561	35	583	59	0	0	0
Arrive On Green	0.08	0.50	0.00	0.00	0.35	0.00	0.37	0.37	0.37	0.00	0.00	0.00
Sat Flow, veh/h	1792	3668	0	0	3668	1599	96	1587	161		0	
Grp Volume(v), veh/h	155	602	0	0	869	0	172	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1792	1787	0	0	1787	1599	1844	0	0			
Q Serve(g_s), s	3.0	6.1	0.0	0.0	12.5	0.0	3.9	0.0	0.0			
Cycle Q Clear(g_c), s	3.0	6.1	0.0	0.0	12.5	0.0	3.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.05		0.09			
Lane Grp Cap(c), veh/h	357	1783	0	0	1255	561	678	0	0			
V/C Ratio(X)	0.43	0.34	0.00	0.00	0.69	0.00	0.25	0.00	0.00			
Avail Cap(c_a), veh/h	571	3404	0	0	2449	1095	678	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.7	9.0	0.0	0.0	16.7	0.0	13.2	0.0	0.0			
Incr Delay (d2), s/veh	0.8	0.1	0.0	0.0	0.7	0.0	0.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	3.0	0.0	0.0	6.3	0.0	2.1	0.0	0.0			
LnGrp Delay(d), s/veh	12.5	9.2	0.0	0.0	17.3	0.0	14.1	0.0	0.0			
LnGrp LOS	B	A			B		B					
Approach Vol, veh/h		757			869			172				
Approach Delay, s/veh		9.8			17.3			14.1				
Approach LOS		A			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		26.0		33.8			8.8	25.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		22.0		57.0			12.0	41.0
Max Q Clear Time (g_c+I1), s		5.9		8.1			5.0	14.5
Green Ext Time (p_c), s		0.8		4.5			0.2	6.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	1218	250	145	712	115	285	936	140	162	807	113
Future Volume (veh/h)	157	1218	250	145	712	115	285	936	140	162	807	113
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	160	1243	255	148	727	117	291	955	143	165	823	115
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1367	281	175	1395	222	348	1330	580	221	1055	147
Arrive On Green	0.11	0.32	0.32	0.10	0.32	0.32	0.10	0.38	0.38	0.06	0.34	0.34
Sat Flow, veh/h	1774	4212	864	1774	4407	702	3442	3539	1544	3442	3114	435
Grp Volume(v), veh/h	160	1000	498	148	557	287	291	955	143	165	468	470
Grp Sat Flow(s),veh/h/ln	1774	1695	1686	1774	1695	1718	1721	1770	1544	1721	1770	1780
Q Serve(g_s), s	10.4	33.1	33.1	9.6	15.7	16.0	9.7	27.0	7.5	5.5	27.8	27.8
Cycle Q Clear(g_c), s	10.4	33.1	33.1	9.6	15.7	16.0	9.7	27.0	7.5	5.5	27.8	27.8
Prop In Lane	1.00		0.51	1.00		0.41	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	189	1101	547	175	1073	544	348	1330	580	221	599	603
V/C Ratio(X)	0.84	0.91	0.91	0.85	0.52	0.53	0.84	0.72	0.25	0.75	0.78	0.78
Avail Cap(c_a), veh/h	288	1129	562	197	1073	544	382	1330	580	235	599	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	37.9	37.9	51.9	32.7	32.8	51.6	31.2	25.1	53.9	34.8	34.8
Incr Delay (d2), s/veh	13.2	10.6	18.6	25.1	0.4	0.9	13.8	3.4	1.0	11.7	9.7	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	17.1	18.2	6.0	7.4	7.7	5.3	13.8	3.3	3.0	15.1	15.2
LnGrp Delay(d), s/veh	64.5	48.5	56.4	77.0	33.2	33.8	65.5	34.6	26.1	65.5	44.5	44.5
LnGrp LOS	E	D	E	E	C	C	E	C	C	E	D	D
Approach Vol, veh/h		1658			992			1389			1103	
Approach Delay, s/veh		52.4			39.9			40.2			47.6	
Approach LOS		D			D			D			D	

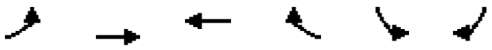
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	48.0	15.6	42.0	15.9	43.7	16.5	41.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	13.0	39.0	13.0	39.0	19.0	33.0
Max Q Clear Time (g_c+I1), s	7.5	29.0	11.6	35.1	11.7	29.8	12.4	18.0
Green Ext Time (p_c), s	0.0	5.9	0.0	2.9	0.1	3.7	0.2	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1120	217	162	707	186	169	855	240	244	882	147
Future Volume (veh/h)	208	1120	217	162	707	186	169	855	240	244	882	147
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	224	1204	233	174	760	200	182	919	258	262	948	158
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	1368	588	202	958	249	211	1106	665	292	1268	789
Arrive On Green	0.14	0.27	0.27	0.11	0.24	0.24	0.12	0.31	0.31	0.16	0.36	0.36
Sat Flow, veh/h	1774	5085	1486	1774	3983	1035	1774	3539	1550	1774	3539	1571
Grp Volume(v), veh/h	224	1204	233	174	645	315	182	919	258	262	948	158
Grp Sat Flow(s),veh/h/ln	1774	1695	1486	1774	1695	1627	1774	1770	1550	1774	1770	1571
Q Serve(g_s), s	14.2	26.0	13.0	11.0	20.4	20.8	11.5	27.6	13.1	16.6	26.9	6.4
Cycle Q Clear(g_c), s	14.2	26.0	13.0	11.0	20.4	20.8	11.5	27.6	13.1	16.6	26.9	6.4
Prop In Lane	1.00		1.00	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	1368	588	202	815	391	211	1106	665	292	1268	789
V/C Ratio(X)	0.88	0.88	0.40	0.86	0.79	0.80	0.86	0.83	0.39	0.90	0.75	0.20
Avail Cap(c_a), veh/h	294	1422	604	232	829	398	248	1106	665	341	1268	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	40.1	25.4	49.8	40.8	40.9	49.5	36.5	22.6	46.9	32.2	15.8
Incr Delay (d2), s/veh	23.5	6.5	0.4	23.9	5.2	11.2	22.9	7.3	1.7	23.1	4.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	13.0	5.4	6.8	10.2	10.6	7.0	14.5	5.9	10.0	13.9	2.9
LnGrp Delay(d), s/veh	71.6	46.6	25.9	73.7	46.0	52.1	72.4	43.8	24.3	70.0	36.3	16.4
LnGrp LOS	E	D	C	E	D	D	E	D	C	E	D	B
Approach Vol, veh/h		1661			1134			1359			1368	
Approach Delay, s/veh		47.1			51.9			43.9			40.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.8	39.8	17.1	34.8	17.6	45.0	20.3	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	35.0	15.0	32.0	16.0	41.0	19.0	28.0
Max Q Clear Time (g_c+I1), s	18.6	29.6	13.0	28.0	13.5	28.9	16.2	22.8
Green Ext Time (p_c), s	0.2	3.1	0.1	2.8	0.1	5.3	0.2	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.6
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	822	944	218	674	197
Future Volume (vph)	30	822	944	218	674	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1687	3374	3374	1459	3271	1374
Flt Permitted	0.14	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	242	3374	3374	1459	3271	1374
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	31	839	963	222	688	201
RTOR Reduction (vph)	0	0	0	119	1	41
Lane Group Flow (vph)	31	839	963	103	707	140
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				2		
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	34.8	34.8	34.8	34.8	50.3	50.3
Effective Green, g (s)	34.8	34.8	34.8	34.8	50.3	50.3
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.54	0.54
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	90	1261	1261	545	1767	742
v/s Ratio Prot		0.25	c0.29		c0.22	
v/s Ratio Perm	0.13			0.07		0.10
v/c Ratio	0.34	0.67	0.76	0.19	0.40	0.19
Uniform Delay, d1	21.0	24.3	25.5	19.6	12.5	11.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	1.3	2.8	0.2	0.7	0.6
Delay (s)	23.2	25.6	28.4	19.8	13.2	11.5
Level of Service	C	C	C	B	B	B
Approach Delay (s/veh)		25.6	26.8		12.9	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	93.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	1423	74	69	1050	47	88	41	83	75	66	20
Future Volume (veh/h)	15	1423	74	69	1050	47	88	41	83	75	66	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	15	1437	75	70	1061	47	89	41	84	76	67	20
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	2684	140	225	2708	120	515	638	538	513	638	531
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	506	4940	258	344	4985	221	1297	1863	1571	1253	1863	1551
Grp Volume(v), veh/h	15	986	526	70	721	387	89	41	84	76	67	20
Grp Sat Flow(s),veh/h/ln	506	1695	1808	344	1695	1815	1297	1863	1571	1253	1863	1551
Q Serve(g_s), s	1.2	13.1	13.1	11.5	8.6	8.7	3.5	1.0	2.6	3.0	1.7	0.6
Cycle Q Clear(g_c), s	9.9	13.1	13.1	24.6	8.6	8.7	5.2	1.0	2.6	4.1	1.7	0.6
Prop In Lane	1.00		0.14	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1842	982	225	1842	986	515	638	538	513	638	531
V/C Ratio(X)	0.05	0.54	0.54	0.31	0.39	0.39	0.17	0.06	0.16	0.15	0.11	0.04
Avail Cap(c_a), veh/h	676	4258	2270	471	4258	2280	515	638	538	513	638	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	10.3	10.3	18.2	9.3	9.3	17.5	15.5	16.0	16.9	15.7	15.3
Incr Delay (d2), s/veh	0.1	0.2	0.5	0.8	0.1	0.3	0.7	0.2	0.6	0.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.1	6.6	1.1	4.0	4.4	1.4	0.6	1.2	1.1	0.9	0.3
LnGrp Delay(d), s/veh	12.2	10.5	10.8	19.0	9.4	9.5	18.2	15.7	16.6	17.5	16.0	15.5
LnGrp LOS	B	B	B	B	A	A	B	B	B	B	B	B
Approach Vol, veh/h		1527			1178			214			163	
Approach Delay, s/veh		10.6			10.0			17.1			16.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		28.0		42.1		28.0		42.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		24.0		88.0		24.0		88.0
Max Q Clear Time (g_c+I1), s		7.2		15.1		6.1		26.6
Green Ext Time (p_c), s		0.7		15.5		0.6		11.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	56	35	2	4	67	389	64	6	417	2
Future Volume (veh/h)	1	0	56	35	2	4	67	389	64	6	417	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	1	0	57	36	2	4	68	397	65	6	426	2
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	61	0	301	60	2	289	190	1092	1150	35	1385	1152
Arrive On Green	0.19	0.00	0.19	0.19	0.19	0.19	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	4	0	1571	10	10	1507	210	1472	1550	7	1867	1553
Grp Volume(v), veh/h	1	0	57	38	0	4	465	0	65	432	0	2
Grp Sat Flow(s),veh/h/ln	4	0	1571	20	0	1507	1682	0	1550	1874	0	1553
Q Serve(g_s), s	0.1	0.0	3.7	0.2	0.0	0.3	0.0	0.0	1.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	23.0	0.0	3.7	23.0	0.0	0.3	10.2	0.0	1.4	9.2	0.0	0.0
Prop In Lane	1.00		1.00	0.95		1.00	0.15		1.00	0.01		1.00
Lane Grp Cap(c), veh/h	61	0	301	62	0	289	1282	0	1150	1421	0	1152
V/C Ratio(X)	0.02	0.00	0.19	0.61	0.00	0.01	0.36	0.00	0.06	0.30	0.00	0.00
Avail Cap(c_a), veh/h	61	0	301	62	0	289	1282	0	1150	1421	0	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.9	0.0	40.7	58.9	0.0	39.3	5.3	0.0	4.2	5.2	0.0	4.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	16.1	0.0	0.0	0.8	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	1.5	0.0	0.1	5.5	0.0	0.6	4.9	0.0	0.0
LnGrp Delay(d), s/veh	60.0	0.0	41.0	75.0	0.0	39.3	6.1	0.0	4.3	5.7	0.0	4.0
LnGrp LOS	E		D	E		D	A		A	A		A
Approach Vol, veh/h		58			42			530			434	
Approach Delay, s/veh		41.3			71.6			5.9			5.7	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		93.0		27.0		93.0		27.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		89.0		23.0		89.0		23.0
Max Q Clear Time (g_c+I1), s		12.2		25.0		11.2		25.0
Green Ext Time (p_c), s		4.1		0.0		3.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	89	93	51	42	61	40	1133	75	77	1130	46
Future Volume (veh/h)	125	89	93	51	42	61	40	1133	75	77	1130	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	132	94	98	54	44	64	42	1193	79	81	1189	48
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	291	284	70	70	102	92	2009	133	104	2223	980
Arrive On Green	0.09	0.16	0.16	0.04	0.10	0.10	0.03	0.60	0.60	0.06	0.63	0.63
Sat Flow, veh/h	1774	1863	1547	1774	672	977	3442	3369	223	1774	3539	1560
Grp Volume(v), veh/h	132	94	98	54	0	108	42	626	646	81	1189	48
Grp Sat Flow(s),veh/h/ln	1774	1863	1547	1774	0	1649	1721	1770	1823	1774	1770	1560
Q Serve(g_s), s	7.8	4.8	5.9	3.2	0.0	6.7	1.3	23.6	23.7	4.8	20.1	1.3
Cycle Q Clear(g_c), s	7.8	4.8	5.9	3.2	0.0	6.7	1.3	23.6	23.7	4.8	20.1	1.3
Prop In Lane	1.00		1.00	1.00		0.59	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	162	291	284	70	0	171	92	1055	1087	104	2223	980
V/C Ratio(X)	0.81	0.32	0.35	0.78	0.00	0.63	0.46	0.59	0.59	0.78	0.53	0.05
Avail Cap(c_a), veh/h	266	402	376	150	0	247	161	1055	1087	200	2223	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	40.0	38.0	50.8	0.0	45.8	51.2	13.5	13.5	49.5	11.1	7.6
Incr Delay (d2), s/veh	9.5	0.6	0.7	16.6	0.0	3.8	3.5	2.5	2.4	11.9	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	2.5	2.6	1.9	0.0	3.2	0.7	12.2	12.6	2.7	10.0	0.6
LnGrp Delay(d), s/veh	57.1	40.6	38.8	67.4	0.0	49.6	54.7	15.9	15.9	61.4	12.0	7.7
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	A
Approach Vol, veh/h		324			162			1314			1318	
Approach Delay, s/veh		46.8			55.5			17.1			14.9	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	67.6	8.2	20.7	6.8	71.0	13.7	15.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	60.0	9.0	23.0	5.0	67.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	6.8	25.7	5.2	7.9	3.3	22.1	9.8	8.7
Green Ext Time (p_c), s	0.1	10.2	0.0	0.6	0.0	11.1	0.1	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.3
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	14.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	36	84	48	27	6	65	269	46	6	316	33
Future Vol, veh/h	26	36	84	48	27	6	65	269	46	6	316	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	28	39	91	52	29	7	71	292	50	7	343	36
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	10.4	11.4	16.2	15.5
HCM LOS	B	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	19%	0%	42%	0%	64%	0%	2%	0%
Vol Thru, %	81%	0%	58%	0%	36%	0%	98%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	334	46	62	84	75	6	322	33
LT Vol	65	0	26	0	48	0	6	0
Through Vol	269	0	36	0	27	0	316	0
RT Vol	0	46	0	84	0	6	0	33
Lane Flow Rate	363	50	67	91	82	7	350	36
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.6	0.071	0.133	0.156	0.166	0.011	0.573	0.052
Departure Headway (Hd)	5.948	5.141	7.085	6.157	7.337	6.295	5.897	5.179
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	606	695	505	580	488	566	613	690
Service Time	3.693	2.885	4.849	3.921	5.108	4.065	3.643	2.924
HCM Lane V/C Ratio	0.599	0.072	0.133	0.157	0.168	0.012	0.571	0.052
HCM Control Delay, s/veh	17.3	8.3	10.9	10.1	11.6	9.1	16.3	8.2
HCM Lane LOS	C	A	B	B	B	A	C	A
HCM 95th-tile Q	4	0.2	0.5	0.5	0.6	0	3.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	888	167	50	686	207	158	859	53	269	622	207
Future Volume (veh/h)	199	888	167	50	686	207	158	859	53	269	622	207
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	209	935	176	53	722	218	166	904	56	283	655	218
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	190	1340	577	138	1340	586	353	1907	118	295	1996	878
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	600	3574	1540	510	3574	1563	638	3415	212	588	3574	1573
Grp Volume(v), veh/h	209	935	176	53	722	218	166	473	487	283	655	218
Grp Sat Flow(s),veh/h/ln	600	1787	1540	510	1787	1563	638	1787	1839	588	1787	1573
Q Serve(g_s), s	26.0	26.6	9.7	11.8	19.0	12.2	22.8	19.1	19.1	47.9	11.9	8.5
Cycle Q Clear(g_c), s	45.0	26.6	9.7	38.3	19.0	12.2	34.7	19.1	19.1	67.0	11.9	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	190	1340	577	138	1340	586	353	998	1027	295	1996	878
V/C Ratio(X)	1.10	0.70	0.30	0.38	0.54	0.37	0.47	0.47	0.47	0.96	0.33	0.25
Avail Cap(c_a), veh/h	190	1340	577	138	1340	586	353	998	1027	295	1996	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	31.7	26.5	48.0	29.4	27.2	23.7	15.9	15.9	40.1	14.3	13.6
Incr Delay (d2), s/veh	94.6	1.6	0.3	1.7	0.4	0.4	4.4	1.6	1.6	43.0	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	13.4	4.2	1.7	9.4	5.3	4.4	9.8	10.1	12.9	5.9	3.9
LnGrp Delay(d), s/veh	145.7	33.4	26.8	49.7	29.8	27.6	28.2	17.5	17.5	83.1	14.8	14.3
LnGrp LOS	F	C	C	D	C	C	C	B	B	F	B	B
Approach Vol, veh/h		1320			993			1126			1156	
Approach Delay, s/veh		50.3			30.4			19.1			31.4	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		49.0		71.0		49.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		45.0		67.0		45.0
Max Q Clear Time (g_c+I1), s		36.7		47.0		69.0		40.3
Green Ext Time (p_c), s		8.6		0.0		0.0		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	895	125	137	813	213	108	930	211	67	1021	323
Future Volume (veh/h)	229	895	125	137	813	213	108	930	211	67	1021	323
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	239	932	130	143	847	222	112	969	220	70	1064	336
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	267	1292	180	171	930	242	164	1203	273	89	1500	658
Arrive On Green	0.15	0.29	0.29	0.10	0.24	0.24	0.05	0.43	0.43	0.05	0.43	0.43
Sat Flow, veh/h	1757	4457	619	1757	3959	1030	3408	2828	641	1757	3505	1539
Grp Volume(v), veh/h	239	701	361	143	717	352	112	600	589	70	1064	336
Grp Sat Flow(s),veh/h/ln	1757	1679	1719	1757	1679	1632	1704	1752	1716	1757	1752	1539
Q Serve(g_s), s	15.6	21.9	22.0	9.3	24.3	24.6	3.8	34.9	35.1	4.6	29.1	18.7
Cycle Q Clear(g_c), s	15.6	21.9	22.0	9.3	24.3	24.6	3.8	34.9	35.1	4.6	29.1	18.7
Prop In Lane	1.00		0.36	1.00		0.63	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	267	973	498	171	789	383	164	745	730	89	1500	658
V/C Ratio(X)	0.90	0.72	0.72	0.84	0.91	0.92	0.68	0.80	0.81	0.79	0.71	0.51
Avail Cap(c_a), veh/h	301	973	498	226	804	391	175	745	730	105	1500	658
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	37.2	37.3	51.9	43.5	43.6	54.7	29.3	29.4	54.8	27.5	24.5
Incr Delay (d2), s/veh	25.4	2.6	5.2	18.6	14.1	25.8	9.6	9.0	9.3	27.4	2.9	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	10.5	11.1	5.4	12.8	13.8	2.0	18.7	18.4	2.9	14.6	8.4
LnGrp Delay(d), s/veh	74.1	39.9	42.5	70.4	57.6	69.4	64.3	38.3	38.7	82.2	30.3	27.3
LnGrp LOS	E	D	D	E	E	E	E	D	D	F	C	C
Approach Vol, veh/h		1301			1212			1301			1470	
Approach Delay, s/veh		46.9			62.5			40.7			32.1	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	53.7	15.3	37.9	9.6	54.0	21.8	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	49.0	15.0	33.0	6.0	50.0	20.0	28.0
Max Q Clear Time (g_c+I1), s	6.6	37.1	11.3	24.0	5.8	31.1	17.6	26.6
Green Ext Time (p_c), s	0.0	5.7	0.1	4.2	0.0	8.9	0.2	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	248	54	169	246	102	27	1601	131	112	1663	66
Future Volume (veh/h)	96	248	54	169	246	102	27	1601	131	112	1663	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	105	273	59	186	270	112	30	1759	144	123	1827	73
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	132	515	253	252	350	140	40	2647	216	153	3093	123
Arrive On Green	0.07	0.14	0.14	0.07	0.14	0.14	0.02	0.55	0.55	0.09	0.61	0.61
Sat Flow, veh/h	1792	3574	1509	3476	2453	984	1792	4831	394	1792	5062	202
Grp Volume(v), veh/h	105	273	59	186	194	188	30	1245	658	123	1235	665
Grp Sat Flow(s),veh/h/ln	1792	1787	1509	1738	1787	1649	1792	1712	1802	1792	1712	1841
Q Serve(g_s), s	6.1	7.5	3.6	5.6	11.1	11.7	1.8	27.5	27.7	7.2	23.4	23.4
Cycle Q Clear(g_c), s	6.1	7.5	3.6	5.6	11.1	11.7	1.8	27.5	27.7	7.2	23.4	23.4
Prop In Lane	1.00		1.00	1.00		0.60	1.00		0.22	1.00		0.11
Lane Grp Cap(c), veh/h	132	515	253	252	255	235	40	1876	987	153	2092	1124
V/C Ratio(X)	0.79	0.53	0.23	0.74	0.76	0.80	0.76	0.66	0.67	0.81	0.59	0.59
Avail Cap(c_a), veh/h	236	739	347	359	319	295	101	1876	987	253	2092	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	42.2	38.5	48.3	43.9	44.1	51.7	17.1	17.1	47.8	12.6	12.6
Incr Delay (d2), s/veh	10.1	0.8	0.5	4.7	8.1	11.5	25.0	1.9	3.6	9.6	1.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.8	1.5	2.9	6.1	6.1	1.1	13.5	14.7	4.0	11.3	12.5
LnGrp Delay(d), s/veh	58.6	43.0	39.0	53.0	52.0	55.7	76.7	19.0	20.7	57.4	13.8	14.9
LnGrp LOS	E	D	D	D	D	E	E	B	C	E	B	B
Approach Vol, veh/h		437			568			1933			2023	
Approach Delay, s/veh		46.2			53.5			20.4			16.8	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.1	62.3	11.7	19.3	6.4	69.0	11.9	19.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	56.0	11.0	22.0	6.0	65.0	14.0	19.0
Max Q Clear Time (g_c+I1), s	9.2	29.7	7.6	9.5	3.8	25.4	8.1	13.7
Green Ext Time (p_c), s	0.1	16.1	0.2	1.4	0.0	20.0	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	587	11	6	283	64	5	3	19	58	2	19
Future Volume (veh/h)	20	587	11	6	283	64	5	3	19	58	2	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	22	638	12	7	308	70	5	3	21	63	2	21
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	928	17	65	764	169	647	368	945	716	35	210
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	53	3386	63	18	2789	618	927	616	1583	1030	59	352
Grp Volume(v), veh/h	350	0	322	205	0	180	8	0	21	86	0	0
Grp Sat Flow(s),veh/h/ln	1817	0	1684	1838	0	1586	1543	0	1583	1442	0	0
Q Serve(g_s), s	1.6	0.0	10.6	0.0	0.0	5.8	0.0	0.0	0.3	0.7	0.0	0.0
Cycle Q Clear(g_c), s	10.5	0.0	10.6	5.6	0.0	5.8	0.1	0.0	0.3	1.4	0.0	0.0
Prop In Lane	0.06		0.04	0.03		0.39	0.62		1.00	0.73		0.24
Lane Grp Cap(c), veh/h	560	0	461	564	0	435	1015	0	945	961	0	0
V/C Ratio(X)	0.63	0.00	0.70	0.36	0.00	0.41	0.01	0.00	0.02	0.09	0.00	0.00
Avail Cap(c_a), veh/h	2214	0	2038	2228	0	1919	1015	0	945	961	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.1	0.0	20.2	18.4	0.0	18.4	5.1	0.0	5.1	5.3	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	1.9	0.4	0.0	0.6	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	5.2	2.9	0.0	2.6	0.1	0.0	0.2	0.7	0.0	0.0
LnGrp Delay(d), s/veh	21.3	0.0	22.1	18.8	0.0	19.1	5.1	0.0	5.1	5.5	0.0	0.0
LnGrp LOS	C		C	B		B	A		A	A		
Approach Vol, veh/h		672			385			29			86	
Approach Delay, s/veh		21.7			18.9			5.1			5.5	
Approach LOS		C			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		41.0		21.0		41.0		21.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		37.0		75.0		37.0		75.0
Max Q Clear Time (g_c+I1), s		2.3		12.6		3.4		7.8
Green Ext Time (p_c), s		0.1		4.4		0.5		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	643	4	2	347	6	3	0	8	15	0	6
Future Volume (veh/h)	4	643	4	2	347	6	3	0	8	15	0	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	4	699	4	2	377	7	3	0	9	16	0	7
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	76	1081	6	75	1065	20	249	49	620	642	22	236
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.53	0.00	0.53	0.53	0.00	0.53
Sat Flow, veh/h	5	3525	20	4	3473	64	297	93	1169	976	41	445
Grp Volume(v), veh/h	370	0	337	202	0	184	12	0	0	23	0	0
Grp Sat Flow(s),veh/h/ln	1859	0	1692	1857	0	1684	1559	0	0	1462	0	0
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.4	0.0	8.4	4.1	0.0	4.2	0.2	0.0	0.0	0.3	0.0	0.0
Prop In Lane	0.01		0.01	0.01		0.04	0.25		0.75	0.70		0.30
Lane Grp Cap(c), veh/h	644	0	519	644	0	516	918	0	0	900	0	0
V/C Ratio(X)	0.58	0.00	0.65	0.31	0.00	0.36	0.01	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	3315	0	2967	3300	0	2953	918	0	0	900	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.7	0.0	14.7	13.2	0.0	13.2	5.5	0.0	0.0	5.5	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.4	0.3	0.0	0.4	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	0.0	4.1	2.2	0.0	2.0	0.1	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	15.5	0.0	16.1	13.5	0.0	13.6	5.5	0.0	0.0	5.5	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		707			386			12			23	
Approach Delay, s/veh		15.8			13.6			5.5			5.5	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		19.0		30.0		19.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		26.0		86.0		26.0		86.0
Max Q Clear Time (g_c+I1), s		2.2		10.4		2.3		6.2
Green Ext Time (p_c), s		0.0		4.6		0.1		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	614	78	8	344	15	37	5	4	15	7	6
Future Volume (veh/h)	2	614	78	8	344	15	37	5	4	15	7	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	2	667	85	9	374	16	40	5	4	16	8	7
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	66	978	124	75	1053	44	745	92	64	500	248	190
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	2	3093	393	23	3332	141	1161	170	118	745	459	351
Grp Volume(v), veh/h	402	0	352	209	0	190	49	0	0	31	0	0
Grp Sat Flow(s),veh/h/ln	1861	0	1626	1825	0	1670	1450	0	0	1555	0	0
Q Serve(g_s), s	0.0	0.0	10.5	0.0	0.0	4.9	0.3	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.5	0.0	10.5	4.8	0.0	4.9	0.8	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.00		0.24	0.04		0.08	0.82		0.08	0.52		0.23
Lane Grp Cap(c), veh/h	653	0	514	645	0	528	901	0	0	938	0	0
V/C Ratio(X)	0.62	0.00	0.68	0.32	0.00	0.36	0.05	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	2804	0	2399	2663	0	2465	901	0	0	938	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.6	0.0	16.6	14.6	0.0	14.7	6.0	0.0	0.0	6.0	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.6	0.3	0.0	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	4.9	2.5	0.0	2.3	0.4	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	17.5	0.0	18.2	14.9	0.0	15.1	6.2	0.0	0.0	6.1	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		754			399			49			31	
Approach Delay, s/veh		17.8			15.0			6.2			6.1	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		34.0		21.6		34.0		21.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		82.0		30.0		82.0
Max Q Clear Time (g_c+I1), s		2.8		12.5		2.5		6.9
Green Ext Time (p_c), s		0.2		5.1		0.1		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.2
HCM 2010 LOS	B

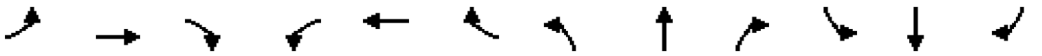
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	596	22	47	362	8	18	8	32	20	4	8
Future Volume (veh/h)	4	596	22	47	362	8	18	8	32	20	4	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	4	648	24	51	393	9	20	9	35	22	4	9
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	957	35	114	755	18	326	169	497	613	120	218
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	5	3401	125	128	2684	65	420	291	859	882	208	377
Grp Volume(v), veh/h	356	0	320	219	0	234	64	0	0	35	0	0
Grp Sat Flow(s),veh/h/ln	1858	0	1673	1193	0	1684	1570	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	9.7	0.8	0.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.7	0.0	9.7	10.5	0.0	6.6	0.9	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.01		0.07	0.23		0.04	0.31		0.55	0.63		0.26
Lane Grp Cap(c), veh/h	587	0	471	414	0	474	991	0	0	951	0	0
V/C Ratio(X)	0.61	0.00	0.68	0.53	0.00	0.49	0.06	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	2621	0	2316	1952	0	2331	991	0	0	951	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.2	0.0	18.2	16.9	0.0	17.1	5.3	0.0	0.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	1.7	1.1	0.0	0.8	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	4.7	2.9	0.0	3.2	0.5	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	19.2	0.0	20.0	17.9	0.0	17.9	5.4	0.0	0.0	5.2	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		676			453			64			35	
Approach Delay, s/veh		19.6			17.9			5.4			5.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.0		20.1		37.0		20.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		33.0		79.0		33.0		79.0
Max Q Clear Time (g_c+I1), s		2.9		11.7		2.5		12.5
Green Ext Time (p_c), s		0.3		4.4		0.1		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	145	543	0	0	361	383	0	0	0	101	0	86
Future Volume (vph)	145	543	0	0	361	383	0	0	0	101	0	86
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0					4.0	4.0	4.0
Lane Util. Factor		0.95			0.95					0.95	0.91	0.95
Frt		1.00			0.92					1.00	0.94	0.85
Flt Protected		0.99			1.00					0.95	0.97	1.00
Satd. Flow (prot)		3502			3266					1681	1543	1504
Flt Permitted		0.58			1.00					0.95	0.90	1.00
Satd. Flow (perm)		2043			3266					1681	1431	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	158	590	0	0	392	416	0	0	0	110	0	93
RTOR Reduction (vph)	0	0	0	0	247	0	0	0	0	0	36	33
Lane Group Flow (vph)	0	748	0	0	561	0	0	0	0	70	33	31
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		29.7			29.7					7.2	35.2	35.2
Effective Green, g (s)		29.7			29.7					7.2	35.2	35.2
Actuated g/C Ratio		0.41			0.41					0.10	0.48	0.48
Clearance Time (s)		4.0			4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		832			1330					166	702	726
v/s Ratio Prot					0.17					c0.04	0.00	0.02
v/s Ratio Perm		c0.37									c0.02	
v/c Ratio		0.90			0.42					0.42	0.05	0.04
Uniform Delay, d1		20.2			15.5					30.9	10.0	10.0
Progression Factor		1.00			1.00					1.00	1.00	1.00
Incremental Delay, d2		12.5			0.2					1.7	0.0	0.1
Delay (s)		32.7			15.7					32.6	10.0	10.1
Level of Service		C			B					C	B	B
Approach Delay (s/veh)		32.7			15.7			0.0			17.8	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	72.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	101	538	3	5	646	408	2	4	9	177	2	82
Future Volume (vph)	101	538	3	5	646	408	2	4	9	177	2	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.92		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		1695		1681	1601	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.75	0.77	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		1679		1322	1295	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	110	585	3	5	702	443	2	4	10	192	2	89
RTOR Reduction (vph)	0	0	2	0	0	225	0	6	0	0	2	49
Lane Group Flow (vph)	110	585	1	5	702	218	0	10	0	102	99	31
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	8.4	33.8	33.8	1.0	26.4	26.4		29.9		29.9	29.9	29.9
Effective Green, g (s)	8.4	33.8	33.8	1.0	26.4	26.4		29.9		29.9	29.9	29.9
Actuated g/C Ratio	0.11	0.44	0.44	0.01	0.34	0.34		0.39		0.39	0.39	0.39
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	193	1559	697	23	1218	544		654		515	504	586
v/s Ratio Prot	c0.06	0.17		0.00	c0.20							
v/s Ratio Perm			0.00			0.14		0.01		c0.08	0.08	0.02
v/c Ratio	0.57	0.38	0.00	0.22	0.58	0.40		0.02		0.20	0.20	0.05
Uniform Delay, d1	32.4	14.4	12.0	37.5	20.6	19.1		14.4		15.5	15.5	14.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	3.8	0.2	0.0	4.7	0.7	0.5		0.0		0.9	0.9	0.2
Delay (s)	36.3	14.5	12.0	42.2	21.2	19.6		14.4		16.3	16.3	14.8
Level of Service	D	B	B	D	C	B		B		B	B	B
Approach Delay (s/veh)		17.9			20.7			14.4			15.9	
Approach LOS		B			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	76.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	33	106	68	202	65	17	102	722	110	4	1052	44
Future Volume (veh/h)	33	106	68	202	65	17	102	722	110	4	1052	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	36	115	74	220	71	18	111	785	120	4	1143	48
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	99	528	53	0	528	249	2124	950	358	2077	87
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	0	296	1583	0	0	1583	468	3539	1583	613	3461	145
Grp Volume(v), veh/h	151	0	74	291	0	18	111	785	120	4	584	607
Grp Sat Flow(s),veh/h/ln	296	0	1583	0	0	1583	468	1770	1583	613	1770	1837
Q Serve(g_s), s	0.0	0.0	3.9	0.0	0.0	0.9	22.3	13.7	3.9	0.4	23.7	23.7
Cycle Q Clear(g_c), s	40.0	0.0	3.9	40.0	0.0	0.9	45.9	13.7	3.9	14.1	23.7	23.7
Prop In Lane	0.24		1.00	0.76		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	136	0	528	53	0	528	249	2124	950	358	1062	1102
V/C Ratio(X)	1.11	0.00	0.14	5.52	0.00	0.03	0.45	0.37	0.13	0.01	0.55	0.55
Avail Cap(c_a), veh/h	136	0	528	53	0	528	249	2124	950	358	1062	1102
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.1	0.0	28.0	60.0	0.0	27.0	28.1	12.3	10.4	16.0	14.3	14.3
Incr Delay (d2), s/veh	110.1	0.0	0.1	2076.6	0.0	0.0	5.7	0.5	0.3	0.1	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.7	32.1	0.0	0.4	3.3	6.8	1.8	0.1	12.1	12.6
LnGrp Delay(d), s/veh	144.2	0.0	28.1	2136.6	0.0	27.0	33.8	12.8	10.7	16.0	16.4	16.3
LnGrp LOS	F		C	F		C	C	B	B	B	B	B
Approach Vol, veh/h		225			309			1016			1195	
Approach Delay, s/veh		106.0			2013.7			14.9			16.3	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		44.0		76.0		44.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		47.9		42.0		25.7		42.0
Green Ext Time (p_c), s		7.6		0.0		10.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		248.0
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	10	47	941	31	44	1280
Future Vol, veh/h	10	47	941	31	44	1280
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	11	51	1012	33	47	1376

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1812	524	0	0	1046	0
Stage 1	1030	-	-	-	-	-
Stage 2	782	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	71	501	-	-	667	-
Stage 1	307	-	-	-	-	-
Stage 2	414	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	66	501	-	-	666	-
Mov Cap-2 Maneuver	66	-	-	-	-	-
Stage 1	307	-	-	-	-	-
Stage 2	385	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	23	0	0.4
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	66	501	666	-
HCM Lane V/C Ratio	-	-	0.163	0.101	0.071	-
HCM Control Delay (s/veh)	-	-	69.9	13	10.8	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.5	0.3	0.2	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	151	93	854	141	140	1306
Future Volume (vph)	151	93	854	141	140	1306
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	1599	3478		1786	3574
Flt Permitted	0.95	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1787	1599	3478		399	3574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	157	97	890	147	146	1360
RTOR Reduction (vph)	0	69	10	0	0	0
Lane Group Flow (vph)	157	28	1027	0	146	1360
Confl. Peds. (#/hr)	12			6	6	
Confl. Bikes (#/hr)				3		
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)	14.7	31.4	64.2		80.9	84.9
Effective Green, g (s)	14.7	31.4	64.2		80.9	84.9
Actuated g/C Ratio	0.14	0.29	0.60		0.75	0.79
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	244	526	2075		515	2820
v/s Ratio Prot	c0.09	0.01	c0.30		0.04	c0.38
v/s Ratio Perm		0.01			0.17	
v/c Ratio	0.64	0.05	0.50		0.28	0.48
Uniform Delay, d1	44.0	27.4	12.4		11.2	3.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	5.7	0.0	0.8		0.3	0.1
Delay (s)	49.7	27.5	13.3		11.5	4.0
Level of Service	D	C	B		B	A
Approach Delay (s/veh)	41.2		13.3			4.7
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	107.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	61	2	61	4	0	4	12	629	6	7	854	27
Future Vol, veh/h	61	2	61	4	0	4	12	629	6	7	854	27
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	4	4	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	68	2	68	4	0	4	13	699	7	8	949	30

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1290	1720	495	1131	1732	357	983	0	0	710	0	0
Stage 1	984	984	-	733	733	-	-	-	-	-	-	-
Stage 2	306	736	-	398	999	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	172	89	445	214	87	546	399	-	-	539	-	-
Stage 1	204	325	-	304	424	-	-	-	-	-	-	-
Stage 2	622	423	-	548	319	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	164	84	443	171	82	544	398	-	-	537	-	-
Mov Cap-2 Maneuver	164	84	-	171	82	-	-	-	-	-	-	-
Stage 1	197	319	-	293	409	-	-	-	-	-	-	-
Stage 2	597	408	-	454	313	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	40.9	19.3	0.3	0.1
HCM LOS	E	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	398	-	-	232	260	537	-	-
HCM Lane V/C Ratio	0.034	-	-	0.594	0.034	0.014	-	-
HCM Control Delay (s/veh)	14.4	-	-	40.9	19.3	11.8	-	-
HCM Lane LOS	B	-	-	E	C	B	-	-
HCM 95th %tile Q(veh)	0.1	-	-	3.4	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	273	41	98	235	112	16	406	97	116	710	164
Future Volume (veh/h)	82	273	41	98	235	112	16	406	97	116	710	164
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.98	0.99		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	87	290	44	104	250	119	17	432	103	123	755	174
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	244	382	58	282	299	142	328	1720	393	504	1909	434
Arrive On Green	0.05	0.24	0.24	0.06	0.25	0.25	0.02	0.42	0.42	0.06	0.47	0.47
Sat Flow, veh/h	1774	1572	238	1774	1185	564	1774	4086	934	1774	4091	930
Grp Volume(v), veh/h	87	0	334	104	0	369	17	355	180	123	624	305
Grp Sat Flow(s),veh/h/ln	1774	0	1810	1774	0	1749	1774	1695	1630	1774	1695	1630
Q Serve(g_s), s	2.8	0.0	13.0	3.3	0.0	15.2	0.4	5.2	5.5	2.8	9.1	9.3
Cycle Q Clear(g_c), s	2.8	0.0	13.0	3.3	0.0	15.2	0.4	5.2	5.5	2.8	9.1	9.3
Prop In Lane	1.00		0.13	1.00		0.32	1.00		0.57	1.00		0.57
Lane Grp Cap(c), veh/h	244	0	440	282	0	442	328	1427	686	504	1582	761
V/C Ratio(X)	0.36	0.00	0.76	0.37	0.00	0.84	0.05	0.25	0.26	0.24	0.39	0.40
Avail Cap(c_a), veh/h	615	0	762	636	0	736	766	1427	686	861	1582	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	26.7	20.6	0.0	26.9	12.4	14.2	14.3	10.5	13.2	13.3
Incr Delay (d2), s/veh	0.9	0.0	2.7	0.8	0.0	4.3	0.1	0.4	0.9	0.2	0.7	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	6.8	1.7	0.0	7.8	0.2	2.5	2.6	1.4	4.4	4.5
LnGrp Delay(d), s/veh	22.1	0.0	29.4	21.4	0.0	31.2	12.5	14.7	15.3	10.7	14.0	14.9
LnGrp LOS	C		C	C		C	B	B	B	B	B	B
Approach Vol, veh/h		421			473			552			1052	
Approach Delay, s/veh		27.9			29.0			14.8			13.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	36.0	8.9	22.5	5.2	39.5	8.1	23.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	20.0	32.0	20.0	32.0	20.0	32.0
Max Q Clear Time (g_c+I1), s	4.8	7.5	5.3	15.0	2.4	11.3	4.8	17.2
Green Ext Time (p_c), s	0.2	3.3	0.2	1.8	0.0	6.0	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	929	49	53	190	18	7
Future Vol, veh/h	929	49	53	190	18	7
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	968	51	55	198	19	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1020	0	1303	995
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	308	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	688	-	179	300
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	687	-	163	300
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.3	26.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	163	300	-	-	687	-
HCM Lane V/C Ratio	0.115	0.024	-	-	0.08	-
HCM Control Delay (s/veh)	29.9	17.3	-	-	10.7	0
HCM Lane LOS	D	C	-	-	B	A
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.3	-

ANAHEIM STATION - 2015 EXISTING AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	598	467	126	914	0	19	0	359	35	152	6
Future Volume (veh/h)	0	598	467	126	914	0	19	0	359	35	152	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1827	1827	1827	0	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	0	680	531	143	1039	0	15	0	416	40	173	7
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	4	4	4	4	0	4	4	4	4	4	4
Cap, veh/h	0	2110	648	219	3370	0	25	0	900	98	1058	473
Arrive On Green	0.00	0.42	0.42	0.06	0.54	0.00	0.01	0.00	0.29	0.03	0.30	0.30
Sat Flow, veh/h	0	5152	1532	3375	6540	0	1740	0	3106	3375	3471	1553
Grp Volume(v), veh/h	0	680	531	143	1039	0	15	0	416	40	173	7
Grp Sat Flow(s),veh/h/ln	0	1663	1532	1688	1571	0	1740	0	1553	1688	1736	1553
Q Serve(g_s), s	0.0	7.5	25.3	3.4	7.6	0.0	0.7	0.0	9.1	1.0	3.0	0.3
Cycle Q Clear(g_c), s	0.0	7.5	25.3	3.4	7.6	0.0	0.7	0.0	9.1	1.0	3.0	0.3
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2110	648	219	3370	0	25	0	900	98	1058	473
V/C Ratio(X)	0.00	0.32	0.82	0.65	0.31	0.00	0.61	0.00	0.46	0.41	0.16	0.01
Avail Cap(c_a), veh/h	0	3975	1221	408	6071	0	126	0	900	163	1058	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.0	21.1	37.8	10.7	0.0	40.6	0.0	24.1	39.5	21.1	20.1
Incr Delay (d2), s/veh	0.0	0.1	2.6	3.3	0.1	0.0	22.2	0.0	1.7	2.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	11.1	1.7	3.3	0.0	0.5	0.0	4.1	0.5	1.5	0.1
LnGrp Delay(d), s/veh	0.0	16.0	23.7	41.1	10.7	0.0	62.8	0.0	25.8	42.2	21.4	20.2
LnGrp LOS		B	C	D	B		E		C	D	C	C
Approach Vol, veh/h		1211			1182			431			220	
Approach Delay, s/veh		19.4			14.4			27.1			25.1	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	28.0	9.4	39.0	5.2	29.2		48.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	24.0	10.0	66.0	6.0	22.0		80.0
Max Q Clear Time (g_c+I1), s	3.0	11.1	5.4	27.3	2.7	5.0		9.6
Green Ext Time (p_c), s	0.0	1.4	0.2	7.7	0.0	0.9		8.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	52	959	0	0	700	45	0	0	0	311	331	263
Future Volume (vph)	52	959	0	0	700	45	0	0	0	311	331	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	0.98				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.95	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3367	6285			5913	1239				1406	5520	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3367	6285			5913	1239				1406	5520	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	60	1102	0	0	805	52	0	0	0	357	380	302
RTOR Reduction (vph)	0	0	0	0	1	37	0	0	0	0	19	0
Lane Group Flow (vph)	60	1102	0	0	809	10	0	0	0	211	809	0
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	5.8	30.6			20.8	20.8				56.3	56.3	
Effective Green, g (s)	5.8	30.6			20.8	20.8				56.3	56.3	
Actuated g/C Ratio	0.06	0.32			0.22	0.22				0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	205	2026			1296	271				834	3274	
v/s Ratio Prot	0.02	c0.18			c0.14					c0.15	0.15	
v/s Ratio Perm						0.01						
v/c Ratio	0.29	0.54			0.62	0.04				0.25	0.25	
Uniform Delay, d1	42.6	26.4			33.5	29.2				9.2	9.2	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	0.8	0.3			0.9	0.1				0.2	0.0	
Delay (s)	43.4	26.7			34.5	29.2				9.4	9.2	
Level of Service	D	C			C	C				A	A	
Approach Delay (s/veh)		27.6			34.2			0.0			9.3	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	94.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	856	24	32	562	56	17	61	13	78	9	151
Future Volume (veh/h)	335	856	24	32	562	56	17	61	13	78	9	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	394	1007	28	38	661	66	20	72	15	92	11	178
Adj No. of Lanes	1	3	1	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	454	2200	666	52	1045	318	518	530	110	521	662	554
Arrive On Green	0.26	0.44	0.44	0.03	0.21	0.21	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1740	4988	1509	1740	4988	1518	1165	1463	305	1278	1827	1529
Grp Volume(v), veh/h	394	1007	28	38	661	66	20	0	87	92	11	178
Grp Sat Flow(s),veh/h/ln	1740	1663	1509	1740	1663	1518	1165	0	1768	1278	1827	1529
Q Serve(g_s), s	15.5	10.2	0.8	1.6	8.7	2.6	0.8	0.0	2.4	3.7	0.3	6.0
Cycle Q Clear(g_c), s	15.5	10.2	0.8	1.6	8.7	2.6	1.1	0.0	2.4	6.1	0.3	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	454	2200	666	52	1045	318	518	0	640	521	662	554
V/C Ratio(X)	0.87	0.46	0.04	0.74	0.63	0.21	0.04	0.00	0.14	0.18	0.02	0.32
Avail Cap(c_a), veh/h	1285	5072	1535	218	2015	613	518	0	640	521	662	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	14.1	11.4	34.6	25.8	23.4	15.0	0.0	15.4	17.4	14.7	16.5
Incr Delay (d2), s/veh	5.2	0.1	0.0	18.4	0.6	0.3	0.1	0.0	0.4	0.7	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	4.7	0.3	1.0	4.0	1.1	0.3	0.0	1.2	1.4	0.1	2.7
LnGrp Delay(d), s/veh	30.5	14.2	11.5	52.9	26.5	23.8	15.2	0.0	15.8	18.1	14.7	18.1
LnGrp LOS	C	B	B	D	C	C	B		B	B	B	B
Approach Vol, veh/h		1429			765			107			281	
Approach Delay, s/veh		18.6			27.6			15.7			18.0	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.1	35.7		30.0	22.7	19.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	9.0	73.0		26.0	53.0	29.0
Max Q Clear Time (g_c+I1), s		4.4	3.6	12.2		8.1	17.5	10.7
Green Ext Time (p_c), s		0.4	0.0	8.6		0.8	1.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	18	189	19	17	65	11	99	0	10	14	0	10
Future Volume (vph)	18	189	19	17	65	11	99	0	10	14	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.99		1.00	0.98		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1770	5006		3433	4956		1770		2787	1770		2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1770	5006		3433	4956		1770		2787	1770		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	19	203	20	18	70	12	106	0	11	15	0	11
RTOR Reduction (vph)	0	12	0	0	11	0	0	0	3	0	0	3
Lane Group Flow (vph)	19	211	0	18	71	0	106	0	8	15	0	8
Confl. Peds. (#/hr)	4		4	4		4						
Confl. Bikes (#/hr)			3			3						
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	1.4	8.6		1.2	8.4		56.7		56.7	56.7		56.7
Effective Green, g (s)	1.4	8.6		1.2	8.4		56.7		56.7	56.7		56.7
Actuated g/C Ratio	0.02	0.11		0.02	0.11		0.72		0.72	0.72		0.72
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	31	548		52	530		1278		2013	1278		2013
v/s Ratio Prot	c0.01	c0.04		0.01	0.01							
v/s Ratio Perm							c0.06		0.00	0.01		0.00
v/c Ratio	0.61	0.38		0.35	0.13		0.08		0.00	0.01		0.00
Uniform Delay, d1	38.3	32.5		38.3	31.8		3.2		3.0	3.1		3.0
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	30.9	0.5		4.0	0.1		0.1		0.0	0.0		0.0
Delay (s)	69.2	32.9		42.2	31.9		3.3		3.0	3.1		3.0
Level of Service	E	C		D	C		A		A	A		A
Approach Delay (s/veh)		35.8			33.7			3.3			3.1	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	78.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	24.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	846	316	225	863	101	117	461	88	278	920	238
Future Volume (veh/h)	258	846	316	225	863	101	117	461	88	278	920	238
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	266	872	326	232	890	104	121	475	91	287	948	245
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	1047	390	266	1239	144	178	1570	471	358	1444	372
Arrive On Green	0.17	0.29	0.29	0.15	0.27	0.27	0.05	0.31	0.31	0.10	0.36	0.36
Sat Flow, veh/h	1774	3621	1348	1774	4604	535	3442	5085	1526	3442	3998	1030
Grp Volume(v), veh/h	266	816	382	232	654	340	121	475	91	287	803	390
Grp Sat Flow(s),veh/h/ln	1774	1695	1578	1774	1695	1749	1721	1695	1526	1721	1695	1637
Q Serve(g_s), s	15.8	24.3	24.5	13.8	18.9	19.0	3.7	7.7	4.7	8.8	21.4	21.5
Cycle Q Clear(g_c), s	15.8	24.3	24.5	13.8	18.9	19.0	3.7	7.7	4.7	8.8	21.4	21.5
Prop In Lane	1.00		0.85	1.00		0.31	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	301	980	456	266	912	471	178	1570	471	358	1224	591
V/C Ratio(X)	0.88	0.83	0.84	0.87	0.72	0.72	0.68	0.30	0.19	0.80	0.66	0.66
Avail Cap(c_a), veh/h	460	1099	512	394	973	502	191	1570	471	510	1224	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	35.9	36.0	44.9	35.7	35.8	50.3	28.5	27.4	47.3	28.9	28.9
Incr Delay (d2), s/veh	12.3	5.1	10.6	13.3	2.4	4.7	8.6	0.5	0.9	6.0	2.8	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	12.0	12.0	7.8	9.1	9.8	2.0	3.7	2.1	4.5	10.5	10.7
LnGrp Delay(d), s/veh	56.1	41.1	46.7	58.2	38.1	40.5	58.9	29.0	28.4	53.2	31.6	34.6
LnGrp LOS	E	D	D	E	D	D	E	C	C	D	C	C
Approach Vol, veh/h		1464			1226			687			1480	
Approach Delay, s/veh		45.3			42.6			34.2			36.6	
Approach LOS		D			D			C			D	

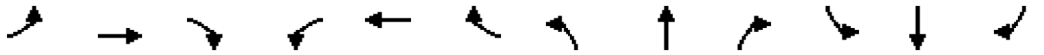
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	37.3	20.2	35.2	9.6	43.0	22.3	33.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	29.0	24.0	35.0	6.0	39.0	28.0	31.0
Max Q Clear Time (g_c+I1), s	10.8	9.7	15.8	26.5	5.7	23.5	17.8	21.0
Green Ext Time (p_c), s	0.4	3.2	0.4	4.7	0.0	6.9	0.5	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	18	26	29	72	35	44	571	65	120	1304	103
Future Volume (veh/h)	35	18	26	29	72	35	44	571	65	120	1304	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	36	19	27	30	75	36	46	595	68	125	1358	107
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	78	111	187	135	65	333	4121	1254	671	3888	306
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1266	685	974	1339	1185	569	360	5085	1547	769	4797	378
Grp Volume(v), veh/h	36	0	46	30	0	111	46	595	68	125	960	505
Grp Sat Flow(s),veh/h/ln	1266	0	1659	1339	0	1753	360	1695	1547	769	1695	1785
Q Serve(g_s), s	2.9	0.0	2.7	2.2	0.0	6.4	4.1	2.7	0.9	4.4	7.9	7.9
Cycle Q Clear(g_c), s	9.3	0.0	2.7	4.9	0.0	6.4	12.1	2.7	0.9	7.1	7.9	7.9
Prop In Lane	1.00		0.59	1.00		0.32	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	137	0	190	187	0	200	333	4121	1254	671	2747	1447
V/C Ratio(X)	0.26	0.00	0.24	0.16	0.00	0.55	0.14	0.14	0.05	0.19	0.35	0.35
Avail Cap(c_a), veh/h	302	0	407	362	0	430	333	4121	1254	671	2747	1447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	0.0	42.8	45.0	0.0	44.4	4.3	2.2	2.0	2.9	2.7	2.7
Incr Delay (d2), s/veh	1.0	0.0	0.7	0.4	0.0	2.4	0.9	0.1	0.1	0.6	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.3	0.8	0.0	3.2	0.5	1.2	0.4	1.1	3.7	4.1
LnGrp Delay(d), s/veh	49.9	0.0	43.5	45.4	0.0	46.8	5.1	2.2	2.1	3.5	3.0	3.3
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		82			141			709			1590	
Approach Delay, s/veh		46.3			46.5			2.4			3.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		90.0		16.1		90.0		16.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		86.0		26.0		86.0		26.0
Max Q Clear Time (g_c+I1), s		14.1		11.3		9.9		8.4
Green Ext Time (p_c), s		5.8		0.2		16.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.8
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	211	77	42	195	26	70	630	24	69	1132	88
Future Volume (veh/h)	71	211	77	42	195	26	70	630	24	69	1132	88
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	76	227	83	45	210	28	75	677	26	74	1217	95
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	419	148	160	515	68	98	3298	126	96	3151	246
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.05	0.66	0.66	0.05	0.66	0.66
Sat Flow, veh/h	1133	2548	903	1061	3137	412	1774	5023	192	1774	4805	375
Grp Volume(v), veh/h	76	155	155	45	117	121	75	456	247	74	859	453
Grp Sat Flow(s),veh/h/ln	1133	1770	1681	1061	1770	1779	1774	1695	1825	1774	1695	1789
Q Serve(g_s), s	6.2	7.7	8.1	3.9	5.7	5.8	4.0	5.1	5.2	4.0	11.2	11.2
Cycle Q Clear(g_c), s	12.0	7.7	8.1	12.0	5.7	5.8	4.0	5.1	5.2	4.0	11.2	11.2
Prop In Lane	1.00		0.54	1.00		0.23	1.00		0.11	1.00		0.21
Lane Grp Cap(c), veh/h	192	291	276	160	291	292	98	2226	1198	96	2223	1173
V/C Ratio(X)	0.40	0.53	0.56	0.28	0.40	0.41	0.77	0.20	0.21	0.77	0.39	0.39
Avail Cap(c_a), veh/h	348	535	508	306	535	538	314	2226	1198	296	2223	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	36.7	36.9	42.4	35.9	36.0	44.7	6.5	6.5	44.8	7.6	7.6
Incr Delay (d2), s/veh	1.3	1.5	1.8	1.0	0.9	0.9	11.9	0.2	0.4	12.1	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.9	3.9	1.2	2.8	2.9	2.3	2.4	2.7	2.3	5.3	5.7
LnGrp Delay(d), s/veh	42.7	38.3	38.7	43.4	36.8	36.9	56.7	6.7	6.9	56.9	8.1	8.6
LnGrp LOS	D	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		386			283			778			1386	
Approach Delay, s/veh		39.3			37.9			11.6			10.9	
Approach LOS		D			D			B			B	

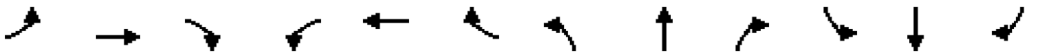
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	67.0		19.8	9.3	66.9		19.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	63.0		29.0	17.0	62.0		29.0
Max Q Clear Time (g_c+I1), s	6.0	7.2		14.0	6.0	13.2		14.0
Green Ext Time (p_c), s	0.1	4.8		1.7	0.1	11.4		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	5	0	200	8	89	12	647	88	101	1152	6
Future Volume (veh/h)	1	5	0	200	8	89	12	647	88	101	1152	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	1	6	0	222	9	99	13	719	98	112	1280	7
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	36	191	0	187	5	649	21	1873	253	140	2513	14
Arrive On Green	0.41	0.41	0.00	0.41	0.41	0.41	0.01	0.41	0.41	0.08	0.48	0.48
Sat Flow, veh/h	0	468	0	309	13	1593	1792	4564	616	1792	5271	29
Grp Volume(v), veh/h	7	0	0	231	0	99	13	538	279	112	831	456
Grp Sat Flow(s),veh/h/ln	468	0	0	322	0	1593	1792	1712	1756	1792	1712	1876
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	4.5	0.8	12.7	12.9	7.1	19.4	19.4
Cycle Q Clear(g_c), s	47.0	0.0	0.0	47.0	0.0	4.5	0.8	12.7	12.9	7.1	19.4	19.4
Prop In Lane	0.14		0.00	0.96		1.00	1.00		0.35	1.00		0.02
Lane Grp Cap(c), veh/h	226	0	0	192	0	649	21	1405	721	140	1632	894
V/C Ratio(X)	0.03	0.00	0.00	1.20	0.00	0.15	0.61	0.38	0.39	0.80	0.51	0.51
Avail Cap(c_a), veh/h	226	0	0	192	0	649	93	1405	721	326	1632	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	0.0	41.7	0.0	21.6	56.7	23.8	23.8	52.3	20.9	20.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	129.7	0.0	0.1	25.5	0.8	1.6	10.0	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	13.0	0.0	2.0	0.6	6.1	6.5	3.9	9.4	10.5
LnGrp Delay(d), s/veh	25.8	0.0	0.0	171.4	0.0	21.7	82.3	24.6	25.4	62.3	22.0	22.9
LnGrp LOS	C			F		C	F	C	C	E	C	C
Approach Vol, veh/h		7			330			830			1399	
Approach Delay, s/veh		25.8			126.5			25.8			25.5	
Approach LOS		C			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	51.3		51.0	5.4	59.0		51.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	21.0	40.0		47.0	6.0	55.0		47.0
Max Q Clear Time (g_c+I1), s	9.1	14.9		49.0	2.8	21.4		49.0
Green Ext Time (p_c), s	0.2	5.3		0.0	0.0	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.6
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	459	176	442	539	26	141	518	252	116	1135	120
Future Volume (vph)	131	459	176	442	539	26	141	518	252	116	1135	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5899	1237	3433	5085	1542	3433	5085	1539	3433	5085	1549
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5899	1237	3433	5085	1542	3433	5085	1539	3433	5085	1549
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	483	185	465	567	27	148	545	265	122	1195	126
RTOR Reduction (vph)	0	20	101	0	0	20	0	0	148	0	0	71
Lane Group Flow (vph)	138	530	17	465	567	7	148	545	117	122	1195	55
Confl. Peds. (#/hr)	7		12	12		7	4		8	8		4
Confl. Bikes (#/hr)									1			3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.4	15.6	15.6	19.8	26.0	26.0	9.5	47.3	47.3	8.8	46.6	46.6
Effective Green, g (s)	9.4	15.6	15.6	19.8	26.0	26.0	9.5	47.3	47.3	8.8	46.6	46.6
Actuated g/C Ratio	0.09	0.15	0.15	0.18	0.24	0.24	0.09	0.44	0.44	0.08	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	300	856	179	632	1229	372	303	2237	677	281	2204	671
v/s Ratio Prot	0.04	c0.09		c0.14	0.11		c0.04	0.11		0.04	c0.23	
v/s Ratio Perm			0.01			0.00			0.08			0.04
v/c Ratio	0.46	0.62	0.10	0.74	0.46	0.02	0.49	0.24	0.17	0.43	0.54	0.08
Uniform Delay, d1	46.6	43.2	39.8	41.4	34.8	31.0	46.7	18.9	18.2	47.0	22.6	17.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.3	0.2	4.4	0.3	0.0	1.2	0.3	0.6	1.1	1.0	0.2
Delay (s)	47.8	44.5	40.1	45.8	35.1	31.0	47.9	19.1	18.8	48.1	23.5	18.1
Level of Service	D	D	D	D	D	C	D	B	B	D	C	B
Approach Delay (s/veh)		44.4			39.7			23.5			25.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	107.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	5	97	0	0	0	18	828	1	3	1423	132
Future Volume (veh/h)	205	5	97	0	0	0	18	828	1	3	1423	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	225	5	107	0	0	0	20	910	1	3	1564	145
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	281	245	77	561	0	60	3724	4	11	3291	305
Arrive On Green	0.16	0.16	0.16	0.00	0.00	0.00	0.02	0.71	0.71	0.00	0.70	0.70
Sat Flow, veh/h	1764	1770	1547	1276	3632	0	3442	5246	6	3442	4730	438
Grp Volume(v), veh/h	225	5	107	0	0	0	20	588	323	3	1121	588
Grp Sat Flow(s),veh/h/ln	1764	1770	1547	1276	1770	0	1721	1695	1862	1721	1695	1778
Q Serve(g_s), s	11.5	0.2	5.8	0.0	0.0	0.0	0.5	5.7	5.7	0.1	14.0	14.1
Cycle Q Clear(g_c), s	11.5	0.2	5.8	0.0	0.0	0.0	0.5	5.7	5.7	0.1	14.0	14.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.25
Lane Grp Cap(c), veh/h	357	281	245	77	561	0	60	2406	1321	11	2358	1237
V/C Ratio(X)	0.63	0.02	0.44	0.00	0.00	0.00	0.34	0.24	0.24	0.27	0.48	0.48
Avail Cap(c_a), veh/h	813	739	646	407	1477	0	147	2406	1321	147	2358	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	33.2	35.5	0.0	0.0	0.0	45.4	4.8	4.8	46.5	6.5	6.5
Incr Delay (d2), s/veh	1.8	0.0	1.2	0.0	0.0	0.0	3.3	0.2	0.4	12.7	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.1	2.6	0.0	0.0	0.0	0.3	2.7	3.0	0.1	6.8	7.3
LnGrp Delay(d), s/veh	39.8	33.2	36.8	0.0	0.0	0.0	48.6	5.0	5.2	59.1	7.2	7.8
LnGrp LOS	D	C	D				D	A	A	E	A	A
Approach Vol, veh/h		337			0			931			1712	
Approach Delay, s/veh		38.7			0.0			6.0			7.5	
Approach LOS		D						A			A	

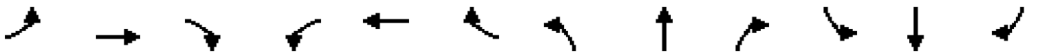
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	70.3		18.8	5.6	69.0		18.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	65.0		39.0	4.0	65.0		39.0
Max Q Clear Time (g_c+I1), s	2.1	7.7		13.5	2.5	16.1		0.0
Green Ext Time (p_c), s	0.0	6.7		1.2	0.0	17.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1389	73	168	389	47	95	613	222	226	1301	180
Future Volume (veh/h)	210	1389	73	168	389	47	95	613	222	226	1301	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	1510	79	183	423	51	103	666	241	246	1414	196
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	295	1847	97	247	1656	196	159	1561	503	314	2117	293
Arrive On Green	0.08	0.37	0.37	0.07	0.36	0.36	0.05	0.32	0.32	0.09	0.37	0.37
Sat Flow, veh/h	3476	4992	261	3476	4647	549	3476	4853	1563	3476	5776	799
Grp Volume(v), veh/h	228	1036	553	183	309	165	103	666	241	246	1188	422
Grp Sat Flow(s),veh/h/ln	1738	1712	1829	1738	1712	1772	1738	1618	1563	1738	1618	1721
Q Serve(g_s), s	7.0	29.8	29.8	5.6	7.0	7.2	3.2	11.8	13.5	7.6	22.4	22.5
Cycle Q Clear(g_c), s	7.0	29.8	29.8	5.6	7.0	7.2	3.2	11.8	13.5	7.6	22.4	22.5
Prop In Lane	1.00		0.14	1.00		0.31	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	295	1267	677	247	1220	632	159	1561	503	314	1779	631
V/C Ratio(X)	0.77	0.82	0.82	0.74	0.25	0.26	0.65	0.43	0.48	0.78	0.67	0.67
Avail Cap(c_a), veh/h	414	1443	771	350	1380	714	223	1561	503	446	1779	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	31.0	31.1	49.7	24.9	24.9	51.2	29.1	29.7	48.6	29.0	29.0
Incr Delay (d2), s/veh	5.8	3.4	6.2	5.0	0.1	0.2	4.4	0.9	3.3	5.8	2.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	14.7	16.2	2.9	3.3	3.6	1.6	5.4	6.3	3.9	10.3	11.7
LnGrp Delay(d), s/veh	54.7	34.5	37.2	54.7	25.0	25.1	55.6	30.0	32.9	54.4	31.0	34.6
LnGrp LOS	D	C	D	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1817			657			1010			1856	
Approach Delay, s/veh		37.8			33.3			33.3			34.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	39.1	11.8	44.4	9.0	44.0	13.3	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	33.0	11.0	46.0	7.0	40.0	13.0	44.0
Max Q Clear Time (g_c+I1), s	9.6	15.5	7.6	31.8	5.2	24.5	9.0	9.2
Green Ext Time (p_c), s	0.3	5.5	0.2	8.6	0.0	9.2	0.3	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	839	1	39	988	43	1	0	130	74	0	20
Future Volume (vph)	2	839	1	39	988	43	1	0	130	74	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	0.98	0.98	1.00		0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1750	5036	1547	1752	5036	1523	1737	1457	1457	1752		1535
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1750	5036	1547	1752	5036	1523	1737	1457	1457	1752		1535
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	912	1	42	1074	47	1	0	141	80	0	22
RTOR Reduction (vph)	0	0	1	0	0	31	0	44	44	0	0	12
Lane Group Flow (vph)	2	912	0	42	1074	16	1	27	26	80	0	10
Confl. Peds. (#/hr)	2		1	1		2	6		6	6		6
Confl. Bikes (#/hr)						3			1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.9	24.3	24.3	4.6	28.0	28.0	0.9	31.5	31.5	7.6		38.2
Effective Green, g (s)	0.9	24.3	24.3	4.6	28.0	28.0	0.9	31.5	31.5	7.6		38.2
Actuated g/C Ratio	0.01	0.29	0.29	0.05	0.33	0.33	0.01	0.38	0.38	0.09		0.45
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	18	1456	447	95	1678	507	18	546	546	158		698
v/s Ratio Prot	0.00	0.18		c0.02	c0.21		0.00	c0.02		c0.05		
v/s Ratio Perm			0.00			0.01			0.02			0.01
v/c Ratio	0.11	0.63	0.00	0.44	0.64	0.03	0.06	0.05	0.05	0.51		0.01
Uniform Delay, d1	41.2	25.9	21.2	38.5	23.7	18.9	41.1	16.7	16.7	36.4		12.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.7	0.8	0.0	3.3	0.8	0.0	1.3	0.2	0.2	2.5		0.0
Delay (s)	43.9	26.8	21.2	41.7	24.6	18.9	42.4	16.9	16.9	39.0		12.6
Level of Service	D	C	C	D	C	B	D	B	B	D		B
Approach Delay (s/veh)		26.8			25.0			17.1			33.3	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	45.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1093	32	387	1014	145	33	85	142	439	500	205
Future Volume (veh/h)	90	1093	32	387	1014	145	33	85	142	439	500	205
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	1104	32	391	1024	146	33	86	143	443	505	207
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	1351	39	464	1272	559	287	438	382	624	1045	426
Arrive On Green	0.04	0.27	0.27	0.13	0.36	0.36	0.02	0.25	0.25	0.21	0.43	0.43
Sat Flow, veh/h	3442	5076	147	3442	3539	1556	1774	1770	1541	1774	2432	991
Grp Volume(v), veh/h	91	737	399	391	1024	146	33	86	143	443	367	345
Grp Sat Flow(s),veh/h/ln	1721	1695	1833	1721	1770	1556	1774	1770	1541	1774	1770	1654
Q Serve(g_s), s	2.8	22.3	22.3	12.1	28.5	7.3	1.5	4.2	8.4	19.3	16.3	16.5
Cycle Q Clear(g_c), s	2.8	22.3	22.3	12.1	28.5	7.3	1.5	4.2	8.4	19.3	16.3	16.5
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	144	902	488	464	1272	559	287	438	382	624	760	710
V/C Ratio(X)	0.63	0.82	0.82	0.84	0.81	0.26	0.11	0.20	0.37	0.71	0.48	0.49
Avail Cap(c_a), veh/h	220	1053	570	598	1488	654	311	438	382	811	760	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	37.6	37.7	46.2	31.6	24.8	29.6	32.6	34.1	21.2	22.5	22.5
Incr Delay (d2), s/veh	4.5	4.5	8.0	8.4	2.9	0.2	0.2	1.0	2.8	2.0	2.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	11.0	12.4	6.3	14.4	3.2	0.7	2.2	3.9	9.6	8.4	8.0
LnGrp Delay(d), s/veh	56.1	42.1	45.6	54.6	34.5	25.0	29.8	33.6	36.9	23.2	24.6	24.9
LnGrp LOS	E	D	D	D	C	C	C	C	D	C	C	C
Approach Vol, veh/h		1227			1561			262			1155	
Approach Delay, s/veh		44.3			38.7			34.9			24.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.4	31.1	18.8	33.1	6.5	51.0	8.6	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	34.0	17.0	19.0	34.0	4.0	47.0	7.0	46.0
Max Q Clear Time (g_c+I1), s	21.3	10.4	14.1	24.3	3.5	18.5	4.8	30.5
Green Ext Time (p_c), s	1.2	0.6	0.6	4.8	0.0	4.8	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	194	38	3	81	32	9	87	12	210	413	170
Future Volume (veh/h)	61	194	38	3	81	32	9	87	12	210	413	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	67	213	42	3	89	35	10	96	13	231	454	187
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	175	350	68	123	298	111	649	2556	340	700	1308	542
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1274	2981	576	1131	2537	945	793	3172	422	803	1623	672
Grp Volume(v), veh/h	67	126	129	3	61	63	10	53	56	432	0	440
Grp Sat Flow(s),veh/h/ln	1274	1787	1770	1131	1787	1694	793	1787	1807	1515	0	1583
Q Serve(g_s), s	5.3	7.0	7.2	0.3	3.3	3.5	0.4	0.6	0.6	7.2	0.0	7.8
Cycle Q Clear(g_c), s	8.8	7.0	7.2	7.5	3.3	3.5	8.2	0.6	0.6	7.8	0.0	7.8
Prop In Lane	1.00		0.33	1.00		0.56	1.00		0.23	0.54		0.42
Lane Grp Cap(c), veh/h	175	210	208	123	210	199	649	1440	1456	1274	0	1276
V/C Ratio(X)	0.38	0.60	0.62	0.02	0.29	0.32	0.02	0.04	0.04	0.34	0.00	0.35
Avail Cap(c_a), veh/h	368	480	475	294	480	455	649	1440	1456	1274	0	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.2	43.7	43.8	47.4	42.0	42.2	3.8	2.0	2.0	2.7	0.0	2.7
Incr Delay (d2), s/veh	1.4	2.8	3.0	0.1	0.8	0.9	0.0	0.0	0.0	0.7	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.6	3.7	0.1	1.7	1.7	0.1	0.3	0.3	3.5	0.0	3.6
LnGrp Delay(d), s/veh	47.6	46.4	46.8	47.4	42.8	43.1	3.9	2.1	2.1	3.4	0.0	3.5
LnGrp LOS	D	D	D	D	D	D	A	A	A	A		A
Approach Vol, veh/h		322			127			119			872	
Approach Delay, s/veh		46.8			43.0			2.2			3.4	
Approach LOS		D			D			A			A	

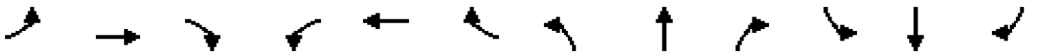
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		88.0		16.2		88.0		16.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		84.0		28.0		84.0		28.0
Max Q Clear Time (g_c+I1), s		10.2		10.8		9.8		9.5
Green Ext Time (p_c), s		0.7		1.4		6.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	94	867	81	145	886	263	231	41	111	7	6	19
Future Volume (veh/h)	94	867	81	145	886	263	231	41	111	7	6	19
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	99	913	85	153	933	277	243	43	117	7	6	20
Adj No. of Lanes	1	3	0	2	3	1	2	1	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	129	1414	131	244	1509	470	486	63	170	462	485	412
Arrive On Green	0.07	0.30	0.30	0.07	0.30	0.30	0.14	0.14	0.14	0.26	0.26	0.26
Sat Flow, veh/h	1757	4690	435	3408	5036	1568	3408	438	1193	1757	1845	1566
Grp Volume(v), veh/h	99	653	345	153	933	277	243	0	160	7	6	20
Grp Sat Flow(s),veh/h/ln	1757	1679	1768	1704	1679	1568	1704	0	1631	1757	1845	1566
Q Serve(g_s), s	4.0	12.2	12.3	3.2	11.5	10.9	4.8	0.0	6.7	0.2	0.2	0.7
Cycle Q Clear(g_c), s	4.0	12.2	12.3	3.2	11.5	10.9	4.8	0.0	6.7	0.2	0.2	0.7
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.73	1.00		1.00
Lane Grp Cap(c), veh/h	129	1012	533	244	1509	470	486	0	233	462	485	412
V/C Ratio(X)	0.77	0.64	0.65	0.63	0.62	0.59	0.50	0.00	0.69	0.02	0.01	0.05
Avail Cap(c_a), veh/h	462	2183	1149	660	2926	911	1132	0	542	462	485	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	21.9	21.9	32.6	21.8	21.5	28.6	0.0	29.5	19.7	19.7	19.9
Incr Delay (d2), s/veh	9.1	0.7	1.3	2.6	0.4	1.2	0.8	0.0	3.6	0.1	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	5.7	6.1	1.6	5.4	4.8	2.3	0.0	3.3	0.1	0.1	0.3
LnGrp Delay(d), s/veh	41.9	22.6	23.2	35.2	22.2	22.7	29.4	0.0	33.0	19.8	19.8	20.1
LnGrp LOS	D	C	C	D	C	C	C		C	B	B	C
Approach Vol, veh/h		1097			1363			403			33	
Approach Delay, s/veh		24.5			23.8			30.8			20.0	
Approach LOS		C			C			C			B	

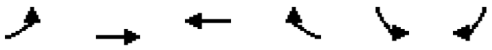
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		23.0	9.2	25.8		14.3	9.3	25.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		19.0	14.0	47.0		24.0	19.0	42.0
Max Q Clear Time (g_c+I1), s		2.7	5.2	14.3		8.7	6.0	13.5
Green Ext Time (p_c), s		0.0	0.3	7.2		1.5	0.2	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.0
HCM 2010 LOS	C



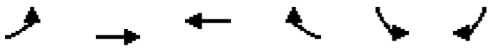
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1638	63	73	655	0	17	0	76	0	0	0
Future Volume (vph)	0	1638	63	73	655	0	17	0	76	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frt		0.99		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3555		1787	3574		1626	2919				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3555		1787	3574		1626	2919				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1780	68	79	712	0	18	0	83	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	69	0	0	0	0
Lane Group Flow (vph)	0	1846	0	79	712	0	16	16	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		61.0		6.0	71.0		18.0	18.0				
Effective Green, g (s)		61.0		6.0	71.0		18.0	18.0				
Actuated g/C Ratio		0.63		0.06	0.73		0.19	0.19				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		2235		110	2616		301	541				
v/s Ratio Prot		c0.52		c0.04	0.20		c0.01	0.01				
v/s Ratio Perm												
v/c Ratio		0.83		0.72	0.27		0.05	0.03				
Uniform Delay, d1		13.9		44.7	4.4		32.5	32.3				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		2.6		20.0	0.1		0.3	0.1				
Delay (s)		16.5		64.6	4.4		32.8	32.4				
Level of Service		B		E	A		C	C				
Approach Delay (s/veh)		16.5			10.4			32.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	97.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



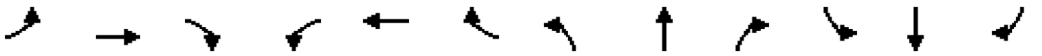
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1153	817	0	455	748
Future Volume (vph)	0	1153	817	0	455	748
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.96	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5036	5036		1707	1490
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5036	5036		1707	1490
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1189	842	0	469	771
RTOR Reduction (vph)	0	0	0	0	11	14
Lane Group Flow (vph)	0	1189	842	0	635	580
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		34.9	34.9		71.1	71.1
Effective Green, g (s)		34.9	34.9		71.1	71.1
Actuated g/C Ratio		0.31	0.31		0.62	0.62
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1541	1541		1064	929
v/s Ratio Prot		c0.24	0.17		0.37	
v/s Ratio Perm						c0.39
v/c Ratio		0.77	0.55		0.60	0.62
Uniform Delay, d1		35.9	33.0		12.9	13.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		2.5	0.4		2.5	3.2
Delay (s)		38.4	33.4		15.3	16.4
Level of Service		D	C		B	B
Approach Delay (s/veh)		38.4	33.4		15.8	
Approach LOS		D	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	840	973	0	127	318
Future Volume (vph)	0	840	973	0	127	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.92	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5036	5036		3209	1427
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5036	5036		3209	1427
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	884	1024	0	134	335
RTOR Reduction (vph)	0	0	0	0	35	35
Lane Group Flow (vph)	0	884	1024	0	267	132
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				7		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		23.9	23.9		47.1	47.1
Effective Green, g (s)		23.9	23.9		47.1	47.1
Actuated g/C Ratio		0.30	0.30		0.60	0.60
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1523	1523		1913	850
v/s Ratio Prot		0.18	c0.20		0.08	
v/s Ratio Perm						c0.09
v/c Ratio		0.58	0.67		0.14	0.16
Uniform Delay, d1		23.3	24.1		7.0	7.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.6	1.2		0.2	0.4
Delay (s)		23.9	25.3		7.2	7.5
Level of Service		C	C		A	A
Approach Delay (s/veh)		23.9	25.3		7.3	
Approach LOS		C	C		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	79.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1489	252	246	439	0	0	0	0	214	33	279
Future Volume (vph)	0	1489	252	246	439	0	0	0	0	214	33	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.91	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3414	1436	1787	3574					1698	1536	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3414	1436	1787	3574					1698	1536	1519
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	1692	286	280	499	0	0	0	0	243	38	317
RTOR Reduction (vph)	0	1	120	0	0	0	0	0	0	0	51	156
Lane Group Flow (vph)	0	1720	137	280	499	0	0	0	0	207	150	34
Confl. Peds. (#/hr)	5					5						
Confl. Bikes (#/hr)			3			9						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		62.4	62.4	21.2	87.6					21.1	21.1	21.1
Effective Green, g (s)		62.4	62.4	21.2	87.6					21.1	21.1	21.1
Actuated g/C Ratio		0.53	0.53	0.18	0.75					0.18	0.18	0.18
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1825	767	324	2682					307	277	274
v/s Ratio Prot		c0.50		c0.16	0.14							
v/s Ratio Perm			0.10							c0.12	0.10	0.02
v/c Ratio		0.94	0.18	0.86	0.19					0.67	0.54	0.13
Uniform Delay, d1		25.5	14.0	46.4	4.2					44.6	43.4	40.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		10.4	0.1	20.5	0.0					11.3	7.4	0.9
Delay (s)		35.9	14.1	66.9	4.3					55.9	50.8	41.0
Level of Service		D	B	E	A					E	D	D
Approach Delay (s/veh)		33.1			26.8			0.0			49.5	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	116.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	1454	153	78	585	0	15	7	8	158	50	168
Future Volume (veh/h)	16	1454	153	78	585	0	15	7	8	158	50	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	17	1580	166	85	636	0	16	8	9	172	54	183
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	28	2192	230	110	1829	0	154	77	201	222	70	252
Arrive On Green	0.02	0.47	0.47	0.06	0.51	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	1792	4705	494	1792	3668	0	1214	607	1584	1379	433	1564
Grp Volume(v), veh/h	17	1149	597	85	636	0	24	0	9	226	0	183
Grp Sat Flow(s),veh/h/ln	1792	1712	1775	1792	1787	0	1821	0	1584	1812	0	1564
Q Serve(g_s), s	0.8	23.4	23.5	4.0	9.2	0.0	1.0	0.0	0.4	10.4	0.0	9.6
Cycle Q Clear(g_c), s	0.8	23.4	23.5	4.0	9.2	0.0	1.0	0.0	0.4	10.4	0.0	9.6
Prop In Lane	1.00		0.28	1.00		0.00	0.67		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	28	1595	827	110	1829	0	231	0	201	292	0	252
V/C Ratio(X)	0.61	0.72	0.72	0.77	0.35	0.00	0.10	0.00	0.04	0.77	0.00	0.73
Avail Cap(c_a), veh/h	103	2174	1127	248	2558	0	231	0	201	544	0	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.4	18.6	18.6	40.1	12.6	0.0	33.5	0.0	33.2	34.8	0.0	34.5
Incr Delay (d2), s/veh	19.8	0.8	1.5	10.8	0.1	0.0	0.9	0.0	0.4	4.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	11.2	11.8	2.3	4.5	0.0	0.6	0.0	0.2	5.5	0.0	4.4
LnGrp Delay(d), s/veh	62.2	19.4	20.1	50.8	12.7	0.0	34.4	0.0	33.6	39.2	0.0	38.5
LnGrp LOS	E	B	C	D	B		C		C	D		D
Approach Vol, veh/h		1763			721			33			409	
Approach Delay, s/veh		20.0			17.2			34.2			38.9	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	9.3	44.4		18.0	5.3	48.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		11.0	12.0	55.0		26.0	5.0	62.0
Max Q Clear Time (g_c+I1), s		3.0	6.0	25.5		12.4	2.8	11.2
Green Ext Time (p_c), s		0.0	0.1	14.9		1.5	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.1
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1346	0	0	659	294	444
Future Volume (veh/h)	1346	0	0	659	294	444
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	0	0	1845	1845	1845
Adj Flow Rate, veh/h	1479	0	0	724	323	488
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	1881	0	0	1881	973	868
Arrive On Green	0.37	0.00	0.00	0.37	0.55	0.55
Sat Flow, veh/h	5368	0	0	5368	1757	1568
Grp Volume(v), veh/h	1479	0	0	724	323	488
Grp Sat Flow(s),veh/h/ln	1679	0	0	1679	1757	1568
Q Serve(g_s), s	28.7	0.0	0.0	11.6	11.1	22.2
Cycle Q Clear(g_c), s	28.7	0.0	0.0	11.6	11.1	22.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1881	0	0	1881	973	868
V/C Ratio(X)	0.79	0.00	0.00	0.38	0.33	0.56
Avail Cap(c_a), veh/h	2332	0	0	2332	973	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	0.0	25.2	13.4	15.9
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.1	0.9	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	0.0	0.0	5.4	5.6	10.1
LnGrp Delay(d), s/veh	32.1	0.0	0.0	25.4	14.3	18.5
LnGrp LOS	C			C	B	B
Approach Vol, veh/h	1479			724	811	
Approach Delay, s/veh	32.1			25.4	16.9	
Approach LOS	C			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		65.0		45.1				45.1
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		61.0		51.0				51.0
Max Q Clear Time (g_c+I1), s		24.2		30.7				13.6
Green Ext Time (p_c), s		2.8		10.4				5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.4
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑↑			↑↑↑↑	↰↰↑	↱
Traffic Volume (vph)	652	0	0	745	382	528
Future Volume (vph)	652	0	0	745	382	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.94	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7471			6346	3272	1427
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7471			6346	3272	1427
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	701	0	0	801	411	568
RTOR Reduction (vph)	0	0	0	0	18	18
Lane Group Flow (vph)	701	0	0	801	649	294
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	19.6			19.6	72.1	72.1
Effective Green, g (s)	19.6			19.6	72.1	72.1
Actuated g/C Ratio	0.20			0.20	0.72	0.72
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1468			1247	2366	1031
v/s Ratio Prot	0.09			c0.13	0.20	
v/s Ratio Perm						c0.21
v/c Ratio	0.48			0.64	0.27	0.29
Uniform Delay, d1	35.5			36.8	4.8	4.8
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.2			1.1	0.3	0.7
Delay (s)	35.8			38.0	5.1	5.5
Level of Service	D			D	A	A
Approach Delay (s/veh)	35.8			38.0	5.2	
Approach LOS	D			D	A	

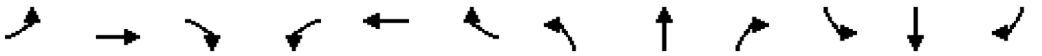
Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	99.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



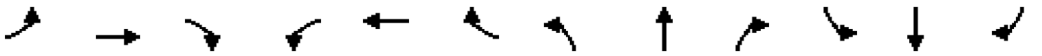
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1279	0	0	796	62	410
Future Volume (vph)	1279	0	0	796	62	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.88	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3574			3574	3192	1455
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3574			3574	3192	1455
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1437	0	0	894	70	461
RTOR Reduction (vph)	0	0	0	0	29	29
Lane Group Flow (vph)	1437	0	0	894	272	201
Confl. Peds. (#/hr)		1	1			
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	45.5			45.5	37.4	37.4
Effective Green, g (s)	45.5			45.5	37.4	37.4
Actuated g/C Ratio	0.50			0.50	0.41	0.41
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1788			1788	1313	598
v/s Ratio Prot	c0.40			0.25	0.09	
v/s Ratio Perm						c0.14
v/c Ratio	0.80			0.50	0.21	0.34
Uniform Delay, d1	19.0			15.1	17.2	18.3
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	2.7			0.2	0.4	1.5
Delay (s)	21.7			15.3	17.6	19.8
Level of Service	C			B	B	B
Approach Delay (s/veh)	21.7			15.3	18.5	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1123	0	0	844	197	32	0	120	0	0	0
Future Volume (vph)	1	1123	0	0	844	197	32	0	120	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00		0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			
Frt	1.00	1.00			0.97		1.00		0.85			
Flt Protected	0.95	1.00			1.00		0.95		1.00			
Satd. Flow (prot)	1787	3574			4969		1787		1579			
Flt Permitted	0.19	1.00			1.00		0.95		1.00			
Satd. Flow (perm)	364	3574			4969		1787		1579			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	1221	0	0	917	214	35	0	130	0	0	0
RTOR Reduction (vph)	0	0	0	0	52	0	0	0	79	0	0	0
Lane Group Flow (vph)	1	1221	0	0	1079	0	35	0	51	0	0	0
Confl. Peds. (#/hr)	1		7	7		1						
Confl. Bikes (#/hr)			7			1			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			1
Actuated Green, G (s)	28.0	28.0			28.0		23.2		23.2			
Effective Green, g (s)	28.0	28.0			28.0		23.2		23.2			
Actuated g/C Ratio	0.47	0.47			0.47		0.39		0.39			
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	172	1690			2350		700		618			
v/s Ratio Prot		c0.34			0.22		0.02					
v/s Ratio Perm	0.00								c0.03			
v/c Ratio	0.01	0.72			0.46		0.05		0.08			
Uniform Delay, d1	8.2	12.5			10.5		11.2		11.3			
Progression Factor	1.00	1.00			1.00		1.00		1.00			
Incremental Delay, d2	0.0	1.6			0.1		0.1		0.3			
Delay (s)	8.3	14.0			10.6		11.3		11.6			
Level of Service	A	B			B		B		B			
Approach Delay (s/veh)		14.0			10.6			11.5			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	59.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



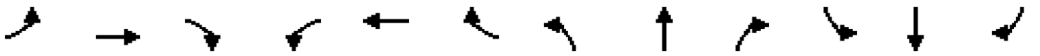
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	788	101	66	627	150	75	12	27	156	13	55
Future Volume (vph)	258	788	101	66	627	150	75	12	27	156	13	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1547	3400	5036	1544	3400	1845	1524	1752	1586	1490
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1547	3400	5036	1544	3400	1845	1524	1752	1586	1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	280	857	110	72	682	163	82	13	29	170	14	60
RTOR Reduction (vph)	0	0	75	0	0	124	0	0	22	0	20	25
Lane Group Flow (vph)	280	857	35	72	682	39	82	13	7	170	18	11
Confl. Peds. (#/hr)	2		1	1		2			9	9		
Confl. Bikes (#/hr)									3			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.4	26.3	26.3	5.7	19.6	19.6	20.4	20.4	20.4	13.6	13.6	26.0
Effective Green, g (s)	12.4	26.3	26.3	5.7	19.6	19.6	20.4	20.4	20.4	13.6	13.6	26.0
Actuated g/C Ratio	0.15	0.32	0.32	0.07	0.24	0.24	0.25	0.25	0.25	0.17	0.17	0.32
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	514	1615	496	236	1203	369	845	459	379	290	263	545
v/s Ratio Prot	c0.08	c0.17		0.02	0.14		c0.02	0.01		c0.10	0.01	0.00
v/s Ratio Perm			0.02			0.03			0.00			0.00
v/c Ratio	0.54	0.53	0.07	0.31	0.57	0.11	0.10	0.03	0.02	0.59	0.07	0.02
Uniform Delay, d1	32.2	22.8	19.4	36.3	27.5	24.4	23.7	23.3	23.2	31.6	28.9	19.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.3	0.1	0.7	0.6	0.1	0.2	0.1	0.1	3.0	0.1	0.0
Delay (s)	33.4	23.1	19.4	37.0	28.1	24.5	23.9	23.4	23.3	34.6	29.0	19.3
Level of Service	C	C	B	D	C	C	C	C	C	C	C	B
Approach Delay (s/veh)		25.1			28.1			23.7			31.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	36	0	0	12	0	0
Future Volume (vph)	36	0	0	12	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.98		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3396			1536		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3396			1536		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	38	0	0	13	0	0
RTOR Reduction (vph)	0	0	0	12	0	0
Lane Group Flow (vph)	38	0	0	1	0	0
Confl. Peds. (#/hr)	4			1	1	
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	0.8			0.7		
Effective Green, g (s)	0.8			0.7		
Actuated g/C Ratio	0.08			0.07		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	285			113		
v/s Ratio Prot	c0.01					
v/s Ratio Perm				c0.00		
v/c Ratio	0.13			0.01		
Uniform Delay, d1	4.0			4.1		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	4.2			4.1		
Level of Service	A			A		
Approach Delay (s/veh)	4.2		4.1			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-0.04		
Actuated Cycle Length (s)	9.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	968	456	363	711	8	196	24	106	12	68	90
Future Volume (vph)	92	968	456	363	711	8	196	24	106	12	68	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1736	3471	1525	1736	3471	1506	1649	1670	1528	1736	1671	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1736	3471	1525	1736	3471	1506	1649	1670	1528	1736	1671	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	95	998	470	374	733	8	202	25	109	12	70	93
RTOR Reduction (vph)	0	0	236	0	0	4	0	0	92	0	41	0
Lane Group Flow (vph)	95	998	234	374	733	4	113	114	17	12	122	0
Confl. Peds. (#/hr)	3		3	3		3			2	2		
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	9.0	38.0	38.0	27.5	56.5	56.5	17.2	17.2	17.2	12.4	12.4	
Effective Green, g (s)	9.0	38.0	38.0	27.5	56.5	56.5	17.2	17.2	17.2	12.4	12.4	
Actuated g/C Ratio	0.08	0.34	0.34	0.25	0.51	0.51	0.15	0.15	0.15	0.11	0.11	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	140	1187	521	429	1765	765	255	258	236	193	186	
v/s Ratio Prot	0.05	c0.29		c0.22	0.21		c0.07	0.07		0.01	c0.07	
v/s Ratio Perm			0.15			0.00			0.01			
v/c Ratio	0.68	0.84	0.45	0.87	0.42	0.01	0.44	0.44	0.07	0.06	0.66	
Uniform Delay, d1	49.6	33.8	28.4	40.1	17.0	13.5	42.6	42.6	40.1	44.1	47.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.3	5.5	0.6	17.4	0.2	0.0	5.5	5.4	0.6	0.1	8.1	
Delay (s)	62.0	39.3	29.0	57.5	17.2	13.5	48.1	48.0	40.7	44.3	55.4	
Level of Service	E	D	C	E	B	B	D	D	D	D	E	
Approach Delay (s/veh)		37.6			30.7			45.7			54.6	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	472	83	252	713	88	67	210	149	68	706	109
Future Volume (veh/h)	67	472	83	252	713	88	67	210	149	68	706	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	71	502	88	268	759	94	71	223	159	72	751	116
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	765	229	312	1394	506	125	1587	690	93	1645	715
Arrive On Green	0.05	0.15	0.15	0.18	0.27	0.27	0.04	0.45	0.45	0.05	0.46	0.46
Sat Flow, veh/h	1774	5085	1525	1774	5085	1543	3442	3539	1539	1774	3539	1538
Grp Volume(v), veh/h	71	502	88	268	759	94	71	223	159	72	751	116
Grp Sat Flow(s),veh/h/ln	1774	1695	1525	1774	1695	1543	1721	1770	1539	1774	1770	1538
Q Serve(g_s), s	3.7	8.6	4.8	13.6	11.8	4.0	1.9	3.4	5.9	3.7	13.3	4.0
Cycle Q Clear(g_c), s	3.7	8.6	4.8	13.6	11.8	4.0	1.9	3.4	5.9	3.7	13.3	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	765	229	312	1394	506	125	1587	690	93	1645	715
V/C Ratio(X)	0.77	0.66	0.38	0.86	0.54	0.19	0.57	0.14	0.23	0.77	0.46	0.16
Avail Cap(c_a), veh/h	230	1154	346	652	2364	800	223	1587	690	230	1645	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.1	35.4	37.0	28.6	22.3	43.9	15.0	15.7	43.3	16.8	14.3
Incr Delay (d2), s/veh	12.8	1.0	1.1	6.9	0.3	0.2	4.0	0.2	0.8	12.6	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.1	2.1	7.2	5.5	1.7	1.0	1.7	2.6	2.1	6.7	1.8
LnGrp Delay(d), s/veh	56.1	38.0	36.5	43.9	29.0	22.5	47.9	15.2	16.5	55.9	17.7	14.8
LnGrp LOS	E	D	D	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		661			1121			453			939	
Approach Delay, s/veh		39.8			32.0			20.8			20.3	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	45.5	20.2	17.9	7.4	47.0	8.8	29.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	37.0	34.0	21.0	6.0	43.0	12.0	43.0
Max Q Clear Time (g_c+I1), s	5.7	7.9	15.6	10.6	3.9	15.3	5.7	13.8
Green Ext Time (p_c), s	0.1	1.9	0.7	2.5	0.0	5.7	0.1	5.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	93	149	15	20	15	97	382	12	42	953	37
Future Volume (veh/h)	12	93	149	15	20	15	97	382	12	42	953	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	13	103	166	17	22	17	108	424	13	47	1059	41
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	252	207	160	252	211	425	2796	1249	788	2796	1234
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1344	1863	1530	1096	1863	1559	510	3539	1580	947	3539	1562
Grp Volume(v), veh/h	13	103	166	17	22	17	108	424	13	47	1059	41
Grp Sat Flow(s),veh/h/ln	1344	1863	1530	1096	1863	1559	510	1770	1580	947	1770	1562
Q Serve(g_s), s	0.9	5.4	11.3	1.6	1.1	1.0	8.6	3.1	0.2	1.3	9.6	0.6
Cycle Q Clear(g_c), s	2.0	5.4	11.3	7.0	1.1	1.0	18.3	3.1	0.2	4.4	9.6	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	252	207	160	252	211	425	2796	1249	788	2796	1234
V/C Ratio(X)	0.06	0.41	0.80	0.11	0.09	0.08	0.25	0.15	0.01	0.06	0.38	0.03
Avail Cap(c_a), veh/h	390	468	384	287	468	391	425	2796	1249	788	2796	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	42.6	45.1	45.8	40.7	40.6	6.1	2.7	2.4	3.2	3.4	2.4
Incr Delay (d2), s/veh	0.1	1.1	7.0	0.3	0.1	0.2	1.4	0.1	0.0	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.9	5.2	0.5	0.6	0.5	1.4	1.5	0.1	0.4	4.7	0.3
LnGrp Delay(d), s/veh	41.7	43.6	52.1	46.0	40.8	40.8	7.6	2.8	2.4	3.4	3.8	2.5
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		282			56			545			1147	
Approach Delay, s/veh		48.5			42.4			3.7			3.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		18.6		89.0		18.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		20.3		13.3		11.6		9.0
Green Ext Time (p_c), s		4.7		0.9		10.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	106	17	209	302	103	21	357	144	69	771	201
Future Volume (veh/h)	69	106	17	209	302	103	21	357	144	69	771	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	71	109	18	215	311	106	22	368	148	71	795	207
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	248	109	260	583	255	34	1341	531	92	2039	911
Arrive On Green	0.05	0.07	0.07	0.15	0.16	0.16	0.02	0.54	0.54	0.05	0.58	0.58
Sat Flow, veh/h	1774	3539	1556	1774	3539	1549	1774	2468	977	1774	3539	1582
Grp Volume(v), veh/h	71	109	18	215	311	106	22	262	254	71	795	207
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1774	1770	1549	1774	1770	1675	1774	1770	1582
Q Serve(g_s), s	3.4	2.5	0.9	10.0	6.8	5.2	1.0	6.8	6.9	3.4	10.4	5.4
Cycle Q Clear(g_c), s	3.4	2.5	0.9	10.0	6.8	5.2	1.0	6.8	6.9	3.4	10.4	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	92	248	109	260	583	255	34	961	910	92	2039	911
V/C Ratio(X)	0.77	0.44	0.16	0.83	0.53	0.42	0.65	0.27	0.28	0.77	0.39	0.23
Avail Cap(c_a), veh/h	271	749	329	626	1456	637	146	961	910	271	2039	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	37.9	37.2	35.3	32.5	31.8	41.4	10.4	10.5	39.8	9.9	8.8
Incr Delay (d2), s/veh	12.7	1.2	0.7	6.6	0.8	1.1	19.1	0.7	0.8	12.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.3	0.4	5.4	3.4	2.3	0.7	3.5	3.4	2.0	5.2	2.5
LnGrp Delay(d), s/veh	52.5	39.1	37.9	41.9	33.3	32.9	60.5	11.1	11.2	52.5	10.4	9.4
LnGrp LOS	D	D	D	D	C	C	E	B	B	D	B	A
Approach Vol, veh/h		198			632			538			1073	
Approach Delay, s/veh		43.8			36.1			13.2			13.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	50.2	16.5	10.0	5.6	53.0	8.4	18.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	43.0	30.0	18.0	7.0	49.0	13.0	35.0
Max Q Clear Time (g_c+I1), s	5.4	8.9	12.0	4.5	3.0	12.4	5.4	8.8
Green Ext Time (p_c), s	0.1	3.2	0.5	0.4	0.0	6.8	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	300	248	132	261	11	99	417	71	13	816	124
Future Volume (veh/h)	187	300	248	132	261	11	99	417	71	13	816	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	215	345	285	152	300	13	114	479	82	15	938	143
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	384	403	458	339	339	15	141	1564	681	24	1331	592
Arrive On Green	0.21	0.21	0.21	0.19	0.19	0.19	0.08	0.44	0.44	0.01	0.37	0.37
Sat Flow, veh/h	1792	1881	1551	1792	1787	77	1792	3574	1555	1792	3574	1591
Grp Volume(v), veh/h	215	345	285	152	0	313	114	479	82	15	938	143
Grp Sat Flow(s),veh/h/ln	1792	1881	1551	1792	0	1864	1792	1787	1555	1792	1787	1591
Q Serve(g_s), s	11.8	19.4	17.5	8.3	0.0	18.0	6.9	9.6	3.4	0.9	24.6	6.8
Cycle Q Clear(g_c), s	11.8	19.4	17.5	8.3	0.0	18.0	6.9	9.6	3.4	0.9	24.6	6.8
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	403	458	339	0	353	141	1564	681	24	1331	592
V/C Ratio(X)	0.56	0.86	0.62	0.45	0.00	0.89	0.81	0.31	0.12	0.63	0.70	0.24
Avail Cap(c_a), veh/h	456	478	520	390	0	406	179	1564	681	81	1331	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	41.6	33.7	39.5	0.0	43.5	49.9	20.1	18.4	54.1	29.4	23.8
Incr Delay (d2), s/veh	1.3	12.5	1.9	0.9	0.0	18.6	19.0	0.5	0.4	23.8	3.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	11.5	7.7	4.2	0.0	11.1	4.2	4.8	1.5	0.6	12.7	3.1
LnGrp Delay(d), s/veh	39.9	54.2	35.6	40.5	0.0	62.1	68.9	20.6	18.7	77.9	32.6	24.8
LnGrp LOS	D	D	D	D		E	E	C	B	E	C	C
Approach Vol, veh/h		845			465			675			1096	
Approach Delay, s/veh		44.3			55.0			28.5			32.2	
Approach LOS		D			D			C			C	

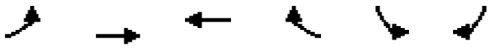
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	52.2		27.6	12.7	45.0		24.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	47.0		28.0	11.0	41.0		24.0
Max Q Clear Time (g_c+I1), s	2.9	11.6		21.4	8.9	26.6		20.0
Green Ext Time (p_c), s	0.0	3.7		2.2	0.0	5.8		0.9

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		38.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Future Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	152	1147	158	122	746	55	123	483	193	239	967	135
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1472	203	152	1571	468	185	1161	496	313	1858	553
Arrive On Green	0.11	0.33	0.33	0.09	0.31	0.31	0.05	0.33	0.33	0.09	0.37	0.37
Sat Flow, veh/h	1757	4451	613	1757	5036	1499	3408	3505	1497	3408	5036	1499
Grp Volume(v), veh/h	152	865	440	122	746	55	123	483	193	239	967	135
Grp Sat Flow(s),veh/h/ln	1757	1679	1707	1757	1679	1499	1704	1752	1497	1704	1679	1499
Q Serve(g_s), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Cycle Q Clear(g_c), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1110	564	152	1571	468	185	1161	496	313	1858	553
V/C Ratio(X)	0.82	0.78	0.78	0.80	0.47	0.12	0.67	0.42	0.39	0.76	0.52	0.24
Avail Cap(c_a), veh/h	350	1406	715	298	1958	583	272	1161	496	476	1858	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	30.3	30.3	45.0	27.9	24.7	46.5	26.0	25.7	44.5	24.7	22.0
Incr Delay (d2), s/veh	8.6	2.2	4.3	9.3	0.2	0.1	4.1	1.1	2.3	3.9	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	11.2	11.7	3.7	5.6	1.1	1.8	5.3	4.4	3.4	7.2	2.8
LnGrp Delay(d), s/veh	52.6	32.5	34.6	54.3	28.1	24.8	50.6	27.1	28.0	48.4	25.8	23.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1457			923			799			1341	
Approach Delay, s/veh		35.2			31.4			31.0			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	37.2	12.7	37.2	9.4	41.0	14.6	35.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	17.0	42.0	8.0	37.0	20.0	39.0
Max Q Clear Time (g_c+I1), s	8.9	12.7	8.8	25.3	5.6	17.0	10.5	14.0
Green Ext Time (p_c), s	0.4	3.5	0.2	7.8	0.1	7.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	166	1074	1057	171	381	383
Future Volume (veh/h)	166	1074	1057	171	381	383
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	173	1119	1101	178	397	399
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	210	2504	1461	236	1428	657
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4518	703	3408	1568
Grp Volume(v), veh/h	173	1119	849	430	397	399
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1698	1704	1568
Q Serve(g_s), s	9.2	13.7	21.5	21.5	7.3	18.9
Cycle Q Clear(g_c), s	9.2	13.7	21.5	21.5	7.3	18.9
Prop In Lane	1.00			0.41	1.00	1.00
Lane Grp Cap(c), veh/h	210	2504	1127	570	1428	657
V/C Ratio(X)	0.82	0.45	0.75	0.75	0.28	0.61
Avail Cap(c_a), veh/h	442	3798	1548	783	1428	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	15.5	28.2	28.2	18.2	21.6
Incr Delay (d2), s/veh	7.9	0.1	1.4	2.8	0.5	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	6.3	10.1	10.5	3.5	17.4
LnGrp Delay(d), s/veh	48.9	15.6	29.6	31.0	18.7	25.7
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		1292	1279		796	
Approach Delay, s/veh		20.1	30.1		22.2	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.5		44.0	15.4	36.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				72.0		40.0	24.0	44.0
Max Q Clear Time (g_c+I1), s				15.7		20.9	11.2	23.5
Green Ext Time (p_c), s				9.8		2.8	0.3	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	1085	103	211	1097	112	42	123	137	2	15	7
Future Volume (veh/h)	86	1085	103	211	1097	112	42	123	137	2	15	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	91	1154	110	224	1167	119	45	131	146	2	16	7
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	118	1697	162	274	2093	213	524	599	501	390	395	173
Arrive On Green	0.07	0.36	0.36	0.16	0.45	0.45	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	1757	4670	445	1757	4632	472	1363	1845	1541	1084	1216	532
Grp Volume(v), veh/h	91	829	435	224	846	440	45	131	146	2	0	23
Grp Sat Flow(s),veh/h/ln	1757	1679	1758	1757	1679	1747	1363	1845	1541	1084	0	1748
Q Serve(g_s), s	3.9	16.1	16.1	9.5	14.2	14.2	1.8	4.0	5.4	0.1	0.0	0.7
Cycle Q Clear(g_c), s	3.9	16.1	16.1	9.5	14.2	14.2	2.5	4.0	5.4	4.1	0.0	0.7
Prop In Lane	1.00		0.25	1.00		0.27	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	118	1220	639	274	1517	789	524	599	501	390	0	568
V/C Ratio(X)	0.77	0.68	0.68	0.82	0.56	0.56	0.09	0.22	0.29	0.01	0.00	0.04
Avail Cap(c_a), veh/h	365	2182	1142	754	2924	1521	524	599	501	390	0	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.3	20.7	20.7	31.4	15.5	15.5	18.6	18.9	19.4	20.4	0.0	17.8
Incr Delay (d2), s/veh	10.0	0.7	1.3	6.0	0.3	0.6	0.3	0.8	1.5	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	7.5	8.0	5.1	6.6	7.0	0.7	2.1	2.5	0.0	0.0	0.4
LnGrp Delay(d), s/veh	45.3	21.4	22.0	37.4	15.8	16.1	18.9	19.7	20.8	20.4	0.0	17.9
LnGrp LOS	D	C	C	D	B	B	B	B	C	C		B
Approach Vol, veh/h		1355			1510			322			25	
Approach Delay, s/veh		23.2			19.1			20.1			18.1	
Approach LOS		C			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	16.0	32.0		29.0	9.2	38.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	33.0	50.0		25.0	16.0	67.0
Max Q Clear Time (g_c+I1), s		7.4	11.5	18.1		6.1	5.9	16.2
Green Ext Time (p_c), s		1.1	0.6	9.9		0.1	0.1	11.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	428	36	49	258	28	24	191	68	62	189	43
Future Volume (veh/h)	65	428	36	49	258	28	24	191	68	62	189	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	71	470	40	54	284	31	26	210	75	68	208	47
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	279	799	68	204	778	84	40	1905	851	89	1626	359
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.54	0.54	0.05	0.57	0.57
Sat Flow, veh/h	1057	3301	280	884	3215	348	1774	3539	1582	1774	2875	635
Grp Volume(v), veh/h	71	251	259	54	155	160	26	210	75	68	126	129
Grp Sat Flow(s),veh/h/ln	1057	1770	1811	884	1770	1793	1774	1770	1582	1774	1770	1740
Q Serve(g_s), s	4.2	8.9	8.9	4.1	5.1	5.2	1.0	2.1	1.6	2.7	2.4	2.5
Cycle Q Clear(g_c), s	9.5	8.9	8.9	13.0	5.1	5.2	1.0	2.1	1.6	2.7	2.4	2.5
Prop In Lane	1.00		0.15	1.00		0.19	1.00		1.00	1.00		0.37
Lane Grp Cap(c), veh/h	279	428	438	204	428	434	40	1905	851	89	1001	984
V/C Ratio(X)	0.25	0.59	0.59	0.26	0.36	0.37	0.65	0.11	0.09	0.77	0.13	0.13
Avail Cap(c_a), veh/h	800	1301	1332	640	1301	1319	401	1905	851	602	1001	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	23.7	23.7	29.4	22.3	22.3	34.3	8.0	7.9	33.2	7.2	7.2
Incr Delay (d2), s/veh	0.5	1.3	1.3	0.7	0.5	0.5	16.2	0.1	0.2	12.8	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	4.5	4.6	1.0	2.6	2.6	0.7	1.0	0.8	1.6	1.2	1.3
LnGrp Delay(d), s/veh	26.7	25.0	25.0	30.1	22.8	22.8	50.5	8.1	8.1	46.0	7.4	7.5
LnGrp LOS	C	C	C	C	C	C	D	A	A	D	A	A
Approach Vol, veh/h		581			369			311			323	
Approach Delay, s/veh		25.2			23.9			11.7			15.6	
Approach LOS		C			C			B			B	

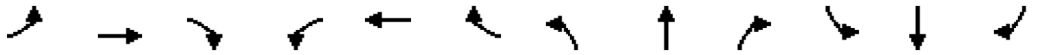
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	42.1		21.1	5.6	44.0		21.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	32.0		52.0	16.0	40.0		52.0
Max Q Clear Time (g_c+I1), s	4.7	4.1		11.5	3.0	4.5		15.0
Green Ext Time (p_c), s	0.1	1.4		3.4	0.0	1.4		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1125	73	427	373	0	67	0	522	0	0	0
Future Volume (veh/h)	0	1125	73	427	373	0	67	0	522	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1210	78	459	401	0	72	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	2461	158	319	2584	0	332	0	301	0	2	0
Arrive On Green	0.00	0.73	0.73	0.73	0.73	0.00	0.19	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	980	3371	217	427	3632	0	1749	0	1583	0	1863	0
Grp Volume(v), veh/h	0	634	654	459	401	0	72	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	980	1770	1818	427	1770	0	1749	0	1583	0	1863	0
Q Serve(g_s), s	0.0	15.1	15.2	57.8	3.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.1	15.2	73.0	3.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1292	1327	319	2584	0	332	0	301	0	2	0
V/C Ratio(X)	0.00	0.49	0.49	1.44	0.16	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1292	1327	319	2584	0	332	0	301	0	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.7	5.7	27.6	4.1	0.0	34.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	214.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.3	7.5	27.8	1.7	0.0	1.8	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	6.0	6.0	242.1	4.1	0.0	35.7	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	F	A		D					
Approach Vol, veh/h		1288			860			72			0	
Approach Delay, s/veh		6.0			131.2			35.7			0.0	
Approach LOS		A			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		23.0		77.0		0.0		77.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		19.0		73.0		16.0		73.0
Max Q Clear Time (g_c+I1), s		5.5		17.2		0.0		75.0
Green Ext Time (p_c), s		0.2		11.3		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.4
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	1195	165	405	544	77	60	259	230	55	612	27
Future Volume (veh/h)	112	1195	165	405	544	77	60	259	230	55	612	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	115	1232	170	418	561	79	62	267	237	57	631	28
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	1394	192	452	1712	756	80	468	386	73	853	38
Arrive On Green	0.08	0.31	0.31	0.25	0.48	0.48	0.04	0.25	0.25	0.04	0.25	0.25
Sat Flow, veh/h	1774	4504	621	1774	3539	1564	1774	1863	1537	1774	3447	153
Grp Volume(v), veh/h	115	927	475	418	561	79	62	267	237	57	324	335
Grp Sat Flow(s),veh/h/ln	1774	1695	1735	1774	1770	1564	1774	1863	1537	1774	1770	1830
Q Serve(g_s), s	7.1	29.0	29.0	25.6	10.8	3.1	3.9	14.0	15.2	3.5	18.8	18.8
Cycle Q Clear(g_c), s	7.1	29.0	29.0	25.6	10.8	3.1	3.9	14.0	15.2	3.5	18.8	18.8
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	143	1049	537	452	1712	756	80	468	386	73	438	453
V/C Ratio(X)	0.81	0.88	0.88	0.93	0.33	0.10	0.78	0.57	0.61	0.78	0.74	0.74
Avail Cap(c_a), veh/h	239	1095	560	541	1746	771	111	468	386	95	438	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	36.6	36.6	40.5	17.7	15.7	52.7	36.5	37.0	52.9	38.6	38.6
Incr Delay (d2), s/veh	10.2	8.5	15.1	20.0	0.1	0.1	20.1	5.0	7.1	25.4	10.7	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.8	16.1	15.0	5.3	1.3	2.3	7.8	7.2	2.3	10.5	10.8
LnGrp Delay(d), s/veh	60.6	45.1	51.6	60.5	17.8	15.7	72.8	41.5	44.1	78.3	49.3	49.0
LnGrp LOS	E	D	D	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		1517			1058			566			716	
Approach Delay, s/veh		48.3			34.5			46.0			51.5	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	32.0	32.4	38.5	9.0	31.6	13.0	57.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	28.0	34.0	36.0	7.0	27.0	15.0	55.0
Max Q Clear Time (g_c+I1), s	5.5	17.2	27.6	31.0	5.9	20.8	9.1	12.8
Green Ext Time (p_c), s	0.0	1.7	0.8	3.5	0.0	1.9	0.1	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1185	462	56	472	0	764	1203	324	0	0	0
Future Volume (veh/h)	0	1185	462	56	472	0	764	1203	324	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1247	486	59	497	0	804	1266	341			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2006	611	106	2352	0	1629	1888	508			
Arrive On Green	0.00	0.39	0.39	0.03	0.46	0.00	0.47	0.47	0.47			
Sat Flow, veh/h	0	5305	1563	3476	5305	0	3476	4029	1084			
Grp Volume(v), veh/h	0	1247	486	59	497	0	804	1076	531			
Grp Sat Flow(s),veh/h/ln	0	1712	1563	1738	1712	0	1738	1712	1690			
Q Serve(g_s), s	0.0	21.3	29.9	1.8	6.3	0.0	17.4	26.5	26.5			
Cycle Q Clear(g_c), s	0.0	21.3	29.9	1.8	6.3	0.0	17.4	26.5	26.5			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.64			
Lane Grp Cap(c), veh/h	0	2006	611	106	2352	0	1629	1604	792			
V/C Ratio(X)	0.00	0.62	0.80	0.56	0.21	0.00	0.49	0.67	0.67			
Avail Cap(c_a), veh/h	0	2453	747	160	2878	0	1629	1604	792			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	26.7	29.3	52.0	17.7	0.0	20.0	22.4	22.4			
Incr Delay (d2), s/veh	0.0	0.3	4.9	4.5	0.0	0.0	1.1	2.2	4.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	10.1	13.7	0.9	3.0	0.0	8.6	12.9	13.4			
LnGrp Delay(d), s/veh	0.0	27.0	34.3	56.5	17.7	0.0	21.1	24.7	26.9			
LnGrp LOS		C	C	E	B		C	C	C			
Approach Vol, veh/h		1733			556			2411				
Approach Delay, s/veh		29.1			21.9			24.0				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			7.3	46.5		55.0		53.8
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			5.0	52.0		51.0		61.0
Max Q Clear Time (g_c+I1), s			3.8	31.9		28.5		8.3
Green Ext Time (p_c), s			0.0	10.6		15.2		3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	1482	252	326	710	70	83	573	306	214	1389	405
Future Volume (veh/h)	196	1482	252	326	710	70	83	573	306	214	1389	405
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.85	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	211	1594	271	351	763	75	89	616	329	230	1494	435
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	1776	578	404	1960	579	139	1591	1073	291	1816	622
Arrive On Green	0.08	0.35	0.35	0.12	0.39	0.39	0.04	0.31	0.31	0.08	0.36	0.36
Sat Flow, veh/h	3442	5085	1473	3442	5085	1503	3442	5085	2382	3442	5085	1380
Grp Volume(v), veh/h	211	1594	271	351	763	75	89	616	329	230	1494	435
Grp Sat Flow(s),veh/h/ln	1721	1695	1473	1721	1695	1503	1721	1695	1191	1721	1695	1380
Q Serve(g_s), s	7.1	35.0	16.2	11.8	12.8	3.8	3.0	11.1	10.7	7.7	31.5	30.4
Cycle Q Clear(g_c), s	7.1	35.0	16.2	11.8	12.8	3.8	3.0	11.1	10.7	7.7	31.5	30.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	1776	578	404	1960	579	139	1591	1073	291	1816	622
V/C Ratio(X)	0.75	0.90	0.47	0.87	0.39	0.13	0.64	0.39	0.31	0.79	0.82	0.70
Avail Cap(c_a), veh/h	614	1816	590	410	1960	579	176	1591	1073	380	1816	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	36.3	26.9	51.0	26.1	23.4	55.6	31.6	22.1	52.8	34.4	27.1
Incr Delay (d2), s/veh	4.1	6.3	0.6	17.5	0.1	0.1	5.1	0.7	0.7	8.2	4.4	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	17.4	6.6	6.6	6.0	1.6	1.5	5.3	3.6	4.0	15.4	12.6
LnGrp Delay(d), s/veh	57.0	42.6	27.5	68.5	26.3	23.5	60.7	32.3	22.9	61.0	38.8	33.5
LnGrp LOS	E	D	C	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		2076			1189			1034			2159	
Approach Delay, s/veh		42.1			38.6			31.8			40.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	40.8	17.8	45.1	8.7	46.0	13.6	49.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	14.0	42.0	6.0	42.0	21.0	35.0
Max Q Clear Time (g_c+I1), s	9.7	13.1	13.8	37.0	5.0	33.5	9.1	14.8
Green Ext Time (p_c), s	0.2	5.9	0.0	4.1	0.0	6.5	0.5	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	308	1642	0	0	450	149	0	0	0	77	76	22
Future Volume (veh/h)	308	1642	0	0	450	149	0	0	0	77	76	22
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	331	1766	0	0	484	160				83	82	24
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	549	3678	0	0	2388	731				175	264	75
Arrive On Green	0.16	0.72	0.00	0.00	0.47	0.47				0.10	0.10	0.10
Sat Flow, veh/h	3476	5305	0	0	5305	1571				1792	2695	761
Grp Volume(v), veh/h	331	1766	0	0	484	160				83	51	55
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1571				1792	1712	1744
Q Serve(g_s), s	3.8	6.4	0.0	0.0	2.4	2.6				1.9	1.2	1.3
Cycle Q Clear(g_c), s	3.8	6.4	0.0	0.0	2.4	2.6				1.9	1.2	1.3
Prop In Lane	1.00		0.00	0.00		1.00				1.00		0.44
Lane Grp Cap(c), veh/h	549	3678	0	0	2388	731				175	168	171
V/C Ratio(X)	0.60	0.48	0.00	0.00	0.20	0.22				0.47	0.30	0.32
Avail Cap(c_a), veh/h	2585	10625	0	0	6327	1936				958	915	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	2.6	0.0	0.0	6.8	6.9				18.4	18.0	18.1
Incr Delay (d2), s/veh	1.1	0.1	0.0	0.0	0.0	0.1				2.0	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.0	0.0	0.0	1.1	1.1				1.0	0.6	0.7
LnGrp Delay(d), s/veh	17.9	2.7	0.0	0.0	6.8	7.0				20.3	19.1	19.2
LnGrp LOS	B	A			A	A				C	B	B
Approach Vol, veh/h		2097			644						189	
Approach Delay, s/veh		5.1			6.9						19.6	
Approach LOS		A			A						B	

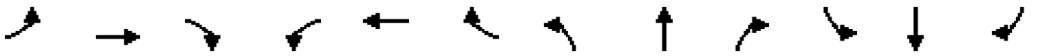
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		8.2		34.8			10.8	24.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		23.0		89.0			32.0	53.0
Max Q Clear Time (g_c+I1), s		3.9		8.4			5.8	4.6
Green Ext Time (p_c), s		0.8		22.4			1.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1344	51	322	947	35	38	8	102	362	384	29
Future Volume (veh/h)	26	1344	51	322	947	35	38	8	102	362	384	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	29	1510	57	362	1064	39	43	9	115	407	431	33
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	1668	63	421	2206	651	264	277	736	455	853	65
Arrive On Green	0.02	0.33	0.33	0.12	0.43	0.43	0.15	0.15	0.15	0.26	0.26	0.26
Sat Flow, veh/h	1774	5015	189	3442	5085	1501	1774	1863	2657	1774	3326	254
Grp Volume(v), veh/h	29	1021	546	362	1064	39	43	9	115	407	228	236
Grp Sat Flow(s),veh/h/ln	1774	1695	1814	1721	1695	1501	1774	1863	1329	1774	1770	1810
Q Serve(g_s), s	1.9	32.9	32.9	11.8	17.1	1.7	2.4	0.5	3.8	25.3	12.6	12.7
Cycle Q Clear(g_c), s	1.9	32.9	32.9	11.8	17.1	1.7	2.4	0.5	3.8	25.3	12.6	12.7
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	37	1128	604	421	2206	651	264	277	736	455	454	464
V/C Ratio(X)	0.78	0.90	0.91	0.86	0.48	0.06	0.16	0.03	0.16	0.89	0.50	0.51
Avail Cap(c_a), veh/h	93	1156	619	451	2206	651	264	277	736	512	511	522
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.7	36.4	36.4	49.2	23.2	18.8	42.5	41.6	31.8	41.0	36.3	36.3
Incr Delay (d2), s/veh	28.2	10.0	16.7	14.7	0.2	0.0	1.3	0.2	0.5	16.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	16.9	19.2	6.5	8.0	0.7	1.3	0.3	1.4	14.6	6.3	6.5
LnGrp Delay(d), s/veh	83.9	46.5	53.1	64.0	23.3	18.9	43.8	41.9	32.2	57.8	37.2	37.2
LnGrp LOS	F	D	D	E	C	B	D	D	C	E	D	D
Approach Vol, veh/h		1596			1465			167			871	
Approach Delay, s/veh		49.4			33.3			35.7			46.8	
Approach LOS		D			C			D			D	

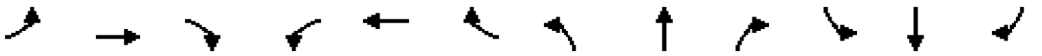
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.0	18.0	42.0		33.3	6.4	53.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		17.0	15.0	39.0		33.0	6.0	48.0
Max Q Clear Time (g_c+I1), s		5.8	13.8	34.9		27.3	3.9	19.1
Green Ext Time (p_c), s		0.4	0.2	3.2		2.0	0.0	8.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D



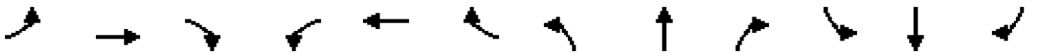
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	225	479	0	0	0	0	795	5	0	1509	0
Future Volume (vph)	39	225	479	0	0	0	0	795	5	0	1509	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					1.00			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1786	2814					7609			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1786	2814					7609			6471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	245	521	0	0	0	0	864	5	0	1640	0
RTOR Reduction (vph)	0	0	18	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	38	249	503	0	0	0	0	869	0	0	1640	0
Confl. Peds. (#/hr)							6		16	16		6
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	23.1	23.1	23.1					62.2			62.2	
Effective Green, g (s)	23.1	23.1	23.1					62.2			62.2	
Actuated g/C Ratio	0.25	0.25	0.25					0.67			0.67	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	420	442	696					5072			4314	
v/s Ratio Prot	0.02	0.14						0.11			c0.25	
v/s Ratio Perm			c0.18									
v/c Ratio	0.09	0.56	0.72					0.17			0.38	
Uniform Delay, d1	27.0	30.7	32.2					5.9			6.9	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.1	1.6	3.7					0.1			0.3	
Delay (s)	27.1	32.3	35.9					5.9			7.2	
Level of Service	C	C	D					A			A	
Approach Delay (s/veh)		34.4			0.0			5.9			7.2	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	93.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1346	566	133	568	0	559	0	59	204	0	4
Future Volume (vph)	0	1346	566	133	568	0	559	0	59	204	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.98	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5920	1231	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5920	1231	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1447	609	143	611	0	601	0	63	219	0	4
RTOR Reduction (vph)	0	26	208	0	0	0	0	0	39	0	0	3
Lane Group Flow (vph)	0	1665	157	143	611	0	601	0	24	219	0	1
Confl. Peds. (#/hr)			18	18								
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		47.5	47.5	9.9	61.4		41.3		41.3	41.3		41.3
Effective Green, g (s)		47.5	47.5	9.9	61.4		41.3		41.3	41.3		41.3
Actuated g/C Ratio		0.43	0.43	0.09	0.55		0.37		0.37	0.37		0.37
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2540	528	310	2848		1293		596	1293		596
v/s Ratio Prot		c0.28		c0.04	0.12							
v/s Ratio Perm			0.13				c0.17		0.01	0.06		0.00
v/c Ratio		0.66	0.30	0.46	0.21		0.46		0.04	0.17		0.00
Uniform Delay, d1		25.1	20.7	47.9	12.5		26.3		22.1	23.2		21.8
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.6	0.3	1.1	0.0		1.2		0.1	0.3		0.0
Delay (s)		25.7	21.0	49.0	12.5		27.5		22.2	23.5		21.8
Level of Service		C	C	D	B		C		C	C		C
Approach Delay (s/veh)		24.9			19.4			27.0			23.5	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	110.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	125	120	355	38	644	0	35	1640	29
Future Volume (vph)	0	0	0	125	120	355	38	644	0	35	1640	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3378	2814	3467	6471		1787	6471	1553
Flt Permitted				0.95	0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3378	2814	3467	6471		1787	6471	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	136	130	386	41	700	0	38	1783	32
RTOR Reduction (vph)	0	0	0	0	0	321	0	0	0	0	0	10
Lane Group Flow (vph)	0	0	0	87	179	65	41	700	0	38	1783	22
Confl. Peds. (#/hr)							8		15	15		8
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				17.8	17.8	17.8	4.1	70.9		5.0	71.8	71.8
Effective Green, g (s)				17.8	17.8	17.8	4.1	70.9		5.0	71.8	71.8
Actuated g/C Ratio				0.17	0.17	0.17	0.04	0.67		0.05	0.68	0.68
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				273	568	473	134	4340		84	4395	1054
v/s Ratio Prot				c0.05	0.05		0.01	0.11		c0.02	c0.28	
v/s Ratio Perm						0.02						0.01
v/c Ratio				0.32	0.32	0.14	0.31	0.16		0.45	0.41	0.02
Uniform Delay, d1				38.6	38.6	37.4	49.4	6.4		49.0	7.5	5.5
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.7	0.3	0.1	1.3	0.1		3.8	0.3	0.0
Delay (s)				39.3	38.9	37.5	50.7	6.5		52.9	7.8	5.5
Level of Service				D	D	D	D	A		D	A	A
Approach Delay (s/veh)		0.0			38.2			8.9			8.7	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	105.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	101	1520	743	203	53	147
Future Volume (veh/h)	101	1520	743	203	53	147
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	111	1670	816	223	58	162
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	146	2975	1674	445	784	699
Arrive On Green	0.08	0.46	0.33	0.33	0.44	0.44
Sat Flow, veh/h	1792	6735	5383	1360	1792	1599
Grp Volume(v), veh/h	111	1670	772	267	58	162
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1626	1792	1599
Q Serve(g_s), s	4.7	14.6	9.9	10.3	1.5	4.9
Cycle Q Clear(g_c), s	4.7	14.6	9.9	10.3	1.5	4.9
Prop In Lane	1.00			0.84	1.00	1.00
Lane Grp Cap(c), veh/h	146	2975	1587	532	784	699
V/C Ratio(X)	0.76	0.56	0.49	0.50	0.07	0.23
Avail Cap(c_a), veh/h	622	6493	2934	983	784	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	15.3	20.9	21.1	12.7	13.7
Incr Delay (d2), s/veh	7.9	0.2	0.2	0.7	0.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	6.5	4.5	4.7	0.8	5.6
LnGrp Delay(d), s/veh	42.9	15.5	21.2	21.8	12.9	14.5
LnGrp LOS	D	B	C	C	B	B
Approach Vol, veh/h		1781	1039		220	
Approach Delay, s/veh		17.2	21.3		14.1	
Approach LOS		B	C		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				39.7		38.0	10.3	29.4
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				78.0		34.0	27.0	47.0
Max Q Clear Time (g_c+I1), s				16.6		6.9	6.7	12.3
Green Ext Time (p_c), s				19.1		0.7	0.2	8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	NWL2	NWR
Lane Configurations										
Traffic Volume (vph)	2	0	1	64	37	18	90	87	10	10
Future Volume (vph)	2	0	1	64	37	18	90	87	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	0.88	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	0.95		1.00	1.00	1.00	0.85
Flt Protected	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	1641		1636	2584	3100		1641	3282	1641	1468
Flt Permitted	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1641		1636	2584	3100		1641	3282	1641	1468
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	3	0	1	85	49	24	120	116	13	13
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	3	0	1	85	73	0	120	116	13	13
Confl. Peds. (#/hr)			2			5				
Confl. Bikes (#/hr)						1				
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA	Prot	Prot
Protected Phases	4	4	8	1	2		1	6	7	7
Permitted Phases				8						
Actuated Green, G (s)	1.0		0.9	11.6	46.7		10.7	61.4	2.6	2.6
Effective Green, g (s)	1.0		0.9	11.6	46.7		10.7	61.4	2.6	2.6
Actuated g/C Ratio	0.01		0.01	0.14	0.57		0.13	0.75	0.03	0.03
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	20		17	492	1767		214	2460	52	46
v/s Ratio Prot	c0.00		0.00	c0.02	0.02		c0.07	c0.04	0.01	c0.01
v/s Ratio Perm				0.01						
v/c Ratio	0.15		0.06	0.17	0.04		0.56	0.05	0.25	0.28
Uniform Delay, d1	40.0		40.1	30.9	7.7		33.4	2.7	38.7	38.7
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	3.5		1.5	0.2	0.0		3.3	0.0	2.5	3.4
Delay (s)	43.5		41.5	31.1	7.8		36.7	2.7	41.2	42.1
Level of Service	D		D	C	A		D	A	D	D
Approach Delay (s/veh)					7.8			20.0		
Approach LOS					A			C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	81.9	Sum of lost time (s)	20.0
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	0	0	0	0	0	0	47	0	14	68	3
Future Volume (veh/h)	4	0	0	0	0	0	0	47	0	14	68	3
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	0	1681				0	1681	0	1681	1681	1900
Adj Flow Rate, veh/h	6	0	0				0	69	0	21	100	4
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.68	0.68	0.68				0.68	0.68	0.68	0.68	0.68	0.68
Percent Heavy Veh, %	13	0	13				0	13	0	13	13	13
Cap, veh/h	10	0	9				0	2712	0	29	2848	113
Arrive On Green	0.01	0.00	0.00				0.00	0.85	0.00	0.02	0.91	0.91
Sat Flow, veh/h	1601	0	1429				0	3363	0	1601	3132	125
Grp Volume(v), veh/h	6	0	0				0	69	0	21	51	53
Grp Sat Flow(s),veh/h/ln	1601	0	1429				0	1597	0	1601	1597	1659
Q Serve(g_s), s	0.4	0.0	0.0				0.0	0.3	0.0	1.2	0.3	0.3
Cycle Q Clear(g_c), s	0.4	0.0	0.0				0.0	0.3	0.0	1.2	0.3	0.3
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	10	0	9				0	2712	0	29	1452	1509
V/C Ratio(X)	0.61	0.00	0.00				0.00	0.03	0.00	0.73	0.03	0.04
Avail Cap(c_a), veh/h	440	0	393				0	2712	0	694	1452	1509
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	0.0	0.0				0.0	1.1	0.0	46.2	0.4	0.4
Incr Delay (d2), s/veh	47.9	0.0	0.0				0.0	0.0	0.0	29.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0				0.0	0.1	0.0	0.8	0.1	0.1
LnGrp Delay(d), s/veh	94.8	0.0	0.0				0.0	1.1	0.0	75.8	0.4	0.4
LnGrp LOS	F							A		E	A	A
Approach Vol, veh/h		6						69			125	
Approach Delay, s/veh		94.8						1.1			13.1	
Approach LOS		F						A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.7	84.3		4.6		90.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	41.0	41.0		26.0		86.0		
Max Q Clear Time (g_c+I1), s	3.2	2.3		2.4		2.3		
Green Ext Time (p_c), s	0.0	0.4		0.0		0.6		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.4

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	4	38	6	5	57	12
Future Vol, veh/h	4	38	6	5	57	12
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	6	54	8	7	80	17

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	182	10	0	0	16	0
Stage 1	13	-	-	-	-	-
Stage 2	169	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	796	1075	-	-	1615	-
Stage 1	1014	-	-	-	-	-
Stage 2	850	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	755	1073	-	-	1614	-
Mov Cap-2 Maneuver	755	-	-	-	-	-
Stage 1	1013	-	-	-	-	-
Stage 2	808	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.7	0	6.1
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	1032	1614	-
HCM Lane V/C Ratio	-	-	0.057	0.05	-
HCM Control Delay (s/veh)	-	-	8.7	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	959	21	0	843	0	7
Future Vol, veh/h	959	21	0	843	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1042	23	0	916	0	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	521
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	-	-	0	-	0	426
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	426
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	426	-	-	-
HCM Lane V/C Ratio	0.018	-	-	-
HCM Control Delay (s/veh)	13.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Future Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	284	827	180	195	630	59	60	802	81	132	1114	212
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	355	987	407	279	786	73	198	1329	134	309	1561	646
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.03	0.41	0.41	0.06	0.44	0.44
Sat Flow, veh/h	1774	3539	1460	1774	3244	303	1774	3217	325	1774	3539	1463
Grp Volume(v), veh/h	284	827	180	195	343	346	60	441	442	132	1114	212
Grp Sat Flow(s),veh/h/ln	1774	1770	1460	1774	1770	1777	1774	1770	1772	1774	1770	1463
Q Serve(g_s), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Cycle Q Clear(g_c), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	355	987	407	279	429	431	198	731	732	309	1561	646
V/C Ratio(X)	0.80	0.84	0.44	0.70	0.80	0.80	0.30	0.60	0.60	0.43	0.71	0.33
Avail Cap(c_a), veh/h	469	1171	483	360	488	490	207	731	732	350	1561	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	36.9	32.3	29.0	38.7	38.8	20.7	24.9	24.9	18.6	24.8	19.9
Incr Delay (d2), s/veh	7.2	4.8	0.8	4.1	8.2	8.4	0.8	3.7	3.7	0.9	2.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	12.4	4.5	4.6	10.7	10.8	1.1	11.0	11.1	2.2	14.2	4.4
LnGrp Delay(d), s/veh	33.8	41.7	33.0	33.1	46.9	47.1	21.5	28.6	28.6	19.6	27.6	21.2
LnGrp LOS	C	D	C	C	D	D	C	C	C	B	C	C
Approach Vol, veh/h		1291			884			943			1458	
Approach Delay, s/veh		38.7			44.0			28.2			25.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	15.0	34.3	7.4	52.0	19.0	30.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	16.0	36.0	4.0	48.0	22.0	30.0
Max Q Clear Time (g_c+I1), s	6.5	23.2	10.8	25.9	4.1	29.9	14.5	21.9
Green Ext Time (p_c), s	0.1	5.5	0.2	4.4	0.0	8.4	0.5	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Future Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	179	927	108	153	933	89	127	613	111	209	1062	144
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	213	1096	128	185	1176	466	262	1288	228	379	1694	495
Arrive On Green	0.12	0.34	0.34	0.10	0.33	0.33	0.07	0.30	0.30	0.10	0.33	0.33
Sat Flow, veh/h	1792	3181	371	1792	3574	1417	1792	4338	769	1792	5136	1500
Grp Volume(v), veh/h	179	521	514	153	933	89	127	481	243	209	1062	144
Grp Sat Flow(s),veh/h/ln	1792	1787	1764	1792	1787	1417	1792	1712	1684	1792	1712	1500
Q Serve(g_s), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Cycle Q Clear(g_c), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	213	616	608	185	1176	466	262	1017	500	379	1694	495
V/C Ratio(X)	0.84	0.85	0.85	0.83	0.79	0.19	0.48	0.47	0.49	0.55	0.63	0.29
Avail Cap(c_a), veh/h	330	763	753	278	1422	564	316	1017	500	479	1694	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	31.2	31.2	45.3	31.4	24.8	23.9	29.6	29.8	21.5	29.2	25.6
Incr Delay (d2), s/veh	10.9	7.3	7.4	11.8	2.6	0.2	1.4	1.6	3.4	1.3	1.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	14.8	14.7	4.9	12.5	1.8	2.6	5.8	6.1	4.0	8.7	3.2
LnGrp Delay(d), s/veh	55.3	38.5	38.6	57.1	34.0	24.9	25.3	31.2	33.1	22.8	30.9	27.1
LnGrp LOS	E	D	D	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1214			1175			851			1415	
Approach Delay, s/veh		41.0			36.3			30.9			29.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	34.6	14.7	39.5	10.9	38.0	16.3	37.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	28.0	16.0	44.0	10.0	34.0	19.0	41.0
Max Q Clear Time (g_c+I1), s	10.0	14.2	10.6	29.8	7.0	20.0	12.1	26.4
Green Ext Time (p_c), s	0.3	3.9	0.2	5.7	0.1	6.6	0.3	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	1123	381	189	866	100	605	620	252	141	937	413
Future Volume (veh/h)	182	1123	381	189	866	100	605	620	252	141	937	413
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	200	1234	419	208	952	110	665	681	277	155	1030	454
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1392	425	265	1274	147	733	2291	704	213	1523	459
Arrive On Green	0.07	0.27	0.27	0.08	0.28	0.28	0.21	0.45	0.45	0.06	0.30	0.30
Sat Flow, veh/h	3442	5085	1554	3442	4609	531	3442	5085	1563	3442	5085	1533
Grp Volume(v), veh/h	200	1234	419	208	699	363	665	681	277	155	1030	454
Grp Sat Flow(s),veh/h/ln	1721	1695	1554	1721	1695	1749	1721	1695	1563	1721	1695	1533
Q Serve(g_s), s	6.7	27.2	31.3	6.9	22.0	22.1	22.0	9.9	13.8	5.2	20.8	34.5
Cycle Q Clear(g_c), s	6.7	27.2	31.3	6.9	22.0	22.1	22.0	9.9	13.8	5.2	20.8	34.5
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1392	425	265	937	484	733	2291	704	213	1523	459
V/C Ratio(X)	0.78	0.89	0.99	0.78	0.75	0.75	0.91	0.30	0.39	0.73	0.68	0.99
Avail Cap(c_a), veh/h	265	1392	425	294	957	494	795	2291	704	294	1523	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	40.7	42.2	53.0	38.6	38.6	44.9	20.4	21.5	53.9	36.0	40.8
Incr Delay (d2), s/veh	13.7	7.3	39.6	11.9	3.2	6.2	13.5	0.3	1.6	5.5	2.4	39.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.6	18.0	3.7	10.7	11.5	11.8	4.7	6.3	2.6	10.1	19.6
LnGrp Delay(d), s/veh	66.8	48.0	81.8	64.9	41.7	44.8	58.4	20.7	23.1	59.4	38.4	80.2
LnGrp LOS	E	D	F	E	D	D	E	C	C	E	D	F
Approach Vol, veh/h		1853			1270			1623			1639	
Approach Delay, s/veh		57.7			46.4			36.6			52.0	
Approach LOS		E			D			D			D	

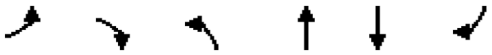
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	56.7	13.0	36.0	28.9	39.0	12.7	36.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	52.0	10.0	32.0	27.0	35.0	9.0	33.0
Max Q Clear Time (g_c+I1), s	7.2	15.8	8.9	33.3	24.0	36.5	8.7	24.1
Green Ext Time (p_c), s	0.1	7.0	0.1	0.0	0.9	0.0	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.6
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	72	773	679	0	15	1519
Future Volume (vph)	72	773	679	0	15	1519
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.87	0.85	1.00		1.00	1.00
Flt Protected	0.99	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3102	1427	5036		1752	6346
Flt Permitted	0.99	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3102	1427	5036		1752	6346
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	74	797	700	0	15	1566
RTOR Reduction (vph)	168	168	0	0	0	0
Lane Group Flow (vph)	305	230	700	0	15	1566
Confl. Peds. (#/hr)				17	17	
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	18.1	18.1	52.6		1.2	57.8
Effective Green, g (s)	18.1	18.1	52.6		1.2	57.8
Actuated g/C Ratio	0.22	0.22	0.63		0.01	0.69
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	669	307	3157		25	4371
v/s Ratio Prot	0.10		0.14		0.01	c0.25
v/s Ratio Perm		c0.16				
v/c Ratio	0.46	0.75	0.22		0.60	0.36
Uniform Delay, d1	28.6	30.8	6.8		41.1	5.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.5	9.6	0.2		34.4	0.2
Delay (s)	29.1	40.4	6.9		75.6	5.6
Level of Service	C	D	A		E	A
Approach Delay (s/veh)	34.3		6.9			6.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	83.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	206	259	33	628	985	0
Future Volume (veh/h)	206	259	33	628	985	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	217	273	35	661	1037	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	671	309	44	4647	3384	0
Arrive On Green	0.20	0.20	0.03	0.73	0.67	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	217	273	35	661	1037	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	6.2	19.2	2.2	3.5	9.6	0.0
Cycle Q Clear(g_c), s	6.2	19.2	2.2	3.5	9.6	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	671	309	44	4647	3384	0
V/C Ratio(X)	0.32	0.88	0.79	0.14	0.31	0.00
Avail Cap(c_a), veh/h	872	401	217	4647	3384	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	44.2	54.9	4.5	7.7	0.0
Incr Delay (d2), s/veh	0.3	16.7	26.1	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	16.9	1.4	1.5	4.5	0.0
LnGrp Delay(d), s/veh	39.3	61.0	81.0	4.6	7.9	0.0
LnGrp LOS	D	E	F	A	A	
Approach Vol, veh/h	490			696	1037	
Approach Delay, s/veh	51.4			8.4	7.9	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		87.0		26.3	6.9	80.1		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		83.0		29.0	14.0	65.0		
Max Q Clear Time (g_c+I1), s		5.5		21.2	4.2	11.6		
Green Ext Time (p_c), s		5.2		1.1	0.0	9.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	787	87	220	468	80	74	432	218	70	490	116
Future Volume (veh/h)	98	787	87	220	468	80	74	432	218	70	490	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.86	1.00		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	105	846	94	237	503	86	80	465	234	75	527	125
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	167	1198	311	321	1426	381	133	2183	587	126	2172	585
Arrive On Green	0.05	0.24	0.24	0.10	0.29	0.29	0.04	0.45	0.45	0.04	0.44	0.44
Sat Flow, veh/h	3312	4893	1270	3312	4893	1308	3312	4893	1317	3312	4893	1317
Grp Volume(v), veh/h	105	846	94	237	503	86	80	465	234	75	527	125
Grp Sat Flow(s),veh/h/ln	1656	1631	1270	1656	1631	1308	1656	1631	1317	1656	1631	1317
Q Serve(g_s), s	2.9	14.5	5.5	6.4	7.5	4.6	2.2	5.3	11.0	2.0	6.2	5.4
Cycle Q Clear(g_c), s	2.9	14.5	5.5	6.4	7.5	4.6	2.2	5.3	11.0	2.0	6.2	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	1198	311	321	1426	381	133	2183	587	126	2172	585
V/C Ratio(X)	0.63	0.71	0.30	0.74	0.35	0.23	0.60	0.21	0.40	0.60	0.24	0.21
Avail Cap(c_a), veh/h	360	1970	511	649	2396	641	324	2183	587	288	2172	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	31.7	28.3	40.4	25.7	24.7	43.4	15.6	17.1	43.5	15.9	15.7
Incr Delay (d2), s/veh	3.9	0.8	0.5	3.3	0.1	0.3	4.3	0.2	2.0	4.4	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.6	2.0	3.1	3.4	1.7	1.1	2.5	4.3	1.0	2.8	2.1
LnGrp Delay(d), s/veh	46.7	32.5	28.8	43.7	25.9	25.0	47.7	15.8	19.2	47.9	16.2	16.5
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		1045			826			779			727	
Approach Delay, s/veh		33.6			30.9			20.1			19.5	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	45.0	12.9	26.5	7.7	44.8	8.6	30.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	41.0	18.0	37.0	9.0	40.0	10.0	45.0
Max Q Clear Time (g_c+I1), s	4.0	13.0	8.4	16.5	4.2	8.2	4.9	9.5
Green Ext Time (p_c), s	0.1	4.2	0.5	6.0	0.1	4.4	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Future Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.89	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	118	556	223	172	503	242	166	516	144	234	799	52
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	773	300	212	897	355	206	1246	333	279	1747	113
Arrive On Green	0.08	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.16	0.36	0.36
Sat Flow, veh/h	1774	3539	1373	1774	3539	1402	1774	3906	1044	1774	4853	314
Grp Volume(v), veh/h	118	556	223	172	503	242	166	445	215	234	557	294
Grp Sat Flow(s),veh/h/ln	1774	1770	1373	1774	1770	1402	1774	1695	1560	1774	1695	1776
Q Serve(g_s), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Cycle Q Clear(g_c), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.18
Lane Grp Cap(c), veh/h	150	773	300	212	897	355	206	1081	497	279	1221	640
V/C Ratio(X)	0.78	0.72	0.74	0.81	0.56	0.68	0.81	0.41	0.43	0.84	0.46	0.46
Avail Cap(c_a), veh/h	309	1192	462	453	1480	586	453	1081	497	577	1221	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	31.2	31.4	36.9	28.0	29.0	37.1	23.0	23.2	35.2	21.1	21.1
Incr Delay (d2), s/veh	8.7	1.3	3.6	7.2	0.6	2.3	7.3	1.2	2.7	6.7	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.2	5.2	4.4	5.2	5.4	4.2	4.3	4.4	5.9	5.2	5.7
LnGrp Delay(d), s/veh	47.3	32.5	35.0	44.2	28.5	31.3	44.4	24.1	25.9	41.9	22.3	23.5
LnGrp LOS	D	C	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		897			917			826			1085	
Approach Delay, s/veh		35.0			32.2			28.7			26.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	31.5	14.3	22.8	14.0	35.0	11.3	25.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	25.0	22.0	29.0	22.0	31.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	13.0	11.4	10.1	15.0	9.9	12.9	7.6	15.4
Green Ext Time (p_c), s	0.5	3.4	0.3	3.8	0.3	5.0	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Future Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	195	911	121	423	953	137	131	498	92	275	904	72
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1196	158	518	1194	517	196	1622	483	356	1750	139
Arrive On Green	0.08	0.26	0.26	0.15	0.34	0.34	0.06	0.32	0.32	0.10	0.37	0.37
Sat Flow, veh/h	3442	4523	598	3442	3539	1534	3442	5085	1514	3442	4788	380
Grp Volume(v), veh/h	195	682	350	423	953	137	131	498	92	275	639	337
Grp Sat Flow(s),veh/h/ln	1721	1695	1731	1721	1770	1534	1721	1695	1514	1721	1695	1778
Q Serve(g_s), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Cycle Q Clear(g_c), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	268	896	458	518	1194	517	196	1622	483	356	1239	650
V/C Ratio(X)	0.73	0.76	0.77	0.82	0.80	0.26	0.67	0.31	0.19	0.77	0.52	0.52
Avail Cap(c_a), veh/h	419	1205	615	839	1689	732	315	1622	483	594	1239	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	33.4	33.4	40.5	29.6	23.7	45.5	25.3	24.3	43.0	24.4	24.5
Incr Delay (d2), s/veh	3.8	2.0	4.0	3.3	1.9	0.3	3.9	0.5	0.9	3.6	1.5	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.8	9.3	5.8	12.0	2.8	1.9	3.5	1.9	3.8	7.0	7.6
LnGrp Delay(d), s/veh	48.2	35.4	37.4	43.8	31.5	24.0	49.4	25.8	25.2	46.6	26.0	27.4
LnGrp LOS	D	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1227			1513			721			1251	
Approach Delay, s/veh		38.0			34.2			30.0			30.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	35.4	18.8	30.0	9.6	40.0	11.7	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	28.0	24.0	35.0	9.0	36.0	12.0	47.0
Max Q Clear Time (g_c+I1), s	9.7	9.3	13.7	20.4	5.7	16.6	7.5	26.1
Green Ext Time (p_c), s	0.5	3.3	1.1	5.7	0.1	6.0	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Future Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	157	95	285	23	86	66	161	818	11	43	1382	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	3	495	37	119	495	191	2864	38	55	2235	218
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.11	0.55	0.55	0.03	0.47	0.47
Sat Flow, veh/h	0	9	1561	0	375	1559	1792	5217	70	1792	4727	462
Grp Volume(v), veh/h	252	0	285	109	0	66	161	536	293	43	1001	516
Grp Sat Flow(s),veh/h/ln	9	0	1561	375	0	1559	1792	1712	1864	1792	1712	1765
Q Serve(g_s), s	0.0	0.0	17.8	0.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Cycle Q Clear(g_c), s	37.0	0.0	17.8	37.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Prop In Lane	0.62		1.00	0.21		1.00	1.00		0.04	1.00		0.26
Lane Grp Cap(c), veh/h	53	0	495	157	0	495	191	1879	1023	55	1619	834
V/C Ratio(X)	4.75	0.00	0.58	0.70	0.00	0.13	0.84	0.29	0.29	0.78	0.62	0.62
Avail Cap(c_a), veh/h	53	0	495	157	0	495	323	1879	1023	108	1619	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	33.2	32.6	0.0	28.4	51.1	14.1	14.1	56.1	22.9	22.9
Incr Delay (d2), s/veh	1729.6	0.0	1.6	12.6	0.0	0.1	9.5	0.4	0.7	20.4	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.2	0.0	7.9	3.1	0.0	1.5	5.6	4.7	5.2	1.7	12.4	13.1
LnGrp Delay(d), s/veh	1785.8	0.0	34.9	45.2	0.0	28.5	60.6	14.5	14.8	76.5	24.7	26.3
LnGrp LOS	F		C	D		C	E	B	B	E	C	C
Approach Vol, veh/h		537			175			990			1560	
Approach Delay, s/veh		856.5			38.9			22.0			26.6	
Approach LOS		F			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	68.0		41.0	16.5	59.1		41.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	64.0		37.0	21.0	50.0		37.0
Max Q Clear Time (g_c+I1), s	4.8	11.8		39.0	12.3	27.4		39.0
Green Ext Time (p_c), s	0.0	5.9		0.0	0.2	10.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		162.5
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Future Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.74		0.63	0.75		0.63	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	81	65	98	79	38	38	593	95	66	1393	12
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	314	168	189	314	168	303	2424	1022	590	2486	21
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.03	0.68	0.68	0.03	0.69	0.69
Sat Flow, veh/h	935	1863	996	925	1863	996	1774	3539	1492	1774	3594	31
Grp Volume(v), veh/h	9	81	65	98	79	38	38	593	95	66	686	719
Grp Sat Flow(s),veh/h/ln	935	1863	996	925	1863	996	1774	1770	1492	1774	1770	1855
Q Serve(g_s), s	0.9	4.0	6.1	10.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Cycle Q Clear(g_c), s	4.8	4.0	6.1	14.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	192	314	168	189	314	168	303	2424	1022	590	1224	1283
V/C Ratio(X)	0.05	0.26	0.39	0.52	0.25	0.23	0.13	0.24	0.09	0.11	0.56	0.56
Avail Cap(c_a), veh/h	319	567	303	315	567	303	326	2424	1022	599	1224	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	38.0	38.9	44.4	38.0	37.8	6.6	6.3	5.6	4.6	8.2	8.2
Incr Delay (d2), s/veh	0.1	0.4	1.5	2.2	0.4	0.7	0.2	0.2	0.2	0.1	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.1	1.8	2.9	2.0	1.0	0.3	3.3	1.0	0.5	10.5	11.0
LnGrp Delay(d), s/veh	40.1	38.4	40.3	46.6	38.4	38.5	6.8	6.5	5.8	4.7	10.0	9.9
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	A
Approach Vol, veh/h		155			215			726			1471	
Approach Delay, s/veh		39.3			42.1			6.4			9.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	76.0		21.7	6.7	76.7		21.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	72.0		32.0	4.0	72.0		32.0
Max Q Clear Time (g_c+I1), s	3.1	8.7		8.1	2.7	22.5		16.8
Green Ext Time (p_c), s	0.0	4.9		0.8	0.0	14.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	7	23	206	17	85	66	795	371	209	1121	45
Future Volume (veh/h)	11	7	23	206	17	85	66	795	371	209	1121	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	12	7	24	219	18	90	70	846	395	222	1193	48
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	322	74	254	329	376	316	90	2586	788	261	3030	122
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.05	0.52	0.52	0.15	0.62	0.62
Sat Flow, veh/h	1245	360	1234	1334	1827	1537	1740	4988	1520	1740	4910	197
Grp Volume(v), veh/h	12	0	31	219	18	90	70	846	395	222	808	433
Grp Sat Flow(s),veh/h/ln	1245	0	1594	1334	1827	1537	1740	1663	1520	1740	1663	1782
Q Serve(g_s), s	0.7	0.0	1.5	15.2	0.8	4.7	3.8	9.4	16.2	11.9	11.7	11.8
Cycle Q Clear(g_c), s	1.5	0.0	1.5	16.7	0.8	4.7	3.8	9.4	16.2	11.9	11.7	11.8
Prop In Lane	1.00		0.77	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	322	0	328	329	376	316	90	2586	788	261	2052	1100
V/C Ratio(X)	0.04	0.00	0.09	0.67	0.05	0.28	0.78	0.33	0.50	0.85	0.39	0.39
Avail Cap(c_a), veh/h	547	0	617	571	707	595	218	2586	788	528	2052	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	0.0	30.8	37.5	30.5	32.0	44.8	13.3	15.0	39.6	9.3	9.3
Incr Delay (d2), s/veh	0.0	0.0	0.1	2.3	0.1	0.5	13.3	0.3	2.3	7.5	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.7	5.8	0.4	2.0	2.2	4.4	7.2	6.3	5.5	6.1
LnGrp Delay(d), s/veh	31.1	0.0	30.9	39.9	30.5	32.5	58.1	13.7	17.2	47.1	9.8	10.3
LnGrp LOS	C		C	D	C	C	E	B	B	D	A	B
Approach Vol, veh/h		43			327			1311			1463	
Approach Delay, s/veh		30.9			37.3			17.1			15.6	
Approach LOS		C			D			B			B	

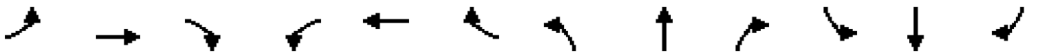
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.4	53.6		23.7	8.9	63.0		23.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	29.0	42.0		37.0	12.0	59.0		37.0
Max Q Clear Time (g_c+I1), s	13.9	18.2		3.5	5.8	13.8		18.7
Green Ext Time (p_c), s	0.5	7.9		0.2	0.1	10.8		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	89	0	0	417	713	20
Future Volume (veh/h)	89	0	0	417	713	20
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	92	0	0	430	735	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2486	0	0	2486	1017	322
Arrive On Green	0.70	0.00	0.00	0.70	0.20	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	92	0	0	430	735	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	0.6	0.0	0.0	3.2	10.6	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	3.2	10.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2486	0	0	2486	1017	322
V/C Ratio(X)	0.04	0.00	0.00	0.17	0.72	0.00
Avail Cap(c_a), veh/h	2486	0	0	2486	3775	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	4.1	29.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.6	5.0	0.0
LnGrp Delay(d), s/veh	3.7	0.0	0.0	4.2	30.0	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	92			430	735	
Approach Delay, s/veh	3.7			4.2	30.0	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		58.0				58.0		19.6
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		54.0				54.0		58.0
Max Q Clear Time (g_c+I1), s		2.6				5.2		12.6
Green Ext Time (p_c), s		0.5				2.8		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	1066	117	312	699	88	121	317	227	463	430	115
Future Volume (vph)	286	1066	117	312	699	88	121	317	227	463	430	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	0.99		1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	0.99	
Satd. Flow (prot)	3433	5085	1367	3433	4967		1610	3115	1417	1522	4578	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.74	
Satd. Flow (perm)	3433	5085	1367	3433	4967		1610	2922	1417	1522	3421	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	295	1099	121	322	721	91	125	327	234	477	443	119
RTOR Reduction (vph)	0	0	91	0	13	0	0	10	48	0	20	0
Lane Group Flow (vph)	295	1099	30	322	799	0	112	389	127	258	761	0
Confl. Peds. (#/hr)	21		58	58		21	26		5	5		26
Confl. Bikes (#/hr)			1			3						
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	14.3	29.2	29.2	13.6	28.5		12.5	46.5	47.6	23.6	61.6	
Effective Green, g (s)	14.3	29.2	29.2	13.6	28.5		12.5	46.5	47.6	23.6	61.6	
Actuated g/C Ratio	0.12	0.25	0.25	0.12	0.24		0.11	0.40	0.41	0.20	0.53	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	421	1275	342	401	1216		172	1188	628	308	2045	
v/s Ratio Prot	0.09	c0.22		c0.09	0.16		0.07	0.04	0.02	c0.17	0.08	
v/s Ratio Perm			0.02					0.10	0.07		c0.12	
v/c Ratio	0.70	0.86	0.09	0.80	0.66		0.65	0.33	0.20	0.84	0.37	
Uniform Delay, d1	49.0	41.7	33.4	50.1	39.6		49.9	24.1	22.2	44.6	16.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.2	6.2	0.1	11.1	1.3		8.5	0.2	0.2	17.7	0.1	
Delay (s)	54.2	47.9	33.5	61.2	40.8		58.4	24.3	22.3	62.2	16.2	
Level of Service	D	D	C	E	D		E	C	C	E	B	
Approach Delay (s/veh)		48.0			46.6			29.4			27.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	116.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	592	313	310	598	55	177	627	102	81	856	135
Future Volume (veh/h)	135	592	313	310	598	55	177	627	102	81	856	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	142	623	329	326	629	58	186	660	107	85	901	142
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	173	783	459	360	1158	598	252	1328	902	109	1285	559
Arrive On Green	0.10	0.22	0.22	0.20	0.32	0.32	0.07	0.37	0.37	0.06	0.36	0.36
Sat Flow, veh/h	1792	3574	1564	1792	3574	1548	3476	3574	1562	1792	3574	1555
Grp Volume(v), veh/h	142	623	329	326	629	58	186	660	107	85	901	142
Grp Sat Flow(s),veh/h/ln	1792	1787	1564	1792	1787	1548	1738	1787	1562	1792	1787	1555
Q Serve(g_s), s	8.4	17.9	20.5	19.3	15.7	2.6	5.7	15.4	3.4	5.1	23.4	7.0
Cycle Q Clear(g_c), s	8.4	17.9	20.5	19.3	15.7	2.6	5.7	15.4	3.4	5.1	23.4	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	783	459	360	1158	598	252	1328	902	109	1285	559
V/C Ratio(X)	0.82	0.80	0.72	0.90	0.54	0.10	0.74	0.50	0.12	0.78	0.70	0.25
Avail Cap(c_a), veh/h	281	824	477	463	1186	611	385	1328	902	198	1285	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	40.1	34.5	42.3	30.1	21.3	49.3	26.3	10.6	50.2	29.7	24.5
Incr Delay (d2), s/veh	9.7	5.2	4.9	17.9	0.5	0.1	4.2	1.3	0.3	11.4	3.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	9.4	9.5	11.3	7.8	1.1	2.9	7.9	1.5	2.8	12.1	3.1
LnGrp Delay(d), s/veh	57.7	45.3	39.4	60.2	30.6	21.4	53.5	27.6	10.9	61.7	32.9	25.6
LnGrp LOS	E	D	D	E	C	C	D	C	B	E	C	C
Approach Vol, veh/h		1094			1013			953			1128	
Approach Delay, s/veh		45.1			39.6			30.8			34.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	44.3	25.8	27.8	11.9	43.0	14.5	39.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	39.0	28.0	25.0	12.0	39.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	7.1	17.4	21.3	22.5	7.7	25.4	10.4	17.7
Green Ext Time (p_c), s	0.1	4.8	0.6	1.3	0.2	5.4	0.2	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.6
HCM 2010 LOS	D

ANAHEIM STATION - 2015 EXISTING PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	542	435	271	2203	0	23	0	245	45	66	9
Future Volume (veh/h)	0	542	435	271	2203	0	23	0	245	45	66	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	0	565	453	282	2295	0	16	0	264	47	69	9
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	0	2346	728	373	3935	0	26	0	736	106	879	393
Arrive On Green	0.00	0.46	0.46	0.11	0.61	0.00	0.01	0.00	0.23	0.03	0.25	0.25
Sat Flow, veh/h	0	5305	1593	3476	6735	0	1792	0	3198	3476	3574	1599
Grp Volume(v), veh/h	0	565	453	282	2295	0	16	0	264	47	69	9
Grp Sat Flow(s),veh/h/ln	0	1712	1593	1738	1618	0	1792	0	1599	1738	1787	1599
Q Serve(g_s), s	0.0	6.1	19.7	7.2	19.7	0.0	0.8	0.0	6.3	1.2	1.4	0.4
Cycle Q Clear(g_c), s	0.0	6.1	19.7	7.2	19.7	0.0	0.8	0.0	6.3	1.2	1.4	0.4
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2346	728	373	3935	0	26	0	736	106	879	393
V/C Ratio(X)	0.00	0.24	0.62	0.76	0.58	0.00	0.61	0.00	0.36	0.44	0.08	0.02
Avail Cap(c_a), veh/h	0	3319	1029	685	5741	0	137	0	736	228	879	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.1	18.8	39.6	10.9	0.0	44.7	0.0	29.5	43.5	26.5	26.1
Incr Delay (d2), s/veh	0.0	0.1	0.9	3.1	0.1	0.0	20.9	0.0	1.4	2.9	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	8.8	3.6	8.6	0.0	0.6	0.0	2.9	0.6	0.7	0.2
LnGrp Delay(d), s/veh	0.0	15.2	19.7	42.7	11.0	0.0	65.6	0.0	30.9	46.4	26.6	26.2
LnGrp LOS		B	B	D	B		E		C	D	C	C
Approach Vol, veh/h		1018			2577			280			125	
Approach Delay, s/veh		17.2			14.5			32.9			34.0	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	25.0	13.8	45.7	5.3	26.5		59.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	21.0	18.0	59.0	7.0	20.0		81.0
Max Q Clear Time (g_c+I1), s	3.2	8.3	9.2	21.7	2.8	3.4		21.7
Green Ext Time (p_c), s	0.0	0.8	0.6	6.0	0.0	0.3		33.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	57	774	0	0	1680	106	0	0	0	768	1076	66
Future Volume (vph)	57	774	0	0	1680	106	0	0	0	768	1076	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.99	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3467	6471			6089	1295				1448	5976	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3467	6471			6089	1295				1448	5976	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	63	851	0	0	1846	116	0	0	0	844	1182	73
RTOR Reduction (vph)	0	0	0	0	1	28	0	0	0	0	5	0
Lane Group Flow (vph)	63	851	0	0	1857	76	0	0	0	422	1672	0
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	3.9	53.1			45.2	45.2				56.2	56.2	
Effective Green, g (s)	3.9	53.1			45.2	45.2				56.2	56.2	
Actuated g/C Ratio	0.03	0.45			0.39	0.39				0.48	0.48	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	115	2929			2346	499				693	2863	
v/s Ratio Prot	c0.02	0.13			c0.31					c0.29	0.28	
v/s Ratio Perm						0.06						
v/c Ratio	0.55	0.29			0.79	0.15				0.61	0.58	
Uniform Delay, d1	55.8	20.2			31.9	23.5				22.5	22.1	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	5.3	0.1			1.9	0.1				1.5	0.3	
Delay (s)	61.1	20.3			33.8	23.7				24.0	22.4	
Level of Service	E	C			C	C				C	C	
Approach Delay (s/veh)		23.1			33.3			0.0			22.7	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	117.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	753	3	32	1468	52	22	148	23	66	4	288
Future Volume (veh/h)	84	753	3	32	1468	52	22	148	23	66	4	288
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	92	827	3	35	1613	57	24	163	25	73	4	316
Adj No. of Lanes	1	3	1	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	118	2417	732	45	2207	684	478	607	93	447	716	608
Arrive On Green	0.07	0.47	0.47	0.03	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1792	5136	1555	1792	5136	1592	1065	1593	244	1202	1881	1598
Grp Volume(v), veh/h	92	827	3	35	1613	57	24	0	188	73	4	316
Grp Sat Flow(s),veh/h/ln	1792	1712	1555	1792	1712	1592	1065	0	1838	1202	1881	1598
Q Serve(g_s), s	4.9	9.9	0.1	1.9	25.4	2.1	1.4	0.0	6.9	4.3	0.1	14.8
Cycle Q Clear(g_c), s	4.9	9.9	0.1	1.9	25.4	2.1	1.5	0.0	6.9	11.2	0.1	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	118	2417	732	45	2207	684	478	0	700	447	716	608
V/C Ratio(X)	0.78	0.34	0.00	0.78	0.73	0.08	0.05	0.00	0.27	0.16	0.01	0.52
Avail Cap(c_a), veh/h	258	3329	1008	147	3012	934	478	0	700	447	716	608
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	16.2	13.6	47.1	23.0	16.4	19.1	0.0	20.8	24.6	18.7	23.2
Incr Delay (d2), s/veh	10.4	0.1	0.0	24.2	0.6	0.1	0.2	0.0	0.9	0.8	0.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.7	0.0	1.2	12.1	0.9	0.4	0.0	3.6	1.5	0.1	7.0
LnGrp Delay(d), s/veh	55.0	16.3	13.6	71.3	23.6	16.4	19.3	0.0	21.7	25.4	18.7	26.4
LnGrp LOS	E	B	B	E	C	B	B		C	C	B	C
Approach Vol, veh/h		922			1705			212			393	
Approach Delay, s/veh		20.2			24.4			21.4			26.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		41.0	6.4	49.7		41.0	10.4	45.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		37.0	8.0	63.0		37.0	14.0	57.0
Max Q Clear Time (g_c+I1), s		8.9	3.9	11.9		16.8	6.9	27.4
Green Ext Time (p_c), s		1.1	0.0	6.4		1.3	0.1	14.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	14	68	26	24	174	65	20	0	9	95	0	12
Future Volume (vph)	14	68	26	24	174	65	20	0	9	95	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.96		1.00	0.96		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1805	4969		3502	4957		1805		2804	1802		2842
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1805	4969		3502	4957		1805		2804	1802		2842
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	16	77	30	27	198	74	23	0	10	108	0	14
RTOR Reduction (vph)	0	26	0	0	64	0	0	0	3	0	0	4
Lane Group Flow (vph)	16	81	0	27	208	0	23	0	7	108	0	10
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	1.3	8.7		2.4	9.8		50.8		50.8	50.8		50.8
Effective Green, g (s)	1.3	8.7		2.4	9.8		50.8		50.8	50.8		50.8
Actuated g/C Ratio	0.02	0.12		0.03	0.13		0.69		0.69	0.69		0.69
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	31	584		113	657		1240		1927	1238		1953
v/s Ratio Prot	c0.01	0.02		0.01	c0.04							
v/s Ratio Perm							0.01		0.00	c0.06		0.00
v/c Ratio	0.52	0.14		0.24	0.32		0.02		0.00	0.09		0.00
Uniform Delay, d1	36.0	29.2		34.9	29.0		3.7		3.6	3.8		3.6
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	13.7	0.1		1.1	0.3		0.0		0.0	0.1		0.0
Delay (s)	49.7	29.3		36.0	29.3		3.7		3.6	4.0		3.6
Level of Service	D	C		D	C		A		A	A		A
Approach Delay (s/veh)		32.0			29.9			3.7			3.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	73.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	965	192	182	1068	215	299	940	161	279	645	192
Future Volume (veh/h)	219	965	192	182	1068	215	299	940	161	279	645	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	228	1005	200	190	1112	224	311	979	168	291	672	200
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	263	1434	285	224	1337	269	382	1459	442	361	1088	318
Arrive On Green	0.15	0.34	0.34	0.13	0.31	0.31	0.11	0.28	0.28	0.10	0.28	0.28
Sat Flow, veh/h	1792	4274	849	1792	4260	858	3476	5136	1556	3476	3914	1143
Grp Volume(v), veh/h	228	805	400	190	894	442	311	979	168	291	586	286
Grp Sat Flow(s),veh/h/ln	1792	1712	1699	1792	1712	1694	1738	1712	1556	1738	1712	1634
Q Serve(g_s), s	13.1	21.6	21.6	11.0	25.6	25.6	9.2	17.8	9.2	8.6	15.8	16.2
Cycle Q Clear(g_c), s	13.1	21.6	21.6	11.0	25.6	25.6	9.2	17.8	9.2	8.6	15.8	16.2
Prop In Lane	1.00		0.50	1.00		0.51	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	263	1149	570	224	1075	532	382	1459	442	361	951	454
V/C Ratio(X)	0.87	0.70	0.70	0.85	0.83	0.83	0.81	0.67	0.38	0.81	0.62	0.63
Avail Cap(c_a), veh/h	390	1264	627	356	1199	593	494	1459	442	461	951	454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	30.5	30.5	45.2	33.6	33.6	45.9	33.4	30.3	46.3	33.2	33.4
Incr Delay (d2), s/veh	12.8	1.6	3.2	10.4	4.7	9.0	7.9	2.5	2.5	8.0	3.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	10.4	10.6	6.1	12.7	13.3	4.9	8.8	4.3	4.6	7.8	8.1
LnGrp Delay(d), s/veh	56.9	32.0	33.7	55.6	38.3	42.7	53.8	35.9	32.8	54.3	36.2	39.9
LnGrp LOS	E	C	C	E	D	D	D	D	C	D	D	D
Approach Vol, veh/h		1433			1526			1458			1163	
Approach Delay, s/veh		36.4			41.7			39.4			41.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	34.0	17.2	39.4	15.6	33.3	19.5	37.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	30.0	21.0	39.0	15.0	29.0	23.0	37.0
Max Q Clear Time (g_c+I1), s	10.6	19.8	13.0	23.6	11.2	18.2	15.1	27.6
Green Ext Time (p_c), s	0.3	4.9	0.3	6.9	0.4	4.1	0.4	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	30	27	71	45	84	38	1215	32	24	991	54
Future Volume (veh/h)	61	30	27	71	45	84	38	1215	32	24	991	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	70	34	31	82	52	97	44	1397	37	28	1139	62
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	166	145	133	240	93	174	393	3920	1193	322	3800	207
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1244	907	827	1342	582	1086	468	5136	1563	375	4979	271
Grp Volume(v), veh/h	70	0	65	82	0	149	44	1397	37	28	783	418
Grp Sat Flow(s),veh/h/ln	1244	0	1733	1342	0	1668	468	1712	1563	375	1712	1826
Q Serve(g_s), s	5.8	0.0	3.4	5.9	0.0	8.6	3.3	9.3	0.6	2.8	7.4	7.4
Cycle Q Clear(g_c), s	14.4	0.0	3.4	9.4	0.0	8.6	10.7	9.3	0.6	12.0	7.4	7.4
Prop In Lane	1.00		0.48	1.00		0.65	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	166	0	278	240	0	268	393	3920	1193	322	2613	1394
V/C Ratio(X)	0.42	0.00	0.23	0.34	0.00	0.56	0.11	0.36	0.03	0.09	0.30	0.30
Avail Cap(c_a), veh/h	346	0	529	435	0	509	393	3920	1193	322	2613	1394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	0.0	38.4	42.5	0.0	40.6	5.5	4.0	3.0	6.0	3.8	3.8
Incr Delay (d2), s/veh	1.7	0.0	0.4	0.8	0.0	1.8	0.6	0.3	0.0	0.5	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.7	2.3	0.0	4.1	0.5	4.4	0.3	0.3	3.5	3.8
LnGrp Delay(d), s/veh	48.9	0.0	38.8	43.3	0.0	42.4	6.0	4.3	3.1	6.5	4.1	4.4
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		135			231			1478			1229	
Approach Delay, s/veh		44.0			42.7			4.3			4.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		84.0		20.8		84.0		20.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		80.0		32.0		80.0		32.0
Max Q Clear Time (g_c+I1), s		12.7		16.4		14.0		11.4
Green Ext Time (p_c), s		15.7		0.4		11.0		1.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		8.9
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	250	99	75	296	78	92	1032	32	32	963	77
Future Volume (veh/h)	100	250	99	75	296	78	92	1032	32	32	963	77
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	108	269	106	81	318	84	99	1110	34	34	1035	83
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	224	629	242	234	697	181	127	3078	94	44	2687	215
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.60	0.60	0.02	0.56	0.56
Sat Flow, veh/h	987	2523	969	1012	2798	726	1792	5118	157	1792	4841	388
Grp Volume(v), veh/h	108	189	186	81	201	201	99	742	402	34	731	387
Grp Sat Flow(s),veh/h/ln	987	1787	1705	1012	1787	1737	1792	1712	1851	1792	1712	1805
Q Serve(g_s), s	10.1	8.5	8.9	7.1	9.2	9.5	5.2	10.6	10.7	1.8	11.7	11.7
Cycle Q Clear(g_c), s	19.5	8.5	8.9	16.0	9.2	9.5	5.2	10.6	10.7	1.8	11.7	11.7
Prop In Lane	1.00		0.57	1.00		0.42	1.00		0.08	1.00		0.21
Lane Grp Cap(c), veh/h	224	446	425	234	446	433	127	2059	1113	44	1901	1002
V/C Ratio(X)	0.48	0.42	0.44	0.35	0.45	0.46	0.78	0.36	0.36	0.77	0.38	0.39
Avail Cap(c_a), veh/h	408	778	742	422	778	756	334	2059	1113	149	1901	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	30.4	30.5	37.2	30.6	30.7	44.0	9.8	9.8	46.7	12.1	12.1
Incr Delay (d2), s/veh	1.6	0.6	0.7	0.9	0.7	0.8	9.7	0.5	0.9	23.4	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.3	4.3	2.0	4.6	4.6	2.9	5.1	5.6	1.2	5.6	6.1
LnGrp Delay(d), s/veh	40.6	31.0	31.2	38.1	31.3	31.5	53.7	10.3	10.7	70.1	12.7	13.3
LnGrp LOS	D	C	C	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		483			483			1243			1152	
Approach Delay, s/veh		33.2			32.5			13.9			14.6	
Approach LOS		C			C			B			B	

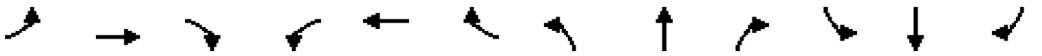
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	62.0		28.0	10.9	57.5		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	58.0		42.0	18.0	48.0		42.0
Max Q Clear Time (g_c+I1), s	3.8	12.7		21.5	7.2	13.7		18.0
Green Ext Time (p_c), s	0.0	9.1		2.5	0.1	8.5		2.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		19.6
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	8	2	219	2	159	8	944	100	63	1113	1
Future Volume (veh/h)	5	8	2	219	2	159	8	944	100	63	1113	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	5	8	2	231	2	167	8	994	105	66	1172	1
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	75	13	318	2	604	14	2194	231	86	2681	2
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.01	0.47	0.47	0.05	0.51	0.51
Sat Flow, veh/h	30	197	35	670	6	1591	1792	4709	496	1792	5300	5
Grp Volume(v), veh/h	15	0	0	233	0	167	8	722	377	66	757	416
Grp Sat Flow(s),veh/h/ln	262	0	0	676	0	1591	1792	1712	1781	1792	1712	1880
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	8.2	0.5	16.1	16.1	4.1	15.8	15.8
Cycle Q Clear(g_c), s	40.7	0.0	0.0	40.3	0.0	8.2	0.5	16.1	16.1	4.1	15.8	15.8
Prop In Lane	0.33		0.13	0.99		1.00	1.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	142	0	0	320	0	604	14	1596	830	86	1732	951
V/C Ratio(X)	0.11	0.00	0.00	0.73	0.00	0.28	0.57	0.45	0.45	0.77	0.44	0.44
Avail Cap(c_a), veh/h	173	0	0	348	0	636	95	1596	830	223	1732	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	0.0	0.0	34.2	0.0	24.2	55.7	20.4	20.4	53.0	17.7	17.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	6.9	0.0	0.2	31.3	0.9	1.8	13.5	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	7.7	0.0	3.7	0.4	7.8	8.4	2.4	7.7	8.6
LnGrp Delay(d), s/veh	28.1	0.0	0.0	41.0	0.0	24.5	87.0	21.3	22.2	66.6	18.5	19.1
LnGrp LOS	C			D		C	F	C	C	E	B	B
Approach Vol, veh/h		15			400			1107			1239	
Approach Delay, s/veh		28.1			34.1			22.1			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	56.5		46.8	4.9	61.0		46.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	49.0		45.0	6.0	57.0		45.0
Max Q Clear Time (g_c+I1), s	6.1	18.1		42.7	2.5	17.8		42.3
Green Ext Time (p_c), s	0.1	8.1		0.0	0.0	9.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	476	92	391	803	54	242	585	224	100	897	215
Future Volume (vph)	185	476	92	391	803	54	242	585	224	100	897	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.94	1.00	1.00	0.98	1.00	1.00	0.94	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	6070	1212	3467	5136	1559	3467	5136	1501	3467	5136	1558
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	6070	1212	3467	5136	1559	3467	5136	1501	3467	5136	1558
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	195	501	97	412	845	57	255	616	236	105	944	226
RTOR Reduction (vph)	0	2	72	0	0	44	0	0	134	0	0	138
Lane Group Flow (vph)	195	509	15	412	845	13	255	616	102	105	944	88
Confl. Peds. (#/hr)	6		26	26		6	7		25	25		7
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.3	18.2	18.2	18.0	24.9	24.9	13.2	46.3	46.3	8.4	41.5	41.5
Effective Green, g (s)	11.3	18.2	18.2	18.0	24.9	24.9	13.2	46.3	46.3	8.4	41.5	41.5
Actuated g/C Ratio	0.11	0.17	0.17	0.17	0.23	0.23	0.12	0.43	0.43	0.08	0.39	0.39
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	366	1033	206	583	1196	363	428	2224	650	272	1993	604
v/s Ratio Prot	0.06	0.08		c0.12	c0.16		c0.07	0.12		0.03	c0.18	
v/s Ratio Perm			0.01			0.01			0.07			0.06
v/c Ratio	0.53	0.49	0.07	0.71	0.71	0.04	0.60	0.28	0.16	0.39	0.47	0.15
Uniform Delay, d1	45.3	40.2	37.3	42.0	37.6	31.7	44.3	19.5	18.4	46.8	24.5	21.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	0.4	0.1	3.9	1.9	0.0	2.2	0.3	0.5	0.9	0.8	0.5
Delay (s)	46.8	40.5	37.4	45.9	39.6	31.8	46.6	19.8	18.9	47.7	25.3	21.7
Level of Service	D	D	D	D	D	C	D	B	B	D	C	C
Approach Delay (s/veh)		41.7			41.2			25.8			26.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	106.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	0	58	1	1	2	58	971	2	2	1170	227
Future Volume (veh/h)	119	0	58	1	1	2	58	971	2	2	1170	227
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	121	0	59	1	1	2	59	991	2	2	1194	232
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	238	206	183	185	206	183	116	3996	8	8	3115	605
Arrive On Green	0.12	0.00	0.12	0.12	0.12	0.12	0.03	0.75	0.75	0.00	0.72	0.72
Sat Flow, veh/h	1411	1787	1587	1343	1787	1587	3476	5292	11	3476	4304	836
Grp Volume(v), veh/h	121	0	59	1	1	2	59	641	352	2	950	476
Grp Sat Flow(s),veh/h/ln	1411	1787	1587	1343	1787	1587	1738	1712	1879	1738	1712	1716
Q Serve(g_s), s	7.8	0.0	3.2	0.1	0.0	0.1	1.6	5.3	5.3	0.1	10.0	10.0
Cycle Q Clear(g_c), s	7.9	0.0	3.2	3.3	0.0	0.1	1.6	5.3	5.3	0.1	10.0	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.49
Lane Grp Cap(c), veh/h	238	206	183	185	206	183	116	2585	1419	8	2478	1242
V/C Ratio(X)	0.51	0.00	0.32	0.01	0.00	0.01	0.51	0.25	0.25	0.27	0.38	0.38
Avail Cap(c_a), veh/h	540	589	523	473	589	523	333	2585	1419	222	2478	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	38.2	39.7	36.8	36.9	44.7	3.5	3.5	46.8	5.0	5.0
Incr Delay (d2), s/veh	1.7	0.0	1.0	0.0	0.0	0.0	3.4	0.2	0.4	17.8	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.5	0.0	0.0	0.0	0.8	2.6	2.9	0.0	4.8	4.9
LnGrp Delay(d), s/veh	42.0	0.0	39.2	39.7	36.8	36.9	48.1	3.7	3.9	64.6	5.4	5.9
LnGrp LOS	D		D	D	D	D	D	A	A	E	A	A
Approach Vol, veh/h		180			4			1052			1428	
Approach Delay, s/veh		41.1			37.6			6.3			5.6	
Approach LOS		D			D			A			A	

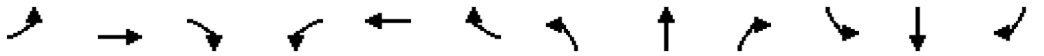
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	75.0		14.8	7.1	72.1		14.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	71.0		31.0	9.0	68.0		31.0
Max Q Clear Time (g_c+I1), s	2.1	7.3		9.9	3.6	12.0		5.3
Green Ext Time (p_c), s	0.0	7.5		0.6	0.0	13.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.3
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	539	72	320	1212	167	90	764	144	136	1110	203
Future Volume (veh/h)	225	539	72	320	1212	167	90	764	144	136	1110	203
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	250	599	80	356	1347	186	100	849	160	151	1233	226
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	320	1528	201	434	1667	230	156	1819	335	215	1920	350
Arrive On Green	0.09	0.33	0.33	0.12	0.37	0.37	0.04	0.33	0.33	0.06	0.35	0.35
Sat Flow, veh/h	3476	4583	604	3476	4552	628	3476	5512	1016	3476	5536	1009
Grp Volume(v), veh/h	250	445	234	356	1013	520	100	745	264	151	1080	379
Grp Sat Flow(s),veh/h/ln	1738	1712	1763	1738	1712	1756	1738	1618	1675	1738	1618	1692
Q Serve(g_s), s	7.5	10.6	10.9	10.7	28.4	28.4	3.0	13.0	13.4	4.5	20.0	20.1
Cycle Q Clear(g_c), s	7.5	10.6	10.9	10.7	28.4	28.4	3.0	13.0	13.4	4.5	20.0	20.1
Prop In Lane	1.00		0.34	1.00		0.36	1.00		0.61	1.00		0.60
Lane Grp Cap(c), veh/h	320	1142	588	434	1254	643	156	1601	552	215	1683	587
V/C Ratio(X)	0.78	0.39	0.40	0.82	0.81	0.81	0.64	0.47	0.48	0.70	0.64	0.65
Avail Cap(c_a), veh/h	456	1316	677	619	1476	757	228	1601	552	326	1683	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	27.2	27.3	45.5	30.4	30.4	50.1	28.3	28.4	49.1	29.3	29.3
Incr Delay (d2), s/veh	5.5	0.2	0.4	5.9	3.0	5.6	4.3	1.0	2.9	4.1	1.9	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	5.0	5.3	5.4	13.9	14.7	1.5	5.9	6.6	2.3	9.2	10.2
LnGrp Delay(d), s/veh	52.9	27.5	27.8	51.4	33.4	36.1	54.4	29.3	31.4	53.2	31.2	34.7
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	C	C
Approach Vol, veh/h		929			1889			1109			1610	
Approach Delay, s/veh		34.4			37.5			32.0			34.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	39.2	17.3	39.6	8.8	41.0	13.8	43.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	34.0	19.0	41.0	7.0	37.0	14.0	46.0
Max Q Clear Time (g_c+I1), s	6.5	15.4	12.7	12.9	5.0	22.1	9.5	30.4
Green Ext Time (p_c), s	0.1	6.3	0.7	4.4	0.0	8.2	0.3	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	817	16	131	1219	100	14	0	59	57	0	17
Future Volume (vph)	16	817	16	131	1219	100	14	0	59	57	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	0.97	0.97	1.00		0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1787	5136	1577	1787	5136	1522	1787	1474	1474	1787		1555
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1787	5136	1577	1787	5136	1522	1787	1474	1474	1787		1555
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	908	18	146	1354	111	16	0	66	63	0	19
RTOR Reduction (vph)	0	0	12	0	0	64	0	24	24	0	0	13
Lane Group Flow (vph)	18	908	6	146	1354	47	16	9	9	63	0	6
Confl. Peds. (#/hr)	10		1	1		10	8		11	11		8
Confl. Bikes (#/hr)						2						4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	2.5	26.7	26.7	12.4	36.6	36.6	2.4	25.0	25.0	7.0		29.6
Effective Green, g (s)	2.5	26.7	26.7	12.4	36.6	36.6	2.4	25.0	25.0	7.0		29.6
Actuated g/C Ratio	0.03	0.31	0.31	0.14	0.42	0.42	0.03	0.29	0.29	0.08		0.34
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	51	1574	483	254	2158	639	49	423	423	143		528
v/s Ratio Prot	0.01	0.18		c0.08	c0.26		0.01	c0.01		c0.04		
v/s Ratio Perm			0.00			0.03			0.01			0.00
v/c Ratio	0.35	0.58	0.01	0.57	0.63	0.07	0.33	0.02	0.02	0.44		0.01
Uniform Delay, d1	41.5	25.4	21.0	34.9	19.9	15.1	41.6	22.3	22.3	38.2		19.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	4.2	0.5	0.0	3.1	0.6	0.0	3.9	0.1	0.1	2.2		0.0
Delay (s)	45.7	26.0	21.0	38.0	20.5	15.2	45.4	22.4	22.4	40.3		19.1
Level of Service	D	C	C	D	C	B	D	C	C	D		B
Approach Delay (s/veh)		26.2			21.7			26.9			35.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	87.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	50.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1088	26	199	1214	481	96	440	259	255	280	176
Future Volume (veh/h)	220	1088	26	199	1214	481	96	440	259	255	280	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	232	1145	27	209	1278	506	101	463	273	268	295	185
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	287	2055	48	269	1405	618	360	571	335	327	717	436
Arrive On Green	0.08	0.40	0.40	0.08	0.39	0.39	0.05	0.27	0.27	0.12	0.34	0.34
Sat Flow, veh/h	3476	5160	122	3476	3574	1573	1792	2150	1259	1792	2119	1289
Grp Volume(v), veh/h	232	760	412	209	1278	506	101	384	352	268	247	233
Grp Sat Flow(s),veh/h/ln	1738	1712	1858	1738	1787	1573	1792	1787	1622	1792	1787	1621
Q Serve(g_s), s	7.8	20.3	20.3	7.0	39.9	34.0	4.8	23.8	24.0	12.4	12.6	13.1
Cycle Q Clear(g_c), s	7.8	20.3	20.3	7.0	39.9	34.0	4.8	23.8	24.0	12.4	12.6	13.1
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.78	1.00		0.80
Lane Grp Cap(c), veh/h	287	1364	740	269	1405	618	360	475	431	327	604	548
V/C Ratio(X)	0.81	0.56	0.56	0.78	0.91	0.82	0.28	0.81	0.82	0.82	0.41	0.42
Avail Cap(c_a), veh/h	294	1364	740	353	1451	638	360	475	431	364	604	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	27.5	27.5	53.6	33.9	32.1	29.4	40.6	40.7	28.6	30.1	30.2
Incr Delay (d2), s/veh	15.0	0.5	0.9	7.8	8.6	8.1	0.4	13.8	15.6	12.7	2.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	9.7	10.6	3.7	21.4	16.1	2.4	13.6	12.6	7.2	6.5	6.2
LnGrp Delay(d), s/veh	68.3	28.0	28.4	61.3	42.5	40.2	29.8	54.4	56.3	41.4	32.1	32.6
LnGrp LOS	E	C	C	E	D	D	C	D	E	D	C	C
Approach Vol, veh/h		1404			1993			837			748	
Approach Delay, s/veh		34.8			43.9			52.2			35.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	35.4	13.2	51.1	10.0	44.0	13.8	50.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	12.0	46.0	6.0	40.0	10.0	48.0
Max Q Clear Time (g_c+I1), s	14.4	26.0	9.0	22.3	6.8	15.1	9.8	41.9
Green Ext Time (p_c), s	0.2	1.3	0.2	8.0	0.0	3.0	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	113	30	7	261	203	30	226	7	54	229	124
Future Volume (veh/h)	172	113	30	7	261	203	30	226	7	54	229	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	207	136	36	8	314	245	36	272	8	65	276	149
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	1136	292	542	776	590	493	1799	53	232	936	494
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	864	2845	731	1232	1943	1478	978	3580	105	351	1862	982
Grp Volume(v), veh/h	207	85	87	8	291	268	36	137	143	256	0	234
Grp Sat Flow(s),veh/h/ln	864	1805	1770	1232	1805	1616	978	1805	1880	1654	0	1541
Q Serve(g_s), s	18.5	2.4	2.5	0.3	9.4	9.7	1.8	3.3	3.3	0.6	0.0	7.3
Cycle Q Clear(g_c), s	28.3	2.4	2.5	2.9	9.4	9.7	9.1	3.3	3.3	6.4	0.0	7.3
Prop In Lane	1.00		0.41	1.00		0.91	1.00		0.06	0.25		0.64
Lane Grp Cap(c), veh/h	330	721	707	542	721	645	493	907	945	887	0	774
V/C Ratio(X)	0.63	0.12	0.12	0.01	0.40	0.42	0.07	0.15	0.15	0.29	0.00	0.30
Avail Cap(c_a), veh/h	737	1571	1541	1122	1571	1406	493	907	945	887	0	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.8	15.4	15.5	16.4	17.5	17.6	14.6	10.9	10.9	11.7	0.0	11.9
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.0	0.4	0.4	0.3	0.4	0.3	0.8	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.2	1.3	0.1	4.8	4.4	0.5	1.7	1.8	3.5	0.0	3.3
LnGrp Delay(d), s/veh	29.8	15.5	15.6	16.4	17.9	18.1	14.9	11.3	11.3	12.5	0.0	12.9
LnGrp LOS	C	B	B	B	B	B	B	B	B	B		B
Approach Vol, veh/h		379			567			316			490	
Approach Delay, s/veh		23.3			18.0			11.7			12.7	
Approach LOS		C			B			B			B	

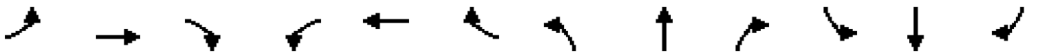
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.0		36.6		45.0		36.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		41.0		71.0		41.0		71.0
Max Q Clear Time (g_c+I1), s		11.1		30.3		9.3		11.7
Green Ext Time (p_c), s		1.7		2.3		3.1		3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	73	890	38	72	1114	261	311	12	90	103	60	183
Future Volume (veh/h)	73	890	38	72	1114	261	311	12	90	103	60	183
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	79	967	41	78	1211	284	338	13	98	112	65	199
Adj No. of Lanes	1	3	0	2	3	1	2	1	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	103	1805	76	134	1738	541	463	25	188	523	549	465
Arrive On Green	0.06	0.36	0.36	0.04	0.34	0.34	0.13	0.13	0.13	0.29	0.29	0.29
Sat Flow, veh/h	1792	5053	214	3476	5136	1599	3476	188	1414	1792	1881	1596
Grp Volume(v), veh/h	79	655	353	78	1211	284	338	0	111	112	65	199
Grp Sat Flow(s),veh/h/ln	1792	1712	1843	1738	1712	1599	1738	0	1601	1792	1881	1596
Q Serve(g_s), s	3.9	13.5	13.6	2.0	18.2	12.7	8.3	0.0	5.8	4.2	2.3	9.0
Cycle Q Clear(g_c), s	3.9	13.5	13.6	2.0	18.2	12.7	8.3	0.0	5.8	4.2	2.3	9.0
Prop In Lane	1.00		0.12	1.00		1.00	1.00		0.88	1.00		1.00
Lane Grp Cap(c), veh/h	103	1223	658	134	1738	541	463	0	213	523	549	465
V/C Ratio(X)	0.77	0.54	0.54	0.58	0.70	0.52	0.73	0.00	0.52	0.21	0.12	0.43
Avail Cap(c_a), veh/h	261	1844	993	312	2478	771	858	0	395	523	549	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	22.8	22.8	42.1	25.5	23.7	37.1	0.0	36.0	23.8	23.2	25.5
Incr Delay (d2), s/veh	11.4	0.4	0.7	4.0	0.5	0.8	2.2	0.0	2.0	0.9	0.4	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.4	7.0	1.0	8.6	5.7	4.1	0.0	2.6	2.2	1.2	4.3
LnGrp Delay(d), s/veh	52.8	23.1	23.5	46.1	26.0	24.5	39.3	0.0	38.0	24.8	23.6	28.4
LnGrp LOS	D	C	C	D	C	C	D		D	C	C	C
Approach Vol, veh/h		1087			1573			449			376	
Approach Delay, s/veh		25.4			26.8			39.0			26.5	
Approach LOS		C			C			D			C	

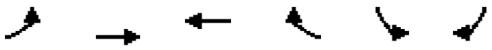
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	7.4	35.8		15.9	9.1	34.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	8.0	48.0		22.0	13.0	43.0
Max Q Clear Time (g_c+I1), s		11.0	4.0	15.6		10.3	5.9	20.2
Green Ext Time (p_c), s		1.2	0.1	7.2		1.4	0.1	10.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C



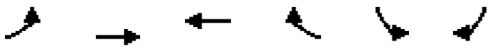
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	870	51	79	1485	0	65	0	126	0	0	0
Future Volume (vph)	0	870	51	79	1485	0	65	0	126	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Frt		0.99		1.00	1.00		1.00	0.86				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3574		1805	3610		1643	2957				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3574		1805	3610		1643	2957				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	978	57	89	1669	0	73	0	142	0	0	0
RTOR Reduction (vph)	0	4	0	0	0	0	0	106	0	0	0	0
Lane Group Flow (vph)	0	1031	0	89	1669	0	66	43	0	0	0	0
Confl. Peds. (#/hr)			5	5								
Confl. Bikes (#/hr)			3									
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		28.2		7.7	39.9		16.3	16.3				
Effective Green, g (s)		28.2		7.7	39.9		16.3	16.3				
Actuated g/C Ratio		0.44		0.12	0.62		0.25	0.25				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1569		216	2243		417	750				
v/s Ratio Prot		0.29		0.05	c0.46		c0.04	0.01				
v/s Ratio Perm												
v/c Ratio		0.66		0.41	0.74		0.16	0.06				
Uniform Delay, d1		14.2		26.2	8.6		18.6	18.1				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		1.0		1.3	1.4		0.8	0.1				
Delay (s)		15.2		27.4	9.9		19.4	18.3				
Level of Service		B		C	A		B	B				
Approach Delay (s/veh)		15.2			10.8			18.6			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	64.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1205	1363	0	304	730
Future Volume (vph)	0	1205	1363	0	304	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.94	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5136	5136		1712	1519
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5136	5136		1712	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1255	1420	0	317	760
RTOR Reduction (vph)	0	0	0	0	3	3
Lane Group Flow (vph)	0	1255	1420	0	550	521
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		40.9	40.9		65.2	65.2
Effective Green, g (s)		40.9	40.9		65.2	65.2
Actuated g/C Ratio		0.36	0.36		0.57	0.57
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1841	1841		978	868
v/s Ratio Prot		0.24	c0.28		0.32	
v/s Ratio Perm						c0.34
v/c Ratio		0.68	0.77		0.56	0.60
Uniform Delay, d1		31.1	32.5		15.4	15.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.1	2.1		2.3	3.1
Delay (s)		32.1	34.5		17.8	19.0
Level of Service		C	C		B	B
Approach Delay (s/veh)		32.1	34.5		18.4	
Approach LOS		C	C		B	

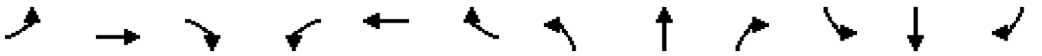
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	988	1004	0	138	448
Future Volume (vph)	0	988	1004	0	138	448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.91	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5136	5136		3249	1455
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5136	5136		3249	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1062	1080	0	148	482
RTOR Reduction (vph)	0	0	0	0	21	21
Lane Group Flow (vph)	0	1062	1080	0	368	220
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		26.6	26.6		54.1	54.1
Effective Green, g (s)		26.6	26.6		54.1	54.1
Actuated g/C Ratio		0.30	0.30		0.61	0.61
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1540	1540		1981	887
v/s Ratio Prot		0.21	c0.21		0.11	
v/s Ratio Perm						c0.15
v/c Ratio		0.69	0.70		0.19	0.25
Uniform Delay, d1		27.4	27.5		7.6	7.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.3	1.5		0.2	0.7
Delay (s)		28.7	29.0		7.8	8.6
Level of Service		C	C		A	A
Approach Delay (s/veh)		28.7	29.0		8.1	
Approach LOS		C	C		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	88.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	825	109	449	1073	0	0	0	0	198	26	462
Future Volume (vph)	0	825	109	449	1073	0	0	0	0	198	26	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.88	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3416	1437	1787	3574					1698	1495	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3416	1437	1787	3574					1698	1495	1519
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	907	120	493	1179	0	0	0	0	218	29	508
RTOR Reduction (vph)	0	1	75	0	0	0	0	0	0	0	87	87
Lane Group Flow (vph)	0	918	33	493	1179	0	0	0	0	196	198	187
Confl. Bikes (#/hr)			1			14						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		33.5	33.5	34.2	71.7					28.4	28.4	28.4
Effective Green, g (s)		33.5	33.5	34.2	71.7					28.4	28.4	28.4
Actuated g/C Ratio		0.31	0.31	0.32	0.66					0.26	0.26	0.26
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1058	445	565	2370					446	392	399
v/s Ratio Prot		c0.27		c0.28	0.33							
v/s Ratio Perm			0.02							0.12	0.13	0.12
v/c Ratio		0.87	0.08	0.87	0.50					0.44	0.51	0.47
Uniform Delay, d1		35.2	26.4	34.9	9.1					33.2	33.9	33.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		7.7	0.1	13.9	0.2					3.1	4.6	3.9
Delay (s)		42.9	26.4	48.8	9.3					36.3	38.5	37.4
Level of Service		D	C	D	A					D	D	D
Approach Delay (s/veh)		41.2			21.0			0.0			37.5	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	108.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1411	31	29	1173	0	154	30	100	129	9	247
Future Volume (veh/h)	6	1411	31	29	1173	0	154	30	100	129	9	247
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	6	1455	32	30	1209	0	159	31	103	133	9	255
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	11	2009	44	40	1449	0	382	74	403	303	21	287
Arrive On Green	0.01	0.39	0.39	0.02	0.41	0.00	0.25	0.25	0.25	0.18	0.18	0.18
Sat Flow, veh/h	1792	5163	114	1792	3668	0	1511	295	1595	1683	114	1594
Grp Volume(v), veh/h	6	965	522	30	1209	0	190	0	103	142	0	255
Grp Sat Flow(s),veh/h/ln	1792	1712	1853	1792	1787	0	1806	0	1595	1797	0	1594
Q Serve(g_s), s	0.3	24.7	24.7	1.7	31.3	0.0	9.0	0.0	5.3	7.2	0.0	16.1
Cycle Q Clear(g_c), s	0.3	24.7	24.7	1.7	31.3	0.0	9.0	0.0	5.3	7.2	0.0	16.1
Prop In Lane	1.00		0.06	1.00		0.00	0.84		1.00	0.94		1.00
Lane Grp Cap(c), veh/h	11	1332	721	40	1449	0	456	0	403	324	0	287
V/C Ratio(X)	0.55	0.72	0.72	0.75	0.83	0.00	0.42	0.00	0.26	0.44	0.00	0.89
Avail Cap(c_a), veh/h	70	1698	919	105	1842	0	456	0	403	367	0	325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.0	26.7	26.7	50.0	27.5	0.0	32.1	0.0	30.7	37.5	0.0	41.1
Incr Delay (d2), s/veh	36.3	1.1	2.1	23.8	2.8	0.0	2.8	0.0	1.5	0.9	0.0	22.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	11.9	13.0	1.1	15.8	0.0	4.8	0.0	2.5	3.7	0.0	8.8
LnGrp Delay(d), s/veh	87.2	27.9	28.8	73.8	30.3	0.0	34.9	0.0	32.2	38.5	0.0	63.8
LnGrp LOS	F	C	C	E	C		C		C	D		E
Approach Vol, veh/h		1493			1239			293			397	
Approach Delay, s/veh		28.4			31.3			33.9			54.7	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.3	44.0		22.5	4.6	45.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	51.0		21.0	4.0	53.0
Max Q Clear Time (g_c+I1), s		11.0	3.7	26.7		18.1	2.3	33.3
Green Ext Time (p_c), s		1.2	0.0	10.9		0.5	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.0
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1049	0	0	1138	607	357
Future Volume (veh/h)	1049	0	0	1138	607	357
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863
Adj Flow Rate, veh/h	1140	0	0	1237	660	388
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1553	0	0	1553	1106	987
Arrive On Green	0.31	0.00	0.00	0.31	0.62	0.62
Sat Flow, veh/h	5421	0	0	5421	1774	1583
Grp Volume(v), veh/h	1140	0	0	1237	660	388
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1774	1583
Q Serve(g_s), s	22.5	0.0	0.0	25.1	25.1	13.7
Cycle Q Clear(g_c), s	22.5	0.0	0.0	25.1	25.1	13.7
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1553	0	0	1553	1106	987
V/C Ratio(X)	0.73	0.00	0.00	0.80	0.60	0.39
Avail Cap(c_a), veh/h	1902	0	0	1902	1106	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	35.8	12.7	10.6
Incr Delay (d2), s/veh	1.2	0.0	0.0	2.0	2.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	0.0	12.0	12.8	6.3
LnGrp Delay(d), s/veh	36.1	0.0	0.0	37.8	15.1	11.7
LnGrp LOS	D			D	B	B
Approach Vol, veh/h	1140			1237	1048	
Approach Delay, s/veh	36.1			37.8	13.8	
Approach LOS	D			D	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		38.3				38.3
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		27.1		24.5				27.1
Green Ext Time (p_c), s		3.9		7.2				7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.9
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑↑			↑↑↑↑	↰↰↑	↱
Traffic Volume (vph)	596	0	0	1121	252	273
Future Volume (vph)	596	0	0	1121	252	273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7544			6408	3336	1441
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7544			6408	3336	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	634	0	0	1193	268	290
RTOR Reduction (vph)	0	0	0	0	27	70
Lane Group Flow (vph)	634	0	0	1193	354	107
Confl. Bikes (#/hr)		1				
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	24.2			24.2	49.1	49.1
Effective Green, g (s)	24.2			24.2	49.1	49.1
Actuated g/C Ratio	0.30			0.30	0.60	0.60
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2245			1907	2014	870
v/s Ratio Prot	0.08			c0.19	c0.11	
v/s Ratio Perm						0.07
v/c Ratio	0.28			0.63	0.18	0.12
Uniform Delay, d1	21.9			24.6	7.1	6.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			0.6	0.2	0.3
Delay (s)	22.0			25.3	7.3	7.2
Level of Service	C			C	A	A
Approach Delay (s/veh)	22.0			25.3	7.3	
Approach LOS	C			C	A	

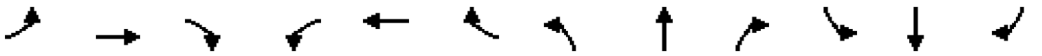
Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	81.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	735	0	0	1589	221	226
Future Volume (vph)	735	0	0	1589	221	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	3574			3574	3375	1455
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	3574			3574	3375	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	790	0	0	1709	238	243
RTOR Reduction (vph)	0	0	0	0	31	108
Lane Group Flow (vph)	790	0	0	1709	299	43
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	48.0			48.0	22.4	22.4
Effective Green, g (s)	48.0			48.0	22.4	22.4
Actuated g/C Ratio	0.61			0.61	0.29	0.29
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2188			2188	964	415
v/s Ratio Prot	0.22			c0.48	c0.09	
v/s Ratio Perm						0.03
v/c Ratio	0.36			0.78	0.31	0.10
Uniform Delay, d1	7.6			11.3	21.9	20.6
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			1.9	0.8	0.5
Delay (s)	7.7			13.2	22.8	21.1
Level of Service	A			B	C	C
Approach Delay (s/veh)	7.7			13.2	22.3	
Approach LOS	A			B	C	

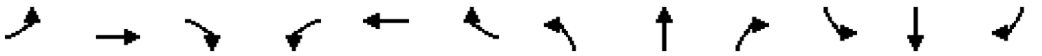
Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	78.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1125	0	0	1368	288	36	0	98	0	0	2
Future Volume (vph)	1	1125	0	0	1368	288	36	0	98	0	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Frt	1.00	1.00			0.97		1.00		0.85			0.87
Flt Protected	0.95	1.00			1.00		0.95		1.00			1.00
Satd. Flow (prot)	1787	3574			4978		1787		1599			1627
Flt Permitted	0.12	1.00			1.00		0.95		1.00			1.00
Satd. Flow (perm)	226	3574			4978		1787		1599			1627
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1	1160	0	0	1410	297	37	0	101	0	0	2
RTOR Reduction (vph)	0	0	0	0	34	0	0	0	72	0	0	2
Lane Group Flow (vph)	1	1160	0	0	1673	0	37	0	29	0	0	0
Confl. Peds. (#/hr)	3		17	17		3						
Confl. Bikes (#/hr)			22			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			6
Actuated Green, G (s)	33.3	33.3			33.3		18.6		18.6			0.8
Effective Green, g (s)	33.3	33.3			33.3		18.6		18.6			0.8
Actuated g/C Ratio	0.51	0.51			0.51		0.29		0.29			0.01
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	116	1839			2562		513		459			20
v/s Ratio Prot		0.32			c0.34		c0.02					
v/s Ratio Perm	0.00								0.02			c0.00
v/c Ratio	0.01	0.63			0.65		0.07		0.06			0.00
Uniform Delay, d1	7.7	11.3			11.5		16.8		16.7			31.6
Progression Factor	1.00	1.00			1.00		1.00		1.00			1.00
Incremental Delay, d2	0.0	0.7			0.6		0.3		0.3			0.0
Delay (s)	7.7	12.0			12.1		17.0		17.0			31.6
Level of Service	A	B			B		B		B			C
Approach Delay (s/veh)		12.0			12.1			17.0			31.6	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	706	73	45	827	166	111	26	46	177	29	358
Future Volume (vph)	96	706	73	45	827	166	111	26	46	177	29	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1539	3433	5085	1563	3433	1863	1546	1770	1543	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1539	3433	5085	1563	3433	1863	1546	1770	1543	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	100	735	76	47	861	173	116	27	48	184	30	373
RTOR Reduction (vph)	0	0	50	0	0	123	0	0	35	0	145	143
Lane Group Flow (vph)	100	735	26	47	861	50	116	27	13	184	60	55
Confl. Peds. (#/hr)			9	9					7	7		
Confl. Bikes (#/hr)			3			1			1			
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	8.1	29.0	29.0	3.8	24.7	24.7	22.4	22.4	22.4	14.6	14.6	22.7
Effective Green, g (s)	8.1	29.0	29.0	3.8	24.7	24.7	22.4	22.4	22.4	14.6	14.6	22.7
Actuated g/C Ratio	0.09	0.34	0.34	0.04	0.29	0.29	0.26	0.26	0.26	0.17	0.17	0.26
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	324	1718	520	152	1463	449	896	486	403	301	262	468
v/s Ratio Prot	c0.03	0.14		0.01	c0.17		c0.03	0.01		c0.10	0.04	0.01
v/s Ratio Perm			0.02			0.03			0.01			0.03
v/c Ratio	0.31	0.43	0.05	0.31	0.59	0.11	0.13	0.06	0.03	0.61	0.23	0.12
Uniform Delay, d1	36.2	22.0	19.1	39.7	26.2	22.5	24.2	23.8	23.6	33.0	30.7	23.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2	0.0	1.2	0.6	0.1	0.3	0.2	0.1	3.6	0.4	0.1
Delay (s)	36.8	22.2	19.2	40.9	26.8	22.6	24.5	24.0	23.8	36.6	31.2	24.1
Level of Service	D	C	B	D	C	C	C	C	C	D	C	C
Approach Delay (s/veh)		23.5			26.7			24.3			30.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

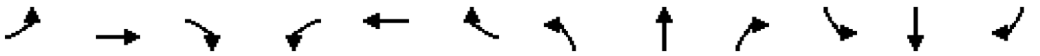
c Critical Lane Group



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	20	0	0	12	0	0
Future Volume (vph)	20	0	0	12	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.97		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3428			1539		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3428			1539		
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	23	0	0	14	0	0
RTOR Reduction (vph)	0	0	0	13	0	0
Lane Group Flow (vph)	23	0	0	1	0	0
Confl. Peds. (#/hr)	5			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	0.7			0.7		
Effective Green, g (s)	0.7			0.7		
Actuated g/C Ratio	0.07			0.07		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	255			114		
v/s Ratio Prot	c0.01					
v/s Ratio Perm				c0.00		
v/c Ratio	0.09			0.01		
Uniform Delay, d1	4.1			4.0		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	4.2			4.1		
Level of Service	A			A		
Approach Delay (s/veh)	4.2		4.1			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-0.03		
Actuated Cycle Length (s)	9.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	997	299	168	1007	6	360	26	181	8	31	142
Future Volume (vph)	65	997	299	168	1007	6	360	26	181	8	31	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1555	1770	3539	1547	1681	1696	1561	1770	1614	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1555	1770	3539	1547	1681	1696	1561	1770	1614	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	71	1096	329	185	1107	7	396	29	199	9	34	156
RTOR Reduction (vph)	0	0	151	0	0	4	0	0	153	0	143	0
Lane Group Flow (vph)	71	1096	178	185	1107	3	210	215	46	9	47	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Confl. Bikes (#/hr)			3									1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	7.2	40.5	40.5	15.4	48.7	48.7	24.4	24.4	24.4	8.9	8.9	
Effective Green, g (s)	7.2	40.5	40.5	15.4	48.7	48.7	24.4	24.4	24.4	8.9	8.9	
Actuated g/C Ratio	0.07	0.38	0.38	0.15	0.46	0.46	0.23	0.23	0.23	0.08	0.08	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	121	1362	598	259	1638	716	389	393	362	149	136	
v/s Ratio Prot	0.04	c0.31		c0.10	0.31		0.12	c0.13		0.01	c0.03	
v/s Ratio Perm			0.11			0.00			0.03			
v/c Ratio	0.59	0.80	0.30	0.71	0.68	0.00	0.54	0.55	0.13	0.06	0.35	
Uniform Delay, d1	47.6	28.8	22.5	42.8	22.1	15.2	35.5	35.5	32.0	44.3	45.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.1	3.6	0.3	9.0	1.1	0.0	5.3	5.4	0.7	0.2	1.5	
Delay (s)	54.6	32.4	22.7	51.8	23.2	15.2	40.8	40.9	32.7	44.5	46.9	
Level of Service	D	C	C	D	C	B	D	D	C	D	D	
Approach Delay (s/veh)		31.3			27.2			38.2			46.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	767	46	223	702	111	166	329	283	75	318	109
Future Volume (veh/h)	56	767	46	223	702	111	166	329	283	75	318	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	63	862	52	251	789	125	187	370	318	84	357	122
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	1211	365	296	1828	660	270	1238	541	109	1178	512
Arrive On Green	0.05	0.24	0.24	0.17	0.36	0.36	0.08	0.35	0.35	0.06	0.33	0.33
Sat Flow, veh/h	1774	5085	1535	1774	5085	1566	3442	3539	1546	1774	3539	1539
Grp Volume(v), veh/h	63	862	52	251	789	125	187	370	318	84	357	122
Grp Sat Flow(s),veh/h/ln	1774	1695	1535	1774	1695	1566	1721	1770	1546	1774	1770	1539
Q Serve(g_s), s	3.1	13.5	2.3	12.0	10.2	4.4	4.6	6.6	14.7	4.1	6.5	5.0
Cycle Q Clear(g_c), s	3.1	13.5	2.3	12.0	10.2	4.4	4.6	6.6	14.7	4.1	6.5	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	1211	365	296	1828	660	270	1238	541	109	1178	512
V/C Ratio(X)	0.78	0.71	0.14	0.85	0.43	0.19	0.69	0.30	0.59	0.77	0.30	0.24
Avail Cap(c_a), veh/h	183	1809	546	631	3094	1050	514	1238	541	285	1178	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	30.4	26.2	35.2	21.2	15.9	39.1	20.6	23.2	40.3	21.6	21.1
Incr Delay (d2), s/veh	14.6	0.8	0.2	6.6	0.2	0.1	3.2	0.6	4.6	10.9	0.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.4	1.0	6.4	4.8	1.9	2.3	3.3	6.9	2.3	3.3	2.3
LnGrp Delay(d), s/veh	55.7	31.2	26.4	41.8	21.3	16.0	42.3	21.2	27.8	51.2	22.2	22.2
LnGrp LOS	E	C	C	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		977			1165			875			563	
Approach Delay, s/veh		32.6			25.2			28.1			26.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	34.5	18.6	24.7	10.8	33.0	8.0	35.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	28.0	31.0	31.0	13.0	29.0	9.0	53.0
Max Q Clear Time (g_c+I1), s	6.1	16.7	14.0	15.5	6.6	8.5	5.1	12.2
Green Ext Time (p_c), s	0.1	2.7	0.6	5.2	0.3	2.5	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	48	197	17	100	35	149	736	7	22	593	42
Future Volume (veh/h)	27	48	197	17	100	35	149	736	7	22	593	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	53	216	19	110	38	164	809	8	24	652	46
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	304	254	223	304	254	594	2688	1200	528	2688	1186
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1232	1863	1556	1103	1863	1552	744	3539	1580	666	3539	1561
Grp Volume(v), veh/h	30	53	216	19	110	38	164	809	8	24	652	46
Grp Sat Flow(s),veh/h/ln	1232	1863	1556	1103	1863	1552	744	1770	1580	666	1770	1561
Q Serve(g_s), s	2.3	2.5	14.0	1.6	5.5	2.2	8.7	7.4	0.1	1.2	5.6	0.8
Cycle Q Clear(g_c), s	7.8	2.5	14.0	4.1	5.5	2.2	14.3	7.4	0.1	8.6	5.6	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	304	254	223	304	254	594	2688	1200	528	2688	1186
V/C Ratio(X)	0.15	0.17	0.85	0.09	0.36	0.15	0.28	0.30	0.01	0.05	0.24	0.04
Avail Cap(c_a), veh/h	395	591	494	392	591	493	594	2688	1200	528	2688	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	37.5	42.3	39.2	38.7	37.3	5.8	3.9	3.0	5.2	3.7	3.1
Incr Delay (d2), s/veh	0.3	0.3	7.7	0.2	0.7	0.3	1.2	0.3	0.0	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.3	6.5	0.5	2.9	1.0	2.0	3.7	0.1	0.2	2.8	0.3
LnGrp Delay(d), s/veh	42.4	37.7	50.0	39.4	39.4	37.6	6.9	4.2	3.0	5.4	3.9	3.2
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		299			167			981			722	
Approach Delay, s/veh		47.0			39.0			4.6			3.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		21.0		83.0		21.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		16.3		16.0		10.6		7.5
Green Ext Time (p_c), s		8.3		1.0		5.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	214	35	145	173	121	24	607	195	130	638	98
Future Volume (veh/h)	91	214	35	145	173	121	24	607	195	130	638	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	99	233	38	158	188	132	26	660	212	141	693	107
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	126	338	148	192	471	207	36	1389	446	174	2148	947
Arrive On Green	0.07	0.10	0.10	0.11	0.13	0.13	0.02	0.53	0.53	0.10	0.61	0.61
Sat Flow, veh/h	1757	3505	1532	1757	3505	1540	1757	2600	834	1757	3505	1545
Grp Volume(v), veh/h	99	233	38	158	188	132	26	445	427	141	693	107
Grp Sat Flow(s),veh/h/ln	1757	1752	1532	1757	1752	1540	1757	1752	1682	1757	1752	1545
Q Serve(g_s), s	5.5	6.4	2.3	8.8	4.9	8.1	1.5	15.8	15.8	7.8	9.5	2.9
Cycle Q Clear(g_c), s	5.5	6.4	2.3	8.8	4.9	8.1	1.5	15.8	15.8	7.8	9.5	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	126	338	148	192	471	207	36	937	899	174	2148	947
V/C Ratio(X)	0.79	0.69	0.26	0.82	0.40	0.64	0.72	0.47	0.48	0.81	0.32	0.11
Avail Cap(c_a), veh/h	229	563	246	371	845	371	106	937	899	353	2148	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	43.5	41.7	43.4	39.4	40.8	48.5	14.5	14.5	43.9	9.3	8.0
Incr Delay (d2), s/veh	10.4	2.5	0.9	8.5	0.5	3.2	23.2	1.7	1.8	8.7	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.2	1.0	4.7	2.4	3.6	0.9	8.0	7.7	4.2	4.6	1.3
LnGrp Delay(d), s/veh	55.9	46.0	42.6	51.8	40.0	44.0	71.6	16.2	16.3	52.6	9.7	8.3
LnGrp LOS	E	D	D	D	D	D	E	B	B	D	A	A
Approach Vol, veh/h		370			478			898			941	
Approach Delay, s/veh		48.3			45.0			17.8			16.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	57.2	14.9	13.6	6.1	65.0	11.1	17.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	47.0	21.0	16.0	6.0	61.0	13.0	24.0
Max Q Clear Time (g_c+I1), s	9.8	17.8	10.8	8.4	3.5	11.5	7.5	10.1
Green Ext Time (p_c), s	0.2	5.9	0.3	0.8	0.0	5.6	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	255	235	75	373	13	163	655	73	21	695	173
Future Volume (veh/h)	142	255	235	75	373	13	163	655	73	21	695	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	146	263	242	77	385	13	168	675	75	22	716	178
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	304	320	441	431	435	15	201	1498	653	32	1163	510
Arrive On Green	0.17	0.17	0.17	0.24	0.24	0.24	0.11	0.42	0.42	0.02	0.33	0.33
Sat Flow, veh/h	1792	1881	1544	1792	1808	61	1792	3574	1558	1792	3574	1569
Grp Volume(v), veh/h	146	263	242	77	0	398	168	675	75	22	716	178
Grp Sat Flow(s),veh/h/ln	1792	1881	1544	1792	0	1869	1792	1787	1558	1792	1787	1569
Q Serve(g_s), s	7.7	14.2	14.0	3.6	0.0	21.6	9.6	14.2	3.1	1.3	17.7	9.1
Cycle Q Clear(g_c), s	7.7	14.2	14.0	3.6	0.0	21.6	9.6	14.2	3.1	1.3	17.7	9.1
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	320	441	431	0	449	201	1498	653	32	1163	510
V/C Ratio(X)	0.48	0.82	0.55	0.18	0.00	0.89	0.84	0.45	0.11	0.68	0.62	0.35
Avail Cap(c_a), veh/h	393	412	517	546	0	570	290	1498	653	85	1163	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	42.0	32.1	31.6	0.0	38.5	45.7	21.8	18.6	51.2	29.9	26.9
Incr Delay (d2), s/veh	1.2	10.1	1.1	0.2	0.0	13.1	13.3	1.0	0.4	22.2	2.4	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	8.3	6.1	1.8	0.0	12.8	5.5	7.1	1.4	0.8	9.1	4.2
LnGrp Delay(d), s/veh	40.5	52.1	33.2	31.8	0.0	51.5	59.0	22.8	19.0	73.4	32.3	28.8
LnGrp LOS	D	D	C	C		D	E	C	B	E	C	C
Approach Vol, veh/h		651			475			918			916	
Approach Delay, s/veh		42.5			48.3			29.1			32.6	
Approach LOS		D			D			C			C	

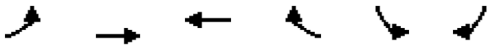
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	48.0		21.8	15.7	38.1		29.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	44.0		23.0	17.0	32.0		32.0
Max Q Clear Time (g_c+I1), s	3.3	16.2		16.2	11.6	19.7		23.6
Green Ext Time (p_c), s	0.0	5.1		1.7	0.2	4.2		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Future Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	191	936	132	222	1438	222	290	1137	132	103	942	156
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1301	183	250	1570	461	354	1380	586	146	1676	489
Arrive On Green	0.12	0.29	0.29	0.14	0.31	0.31	0.10	0.39	0.39	0.04	0.33	0.33
Sat Flow, veh/h	1774	4471	628	1774	5085	1494	3442	3539	1502	3442	5085	1485
Grp Volume(v), veh/h	191	709	359	222	1438	222	290	1137	132	103	942	156
Grp Sat Flow(s),veh/h/ln	1774	1695	1708	1774	1695	1494	1721	1770	1502	1721	1695	1485
Q Serve(g_s), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Cycle Q Clear(g_c), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	986	497	250	1570	461	354	1380	586	146	1676	489
V/C Ratio(X)	0.87	0.72	0.72	0.89	0.92	0.48	0.82	0.82	0.23	0.71	0.56	0.32
Avail Cap(c_a), veh/h	241	986	497	286	1595	469	467	1380	586	146	1676	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	37.5	37.5	49.7	39.3	33.1	51.8	32.3	24.1	55.7	32.5	29.6
Incr Delay (d2), s/veh	26.4	2.6	5.1	24.8	8.6	0.8	8.5	5.7	0.9	14.4	1.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	10.7	11.2	8.8	16.3	6.0	5.0	17.7	3.0	2.0	8.6	4.0
LnGrp Delay(d), s/veh	77.2	40.0	42.7	74.5	47.9	33.9	60.3	38.0	24.9	70.1	33.9	31.3
LnGrp LOS	E	D	D	E	D	C	E	D	C	E	C	C
Approach Vol, veh/h		1259			1882			1559			1201	
Approach Delay, s/veh		46.4			49.4			41.1			36.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	50.0	20.6	38.3	16.1	42.9	18.5	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	46.0	19.0	34.0	16.0	35.0	16.0	37.0
Max Q Clear Time (g_c+I1), s	5.5	36.1	16.5	24.3	11.7	20.0	14.5	34.1
Green Ext Time (p_c), s	0.0	5.5	0.1	4.6	0.4	6.2	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	355	1086	1258	300	285	263
Future Volume (veh/h)	355	1086	1258	300	285	263
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	374	1143	1324	316	300	277
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	417	3479	1668	397	841	387
Arrive On Green	0.23	0.68	0.40	0.40	0.24	0.24
Sat Flow, veh/h	1792	5305	4290	982	3476	1599
Grp Volume(v), veh/h	374	1143	1100	540	300	277
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1679	1738	1599
Q Serve(g_s), s	20.1	9.2	28.0	28.0	7.1	15.8
Cycle Q Clear(g_c), s	20.1	9.2	28.0	28.0	7.1	15.8
Prop In Lane	1.00			0.59	1.00	1.00
Lane Grp Cap(c), veh/h	417	3479	1386	679	841	387
V/C Ratio(X)	0.90	0.33	0.79	0.80	0.36	0.72
Avail Cap(c_a), veh/h	668	4555	1622	795	841	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	6.6	25.9	25.9	31.2	34.5
Incr Delay (d2), s/veh	9.7	0.1	2.4	4.9	1.2	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	4.3	13.6	13.8	3.6	14.6
LnGrp Delay(d), s/veh	46.7	6.7	28.3	30.8	32.4	45.3
LnGrp LOS	D	A	C	C	C	D
Approach Vol, veh/h		1517	1640		577	
Approach Delay, s/veh		16.5	29.1		38.6	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				71.2		28.0	27.1	44.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				88.0		24.0	37.0	47.0
Max Q Clear Time (g_c+I1), s				11.2		17.8	22.1	30.0
Green Ext Time (p_c), s				10.2		1.2	1.0	10.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1115	41	132	1368	37	107	32	253	67	99	94
Future Volume (veh/h)	33	1115	41	132	1368	37	107	32	253	67	99	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	36	1225	45	145	1503	41	118	35	278	74	109	103
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	47	1734	64	182	2140	58	482	796	674	522	374	353
Arrive On Green	0.03	0.34	0.34	0.10	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1792	5082	187	1792	5136	140	1175	1881	1593	1070	883	834
Grp Volume(v), veh/h	36	825	445	145	1002	542	118	35	278	74	0	212
Grp Sat Flow(s),veh/h/ln	1792	1712	1845	1792	1712	1852	1175	1881	1593	1070	0	1717
Q Serve(g_s), s	1.8	18.8	18.8	7.1	21.7	21.7	6.6	1.0	10.9	3.9	0.0	7.3
Cycle Q Clear(g_c), s	1.8	18.8	18.8	7.1	21.7	21.7	13.9	1.0	10.9	4.9	0.0	7.3
Prop In Lane	1.00		0.10	1.00		0.08	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	47	1168	630	182	1426	772	482	796	674	522	0	727
V/C Ratio(X)	0.76	0.71	0.71	0.80	0.70	0.70	0.24	0.04	0.41	0.14	0.00	0.29
Avail Cap(c_a), veh/h	160	1793	966	459	2365	1279	482	796	674	522	0	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	43.4	25.7	25.7	39.4	21.6	21.6	21.6	15.2	18.1	16.7	0.0	17.0
Incr Delay (d2), s/veh	21.8	0.8	1.5	7.7	0.6	1.2	1.2	0.1	1.9	0.6	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	9.0	9.8	3.9	10.3	11.2	2.3	0.5	5.1	1.2	0.0	3.6
LnGrp Delay(d), s/veh	65.2	26.5	27.1	47.1	22.2	22.8	22.8	15.3	19.9	17.2	0.0	18.0
LnGrp LOS	E	C	C	D	C	C	C	B	B	B		B
Approach Vol, veh/h		1306			1689			431			286	
Approach Delay, s/veh		27.8			24.5			20.3			17.8	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		42.0	13.1	34.6		42.0	6.4	41.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		38.0	23.0	47.0		38.0	8.0	62.0
Max Q Clear Time (g_c+I1), s		15.9	9.1	20.8		9.3	3.8	23.7
Green Ext Time (p_c), s		1.5	0.3	9.2		1.7	0.0	13.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	313	42	70	557	46	32	217	1	32	280	49
Future Volume (veh/h)	79	313	42	70	557	46	32	217	1	32	280	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	89	352	47	79	626	52	36	244	1	36	315	55
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	230	1044	138	339	1100	91	50	1696	749	50	1444	249
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.03	0.48	0.48	0.03	0.48	0.48
Sat Flow, veh/h	758	3137	415	981	3305	274	1774	3539	1563	1774	3013	520
Grp Volume(v), veh/h	89	197	202	79	335	343	36	244	1	36	183	187
Grp Sat Flow(s),veh/h/ln	758	1770	1782	981	1770	1810	1774	1770	1563	1774	1770	1763
Q Serve(g_s), s	8.2	6.3	6.4	4.9	11.7	11.7	1.5	2.9	0.0	1.5	4.5	4.6
Cycle Q Clear(g_c), s	20.0	6.3	6.4	11.3	11.7	11.7	1.5	2.9	0.0	1.5	4.5	4.6
Prop In Lane	1.00		0.23	1.00		0.15	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	230	589	593	339	589	603	50	1696	749	50	848	845
V/C Ratio(X)	0.39	0.33	0.34	0.23	0.57	0.57	0.72	0.14	0.00	0.72	0.22	0.22
Avail Cap(c_a), veh/h	583	1413	1423	796	1413	1445	283	1696	749	283	848	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	18.8	18.8	23.1	20.6	20.6	36.2	10.9	10.2	36.2	11.4	11.4
Incr Delay (d2), s/veh	1.1	0.3	0.3	0.3	0.9	0.9	17.7	0.2	0.0	17.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	3.1	3.2	1.4	5.8	6.0	1.0	1.5	0.0	1.0	2.3	2.4
LnGrp Delay(d), s/veh	29.9	19.1	19.2	23.5	21.5	21.5	53.9	11.1	10.2	53.9	12.0	12.0
LnGrp LOS	C	B	B	C	C	C	D	B	B	D	B	B
Approach Vol, veh/h		488			757			281			406	
Approach Delay, s/veh		21.1			21.7			16.6			15.7	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	40.0		29.0	6.1	40.0		29.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	36.0		60.0	12.0	36.0		60.0
Max Q Clear Time (g_c+I1), s	3.5	4.9		22.0	3.5	6.6		13.7
Green Ext Time (p_c), s	0.0	1.4		3.1	0.0	2.0		4.8

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		19.5
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	619	90	371	878	0	194	0	570	0	0	0
Future Volume (veh/h)	0	619	90	371	878	0	194	0	570	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	0	696	101	417	987	0	218	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	73	2232	324	507	2557	0	357	0	325	0	2	0
Arrive On Green	0.00	0.72	0.72	0.72	0.72	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	574	3121	452	685	3668	0	1757	0	1599	0	1881	0
Grp Volume(v), veh/h	0	398	399	417	987	0	218	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	574	1787	1786	685	1787	0	1757	0	1599	0	1881	0
Q Serve(g_s), s	0.0	8.0	8.0	56.1	10.7	0.0	11.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.0	8.0	64.1	10.7	0.0	11.1	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.25	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	73	1278	1278	507	2557	0	357	0	325	0	2	0
V/C Ratio(X)	0.00	0.31	0.31	0.82	0.39	0.00	0.61	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	83	1308	1308	519	2617	0	357	0	325	0	306	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.1	5.1	16.9	5.5	0.0	35.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	10.1	0.1	0.0	7.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.9	3.9	11.8	5.2	0.0	6.1	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	5.3	5.3	27.0	5.6	0.0	43.2	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	C	A		D					
Approach Vol, veh/h		797			1404			218			0	
Approach Delay, s/veh		5.3			12.0			43.2			0.0	
Approach LOS		A			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.0		74.3		0.0		74.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		72.0		16.0		72.0
Max Q Clear Time (g_c+I1), s		13.1		10.0		0.0		66.1
Green Ext Time (p_c), s		0.6		5.5		0.0		4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	923	115	284	1217	189	199	485	394	87	355	84
Future Volume (veh/h)	113	923	115	284	1217	189	199	485	394	87	355	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	116	952	119	293	1255	195	205	500	406	90	366	87
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	143	1336	166	324	1398	593	237	612	507	114	731	172
Arrive On Green	0.08	0.29	0.29	0.18	0.39	0.39	0.13	0.33	0.33	0.06	0.26	0.26
Sat Flow, veh/h	1792	4605	574	1792	3574	1515	1792	1881	1559	1792	2856	670
Grp Volume(v), veh/h	116	707	364	293	1255	195	205	500	406	90	227	226
Grp Sat Flow(s),veh/h/ln	1792	1712	1754	1792	1787	1515	1792	1881	1559	1792	1787	1738
Q Serve(g_s), s	7.3	21.0	21.1	18.2	37.5	10.2	12.8	27.8	27.0	5.6	12.3	12.6
Cycle Q Clear(g_c), s	7.3	21.0	21.1	18.2	37.5	10.2	12.8	27.8	27.0	5.6	12.3	12.6
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	143	994	509	324	1398	593	237	612	507	114	458	445
V/C Ratio(X)	0.81	0.71	0.71	0.91	0.90	0.33	0.86	0.82	0.80	0.79	0.50	0.51
Avail Cap(c_a), veh/h	173	1023	524	378	1476	626	362	612	507	142	458	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	36.1	36.2	45.7	32.5	24.2	48.4	35.3	35.0	52.5	36.1	36.2
Incr Delay (d2), s/veh	21.2	2.3	4.5	22.6	7.4	0.3	12.8	11.5	12.5	21.1	3.8	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	10.2	10.8	11.1	19.9	4.3	7.2	16.4	13.4	3.5	6.5	6.6
LnGrp Delay(d), s/veh	72.8	38.4	40.6	68.3	39.9	24.5	61.1	46.8	47.5	73.7	39.9	40.3
LnGrp LOS	E	D	D	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1187			1743			1111			543	
Approach Delay, s/veh		42.4			43.0			49.7			45.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	41.0	24.5	37.0	19.1	33.1	13.1	48.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	37.0	24.0	34.0	23.0	23.0	11.0	47.0
Max Q Clear Time (g_c+I1), s	7.6	29.8	20.2	23.1	14.8	14.6	9.3	39.5
Green Ext Time (p_c), s	0.0	2.7	0.3	5.1	0.3	1.5	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	888	299	151	1037	0	245	139	201	0	0	0
Future Volume (veh/h)	0	888	299	151	1037	0	245	139	201	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1021	344	174	1192	0	282	160	231			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	1781	545	274	2461	0	1439	1417	662			
Arrive On Green	0.00	0.35	0.35	0.08	0.48	0.00	0.41	0.41	0.41			
Sat Flow, veh/h	0	5305	1571	3476	5305	0	3476	3424	1599			
Grp Volume(v), veh/h	0	1021	344	174	1192	0	282	160	231			
Grp Sat Flow(s),veh/h/ln	0	1712	1571	1738	1712	0	1738	1712	1599			
Q Serve(g_s), s	0.0	12.1	13.7	3.6	11.8	0.0	3.9	2.2	7.4			
Cycle Q Clear(g_c), s	0.0	12.1	13.7	3.6	11.8	0.0	3.9	2.2	7.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	1781	545	274	2461	0	1439	1417	662			
V/C Ratio(X)	0.00	0.57	0.63	0.63	0.48	0.00	0.20	0.11	0.35			
Avail Cap(c_a), veh/h	0	3909	1196	928	5555	0	1439	1417	662			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	19.9	20.5	33.4	13.2	0.0	14.0	13.5	15.0			
Incr Delay (d2), s/veh	0.0	0.3	1.2	2.4	0.1	0.0	0.3	0.2	1.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	5.7	6.1	1.8	5.6	0.0	1.9	1.1	3.5			
LnGrp Delay(d), s/veh	0.0	20.2	21.7	35.9	13.4	0.0	14.3	13.6	16.5			
LnGrp LOS		C	C	D	B		B	B	B			
Approach Vol, veh/h		1365			1366			673				
Approach Delay, s/veh		20.6			16.2			14.9				
Approach LOS		C			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			9.9	30.0		35.0		39.9
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			20.0	57.0		31.0		81.0
Max Q Clear Time (g_c+I1), s			5.6	15.7		9.4		13.8
Green Ext Time (p_c), s			0.4	10.3		3.3		10.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	399	1433	78	252	1114	121	163	1086	749	149	1028	389
Future Volume (veh/h)	399	1433	78	252	1114	121	163	1086	749	149	1028	389
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	434	1558	85	274	1211	132	177	1180	814	162	1117	423
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	515	1839	655	348	1593	472	237	1705	1145	222	1684	720
Arrive On Green	0.15	0.36	0.36	0.10	0.31	0.31	0.07	0.33	0.33	0.06	0.33	0.33
Sat Flow, veh/h	3476	5136	1525	3476	5136	1520	3476	5136	2599	3476	5136	1473
Grp Volume(v), veh/h	434	1558	85	274	1211	132	177	1180	814	162	1117	423
Grp Sat Flow(s),veh/h/ln	1738	1712	1525	1738	1712	1520	1738	1712	1300	1738	1712	1473
Q Serve(g_s), s	13.3	30.7	3.7	8.5	23.4	7.2	5.5	21.9	28.4	5.0	20.5	23.2
Cycle Q Clear(g_c), s	13.3	30.7	3.7	8.5	23.4	7.2	5.5	21.9	28.4	5.0	20.5	23.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	1839	655	348	1593	472	237	1705	1145	222	1684	720
V/C Ratio(X)	0.84	0.85	0.13	0.79	0.76	0.28	0.75	0.69	0.71	0.73	0.66	0.59
Avail Cap(c_a), veh/h	696	1964	692	570	1777	526	253	1705	1145	253	1684	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	32.5	19.1	48.3	34.2	28.6	50.2	31.8	25.8	50.5	31.7	21.2
Incr Delay (d2), s/veh	7.0	3.5	0.1	4.0	1.8	0.3	10.8	2.3	3.8	8.8	2.1	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	15.0	1.6	4.3	11.2	3.1	3.0	10.6	10.7	2.7	10.0	10.0
LnGrp Delay(d), s/veh	52.6	36.0	19.2	52.2	35.9	28.9	61.1	34.1	29.5	59.3	33.8	24.7
LnGrp LOS	D	D	B	D	D	C	E	C	C	E	C	C
Approach Vol, veh/h		2077			1617			2171			1702	
Approach Delay, s/veh		38.7			38.1			34.6			33.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	40.5	15.0	43.3	11.5	40.0	20.3	38.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	36.0	18.0	42.0	8.0	36.0	22.0	38.0
Max Q Clear Time (g_c+I1), s	7.0	30.4	10.5	32.7	7.5	25.2	15.3	25.4
Green Ext Time (p_c), s	0.0	4.5	0.5	6.6	0.0	6.4	0.9	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	394	739	0	0	1023	533	0	0	0	189	774	12
Future Volume (veh/h)	394	739	0	0	1023	533	0	0	0	189	774	12
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	453	849	0	0	1176	613				217	890	14
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	524	3248	0	0	2289	703				291	1289	21
Arrive On Green	0.15	0.63	0.00	0.00	0.45	0.45				0.30	0.30	0.30
Sat Flow, veh/h	3476	5305	0	0	5305	1577				984	4357	70
Grp Volume(v), veh/h	453	849	0	0	1176	613				404	343	374
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1577				1832	1712	1868
Q Serve(g_s), s	14.2	8.1	0.0	0.0	18.4	39.3				22.2	19.7	19.7
Cycle Q Clear(g_c), s	14.2	8.1	0.0	0.0	18.4	39.3				22.2	19.7	19.7
Prop In Lane	1.00		0.00	0.00		1.00				0.54		0.04
Lane Grp Cap(c), veh/h	524	3248	0	0	2289	703				542	507	553
V/C Ratio(X)	0.86	0.26	0.00	0.00	0.51	0.87				0.75	0.68	0.68
Avail Cap(c_a), veh/h	623	3638	0	0	2533	778				542	507	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	9.0	0.0	0.0	22.2	28.0				35.5	34.6	34.6
Incr Delay (d2), s/veh	10.6	0.0	0.0	0.0	0.2	9.9				9.0	7.1	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	3.8	0.0	0.0	8.6	19.0				12.6	10.3	11.2
LnGrp Delay(d), s/veh	56.8	9.1	0.0	0.0	22.4	38.0				44.5	41.7	41.1
LnGrp LOS	E	A			C	D				D	D	D
Approach Vol, veh/h		1302			1789						1121	
Approach Delay, s/veh		25.7			27.7						42.5	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		37.0		74.5			20.8	53.7
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		33.0		79.0			20.0	55.0
Max Q Clear Time (g_c+I1), s		24.2		10.1			16.2	41.3
Green Ext Time (p_c), s		4.1		6.7			0.6	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1266	63	153	1517	50	141	27	439	151	81	87
Future Volume (veh/h)	66	1266	63	153	1517	50	141	27	439	151	81	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	68	1305	65	158	1564	52	145	28	453	156	84	90
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	88	1978	99	233	2124	636	432	453	839	230	230	195
Arrive On Green	0.05	0.40	0.40	0.07	0.41	0.41	0.24	0.24	0.24	0.13	0.13	0.13
Sat Flow, veh/h	1792	5000	249	3476	5136	1538	1792	1881	2699	1792	1787	1513
Grp Volume(v), veh/h	68	894	476	158	1564	52	145	28	453	156	84	90
Grp Sat Flow(s),veh/h/ln	1792	1712	1825	1738	1712	1538	1792	1881	1350	1792	1787	1513
Q Serve(g_s), s	3.6	20.4	20.4	4.2	24.5	2.0	6.4	1.1	13.3	7.9	4.1	5.3
Cycle Q Clear(g_c), s	3.6	20.4	20.4	4.2	24.5	2.0	6.4	1.1	13.3	7.9	4.1	5.3
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	1355	722	233	2124	636	432	453	839	230	230	195
V/C Ratio(X)	0.77	0.66	0.66	0.68	0.74	0.08	0.34	0.06	0.54	0.68	0.37	0.46
Avail Cap(c_a), veh/h	188	1686	899	510	2744	822	432	453	839	375	374	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	23.6	23.6	43.5	23.6	17.0	29.9	27.9	27.5	39.7	38.0	38.5
Incr Delay (d2), s/veh	13.2	0.7	1.3	3.4	0.8	0.1	2.1	0.3	2.5	3.5	1.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.7	10.4	2.2	11.7	0.8	3.4	0.6	5.3	4.2	2.1	2.3
LnGrp Delay(d), s/veh	58.1	24.3	24.8	46.9	24.4	17.0	32.0	28.2	29.9	43.2	39.0	40.2
LnGrp LOS	E	C	C	D	C	B	C	C	C	D	D	D
Approach Vol, veh/h		1438			1774			626			330	
Approach Delay, s/veh		26.1			26.2			30.3			41.3	
Approach LOS		C			C			C			D	

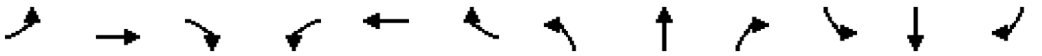
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	10.4	41.8		16.3	8.7	43.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	14.0	47.0		20.0	10.0	51.0
Max Q Clear Time (g_c+I1), s		15.3	6.2	22.4		9.9	5.6	26.5
Green Ext Time (p_c), s		1.6	0.3	10.3		1.0	0.0	13.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C



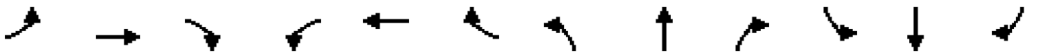
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	126	235	0	0	0	0	1603	10	0	1420	0
Future Volume (vph)	52	126	235	0	0	0	0	1603	10	0	1420	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					1.00			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1783	2814					7610			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1783	2814					7610			6471	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	140	261	0	0	0	0	1781	11	0	1578	0
RTOR Reduction (vph)	0	0	51	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	146	210	0	0	0	0	1792	0	0	1578	0
Confl. Peds. (#/hr)							5		6	6		5
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	13.4	13.4	13.4					74.5			74.5	
Effective Green, g (s)	13.4	13.4	13.4					74.5			74.5	
Actuated g/C Ratio	0.14	0.14	0.14					0.78			0.78	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	237	249	393					5911			5027	
v/s Ratio Prot	0.03	c0.08						0.24			c0.24	
v/s Ratio Perm			0.07									
v/c Ratio	0.22	0.59	0.53					0.30			0.31	
Uniform Delay, d1	36.6	38.7	38.4					3.1			3.2	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.5	3.5	1.4					0.1			0.2	
Delay (s)	37.1	42.2	39.8					3.3			3.3	
Level of Service	D	D	D					A			A	
Approach Delay (s/veh)		40.2			0.0			3.3			3.3	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	95.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



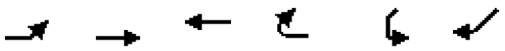
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1398	925	203	1073	0	435	0	60	140	0	6
Future Volume (vph)	0	1398	925	203	1073	0	435	0	60	140	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.96	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5802	1237	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5802	1237	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1427	944	207	1095	0	444	0	61	143	0	6
RTOR Reduction (vph)	0	51	233	0	0	0	0	0	44	0	0	4
Lane Group Flow (vph)	0	1848	239	207	1095	0	444	0	17	143	0	2
Confl. Peds. (#/hr)	2		16	16		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		55.5	55.5	11.9	71.4		30.3		30.3	30.3		30.3
Effective Green, g (s)		55.5	55.5	11.9	71.4		30.3		30.3	30.3		30.3
Actuated g/C Ratio		0.51	0.51	0.11	0.65		0.28		0.28	0.28		0.28
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2935	625	376	3342		957		441	957		441
v/s Ratio Prot		c0.32		c0.06	0.21							
v/s Ratio Perm			0.19				c0.13		0.01	0.04		0.00
v/c Ratio		0.63	0.38	0.55	0.33		0.46		0.04	0.15		0.00
Uniform Delay, d1		19.6	16.6	46.4	8.5		33.0		29.0	30.0		28.8
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.4	0.4	1.7	0.1		1.6		0.2	0.3		0.0
Delay (s)		20.1	17.0	48.1	8.6		34.6		29.2	30.3		28.8
Level of Service		C	B	D	A		C		C	C		C
Approach Delay (s/veh)		19.5			14.8			33.9			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	58	974	244	222	1081	0	15	1670	28
Future Volume (vph)	0	0	0	58	974	244	222	1081	0	15	1670	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3423	2814	3467	6471		1787	6471	1566
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3423	2814	3467	6471		1787	6471	1566
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	65	1094	274	249	1215	0	17	1876	31
RTOR Reduction (vph)	0	0	0	0	0	124	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	58	1101	150	249	1215	0	17	1876	11
Confl. Peds. (#/hr)							3		5	5		3
Confl. Bikes (#/hr)									4			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				53.0	53.0	53.0	12.2	54.7		2.0	44.5	44.5
Effective Green, g (s)				53.0	53.0	53.0	12.2	54.7		2.0	44.5	44.5
Actuated g/C Ratio				0.44	0.44	0.44	0.10	0.45		0.02	0.37	0.37
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				708	1490	1225	347	2908		29	2366	572
v/s Ratio Prot				0.04	c0.32		c0.07	0.19		0.01	c0.29	
v/s Ratio Perm						0.05						0.01
v/c Ratio				0.08	0.74	0.12	0.72	0.42		0.59	0.79	0.02
Uniform Delay, d1				20.1	28.6	20.5	53.1	22.7		59.4	34.5	24.7
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.0	2.0	0.0	6.9	0.4		26.8	2.8	0.1
Delay (s)				20.2	30.5	20.5	60.0	23.2		86.2	37.3	24.7
Level of Service				C	C	C	E	C		F	D	C
Approach Delay (s/veh)		0.0			28.2			29.4			37.5	
Approach LOS		A			C			C			D	

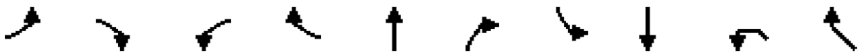
Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	121.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	164	1475	1506	355	55	154
Future Volume (veh/h)	164	1475	1506	355	55	154
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	173	1553	1585	374	58	162
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	214	4067	2435	575	504	450
Arrive On Green	0.12	0.63	0.46	0.46	0.28	0.28
Sat Flow, veh/h	1792	6735	5509	1238	1792	1599
Grp Volume(v), veh/h	173	1553	1467	492	58	162
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1629	1792	1599
Q Serve(g_s), s	8.4	10.4	20.6	20.6	2.1	7.2
Cycle Q Clear(g_c), s	8.4	10.4	20.6	20.6	2.1	7.2
Prop In Lane	1.00			0.76	1.00	1.00
Lane Grp Cap(c), veh/h	214	4067	2253	756	504	450
V/C Ratio(X)	0.81	0.38	0.65	0.65	0.12	0.36
Avail Cap(c_a), veh/h	524	6339	3115	1046	504	450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	8.1	18.3	18.3	23.7	25.5
Incr Delay (d2), s/veh	7.2	0.1	0.3	1.0	0.5	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	4.7	9.2	9.4	1.1	0.3
LnGrp Delay(d), s/veh	45.3	8.1	18.6	19.2	24.2	27.7
LnGrp LOS	D	A	B	B	C	C
Approach Vol, veh/h		1726	1959		220	
Approach Delay, s/veh		11.9	18.8		26.8	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				59.8		29.0	14.6	45.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				87.0		25.0	26.0	57.0
Max Q Clear Time (g_c+I1), s				12.4		9.2	10.4	22.6
Green Ext Time (p_c), s				17.2		0.6	0.4	18.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.2
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	NWL2	NWR
Lane Configurations										
Traffic Volume (vph)	23	0	5	108	101	2	67	45	10	10
Future Volume (vph)	23	0	5	108	101	2	67	45	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	0.88	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00		1.00	1.00	1.00	0.85
Flt Protected	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	1671		1671	2632	3333		1671	3343	1671	1495
Flt Permitted	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1671		1671	2632	3333		1671	3343	1671	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	0	5	117	110	2	73	49	11	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	25	0	5	117	112	0	73	49	11	11
Confl. Peds. (#/hr)			12			2				
Confl. Bikes (#/hr)						1				
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA	Prot	Prot
Protected Phases	4	4	8	1	2		1	6	7	7
Permitted Phases				8						
Actuated Green, G (s)	2.7		1.0	9.8	43.2		8.8	56.0	2.4	2.4
Effective Green, g (s)	2.7		1.0	9.8	43.2		8.8	56.0	2.4	2.4
Actuated g/C Ratio	0.03		0.01	0.13	0.55		0.11	0.72	0.03	0.03
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	57		21	465	1843		188	2397	51	45
v/s Ratio Prot	c0.01		0.00	c0.03	c0.03		c0.04	0.01	0.01	c0.01
v/s Ratio Perm				0.02						
v/c Ratio	0.44		0.24	0.25	0.06		0.39	0.02	0.22	0.24
Uniform Delay, d1	37.0		38.2	30.8	8.1		32.2	3.2	36.9	37.0
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3		5.8	0.3	0.1		1.3	0.0	2.1	2.8
Delay (s)	42.3		44.0	31.1	8.1		33.5	3.2	39.1	39.8
Level of Service	D		D	C	A		C	A	D	D
Approach Delay (s/veh)					8.1			21.3		
Approach LOS					A			C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.14		
Actuated Cycle Length (s)	78.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	37.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	0	0	0	0	0	0	98	0	15	39	1
Future Volume (veh/h)	4	0	0	0	0	0	0	98	0	15	39	1
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	0	1712				0	1712	0	1712	1712	1900
Adj Flow Rate, veh/h	4	0	0				0	108	0	16	43	1
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	0	11				0	11	0	11	11	11
Cap, veh/h	7	0	6				0	2787	0	24	2966	69
Arrive On Green	0.00	0.00	0.00				0.00	0.86	0.00	0.01	0.91	0.91
Sat Flow, veh/h	1630	0	1455				0	3423	0	1630	3249	75
Grp Volume(v), veh/h	4	0	0				0	108	0	16	21	23
Grp Sat Flow(s),veh/h/ln	1630	0	1455				0	1626	0	1630	1626	1698
Q Serve(g_s), s	0.2	0.0	0.0				0.0	0.5	0.0	0.9	0.1	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.0				0.0	0.5	0.0	0.9	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.04
Lane Grp Cap(c), veh/h	7	0	6				0	2787	0	24	1484	1550
V/C Ratio(X)	0.58	0.00	0.00				0.00	0.04	0.00	0.68	0.01	0.01
Avail Cap(c_a), veh/h	406	0	362				0	2787	0	592	1484	1550
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	0.0	0.0				0.0	1.0	0.0	47.3	0.4	0.4
Incr Delay (d2), s/veh	59.8	0.0	0.0				0.0	0.0	0.0	29.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0				0.0	0.2	0.0	0.6	0.1	0.1
LnGrp Delay(d), s/veh	107.7	0.0	0.0				0.0	1.0	0.0	76.3	0.4	0.4
LnGrp LOS	F							A		E	A	A
Approach Vol, veh/h		4						108			60	
Approach Delay, s/veh		107.7						1.0			20.6	
Approach LOS		F						A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.4	86.6		4.4		92.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	35.0	49.0		24.0		88.0		
Max Q Clear Time (g_c+I1), s	2.9	2.5		2.2		2.1		
Green Ext Time (p_c), s	0.0	0.7		0.0		0.3		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5.8

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	15	67	31	5	25	13
Future Vol, veh/h	15	67	31	5	25	13
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	17	75	35	6	28	15

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	103	21	0	0	41	0
Stage 1	38	-	-	-	-	-
Stage 2	65	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	884	1051	-	-	1567	-
Stage 1	980	-	-	-	-	-
Stage 2	950	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	867	1051	-	-	1567	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	980	-	-	-	-	-
Stage 2	932	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.9	0	4.8
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	1012	1567	-
HCM Lane V/C Ratio	-	-	0.091	0.018	-
HCM Control Delay (s/veh)	-	-	8.9	7.3	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.3	0.1	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	931	10	0	1038	0	15
Future Vol, veh/h	931	10	0	1038	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	990	11	0	1104	0	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	495
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	445
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	445
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	445	-	-	-
HCM Lane V/C Ratio	0.036	-	-	-
HCM Control Delay (s/veh)	13.4	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Future Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	267	645	94	186	824	98	101	1060	53	126	846	286
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	309	1143	486	351	923	110	258	1335	67	229	1414	603
Arrive On Green	0.12	0.32	0.32	0.09	0.29	0.29	0.05	0.39	0.39	0.06	0.40	0.40
Sat Flow, veh/h	1792	3574	1521	1792	3196	380	1792	3455	173	1792	3574	1525
Grp Volume(v), veh/h	267	645	94	186	461	461	101	548	565	126	846	286
Grp Sat Flow(s),veh/h/ln	1792	1787	1521	1792	1787	1789	1792	1787	1841	1792	1787	1525
Q Serve(g_s), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Cycle Q Clear(g_c), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	309	1143	486	351	516	517	258	691	711	229	1414	603
V/C Ratio(X)	0.87	0.56	0.19	0.53	0.89	0.89	0.39	0.79	0.79	0.55	0.60	0.47
Avail Cap(c_a), veh/h	380	1253	533	413	562	563	314	691	711	252	1414	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	31.4	27.4	24.9	37.9	37.9	21.0	30.2	30.2	23.9	26.6	25.0
Incr Delay (d2), s/veh	15.8	0.5	0.2	1.2	15.7	15.7	1.0	9.1	8.9	2.1	1.9	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	8.3	2.1	4.0	15.8	15.8	1.9	16.7	17.1	2.4	10.6	7.0
LnGrp Delay(d), s/veh	42.4	31.9	27.6	26.2	53.6	53.6	21.9	39.4	39.1	25.9	28.5	27.7
LnGrp LOS	D	C	C	C	D	D	C	D	D	C	C	C
Approach Vol, veh/h		1006			1108			1214			1258	
Approach Delay, s/veh		34.3			49.0			37.8			28.1	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	47.0	14.1	39.6	9.5	48.0	17.6	36.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	14.0	39.0	9.0	42.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	6.7	32.2	10.0	18.7	5.7	22.9	13.2	29.5
Green Ext Time (p_c), s	0.0	5.2	0.2	4.6	0.1	6.8	0.3	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Future Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	174	818	74	156	1141	190	190	924	165	125	756	141
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	205	1245	113	187	1323	525	327	1310	233	243	1412	408
Arrive On Green	0.11	0.38	0.38	0.10	0.37	0.37	0.09	0.30	0.30	0.07	0.28	0.28
Sat Flow, veh/h	1792	3275	296	1792	3574	1419	1792	4333	770	1792	5136	1483
Grp Volume(v), veh/h	174	446	446	156	1141	190	190	729	360	125	756	141
Grp Sat Flow(s),veh/h/ln	1792	1787	1785	1792	1787	1419	1792	1712	1679	1792	1712	1483
Q Serve(g_s), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Cycle Q Clear(g_c), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	205	679	678	187	1323	525	327	1035	507	243	1412	408
V/C Ratio(X)	0.85	0.66	0.66	0.83	0.86	0.36	0.58	0.70	0.71	0.51	0.54	0.35
Avail Cap(c_a), veh/h	279	720	719	295	1473	585	406	1035	507	272	1412	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	28.0	28.0	47.9	31.8	25.0	25.1	33.8	33.8	27.4	33.6	31.7
Incr Delay (d2), s/veh	16.2	2.0	2.0	10.8	5.1	0.4	1.6	4.0	8.2	1.7	1.5	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	11.4	11.4	5.2	16.8	4.2	4.1	10.3	10.7	2.8	6.6	3.7
LnGrp Delay(d), s/veh	63.6	30.0	30.0	58.8	36.9	25.4	26.7	37.8	42.0	29.0	35.1	34.0
LnGrp LOS	E	C	C	E	D	C	C	D	D	C	D	C
Approach Vol, veh/h		1066			1487			1279			1022	
Approach Delay, s/veh		35.5			37.7			37.3			34.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	37.0	15.4	45.5	14.2	34.0	16.5	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	33.0	18.0	44.0	15.0	27.0	17.0	45.0
Max Q Clear Time (g_c+I1), s	7.4	22.8	11.3	24.5	10.1	15.7	12.4	34.3
Green Ext Time (p_c), s	0.0	5.0	0.2	5.5	0.2	4.2	0.2	6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	776	430	162	1648	75	654	904	302	75	734	309
Future Volume (veh/h)	300	776	430	162	1648	75	654	904	302	75	734	309
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	312	808	448	169	1717	78	681	942	315	78	765	322
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	1996	592	226	1781	81	717	1893	572	125	1017	300
Arrive On Green	0.10	0.39	0.39	0.07	0.36	0.36	0.21	0.37	0.37	0.04	0.20	0.20
Sat Flow, veh/h	3442	5085	1507	3442	4973	226	3442	5085	1538	3442	5085	1499
Grp Volume(v), veh/h	312	808	448	169	1170	625	681	942	315	78	765	322
Grp Sat Flow(s),veh/h/ln	1721	1695	1507	1721	1695	1809	1721	1695	1538	1721	1695	1499
Q Serve(g_s), s	10.8	13.8	30.8	5.8	40.6	40.7	23.4	17.1	19.4	2.7	17.0	24.0
Cycle Q Clear(g_c), s	10.8	13.8	30.8	5.8	40.6	40.7	23.4	17.1	19.4	2.7	17.0	24.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1996	592	226	1214	648	717	1893	572	125	1017	300
V/C Ratio(X)	0.91	0.40	0.76	0.75	0.96	0.97	0.95	0.50	0.55	0.62	0.75	1.07
Avail Cap(c_a), veh/h	344	1996	592	287	1215	648	717	1893	572	172	1017	300
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	26.3	31.5	55.1	37.7	37.8	46.9	29.0	29.7	57.0	45.2	48.0
Incr Delay (d2), s/veh	26.5	0.1	5.6	7.9	17.7	26.8	22.0	0.9	3.8	5.0	5.1	72.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	6.5	13.7	3.0	22.0	25.1	13.4	8.2	8.9	1.4	8.4	16.0
LnGrp Delay(d), s/veh	79.9	26.4	37.1	63.0	55.5	64.6	68.9	30.0	33.5	62.0	50.3	120.9
LnGrp LOS	E	C	D	E	E	E	E	C	C	E	D	F
Approach Vol, veh/h		1568			1964			1938			1165	
Approach Delay, s/veh		40.1			59.0			44.2			70.6	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	48.6	11.9	51.1	29.0	28.0	16.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	10.0	45.0	25.0	24.0	12.0	43.0
Max Q Clear Time (g_c+I1), s	4.7	21.4	7.8	32.8	25.4	26.0	12.8	42.7
Green Ext Time (p_c), s	0.0	8.6	0.1	5.6	0.0	0.0	0.0	0.3

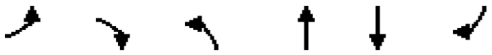
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.3
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	37	684	1181	0	50	1337
Future Volume (vph)	37	684	1181	0	50	1337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.86	0.85	1.00		1.00	1.00
Flt Protected	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3110	1441	5085		1770	6408
Flt Permitted	1.00	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3110	1441	5085		1770	6408
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	39	712	1230	0	52	1393
RTOR Reduction (vph)	171	171	0	0	0	0
Lane Group Flow (vph)	225	185	1230	0	52	1393
Confl. Peds. (#/hr)				13	13	
Confl. Bikes (#/hr)				4		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	16.9	16.9	59.9		5.3	69.2
Effective Green, g (s)	16.9	16.9	59.9		5.3	69.2
Actuated g/C Ratio	0.18	0.18	0.64		0.06	0.74
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	558	258	3236		99	4712
v/s Ratio Prot	0.07		c0.24		c0.03	0.22
v/s Ratio Perm		c0.13				
v/c Ratio	0.40	0.72	0.38		0.53	0.30
Uniform Delay, d1	34.1	36.4	8.2		43.2	4.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.5	9.2	0.3		5.0	0.2
Delay (s)	34.6	45.6	8.5		48.1	4.4
Level of Service	C	D	A		D	A
Approach Delay (s/veh)	39.8		8.5			5.9
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	94.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

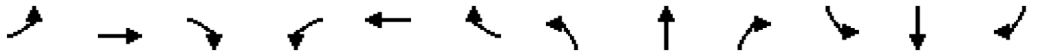
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	248	261	66	1398	684	0
Future Volume (veh/h)	248	261	66	1398	684	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	267	281	71	1503	735	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	706	325	92	4564	3172	0
Arrive On Green	0.21	0.21	0.05	0.72	0.63	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	267	281	71	1503	735	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	7.3	18.8	4.3	9.5	6.9	0.0
Cycle Q Clear(g_c), s	7.3	18.8	4.3	9.5	6.9	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	706	325	92	4564	3172	0
V/C Ratio(X)	0.38	0.87	0.77	0.33	0.23	0.00
Avail Cap(c_a), veh/h	1068	492	373	4564	3172	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	41.5	50.7	5.6	8.7	0.0
Incr Delay (d2), s/veh	0.3	10.1	12.6	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	16.1	2.4	4.1	3.2	0.0
LnGrp Delay(d), s/veh	37.3	51.6	63.3	5.8	8.9	0.0
LnGrp LOS	D	D	E	A	A	
Approach Vol, veh/h	548			1574	735	
Approach Delay, s/veh	44.6			8.4	8.9	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		82.0		26.5	9.7	72.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		78.0		34.0	23.0	51.0		
Max Q Clear Time (g_c+I1), s		11.5		20.8	6.3	8.9		
Green Ext Time (p_c), s		17.0		1.7	0.1	5.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	840	79	223	1289	91	156	772	266	78	730	188
Future Volume (veh/h)	176	840	79	223	1289	91	156	772	266	78	730	188
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.87	1.00		0.85	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	189	903	85	240	1386	98	168	830	286	84	785	202
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	253	1663	448	308	1745	473	232	1968	521	135	1825	484
Arrive On Green	0.07	0.33	0.33	0.09	0.35	0.35	0.07	0.39	0.39	0.04	0.36	0.36
Sat Flow, veh/h	3408	5036	1358	3408	5036	1365	3408	5036	1333	3408	5036	1335
Grp Volume(v), veh/h	189	903	85	240	1386	98	168	830	286	84	785	202
Grp Sat Flow(s),veh/h/ln	1704	1679	1358	1704	1679	1365	1704	1679	1333	1704	1679	1335
Q Serve(g_s), s	5.8	15.7	4.8	7.4	26.7	5.4	5.2	12.9	17.9	2.6	12.7	12.2
Cycle Q Clear(g_c), s	5.8	15.7	4.8	7.4	26.7	5.4	5.2	12.9	17.9	2.6	12.7	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	1663	448	308	1745	473	232	1968	521	135	1825	484
V/C Ratio(X)	0.75	0.54	0.19	0.78	0.79	0.21	0.72	0.42	0.55	0.62	0.43	0.42
Avail Cap(c_a), veh/h	349	1921	518	444	2061	559	349	1968	521	222	1825	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	29.4	25.7	47.8	31.7	24.7	49.1	23.9	25.4	50.8	25.9	25.7
Incr Delay (d2), s/veh	5.6	0.3	0.2	5.5	1.9	0.2	4.3	0.7	4.1	4.6	0.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	7.3	1.8	3.7	12.6	2.1	2.6	6.1	7.2	1.3	6.0	4.9
LnGrp Delay(d), s/veh	54.4	29.6	25.9	53.3	33.6	24.9	53.4	24.6	29.5	55.4	26.6	28.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		1177			1724			1284			1071	
Approach Delay, s/veh		33.4			35.8			29.4			29.2	
Approach LOS		C			D			C			C	

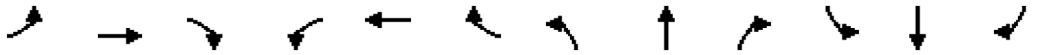
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	46.0	13.7	39.5	11.3	43.0	12.0	41.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	14.0	41.0	11.0	38.0	11.0	44.0
Max Q Clear Time (g_c+I1), s	4.6	19.9	9.4	17.7	7.2	14.7	7.8	28.7
Green Ext Time (p_c), s	0.0	7.0	0.3	6.6	0.2	6.5	0.2	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Future Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.91	1.00		0.89	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	192	449	201	316	1018	347	351	944	115	275	796	136
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	853	340	349	1111	450	380	1184	143	304	938	158
Arrive On Green	0.12	0.24	0.24	0.19	0.31	0.31	0.21	0.26	0.26	0.17	0.22	0.22
Sat Flow, veh/h	1792	3574	1426	1792	3574	1449	1792	4573	554	1792	4331	730
Grp Volume(v), veh/h	192	449	201	316	1018	347	351	705	354	275	627	305
Grp Sat Flow(s),veh/h/ln	1792	1787	1426	1792	1787	1449	1792	1712	1704	1792	1712	1638
Q Serve(g_s), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Cycle Q Clear(g_c), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.45
Lane Grp Cap(c), veh/h	220	853	340	349	1111	450	380	886	441	304	741	355
V/C Ratio(X)	0.87	0.53	0.59	0.91	0.92	0.77	0.92	0.80	0.80	0.91	0.85	0.86
Avail Cap(c_a), veh/h	232	853	340	464	1141	463	417	886	441	340	741	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	38.4	39.1	45.6	38.5	36.2	44.7	40.1	40.2	47.2	43.5	43.7
Incr Delay (d2), s/veh	27.8	0.6	2.7	17.5	11.4	7.6	25.0	7.3	14.2	24.9	11.4	22.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	6.3	6.0	11.6	17.4	11.0	13.7	11.4	12.3	10.7	10.8	11.7
LnGrp Delay(d), s/veh	77.7	39.0	41.8	63.1	49.8	43.8	69.8	47.4	54.4	72.1	55.0	66.6
LnGrp LOS	E	D	D	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		842			1681			1410			1207	
Approach Delay, s/veh		48.5			51.1			54.7			61.8	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	34.0	26.6	31.7	28.6	29.1	18.2	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	30.0	30.0	22.0	27.0	25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	19.4	24.5	22.0	16.5	24.2	22.8	14.2	33.8
Green Ext Time (p_c), s	0.2	3.0	0.6	1.7	0.3	1.2	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Future Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	226	815	87	368	1101	253	333	919	136	317	763	112
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	294	1516	161	447	1315	551	410	1457	425	391	1248	181
Arrive On Green	0.08	0.32	0.32	0.13	0.37	0.37	0.12	0.28	0.28	0.11	0.28	0.28
Sat Flow, veh/h	3476	4682	496	3476	3574	1498	3476	5136	1497	3476	4489	652
Grp Volume(v), veh/h	226	594	308	368	1101	253	333	919	136	317	580	295
Grp Sat Flow(s),veh/h/ln	1738	1712	1754	1738	1787	1498	1738	1712	1497	1738	1712	1717
Q Serve(g_s), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Cycle Q Clear(g_c), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	294	1109	568	447	1315	551	410	1457	425	391	952	477
V/C Ratio(X)	0.77	0.54	0.54	0.82	0.84	0.46	0.81	0.63	0.32	0.81	0.61	0.62
Avail Cap(c_a), veh/h	395	1263	647	625	1555	652	592	1457	425	526	952	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	29.2	29.3	44.9	30.5	25.4	45.5	33.0	29.8	45.8	33.2	33.3
Incr Delay (d2), s/veh	6.3	0.4	0.8	6.2	3.6	0.6	5.6	2.1	2.0	6.9	2.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	7.2	7.5	5.6	15.3	5.7	5.1	8.1	3.4	4.9	7.7	8.3
LnGrp Delay(d), s/veh	53.7	29.6	30.1	51.1	34.2	26.0	51.0	35.1	31.8	52.7	36.1	39.2
LnGrp LOS	D	C	C	D	C	C	D	D	C	D	D	D
Approach Vol, veh/h		1128			1722			1388			1192	
Approach Delay, s/veh		34.6			36.6			38.6			41.3	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	34.0	17.6	38.2	16.5	33.4	12.9	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	19.0	39.0	18.0	28.0	12.0	46.0
Max Q Clear Time (g_c+I1), s	11.4	18.5	12.9	17.2	11.9	17.8	8.7	31.7
Green Ext Time (p_c), s	0.5	5.0	0.7	5.8	0.6	3.9	0.2	7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Future Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	180	19	161	10	22	27	168	1230	13	26	759	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	562	41	72	572	201	2705	29	35	1853	326
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.52	0.52	0.02	0.42	0.42
Sat Flow, veh/h	0	0	1567	0	202	1595	1792	5238	55	1792	4368	769
Grp Volume(v), veh/h	199	0	161	32	0	27	168	804	439	26	593	301
Grp Sat Flow(s),veh/h/ln	0	0	1567	202	0	1595	1792	1712	1869	1792	1712	1714
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Cycle Q Clear(g_c), s	41.0	0.0	8.4	41.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Prop In Lane	0.90		1.00	0.31		1.00	1.00		0.03	1.00		0.45
Lane Grp Cap(c), veh/h	60	0	562	114	0	572	201	1768	965	35	1452	727
V/C Ratio(X)	3.32	0.00	0.29	0.28	0.00	0.05	0.84	0.45	0.45	0.74	0.41	0.41
Avail Cap(c_a), veh/h	60	0	562	114	0	572	439	1768	965	125	1452	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	26.2	29.8	0.0	23.9	49.7	17.5	17.5	55.7	22.9	23.0
Incr Delay (d2), s/veh	1083.5	0.0	0.3	1.3	0.0	0.0	8.9	0.8	1.5	25.5	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	0.0	3.7	0.7	0.0	0.6	5.7	8.1	9.1	1.1	6.7	7.0
LnGrp Delay(d), s/veh	1140.6	0.0	26.4	31.1	0.0	23.9	58.6	18.3	19.0	81.2	23.8	24.7
LnGrp LOS	F		C	C		C	E	B	B	F	C	C
Approach Vol, veh/h		360			59			1411			920	
Approach Delay, s/veh		642.3			27.8			23.3			25.7	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	63.0		45.0	16.8	52.4		45.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	59.0		41.0	28.0	39.0		41.0
Max Q Clear Time (g_c+I1), s	3.6	19.0		43.0	12.5	16.0		43.0
Green Ext Time (p_c), s	0.0	10.0		0.0	0.4	5.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		105.2
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Future Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.90	0.94		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	20	47	82	118	90	55	114	983	84	56	857	32
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	296	227	235	296	229	507	2464	1056	434	2391	89
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.69	0.69	0.03	0.68	0.68
Sat Flow, veh/h	1181	1881	1443	1191	1881	1453	1792	3574	1533	1792	3507	131
Grp Volume(v), veh/h	20	47	82	118	90	55	114	983	84	56	437	452
Grp Sat Flow(s),veh/h/ln	1181	1881	1443	1191	1881	1453	1792	1787	1533	1792	1787	1851
Q Serve(g_s), s	1.5	2.1	5.0	9.4	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Cycle Q Clear(g_c), s	5.7	2.1	5.0	11.5	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	209	296	227	235	296	229	507	2464	1056	434	1219	1262
V/C Ratio(X)	0.10	0.16	0.36	0.50	0.30	0.24	0.22	0.40	0.08	0.13	0.36	0.36
Avail Cap(c_a), veh/h	394	591	454	422	591	457	709	2464	1056	540	1219	1262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	35.9	37.1	40.9	36.8	36.4	4.7	6.6	5.0	4.8	6.6	6.6
Incr Delay (d2), s/veh	0.2	0.2	1.0	1.7	0.6	0.5	0.2	0.5	0.1	0.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	2.0	3.2	2.2	1.4	0.9	5.8	0.8	0.5	5.3	5.4
LnGrp Delay(d), s/veh	39.5	36.2	38.1	42.6	37.4	36.9	5.0	7.1	5.2	5.0	7.4	7.4
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		149			263			1181			945	
Approach Delay, s/veh		37.7			39.6			6.7			7.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	72.0		19.5	7.9	71.3		19.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	68.0		31.0	15.0	62.0		31.0
Max Q Clear Time (g_c+I1), s	2.9	13.6		7.7	3.9	12.1		13.5
Green Ext Time (p_c), s	0.0	9.1		0.6	0.2	7.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	22	102	454	39	210	57	1152	258	108	1096	29
Future Volume (veh/h)	29	22	102	454	39	210	57	1152	258	108	1096	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	30	23	106	473	41	219	59	1200	269	112	1142	30
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	558	131	601	577	842	703	76	1791	543	140	1976	52
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.04	0.35	0.35	0.08	0.39	0.39
Sat Flow, veh/h	1111	289	1330	1252	1863	1554	1774	5085	1541	1774	5088	134
Grp Volume(v), veh/h	30	0	129	473	41	219	59	1200	269	112	761	411
Grp Sat Flow(s),veh/h/ln	1111	0	1619	1252	1863	1554	1774	1695	1541	1774	1695	1832
Q Serve(g_s), s	1.6	0.0	4.9	37.2	1.3	9.3	3.4	20.6	14.1	6.4	18.2	18.2
Cycle Q Clear(g_c), s	2.9	0.0	4.9	42.1	1.3	9.3	3.4	20.6	14.1	6.4	18.2	18.2
Prop In Lane	1.00		0.82	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	558	0	732	577	842	703	76	1791	543	140	1317	711
V/C Ratio(X)	0.05	0.00	0.18	0.82	0.05	0.31	0.78	0.67	0.50	0.80	0.58	0.58
Avail Cap(c_a), veh/h	692	0	927	728	1067	890	155	1791	543	224	1317	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	16.8	29.3	15.8	18.0	48.8	28.3	26.2	46.6	24.8	24.8
Incr Delay (d2), s/veh	0.0	0.0	0.1	6.0	0.0	0.3	15.3	2.0	3.2	9.9	1.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	2.2	13.8	0.7	4.0	2.0	10.0	6.5	3.5	8.8	9.8
LnGrp Delay(d), s/veh	16.6	0.0	16.9	35.3	15.8	18.2	64.1	30.3	29.4	56.6	26.7	28.2
LnGrp LOS	B		B	D	B	B	E	C	C	E	C	C
Approach Vol, veh/h		159			733			1528			1284	
Approach Delay, s/veh		16.9			29.1			31.4			29.8	
Approach LOS		B			C			C			C	

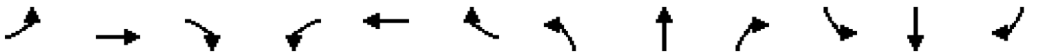
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	40.3		50.6	8.4	44.0		50.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	36.0		59.0	9.0	40.0		59.0
Max Q Clear Time (g_c+I1), s	8.4	22.6		6.9	5.4	20.2		44.1
Green Ext Time (p_c), s	0.1	7.5		1.0	0.0	7.7		2.5

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		29.8	
HCM 2010 LOS		C	

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	174	0	0	144	697	40
Future Volume (veh/h)	174	0	0	144	697	40
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	181	0	0	150	726	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2340	0	0	2340	1083	343
Arrive On Green	0.65	0.00	0.00	0.65	0.21	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	181	0	0	150	726	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	1.1	0.0	0.0	0.9	8.1	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	0.9	8.1	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2340	0	0	2340	1083	343
V/C Ratio(X)	0.08	0.00	0.00	0.06	0.67	0.00
Avail Cap(c_a), veh/h	2340	0	0	2340	5954	1884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.8	0.0	0.0	3.8	22.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.5	3.8	0.0
LnGrp Delay(d), s/veh	3.9	0.0	0.0	3.9	22.7	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	181			150	726	
Approach Delay, s/veh	3.9			3.9	22.7	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		44.0				44.0		17.1
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		40.0				40.0		72.0
Max Q Clear Time (g_c+I1), s		3.1				2.9		10.1
Green Ext Time (p_c), s		1.1				0.9		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	274	776	111	497	1282	185	198	766	392	215	576	65
Future Volume (vph)	274	776	111	497	1282	185	198	766	392	215	576	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.99		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3467	5136	1496	3467	5003		1626	3207	1455	1537	4745	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.91	
Satd. Flow (perm)	3467	5136	1496	3467	5003		1626	3012	1455	1537	4322	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	291	826	118	529	1364	197	211	815	417	229	613	69
RTOR Reduction (vph)	0	0	90	0	16	0	0	3	32	0	10	0
Lane Group Flow (vph)	291	826	28	529	1546	0	190	875	343	206	695	0
Confl. Peds. (#/hr)	18		23	23		18	23					23
Confl. Bikes (#/hr)			2			6						1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pt+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	2 3	1	6	
Permitted Phases			4									
Actuated Green, G (s)	11.0	28.2	28.2	21.8	39.0		18.5	54.5	61.8	17.6	52.7	
Effective Green, g (s)	11.0	28.2	28.2	21.8	39.0		18.5	54.5	61.8	17.6	52.7	
Actuated g/C Ratio	0.09	0.24	0.24	0.18	0.33		0.15	0.46	0.52	0.15	0.44	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	318	1210	352	631	1631		251	1402	751	226	1966	
v/s Ratio Prot	0.08	0.16		c0.15	c0.31		0.12	0.10	0.24	c0.13	0.05	
v/s Ratio Perm			0.02					c0.19			0.10	
v/c Ratio	0.92	0.68	0.08	0.84	0.95		0.76	0.62	0.46	0.91	0.35	
Uniform Delay, d1	53.8	41.6	35.6	47.2	39.3		48.4	24.8	18.3	50.2	22.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	29.5	1.6	0.1	9.5	12.0		12.3	0.9	0.4	36.6	0.1	
Delay (s)	83.3	43.2	35.7	56.7	51.3		60.7	25.6	18.7	86.8	22.3	
Level of Service	F	D	D	E	D		E	C	B	F	C	
Approach Delay (s/veh)		52.0			52.6			28.4			36.9	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	119.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	649	179	187	810	67	349	832	212	134	626	209
Future Volume (veh/h)	168	649	179	187	810	67	349	832	212	134	626	209
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	185	713	197	205	890	74	384	914	233	147	688	230
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	216	982	632	236	1023	595	459	1244	750	177	1124	477
Arrive On Green	0.12	0.27	0.27	0.13	0.29	0.29	0.13	0.35	0.35	0.10	0.31	0.31
Sat Flow, veh/h	1792	3574	1531	1792	3574	1528	3476	3574	1548	1792	3574	1516
Grp Volume(v), veh/h	185	713	197	205	890	74	384	914	233	147	688	230
Grp Sat Flow(s),veh/h/ln	1792	1787	1531	1792	1787	1528	1738	1787	1548	1792	1787	1516
Q Serve(g_s), s	11.1	19.7	9.6	12.2	25.8	3.4	11.8	24.5	10.1	8.8	17.8	13.4
Cycle Q Clear(g_c), s	11.1	19.7	9.6	12.2	25.8	3.4	11.8	24.5	10.1	8.8	17.8	13.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	982	632	236	1023	595	459	1244	750	177	1124	477
V/C Ratio(X)	0.86	0.73	0.31	0.87	0.87	0.12	0.84	0.73	0.31	0.83	0.61	0.48
Avail Cap(c_a), veh/h	279	1113	688	295	1146	648	605	1244	750	230	1124	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	35.9	22.0	46.5	37.0	21.7	46.2	31.2	17.4	48.3	31.8	30.2
Incr Delay (d2), s/veh	18.2	2.1	0.3	19.5	6.9	0.1	7.7	3.9	1.1	17.8	2.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	10.0	4.1	7.3	13.7	1.5	6.1	12.7	4.5	5.2	9.2	6.1
LnGrp Delay(d), s/veh	65.3	37.9	22.3	66.0	43.9	21.8	53.9	35.1	18.5	66.1	34.3	33.7
LnGrp LOS	E	D	C	E	D	C	D	D	B	E	C	C
Approach Vol, veh/h		1095			1169			1531			1065	
Approach Delay, s/veh		39.7			46.4			37.3			38.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	42.0	18.4	34.0	18.4	38.3	17.2	35.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	38.0	18.0	34.0	19.0	33.0	17.0	35.0
Max Q Clear Time (g_c+I1), s	10.8	26.5	14.2	21.7	13.8	19.8	13.1	27.8
Green Ext Time (p_c), s	0.1	5.4	0.2	4.2	0.7	4.4	0.2	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.3
HCM 2010 LOS	D

FULLERTON STATION - 2015 EXISTING AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	718	160	163	482	79	124	1007	116	240	1330	25
Future Volume (veh/h)	44	718	160	163	482	79	124	1007	116	240	1330	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	45	740	165	168	497	81	128	1038	120	247	1371	26
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	285	818	182	230	1035	168	203	1298	150	294	1581	30
Arrive On Green	0.03	0.28	0.28	0.08	0.34	0.34	0.06	0.40	0.40	0.10	0.44	0.44
Sat Flow, veh/h	1792	2906	648	1792	3080	500	1792	3229	373	1792	3587	68
Grp Volume(v), veh/h	45	455	450	168	287	291	128	574	584	247	683	714
Grp Sat Flow(s),veh/h/ln	1792	1787	1767	1792	1787	1793	1792	1787	1814	1792	1787	1868
Q Serve(g_s), s	2.1	28.4	28.4	7.4	14.7	14.9	4.8	32.8	32.8	8.9	40.0	40.1
Cycle Q Clear(g_c), s	2.1	28.4	28.4	7.4	14.7	14.9	4.8	32.8	32.8	8.9	40.0	40.1
Prop In Lane	1.00		0.37	1.00		0.28	1.00		0.21	1.00		0.04
Lane Grp Cap(c), veh/h	285	503	497	230	600	602	203	719	730	294	788	823
V/C Ratio(X)	0.16	0.90	0.90	0.73	0.48	0.48	0.63	0.80	0.80	0.84	0.87	0.87
Avail Cap(c_a), veh/h	299	541	535	239	633	635	223	719	730	352	788	823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	40.1	40.1	29.4	30.4	30.4	25.9	30.5	30.5	24.3	29.3	29.3
Incr Delay (d2), s/veh	0.3	18.0	18.2	10.4	0.6	0.6	4.9	9.1	9.0	14.4	12.3	11.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	16.5	16.4	4.3	7.4	7.4	2.6	17.9	18.2	5.6	22.4	23.4
LnGrp Delay(d), s/veh	29.0	58.1	58.3	39.8	31.0	31.0	30.8	39.5	39.5	38.6	41.6	41.2
LnGrp LOS	C	E	E	D	C	C	C	D	D	D	D	D
Approach Vol, veh/h		950			746			1286			1644	
Approach Delay, s/veh		56.8			33.0			38.6			41.0	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	50.5	13.4	36.6	10.7	55.0	7.1	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	44.0	10.0	35.0	8.0	51.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	10.9	34.8	9.4	30.4	6.8	42.1	4.1	16.9
Green Ext Time (p_c), s	0.3	4.9	0.0	2.2	0.0	5.7	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	640	76	154	310	41	54	1014	215	164	1364	151
Future Volume (veh/h)	170	640	76	154	310	41	54	1014	215	164	1364	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	674	80	162	326	43	57	1067	226	173	1436	159
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	745	88	234	710	93	149	1686	742	286	1650	181
Arrive On Green	0.09	0.23	0.23	0.09	0.23	0.23	0.03	0.48	0.48	0.07	0.51	0.51
Sat Flow, veh/h	1774	3181	377	1774	3139	410	1774	3539	1557	1774	3211	353
Grp Volume(v), veh/h	179	375	379	162	182	187	57	1067	226	173	786	809
Grp Sat Flow(s),veh/h/ln	1774	1770	1788	1774	1770	1780	1774	1770	1557	1774	1770	1794
Q Serve(g_s), s	8.9	24.0	24.1	8.1	10.4	10.6	1.9	26.4	10.4	5.6	45.4	46.6
Cycle Q Clear(g_c), s	8.9	24.0	24.1	8.1	10.4	10.6	1.9	26.4	10.4	5.6	45.4	46.6
Prop In Lane	1.00		0.21	1.00		0.23	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	365	414	419	234	400	403	149	1686	742	286	909	922
V/C Ratio(X)	0.49	0.90	0.91	0.69	0.46	0.46	0.38	0.63	0.30	0.61	0.86	0.88
Avail Cap(c_a), veh/h	396	440	444	249	409	412	159	1686	742	381	909	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	43.4	43.5	33.2	39.0	39.0	24.1	22.9	18.7	18.4	24.8	25.1
Incr Delay (d2), s/veh	1.0	21.2	21.3	7.4	0.8	0.8	1.6	1.8	1.1	2.1	10.7	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	14.2	14.4	4.4	5.2	5.3	1.0	13.3	4.7	2.9	24.8	25.9
LnGrp Delay(d), s/veh	31.6	64.6	64.8	40.6	39.8	39.9	25.7	24.7	19.8	20.4	35.5	36.7
LnGrp LOS	C	E	E	D	D	D	C	C	B	C	D	D
Approach Vol, veh/h		933			531			1350			1768	
Approach Delay, s/veh		58.3			40.1			23.9			34.6	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	59.6	14.1	31.3	7.4	64.0	15.0	30.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	50.0	11.0	29.0	4.0	60.0	13.0	27.0
Max Q Clear Time (g_c+I1), s	7.6	28.4	10.1	26.1	3.9	48.6	10.9	12.6
Green Ext Time (p_c), s	0.2	8.8	0.0	1.3	0.0	7.8	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1053	91	114	618	4	49	62	78	14	96	20
Future Volume (veh/h)	43	1053	91	114	618	4	49	62	78	14	96	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	46	1132	98	123	665	4	53	67	84	15	103	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	475	1920	166	265	2106	13	435	582	480	93	528	492
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	772	3322	287	456	3642	22	1269	1881	1552	116	1705	1591
Grp Volume(v), veh/h	46	608	622	123	326	343	53	67	84	118	0	22
Grp Sat Flow(s),veh/h/ln	772	1787	1822	456	1787	1877	1269	1881	1552	1821	0	1591
Q Serve(g_s), s	2.3	15.5	15.5	16.8	6.7	6.7	2.3	1.8	2.8	0.0	0.0	0.7
Cycle Q Clear(g_c), s	9.0	15.5	15.5	32.4	6.7	6.7	5.6	1.8	2.8	3.3	0.0	0.7
Prop In Lane	1.00		0.16	1.00		0.01	1.00		1.00	0.13		1.00
Lane Grp Cap(c), veh/h	475	1033	1053	265	1033	1085	435	582	480	620	0	492
V/C Ratio(X)	0.10	0.59	0.59	0.46	0.32	0.32	0.12	0.12	0.17	0.19	0.00	0.04
Avail Cap(c_a), veh/h	1005	2262	2306	578	2262	2376	435	582	480	620	0	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.1	9.6	9.6	20.0	7.7	7.7	20.1	17.6	17.9	18.1	0.0	17.2
Incr Delay (d2), s/veh	0.1	0.5	0.5	1.3	0.2	0.2	0.6	0.4	0.8	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	7.6	7.9	2.2	3.3	3.5	0.9	1.0	1.3	1.8	0.0	0.3
LnGrp Delay(d), s/veh	10.2	10.1	10.1	21.2	7.9	7.9	20.7	18.0	18.7	18.8	0.0	17.4
LnGrp LOS	B	B	B	C	A	A	C	B	B	B		B
Approach Vol, veh/h		1276			792			204			140	
Approach Delay, s/veh		10.1			10.0			19.0			18.5	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.0		45.1		26.0		45.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		22.0		90.0		22.0		90.0
Max Q Clear Time (g_c+I1), s		7.6		17.5		5.3		34.4
Green Ext Time (p_c), s		0.7		11.2		0.6		6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	929	72	105	420	16	66	169	131	34	231	33
Future Volume (veh/h)	55	929	72	105	420	16	66	169	131	34	231	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	60	1010	78	114	457	17	72	184	142	37	251	36
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	452	1724	746	223	1724	744	454	811	674	468	811	674
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	922	3574	1546	521	3574	1543	1095	1881	1562	1056	1881	1562
Grp Volume(v), veh/h	60	1010	78	114	457	17	72	184	142	37	251	36
Grp Sat Flow(s),veh/h/ln	922	1787	1546	521	1787	1543	1095	1881	1562	1056	1881	1562
Q Serve(g_s), s	3.8	18.9	2.5	18.7	7.0	0.5	4.3	5.7	5.3	2.1	8.1	1.2
Cycle Q Clear(g_c), s	10.9	18.9	2.5	37.6	7.0	0.5	12.4	5.7	5.3	7.8	8.1	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	452	1724	746	223	1724	744	454	811	674	468	811	674
V/C Ratio(X)	0.13	0.59	0.10	0.51	0.27	0.02	0.16	0.23	0.21	0.08	0.31	0.05
Avail Cap(c_a), veh/h	724	2775	1201	376	2775	1198	454	811	674	468	811	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	17.3	13.1	30.9	14.2	12.6	21.4	16.6	16.5	19.1	17.3	15.3
Incr Delay (d2), s/veh	0.1	0.3	0.1	1.8	0.1	0.0	0.7	0.6	0.7	0.3	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	9.3	1.1	2.8	3.4	0.2	1.4	3.1	2.4	0.7	4.4	0.6
LnGrp Delay(d), s/veh	17.6	17.6	13.1	32.7	14.3	12.6	22.1	17.3	17.2	19.4	18.3	15.5
LnGrp LOS	B	B	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		1148			588			398			324	
Approach Delay, s/veh		17.3			17.8			18.1			18.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.0		48.7		44.0		48.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s		14.4		20.9		10.1		39.6
Green Ext Time (p_c), s		1.9		10.0		1.9		5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	7	370	35	6	379
Future Vol, veh/h	13	7	370	35	6	379
Conflicting Peds, #/hr	0	0	0	22	22	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	15	8	435	41	7	446

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	917	457	0	0	498	0
Stage 1	457	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	303	606	-	-	1071	-
Stage 1	640	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	295	595	-	-	1051	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	15.5	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	295	595	1051	-
HCM Lane V/C Ratio	-	-	0.052	0.014	0.007	-
HCM Control Delay (s/veh)	-	-	17.9	11.1	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	8	14	21	11	9	17	282	16	13	254	6
Future Vol, veh/h	4	8	14	21	11	9	17	282	16	13	254	6
Conflicting Peds, #/hr	3	0	1	1	0	3	22	0	22	22	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	9	15	23	12	10	19	310	18	14	279	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	700	717	302	694	706	335	308	0	0	350	0	0
Stage 1	329	329	-	370	370	-	-	-	-	-	-	-
Stage 2	371	388	-	324	336	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	353	354	735	356	359	705	1247	-	-	1203	-	-
Stage 1	682	645	-	648	618	-	-	-	-	-	-	-
Stage 2	647	607	-	686	640	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	324	332	721	328	337	690	1224	-	-	1181	-	-
Mov Cap-2 Maneuver	324	332	-	328	337	-	-	-	-	-	-	-
Stage 1	659	626	-	626	597	-	-	-	-	-	-	-
Stage 2	614	586	-	654	621	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13	15.7	0.4	0.4
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1224	-	-	329	721	331	690	1181	-	-
HCM Lane V/C Ratio	0.015	-	-	0.04	0.021	0.106	0.014	0.012	-	-
HCM Control Delay (s/veh)	8	-	-	16.4	10.1	17.2	10.3	8.1	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.4	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	251	0	0	109	39	3	202	25	99	66	157
Future Volume (veh/h)	10	251	0	0	109	39	3	202	25	99	66	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	12	299	0	0	130	46	4	240	30	118	79	187
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	375	319	90	375	303	844	1302	1070	808	1302	1070
Arrive On Green	0.20	0.20	0.00	0.00	0.20	0.20	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1164	1863	1583	1076	1863	1505	1100	1863	1531	1098	1863	1531
Grp Volume(v), veh/h	12	299	0	0	130	46	4	240	30	118	79	187
Grp Sat Flow(s),veh/h/ln	1164	1863	1583	1076	1863	1505	1100	1863	1531	1098	1863	1531
Q Serve(g_s), s	0.7	12.2	0.0	0.0	4.8	2.0	0.1	3.6	0.5	3.3	1.1	3.4
Cycle Q Clear(g_c), s	5.5	12.2	0.0	0.0	4.8	2.0	1.2	3.6	0.5	6.9	1.1	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	375	319	90	375	303	844	1302	1070	808	1302	1070
V/C Ratio(X)	0.05	0.80	0.00	0.00	0.35	0.15	0.00	0.18	0.03	0.15	0.06	0.17
Avail Cap(c_a), veh/h	834	1302	1107	625	1302	1052	844	1302	1070	808	1302	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	30.4	0.0	0.0	27.5	26.4	4.0	4.2	3.7	5.4	3.8	4.1
Incr Delay (d2), s/veh	0.1	3.9	0.0	0.0	0.5	0.2	0.0	0.3	0.0	0.4	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.7	0.0	0.0	2.5	0.8	0.0	1.9	0.2	1.1	0.6	1.5
LnGrp Delay(d), s/veh	29.9	34.4	0.0	0.0	28.0	26.6	4.0	4.5	3.8	5.7	3.9	4.5
LnGrp LOS	C	C			C	C	A	A	A	A	A	A
Approach Vol, veh/h		311			176			274			384	
Approach Delay, s/veh		34.2			27.7			4.4			4.8	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		20.1		60.0		20.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s		5.6		14.2		8.9		6.8
Green Ext Time (p_c), s		1.7		1.9		1.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	1349	23	45	591	50	39	56	128	72	38	62
Future Volume (veh/h)	91	1349	23	45	591	50	39	56	128	72	38	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	1451	25	48	635	54	42	60	138	77	41	67
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	2150	37	218	1899	160	575	737	608	530	737	607
Arrive On Green	0.05	0.42	0.42	0.03	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1774	5144	89	1774	4759	401	1264	1863	1537	1167	1863	1534
Grp Volume(v), veh/h	98	956	520	48	451	238	42	60	138	77	41	67
Grp Sat Flow(s),veh/h/ln	1774	1695	1842	1774	1695	1770	1264	1863	1537	1167	1863	1534
Q Serve(g_s), s	2.5	17.9	17.9	1.2	7.2	7.3	1.7	1.6	4.7	3.5	1.1	2.2
Cycle Q Clear(g_c), s	2.5	17.9	17.9	1.2	7.2	7.3	2.7	1.6	4.7	5.0	1.1	2.2
Prop In Lane	1.00		0.05	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	1417	770	218	1353	706	575	737	608	530	737	607
V/C Ratio(X)	0.24	0.67	0.67	0.22	0.33	0.34	0.07	0.08	0.23	0.15	0.06	0.11
Avail Cap(c_a), veh/h	592	2899	1575	386	2813	1468	575	737	608	530	737	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	18.5	18.5	15.0	16.3	16.3	15.5	14.8	15.7	16.4	14.6	15.0
Incr Delay (d2), s/veh	0.3	0.6	1.0	0.5	0.1	0.3	0.2	0.2	0.9	0.6	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.5	9.3	0.6	3.4	3.6	0.6	0.8	2.1	1.2	0.6	1.0
LnGrp Delay(d), s/veh	13.2	19.0	19.5	15.5	16.5	16.6	15.7	15.0	16.6	16.9	14.8	15.3
LnGrp LOS	B	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1574			737			240			185	
Approach Delay, s/veh		18.8			16.4			16.0			15.9	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	6.6	36.7		35.0	8.1	35.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	12.0	65.0
Max Q Clear Time (g_c+I1), s		6.7	3.2	19.9		7.0	4.5	9.3
Green Ext Time (p_c), s		0.9	0.0	12.8		0.7	0.1	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	989	87	34	684	4	8	5	54	3	15	46
Future Vol, veh/h	44	989	87	34	684	4	8	5	54	3	15	46
Conflicting Peds, #/hr	1	0	5	5	0	1	2	0	3	3	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	45	1020	90	35	705	4	8	5	56	3	15	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	710	0	0	1115	0	0	1592	1940	563	1384	1983	358
Stage 1	-	-	-	-	-	-	1160	1160	-	778	778	-
Stage 2	-	-	-	-	-	-	432	780	-	606	1205	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	892	-	-	628	-	-	73	65	472	104	61	641
Stage 1	-	-	-	-	-	-	210	270	-	358	407	-
Stage 2	-	-	-	-	-	-	575	406	-	453	257	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	891	-	-	625	-	-	48	58	469	79	54	639
Mov Cap-2 Maneuver	-	-	-	-	-	-	48	58	-	79	54	-
Stage 1	-	-	-	-	-	-	199	255	-	340	384	-
Stage 2	-	-	-	-	-	-	481	383	-	370	243	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.5	30.3	40.6
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	51	469	891	-	-	625	-	-	165
HCM Lane V/C Ratio	0.263	0.119	0.051	-	-	0.056	-	-	0.4
HCM Control Delay (s/veh)	99.1	13.7	9.3	-	-	11.1	-	-	40.6
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.9	0.4	0.2	-	-	0.2	-	-	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	979	55	22	447	19	7	14	16	24	36	27
Future Volume (veh/h)	50	979	55	22	447	19	7	14	16	24	36	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	54	1064	60	24	486	21	8	15	17	26	39	29
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	468	1549	687	245	1490	660	249	436	579	285	399	579
Arrive On Green	0.04	0.43	0.43	0.02	0.42	0.42	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1792	3574	1584	1792	3574	1584	484	1200	1595	575	1098	1595
Grp Volume(v), veh/h	54	1064	60	24	486	21	23	0	17	65	0	29
Grp Sat Flow(s),veh/h/ln	1792	1787	1584	1792	1787	1584	1685	0	1595	1673	0	1595
Q Serve(g_s), s	1.1	15.9	1.5	0.5	6.1	0.5	0.0	0.0	0.5	0.0	0.0	0.8
Cycle Q Clear(g_c), s	1.1	15.9	1.5	0.5	6.1	0.5	0.5	0.0	0.5	1.5	0.0	0.8
Prop In Lane	1.00		1.00	1.00		1.00	0.35		1.00	0.40		1.00
Lane Grp Cap(c), veh/h	468	1549	687	245	1490	660	685	0	579	684	0	579
V/C Ratio(X)	0.12	0.69	0.09	0.10	0.33	0.03	0.03	0.00	0.03	0.10	0.00	0.05
Avail Cap(c_a), veh/h	617	4112	1823	423	4112	1822	685	0	579	684	0	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	15.1	11.0	12.3	13.0	11.4	13.6	0.0	13.5	13.9	0.0	13.6
Incr Delay (d2), s/veh	0.1	0.5	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.8	0.6	0.3	3.0	0.2	0.3	0.0	0.2	0.8	0.0	0.4
LnGrp Delay(d), s/veh	10.5	15.6	11.1	12.5	13.1	11.4	13.6	0.0	13.6	14.1	0.0	13.8
LnGrp LOS	B	B	B	B	B	B	B		B	B		B
Approach Vol, veh/h		1178			531			40			94	
Approach Delay, s/veh		15.2			13.0			13.6			14.0	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	5.4	32.6		28.0	6.5	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	8.0	76.0		24.0	8.0	76.0
Max Q Clear Time (g_c+I1), s		2.5	2.5	17.9		3.5	3.1	8.1
Green Ext Time (p_c), s		0.1	0.0	10.8		0.4	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	1447	479	421	1466	106	251	511	245	166	1037	187
Future Volume (veh/h)	196	1447	479	421	1466	106	251	511	245	166	1037	187
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	1507	499	439	1527	110	261	532	255	173	1080	195
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	1512	492	459	2326	722	287	1354	419	231	1271	393
Arrive On Green	0.08	0.40	0.40	0.13	0.46	0.46	0.08	0.27	0.27	0.07	0.25	0.25
Sat Flow, veh/h	3442	3780	1231	3442	5085	1578	3442	5085	1574	3442	5085	1574
Grp Volume(v), veh/h	204	1349	657	439	1527	110	261	532	255	173	1080	195
Grp Sat Flow(s),veh/h/ln	1721	1695	1621	1721	1695	1578	1721	1695	1574	1721	1695	1574
Q Serve(g_s), s	7.0	47.6	48.0	15.2	27.9	4.9	9.0	10.3	17.0	5.9	24.3	12.7
Cycle Q Clear(g_c), s	7.0	47.6	48.0	15.2	27.9	4.9	9.0	10.3	17.0	5.9	24.3	12.7
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	1356	648	459	2326	722	287	1354	419	231	1271	393
V/C Ratio(X)	0.78	0.99	1.01	0.96	0.66	0.15	0.91	0.39	0.61	0.75	0.85	0.50
Avail Cap(c_a), veh/h	315	1356	648	459	2326	722	287	1354	419	315	1271	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	35.9	36.0	51.7	25.2	19.0	54.6	36.1	38.5	55.0	42.9	38.5
Incr Delay (d2), s/veh	10.0	23.1	38.7	31.1	0.7	0.1	30.9	0.9	6.4	6.5	7.2	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	26.5	28.4	9.2	13.2	2.1	5.5	4.9	8.1	3.0	12.2	6.0
LnGrp Delay(d), s/veh	64.5	59.0	74.7	82.8	25.9	19.1	85.5	36.9	45.0	61.5	50.1	42.9
LnGrp LOS	E	E	F	F	C	B	F	D	D	E	D	D
Approach Vol, veh/h		2210			2076			1048			1448	
Approach Delay, s/veh		64.2			37.6			51.0			50.5	
Approach LOS		E			D			D			D	

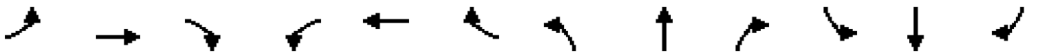
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	36.0	20.0	52.0	14.0	34.0	13.1	58.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	29.0	16.0	48.0	10.0	30.0	11.0	53.0
Max Q Clear Time (g_c+I1), s	7.9	19.0	17.2	50.0	11.0	26.3	9.0	29.9
Green Ext Time (p_c), s	0.1	3.0	0.0	0.0	0.0	2.4	0.1	11.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	1196	222	249	1108	168	189	699	88	421	1236	287
Future Volume (veh/h)	316	1196	222	249	1108	168	189	699	88	421	1236	287
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	329	1246	231	259	1154	175	197	728	92	439	1288	299
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	358	1535	285	315	1257	382	238	1400	424	509	1453	337
Arrive On Green	0.20	0.35	0.35	0.09	0.24	0.24	0.07	0.27	0.27	0.15	0.35	0.35
Sat Flow, veh/h	1792	4339	804	3476	5136	1561	3476	5136	1556	3476	4146	962
Grp Volume(v), veh/h	329	983	494	259	1154	175	197	728	92	439	1063	524
Grp Sat Flow(s),veh/h/ln	1792	1712	1719	1738	1712	1561	1738	1712	1556	1738	1712	1684
Q Serve(g_s), s	21.1	30.5	30.5	8.6	25.6	11.2	6.5	14.1	5.3	14.4	34.2	34.3
Cycle Q Clear(g_c), s	21.1	30.5	30.5	8.6	25.6	11.2	6.5	14.1	5.3	14.4	34.2	34.3
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	358	1211	608	315	1257	382	238	1400	424	509	1200	590
V/C Ratio(X)	0.92	0.81	0.81	0.82	0.92	0.46	0.83	0.52	0.22	0.86	0.89	0.89
Avail Cap(c_a), veh/h	398	1288	647	327	1273	387	238	1400	424	624	1200	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	34.3	34.3	52.3	43.0	37.6	53.8	36.1	32.9	48.8	35.8	35.8
Incr Delay (d2), s/veh	24.8	3.9	7.4	15.0	10.7	0.9	21.1	1.4	1.2	10.2	9.8	17.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	15.0	15.6	4.8	13.3	4.9	3.8	6.9	2.4	7.7	17.7	18.8
LnGrp Delay(d), s/veh	70.7	38.1	41.7	67.3	53.7	38.4	74.9	37.5	34.1	59.0	45.6	53.6
LnGrp LOS	E	D	D	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		1806			1588			1017			2026	
Approach Delay, s/veh		45.0			54.2			44.4			50.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	35.9	14.6	45.4	12.0	45.0	27.4	32.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	28.0	11.0	44.0	8.0	41.0	26.0	29.0
Max Q Clear Time (g_c+I1), s	16.4	16.1	10.6	32.5	8.5	36.3	23.1	27.6
Green Ext Time (p_c), s	0.7	3.8	0.0	7.0	0.0	3.5	0.3	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	83	29	706	142	128	39	826	355	41	1439	83
Future Volume (vph)	43	83	29	706	142	128	39	826	355	41	1439	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1881	1599	1698	1730	1565	1787	5136	1571	1787	5086	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1881	1599	1698	1730	1565	1787	5136	1571	1787	5086	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	45	86	30	735	148	133	41	860	370	43	1499	86
RTOR Reduction (vph)	0	0	28	0	0	92	0	0	222	0	5	0
Lane Group Flow (vph)	45	86	2	441	442	41	41	860	148	43	1580	0
Confl. Peds. (#/hr)	3					3	2		2	2		2
Confl. Bikes (#/hr)						5			3			4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	8.3	8.3	8.3	31.1	31.1	31.1	4.9	40.3	40.3	5.0	40.4	
Effective Green, g (s)	8.3	8.3	8.3	31.1	31.1	31.1	4.9	40.3	40.3	5.0	40.4	
Actuated g/C Ratio	0.08	0.08	0.08	0.31	0.31	0.31	0.05	0.40	0.40	0.05	0.40	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	147	155	131	524	534	483	86	2055	628	88	2040	
v/s Ratio Prot	0.03	c0.05		c0.26	0.26		0.02	0.17		c0.02	c0.31	
v/s Ratio Perm			0.00			0.03			0.09			
v/c Ratio	0.31	0.55	0.02	0.84	0.83	0.09	0.48	0.42	0.24	0.49	0.77	
Uniform Delay, d1	43.5	44.4	42.5	32.5	32.3	24.7	46.7	21.8	20.0	46.6	26.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	4.3	0.1	11.7	10.2	0.1	4.1	0.6	0.9	4.2	1.9	
Delay (s)	44.7	48.7	42.5	44.2	42.5	24.8	50.8	22.4	20.9	50.8	28.1	
Level of Service	D	D	D	D	D	C	D	C	C	D	C	
Approach Delay (s/veh)		46.4			40.9			22.9			28.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	191	78	65	156	262	125	865	98	446	1551	22
Future Volume (veh/h)	26	191	78	65	156	262	125	865	98	446	1551	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	29	212	87	72	173	291	139	961	109	496	1723	24
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	160	352	285	153	352	552	168	1753	199	576	2199	950
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.54	0.54	0.17	0.62	0.62
Sat Flow, veh/h	927	1881	1523	1080	1881	1532	1792	3228	366	3476	3574	1544
Grp Volume(v), veh/h	29	212	87	72	173	291	139	532	538	496	1723	24
Grp Sat Flow(s),veh/h/ln	927	1881	1523	1080	1881	1532	1792	1787	1807	1738	1787	1544
Q Serve(g_s), s	3.3	11.9	5.7	7.6	9.5	17.5	8.8	22.4	22.4	16.0	41.3	0.7
Cycle Q Clear(g_c), s	12.8	11.9	5.7	19.5	9.5	17.5	8.8	22.4	22.4	16.0	41.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	160	352	285	153	352	552	168	970	981	576	2199	950
V/C Ratio(X)	0.18	0.60	0.30	0.47	0.49	0.53	0.83	0.55	0.55	0.86	0.78	0.03
Avail Cap(c_a), veh/h	163	359	290	157	359	557	233	970	981	753	2199	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	43.0	40.4	51.9	42.0	29.8	51.4	17.2	17.2	46.8	16.5	8.7
Incr Delay (d2), s/veh	0.5	2.7	0.6	2.2	1.1	0.9	16.0	2.2	2.2	8.0	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.5	2.4	2.4	5.1	7.5	5.1	11.5	11.7	8.4	21.0	0.3
LnGrp Delay(d), s/veh	48.3	45.7	41.0	54.1	43.0	30.7	67.4	19.4	19.4	54.8	19.4	8.7
LnGrp LOS	D	D	D	D	D	C	E	B	B	D	B	A
Approach Vol, veh/h		328			536			1209			2243	
Approach Delay, s/veh		44.7			37.8			24.9			27.1	
Approach LOS		D			D			C			C	

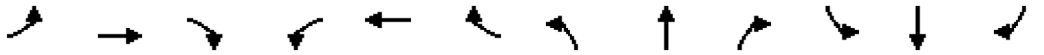
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.1	66.7		25.6	14.8	75.0		25.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	61.0		22.0	15.0	71.0		22.0
Max Q Clear Time (g_c+I1), s	18.0	24.4		14.8	10.8	43.3		21.5
Green Ext Time (p_c), s	1.1	8.4		0.9	0.1	16.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	835	66	166	590	100	34	817	225	138	1404	83
Future Volume (veh/h)	146	835	66	166	590	100	34	817	225	138	1404	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	154	879	69	175	621	105	36	860	237	145	1478	87
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	295	941	74	213	1001	420	131	1227	338	268	1650	97
Arrive On Green	0.08	0.28	0.28	0.08	0.28	0.28	0.02	0.45	0.45	0.06	0.48	0.48
Sat Flow, veh/h	1792	3340	262	1792	3574	1500	1792	2743	755	1792	3416	200
Grp Volume(v), veh/h	154	470	478	175	621	105	36	560	537	145	769	796
Grp Sat Flow(s),veh/h/ln	1792	1787	1815	1792	1787	1500	1792	1787	1711	1792	1787	1829
Q Serve(g_s), s	7.1	30.3	30.3	8.2	17.9	6.4	1.3	29.8	29.8	5.0	46.1	47.0
Cycle Q Clear(g_c), s	7.1	30.3	30.3	8.2	17.9	6.4	1.3	29.8	29.8	5.0	46.1	47.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.44	1.00		0.11
Lane Grp Cap(c), veh/h	295	503	511	213	1001	420	131	799	765	268	863	883
V/C Ratio(X)	0.52	0.93	0.93	0.82	0.62	0.25	0.27	0.70	0.70	0.54	0.89	0.90
Avail Cap(c_a), veh/h	353	515	523	213	1001	420	150	799	765	313	863	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	41.3	41.3	31.6	37.0	32.9	25.6	26.3	26.3	20.6	27.7	27.9
Incr Delay (d2), s/veh	1.4	24.1	23.9	22.2	1.2	0.3	1.1	5.1	5.3	1.7	13.4	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	18.3	18.5	5.3	9.0	2.7	0.7	15.8	15.2	2.5	25.9	27.1
LnGrp Delay(d), s/veh	29.8	65.5	65.2	53.8	38.2	33.2	26.7	31.3	31.6	22.3	41.1	42.0
LnGrp LOS	C	E	E	D	D	C	C	C	C	C	D	D
Approach Vol, veh/h		1102			901			1133			1710	
Approach Delay, s/veh		60.4			40.7			31.3			39.9	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	56.8	13.0	37.2	6.8	61.0	13.2	37.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	51.0	9.0	34.0	4.0	57.0	13.0	30.0
Max Q Clear Time (g_c+I1), s	7.0	31.8	10.2	32.3	3.3	49.0	9.1	19.9
Green Ext Time (p_c), s	0.1	7.9	0.0	1.0	0.0	5.8	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	782	83	246	400	24	43	762	272	54	1279	50
Future Volume (veh/h)	143	782	83	246	400	24	43	762	272	54	1279	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	155	850	90	267	435	26	47	828	296	59	1390	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	389	905	393	296	1075	469	147	1633	706	262	1610	62
Arrive On Green	0.08	0.25	0.25	0.12	0.30	0.30	0.03	0.46	0.46	0.03	0.46	0.46
Sat Flow, veh/h	1792	3574	1552	1792	3574	1558	1792	3574	1546	1792	3503	136
Grp Volume(v), veh/h	155	850	90	267	435	26	47	828	296	59	708	736
Grp Sat Flow(s),veh/h/ln	1792	1787	1552	1792	1787	1558	1792	1787	1546	1792	1787	1852
Q Serve(g_s), s	7.5	27.4	5.4	12.5	11.4	1.4	1.6	19.2	15.1	2.1	41.6	41.9
Cycle Q Clear(g_c), s	7.5	27.4	5.4	12.5	11.4	1.4	1.6	19.2	15.1	2.1	41.6	41.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	389	905	393	296	1075	469	147	1633	706	262	821	851
V/C Ratio(X)	0.40	0.94	0.23	0.90	0.40	0.06	0.32	0.51	0.42	0.23	0.86	0.86
Avail Cap(c_a), veh/h	389	913	396	317	1126	491	161	1633	706	285	821	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	43.0	34.8	29.5	32.7	29.2	24.5	22.6	21.4	17.8	28.4	28.5
Incr Delay (d2), s/veh	0.7	16.9	0.3	26.4	0.2	0.0	1.2	1.1	1.8	0.4	11.5	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	15.6	2.4	8.3	5.7	0.6	0.9	9.7	6.8	1.0	23.1	24.0
LnGrp Delay(d), s/veh	29.7	59.8	35.1	55.9	32.9	29.2	25.7	23.7	23.3	18.2	39.9	39.9
LnGrp LOS	C	E	D	E	C	C	C	C	C	B	D	D
Approach Vol, veh/h		1095			728			1171			1503	
Approach Delay, s/veh		53.5			41.2			23.7			39.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	57.7	18.6	33.8	7.1	58.0	13.0	39.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	16.0	30.0	4.0	54.0	9.0	37.0
Max Q Clear Time (g_c+I1), s	4.1	21.2	14.5	29.4	3.6	43.9	9.5	13.4
Green Ext Time (p_c), s	0.0	7.8	0.1	0.4	0.0	6.8	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	14	54	33	15	21	31	1049	39	23	1547	38
Future Volume (veh/h)	7	14	54	33	15	21	31	1049	39	23	1547	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	8	15	58	35	16	23	33	1128	42	25	1663	41
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	41	58	243	51	14	243	241	2603	1159	385	2591	1129
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.02	0.73	0.73	0.02	0.72	0.72
Sat Flow, veh/h	0	384	1599	0	96	1599	1792	3574	1591	1792	3574	1558
Grp Volume(v), veh/h	23	0	58	51	0	23	33	1128	42	25	1663	41
Grp Sat Flow(s),veh/h/ln	384	0	1599	96	0	1599	1792	1787	1591	1792	1787	1558
Q Serve(g_s), s	0.0	0.0	3.8	0.0	0.0	1.5	0.6	14.9	0.9	0.4	28.4	0.9
Cycle Q Clear(g_c), s	18.0	0.0	3.8	18.0	0.0	1.5	0.6	14.9	0.9	0.4	28.4	0.9
Prop In Lane	0.35		1.00	0.69		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	99	0	243	66	0	243	241	2603	1159	385	2591	1129
V/C Ratio(X)	0.23	0.00	0.24	0.78	0.00	0.09	0.14	0.43	0.04	0.06	0.64	0.04
Avail Cap(c_a), veh/h	99	0	243	66	0	243	261	2603	1159	412	2591	1129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	0.0	44.3	54.3	0.0	43.3	7.7	6.4	4.5	4.9	8.4	4.6
Incr Delay (d2), s/veh	1.2	0.0	0.5	43.3	0.0	0.2	0.3	0.5	0.1	0.1	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.7	2.4	0.0	0.7	0.3	7.4	0.4	0.2	14.3	0.4
LnGrp Delay(d), s/veh	45.3	0.0	44.8	97.6	0.0	43.5	8.0	6.9	4.6	5.0	9.6	4.7
LnGrp LOS	D		D	F		D	A	A	A	A	A	A
Approach Vol, veh/h		81			74			1203			1729	
Approach Delay, s/veh		44.9			80.8			6.9			9.5	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	90.4		22.0	6.7	90.0		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	86.0		18.0	4.0	86.0		18.0
Max Q Clear Time (g_c+I1), s	2.4	16.9		20.0	2.6	30.4		20.0
Green Ext Time (p_c), s	0.0	11.2		0.0	0.0	21.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	29	0	0	27	0	1092	10	0	1627	8
Future Vol, veh/h	0	0	29	0	0	27	0	1092	10	0	1627	8
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	5	5	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	31	0	0	29	0	1174	11	0	1749	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	875	-	-	587	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	294	0	0	455	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	294	-	-	455	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

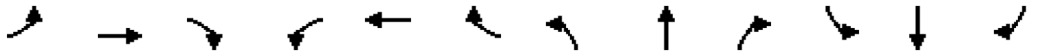
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.7	13.5	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	294	455	-
HCM Lane V/C Ratio	-	0.106	0.064	-
HCM Control Delay (s/veh)	-	18.7	13.5	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.4	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	232	1019	293	117	420	113	91	914	170	203	1648	112
Future Volume (veh/h)	232	1019	293	117	420	113	91	914	170	203	1648	112
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	249	1096	315	126	452	122	98	983	183	218	1772	120
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	315	1350	403	184	805	344	152	1646	716	283	2443	165
Arrive On Green	0.09	0.26	0.26	0.05	0.23	0.23	0.04	0.46	0.46	0.08	0.50	0.50
Sat Flow, veh/h	3476	5136	1532	3476	3574	1528	3476	3574	1554	3476	4904	331
Grp Volume(v), veh/h	249	1096	315	126	452	122	98	983	183	218	1236	656
Grp Sat Flow(s),veh/h/ln	1738	1712	1532	1738	1787	1528	1738	1787	1554	1738	1712	1811
Q Serve(g_s), s	7.9	22.5	21.5	4.0	12.6	7.6	3.1	23.0	8.1	6.9	31.9	32.0
Cycle Q Clear(g_c), s	7.9	22.5	21.5	4.0	12.6	7.6	3.1	23.0	8.1	6.9	31.9	32.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	315	1350	403	184	805	344	152	1646	716	283	1706	902
V/C Ratio(X)	0.79	0.81	0.78	0.69	0.56	0.35	0.64	0.60	0.26	0.77	0.72	0.73
Avail Cap(c_a), veh/h	433	1508	450	247	858	367	216	1646	716	402	1706	902
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	38.8	38.4	52.3	38.6	36.7	52.9	22.6	18.5	50.6	22.2	22.2
Incr Delay (d2), s/veh	6.7	3.2	7.9	4.8	0.7	0.6	4.5	1.6	0.9	5.7	2.7	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	11.1	10.0	2.0	6.3	3.2	1.6	11.7	3.6	3.6	15.6	17.3
LnGrp Delay(d), s/veh	56.8	42.0	46.3	57.1	39.4	37.3	57.4	24.2	19.4	56.3	24.9	27.3
LnGrp LOS	E	D	D	E	D	D	E	C	B	E	C	C
Approach Vol, veh/h		1660			700			1264			2110	
Approach Delay, s/veh		45.0			42.2			26.1			28.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	55.8	9.9	33.6	8.9	60.0	14.2	29.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	50.0	8.0	33.0	7.0	56.0	14.0	27.0
Max Q Clear Time (g_c+I1), s	8.9	25.0	6.0	24.5	5.1	34.0	9.9	14.6
Green Ext Time (p_c), s	0.3	8.0	0.1	5.1	0.0	13.7	0.3	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	151	302	130	79	1072	0	0	1557	552
Future Volume (veh/h)	0	0	0	151	302	130	79	1072	0	0	1557	552
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				159	318	137	83	1128	0	0	1639	581
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				221	440	197	134	4085	0	0	2713	930
Arrive On Green				0.12	0.12	0.12	0.04	0.80	0.00	0.00	0.73	0.73
Sat Flow, veh/h				1774	3539	1583	3442	5253	0	0	3893	1277
Grp Volume(v), veh/h				159	318	137	83	1128	0	0	1486	734
Grp Sat Flow(s),veh/h/ln				1774	1770	1583	1721	1695	0	0	1695	1612
Q Serve(g_s), s				9.5	9.6	9.2	2.6	6.2	0.0	0.0	23.5	25.1
Cycle Q Clear(g_c), s				9.5	9.6	9.2	2.6	6.2	0.0	0.0	23.5	25.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.79
Lane Grp Cap(c), veh/h				221	440	197	134	4085	0	0	2469	1174
V/C Ratio(X)				0.72	0.72	0.70	0.62	0.28	0.00	0.00	0.60	0.62
Avail Cap(c_a), veh/h				368	735	329	249	4085	0	0	2469	1174
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.6	46.7	46.5	52.4	2.8	0.0	0.0	7.3	7.5
Incr Delay (d2), s/veh				4.4	2.3	4.4	4.6	0.2	0.0	0.0	1.1	2.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.0	4.8	4.3	1.3	2.9	0.0	0.0	11.1	11.8
LnGrp Delay(d), s/veh				51.0	48.9	50.9	57.0	2.9	0.0	0.0	8.4	10.0
LnGrp LOS				D	D	D	E	A			A	B
Approach Vol, veh/h					614			1211			2220	
Approach Delay, s/veh					49.9			6.6			8.9	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		93.0			8.3	84.7		17.8
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		89.0			8.0	77.0		23.0
Max Q Clear Time (g_c+I1), s		8.2			4.6	27.1		11.6
Green Ext Time (p_c), s		10.1			0.1	28.4		2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	368	253	124	0	0	0	0	836	279	366	1297	0
Future Volume (veh/h)	368	253	124	0	0	0	0	836	279	366	1297	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	409	281	138				0	929	310	407	1441	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	671	363	309				0	2751	839	504	3695	0
Arrive On Green	0.19	0.19	0.19				0.00	0.54	0.54	0.15	0.73	0.00
Sat Flow, veh/h	3442	1863	1583				0	5253	1552	3442	5253	0
Grp Volume(v), veh/h	409	281	138				0	929	310	407	1441	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583				0	1695	1552	1721	1695	0
Q Serve(g_s), s	11.1	14.6	7.8				0.0	10.5	11.7	11.7	11.0	0.0
Cycle Q Clear(g_c), s	11.1	14.6	7.8				0.0	10.5	11.7	11.7	11.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	671	363	309				0	2751	839	504	3695	0
V/C Ratio(X)	0.61	0.77	0.45				0.00	0.34	0.37	0.81	0.39	0.00
Avail Cap(c_a), veh/h	1284	695	591				0	2751	839	980	3695	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	38.9	36.2				0.0	13.1	13.4	42.1	5.3	0.0
Incr Delay (d2), s/veh	0.9	3.5	1.0				0.0	0.3	1.3	3.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	7.9	3.5				0.0	5.0	5.3	5.8	5.2	0.0
LnGrp Delay(d), s/veh	38.4	42.4	37.2				0.0	13.5	14.7	45.2	5.6	0.0
LnGrp LOS	D	D	D					B	B	D	A	
Approach Vol, veh/h		828						1239			1848	
Approach Delay, s/veh		39.5						13.8			14.3	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.9	59.1		23.8		78.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	29.0	41.0		38.0		74.0		
Max Q Clear Time (g_c+I1), s	13.7	13.7		16.6		13.0		
Green Ext Time (p_c), s	1.3	8.5		3.3		14.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	1420	156	344	1097	127	134	473	172	276	1036	373
Future Volume (veh/h)	236	1420	156	344	1097	127	134	473	172	276	1036	373
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	265	1596	175	387	1233	143	151	531	193	310	1164	419
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	321	1626	504	406	1751	543	164	1164	696	374	1221	682
Arrive On Green	0.09	0.32	0.32	0.12	0.34	0.34	0.09	0.33	0.33	0.11	0.34	0.34
Sat Flow, veh/h	3476	5136	1591	3476	5136	1592	1792	3574	1566	3476	3574	1564
Grp Volume(v), veh/h	265	1596	175	387	1233	143	151	531	193	310	1164	419
Grp Sat Flow(s),veh/h/ln	1738	1712	1591	1738	1712	1592	1792	1787	1566	1738	1787	1564
Q Serve(g_s), s	9.0	37.0	10.1	13.3	25.0	7.8	10.0	14.1	9.4	10.5	38.2	24.8
Cycle Q Clear(g_c), s	9.0	37.0	10.1	13.3	25.0	7.8	10.0	14.1	9.4	10.5	38.2	24.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	1626	504	406	1751	543	164	1164	696	374	1221	682
V/C Ratio(X)	0.83	0.98	0.35	0.95	0.70	0.26	0.92	0.46	0.28	0.83	0.95	0.61
Avail Cap(c_a), veh/h	348	1626	504	406	1751	543	164	1164	696	492	1221	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	40.6	31.5	52.7	34.3	28.6	54.1	32.0	21.3	52.5	38.6	26.3
Incr Delay (d2), s/veh	14.1	18.0	0.4	33.0	1.3	0.3	47.4	1.3	1.0	8.7	16.7	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	20.1	4.5	8.3	12.0	3.5	7.1	7.1	4.3	5.5	21.6	11.5
LnGrp Delay(d), s/veh	67.6	58.6	31.9	85.7	35.6	28.9	101.4	33.3	22.3	61.2	55.3	30.4
LnGrp LOS	E	E	C	F	D	C	F	C	C	E	E	C
Approach Vol, veh/h		2036			1763			875			1893	
Approach Delay, s/veh		57.5			46.1			42.6			50.7	
Approach LOS		E			D			D			D	

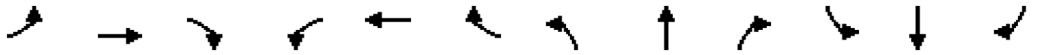
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	43.1	18.0	42.0	15.0	45.0	15.1	44.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	35.0	14.0	38.0	11.0	41.0	12.0	40.0
Max Q Clear Time (g_c+I1), s	12.5	16.1	15.3	39.0	12.0	40.2	11.0	27.0
Green Ext Time (p_c), s	0.4	3.7	0.0	0.0	0.0	0.7	0.1	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	791	119	228	669	141	81	501	141	64	549	83
Future Volume (veh/h)	251	791	119	228	669	141	81	501	141	64	549	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.78	1.00		0.84	0.98		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	264	833	125	240	704	148	85	527	148	67	578	87
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	304	1024	154	317	930	323	318	1331	500	337	1104	165
Arrive On Green	0.17	0.34	0.34	0.09	0.26	0.26	0.04	0.37	0.37	0.04	0.36	0.36
Sat Flow, veh/h	1792	3023	454	3476	3574	1243	1792	3574	1342	1792	3031	454
Grp Volume(v), veh/h	264	493	465	240	704	148	85	527	148	67	339	326
Grp Sat Flow(s),veh/h/ln	1792	1787	1689	1738	1787	1243	1792	1787	1342	1792	1787	1698
Q Serve(g_s), s	14.3	25.0	25.0	6.7	18.0	9.9	2.9	10.8	7.7	2.3	14.8	15.0
Cycle Q Clear(g_c), s	14.3	25.0	25.0	6.7	18.0	9.9	2.9	10.8	7.7	2.3	14.8	15.0
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	304	605	572	317	930	323	318	1331	500	337	651	618
V/C Ratio(X)	0.87	0.81	0.81	0.76	0.76	0.46	0.27	0.40	0.30	0.20	0.52	0.53
Avail Cap(c_a), veh/h	523	864	816	490	1187	413	345	1331	500	361	651	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	30.0	30.0	44.1	33.9	30.9	19.5	22.9	22.0	19.1	24.8	24.8
Incr Delay (d2), s/veh	7.7	4.0	4.3	3.7	2.1	1.0	0.4	0.9	1.5	0.3	3.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	13.0	12.3	3.4	9.2	3.5	1.5	5.5	3.1	1.1	7.8	7.5
LnGrp Delay(d), s/veh	47.9	34.0	34.3	47.8	36.0	31.9	19.9	23.8	23.5	19.4	27.8	28.0
LnGrp LOS	D	C	C	D	D	C	B	C	C	B	C	C
Approach Vol, veh/h		1222			1092			760			732	
Approach Delay, s/veh		37.1			38.0			23.3			27.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	41.0	13.1	37.6	8.5	40.2	20.9	29.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	37.0	14.0	48.0	6.0	36.0	29.0	33.0
Max Q Clear Time (g_c+I1), s	4.3	12.8	8.7	27.0	4.9	17.0	16.3	20.0
Green Ext Time (p_c), s	0.0	4.2	0.4	6.7	0.0	4.1	0.6	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	883	133	141	449	75	160	644	188	66	935	114
Future Volume (veh/h)	71	883	133	141	449	75	160	644	188	66	935	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	76	939	141	150	478	80	170	685	200	70	995	121
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	98	1078	461	208	1097	478	275	1657	737	338	1374	167
Arrive On Green	0.05	0.30	0.30	0.06	0.31	0.31	0.07	0.46	0.46	0.04	0.43	0.43
Sat Flow, veh/h	1792	3574	1527	3476	3574	1556	1792	3574	1591	1792	3202	389
Grp Volume(v), veh/h	76	939	141	150	478	80	170	685	200	70	555	561
Grp Sat Flow(s),veh/h/ln	1792	1787	1527	1738	1787	1556	1792	1787	1591	1792	1787	1804
Q Serve(g_s), s	4.8	28.5	8.1	4.8	12.2	4.3	5.8	14.5	8.8	2.5	29.4	29.5
Cycle Q Clear(g_c), s	4.8	28.5	8.1	4.8	12.2	4.3	5.8	14.5	8.8	2.5	29.4	29.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	98	1078	461	208	1097	478	275	1657	737	338	767	774
V/C Ratio(X)	0.78	0.87	0.31	0.72	0.44	0.17	0.62	0.41	0.27	0.21	0.72	0.72
Avail Cap(c_a), veh/h	172	1188	507	243	1097	478	354	1657	737	354	767	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	37.8	30.7	52.8	31.7	28.9	21.3	20.4	18.8	17.6	27.0	27.0
Incr Delay (d2), s/veh	12.5	6.8	0.4	8.4	0.3	0.2	2.3	0.8	0.9	0.3	5.9	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	15.1	3.5	2.6	6.1	1.9	3.0	7.3	4.0	1.2	15.7	15.9
LnGrp Delay(d), s/veh	65.9	44.6	31.1	61.2	32.0	29.1	23.6	21.1	19.7	17.9	32.9	32.9
LnGrp LOS	E	D	C	E	C	C	C	C	B	B	C	C
Approach Vol, veh/h		1156			708			1055			1186	
Approach Delay, s/veh		44.3			37.8			21.2			32.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	57.0	10.8	38.5	12.0	53.1	10.2	39.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	8.0	38.0	13.0	45.0	11.0	35.0
Max Q Clear Time (g_c+I1), s	4.5	16.5	6.8	30.5	7.8	31.5	6.8	14.2
Green Ext Time (p_c), s	0.0	5.7	0.0	4.0	0.2	6.0	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	2	0	42	7	0	8	60	1048	117	4	1261	24
Future Vol, veh/h	2	0	42	7	0	8	60	1048	117	4	1261	24
Conflicting Peds, #/hr	0	0	1	1	0	0	11	0	29	29	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	150	-	50	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	2	0	44	7	0	8	63	1103	123	4	1327	25

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2037	2740	688	1931	2629	581	1363	0	0	1255	0	0
Stage 1	1359	1359	-	1258	1258	-	-	-	-	-	-	-
Stage 2	678	1381	-	673	1371	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	6.52	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	4.01	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	34	20	391	40	24	460	505	-	-	556	-	-
Stage 1	158	217	-	182	243	-	-	-	-	-	-	-
Stage 2	411	212	-	413	214	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	30	17	387	31	20	449	500	-	-	543	-	-
Mov Cap-2 Maneuver	30	17	-	31	20	-	-	-	-	-	-	-
Stage 1	137	214	-	155	207	-	-	-	-	-	-	-
Stage 2	352	181	-	363	211	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	20.9	79	0.6	0
HCM LOS	C	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	500	-	-	30	387	31	449	543	-	-
HCM Lane V/C Ratio	0.126	-	-	0.07	0.114	0.238	0.019	0.008	-	-
HCM Control Delay (s/veh)	13.2	-	-	133.9	15.5	154.2	13.2	11.7	-	-
HCM Lane LOS	B	-	-	F	C	F	B	B	-	-
HCM 95th %tile Q(veh)	0.4	-	-	0.2	0.4	0.7	0.1	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	983	164	79	422	192	104	806	112	303	927	87
Future Volume (veh/h)	182	983	164	79	422	192	104	806	112	303	927	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	190	1024	171	82	440	200	108	840	117	316	966	91
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	221	1318	220	133	505	227	303	1407	615	409	1662	729
Arrive On Green	0.12	0.30	0.30	0.04	0.21	0.21	0.05	0.39	0.39	0.12	0.46	0.46
Sat Flow, veh/h	1792	4414	736	3476	2367	1064	1792	3574	1563	1792	3574	1568
Grp Volume(v), veh/h	190	794	401	82	331	309	108	840	117	316	966	91
Grp Sat Flow(s),veh/h/ln	1792	1712	1726	1738	1787	1643	1792	1787	1563	1792	1787	1568
Q Serve(g_s), s	11.4	23.2	23.3	2.5	19.6	20.0	3.9	20.4	5.4	10.9	21.7	3.6
Cycle Q Clear(g_c), s	11.4	23.2	23.3	2.5	19.6	20.0	3.9	20.4	5.4	10.9	21.7	3.6
Prop In Lane	1.00		0.43	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	1023	516	133	381	350	303	1407	615	409	1662	729
V/C Ratio(X)	0.86	0.78	0.78	0.62	0.87	0.88	0.36	0.60	0.19	0.77	0.58	0.12
Avail Cap(c_a), veh/h	294	1186	598	190	424	389	356	1407	615	547	1662	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	35.1	35.1	52.0	41.7	41.8	19.0	26.4	21.8	19.3	21.5	16.7
Incr Delay (d2), s/veh	17.2	2.9	5.6	4.6	16.1	19.0	0.7	1.9	0.7	4.8	1.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	11.3	12.0	1.3	11.4	11.0	1.9	10.4	2.4	5.8	11.1	1.6
LnGrp Delay(d), s/veh	64.3	38.0	40.8	56.5	57.8	60.8	19.7	28.2	22.5	24.1	23.0	17.0
LnGrp LOS	E	D	D	E	E	E	B	C	C	C	C	B
Approach Vol, veh/h		1385			722			1065			1373	
Approach Delay, s/veh		42.4			59.0			26.7			22.9	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	47.2	8.2	36.8	9.7	55.0	17.6	27.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	38.0	6.0	38.0	9.0	51.0	18.0	26.0
Max Q Clear Time (g_c+I1), s	12.9	22.4	4.5	25.3	5.9	23.7	13.4	22.0
Green Ext Time (p_c), s	0.6	5.3	0.0	6.1	0.1	7.6	0.2	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	148	298	457	51	714	0	0	1029	302
Future Volume (veh/h)	0	0	0	148	298	457	51	714	0	0	1029	302
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				157	317	486	54	760	0	0	1095	321
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				393	849	550	70	2945	0	0	1957	574
Arrive On Green				0.35	0.35	0.35	0.04	0.58	0.00	0.00	0.50	0.50
Sat Flow, veh/h				1132	2444	1583	1774	5253	0	0	4058	1140
Grp Volume(v), veh/h				251	223	486	54	760	0	0	954	462
Grp Sat Flow(s),veh/h/ln				1806	1770	1583	1774	1695	0	0	1695	1640
Q Serve(g_s), s				11.4	10.3	31.4	3.3	8.0	0.0	0.0	21.2	21.2
Cycle Q Clear(g_c), s				11.4	10.3	31.4	3.3	8.0	0.0	0.0	21.2	21.2
Prop In Lane				0.63		1.00	1.00		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				627	615	550	70	2945	0	0	1706	825
V/C Ratio(X)				0.40	0.36	0.88	0.78	0.26	0.00	0.00	0.56	0.56
Avail Cap(c_a), veh/h				814	797	713	147	2945	0	0	1706	825
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.9	26.5	33.4	51.8	11.3	0.0	0.0	18.7	18.7
Incr Delay (d2), s/veh				0.4	0.4	10.4	16.6	0.2	0.0	0.0	1.3	2.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.8	5.1	15.4	1.9	3.8	0.0	0.0	10.1	10.1
LnGrp Delay(d), s/veh				27.3	26.9	43.8	68.4	11.5	0.0	0.0	20.0	21.4
LnGrp LOS				C	C	D	E	B			C	C
Approach Vol, veh/h					960			814			1416	
Approach Delay, s/veh					35.6			15.3			20.5	
Approach LOS					D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			8.3	58.7		41.8
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			9.0	50.0		49.0
Max Q Clear Time (g_c+I1), s		10.0			5.3	23.2		33.4
Green Ext Time (p_c), s		5.8			0.0	11.0		4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	558	126	0	0	0	0	555	278	492	718	0
Future Volume (veh/h)	200	558	126	0	0	0	0	555	278	492	718	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	222	620	140				0	617	309	547	798	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	268	796	470				0	1380	633	643	2231	0
Arrive On Green	0.30	0.30	0.30				0.00	0.41	0.41	0.19	0.63	0.00
Sat Flow, veh/h	904	2683	1583				0	3558	1554	3442	3632	0
Grp Volume(v), veh/h	446	396	140				0	617	309	547	798	0
Grp Sat Flow(s),veh/h/ln	1818	1770	1583				0	1695	1554	1721	1770	0
Q Serve(g_s), s	25.1	22.2	7.5				0.0	14.4	16.1	16.8	11.8	0.0
Cycle Q Clear(g_c), s	25.1	22.2	7.5				0.0	14.4	16.1	16.8	11.8	0.0
Prop In Lane	0.50		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	539	525	470				0	1380	633	643	2231	0
V/C Ratio(X)	0.83	0.75	0.30				0.00	0.45	0.49	0.85	0.36	0.00
Avail Cap(c_a), veh/h	714	695	622				0	1380	633	975	2231	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.9	34.9	29.7				0.0	23.5	24.0	43.0	9.7	0.0
Incr Delay (d2), s/veh	6.2	3.3	0.4				0.0	1.1	2.7	4.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	11.2	3.3				0.0	7.0	7.3	8.4	5.8	0.0
LnGrp Delay(d), s/veh	42.1	38.2	30.1				0.0	24.6	26.7	47.7	10.1	0.0
LnGrp LOS	D	D	C					C	C	D	B	
Approach Vol, veh/h		982						926			1345	
Approach Delay, s/veh		38.8						25.3			25.4	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	24.4	48.6		36.5		73.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	31.0	34.0		43.0		69.0		
Max Q Clear Time (g_c+I1), s	18.8	18.1		27.1		13.8		
Green Ext Time (p_c), s	1.6	5.4		5.4		6.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	996	61	130	1244	49	52	132	108	146	262	65
Future Volume (veh/h)	45	996	61	130	1244	49	52	132	108	146	262	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	0.94		0.85	0.96		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	54	1186	73	155	1481	58	62	157	129	174	312	77
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	171	1605	99	267	1761	69	304	410	295	390	754	181
Arrive On Green	0.03	0.47	0.47	0.06	0.50	0.50	0.04	0.22	0.22	0.09	0.27	0.27
Sat Flow, veh/h	1792	3409	210	1792	3495	136	1792	1881	1355	1792	2772	664
Grp Volume(v), veh/h	54	621	638	155	755	784	62	157	129	174	198	191
Grp Sat Flow(s),veh/h/ln	1792	1787	1832	1792	1787	1844	1792	1881	1355	1792	1787	1649
Q Serve(g_s), s	1.6	29.0	29.1	4.4	37.4	37.8	2.7	7.3	8.5	7.4	9.3	9.8
Cycle Q Clear(g_c), s	1.6	29.0	29.1	4.4	37.4	37.8	2.7	7.3	8.5	7.4	9.3	9.8
Prop In Lane	1.00		0.11	1.00		0.07	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	171	841	862	267	900	929	304	410	295	390	486	448
V/C Ratio(X)	0.32	0.74	0.74	0.58	0.84	0.84	0.20	0.38	0.44	0.45	0.41	0.43
Avail Cap(c_a), veh/h	221	972	996	414	1128	1164	322	410	295	451	486	448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	22.1	22.1	18.5	21.9	22.0	29.6	34.4	34.8	26.1	30.7	30.9
Incr Delay (d2), s/veh	1.0	2.6	2.5	2.0	4.7	4.8	0.3	2.7	4.6	0.8	2.5	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	14.9	15.3	2.3	19.4	20.4	1.4	4.1	3.6	3.7	5.0	4.8
LnGrp Delay(d), s/veh	21.1	24.7	24.7	20.5	26.6	26.8	29.9	37.1	39.4	26.9	33.2	33.8
LnGrp LOS	C	C	C	C	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1313			1694			348			563	
Approach Delay, s/veh		24.5			26.2			36.7			31.5	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	26.4	10.6	52.5	7.9	32.0	7.1	55.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	20.0	15.0	56.0	5.0	28.0	6.0	65.0
Max Q Clear Time (g_c+I1), s	9.4	10.5	6.4	31.1	4.7	11.8	3.6	39.8
Green Ext Time (p_c), s	0.1	0.9	0.2	9.0	0.0	2.0	0.0	12.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	964	38	18	477	31	41	109	23	131	111	191
Future Volume (veh/h)	147	964	38	18	477	31	41	109	23	131	111	191
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	169	1108	44	21	548	36	47	125	26	151	128	220
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	406	1403	56	177	1146	75	398	914	185	566	637	555
Arrive On Green	0.08	0.40	0.40	0.02	0.34	0.34	0.03	0.31	0.31	0.08	0.36	0.36
Sat Flow, veh/h	1774	3466	138	1774	3369	221	1774	2919	590	1774	1770	1543
Grp Volume(v), veh/h	169	566	586	21	287	297	47	74	77	151	128	220
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1770	1821	1774	1770	1739	1774	1770	1543
Q Serve(g_s), s	5.0	24.1	24.1	0.7	11.0	11.1	1.5	2.6	2.7	4.7	4.3	9.2
Cycle Q Clear(g_c), s	5.0	24.1	24.1	0.7	11.0	11.1	1.5	2.6	2.7	4.7	4.3	9.2
Prop In Lane	1.00		0.08	1.00		0.12	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	406	716	743	177	602	619	398	554	544	566	637	555
V/C Ratio(X)	0.42	0.79	0.79	0.12	0.48	0.48	0.12	0.13	0.14	0.27	0.20	0.40
Avail Cap(c_a), veh/h	568	1273	1320	227	1047	1078	487	554	544	736	637	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	22.4	22.4	20.0	22.4	22.4	19.2	21.2	21.3	16.3	19.0	20.6
Incr Delay (d2), s/veh	0.7	2.0	1.9	0.3	0.6	0.6	0.1	0.5	0.5	0.3	0.7	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	12.0	12.5	0.3	5.4	5.6	0.8	1.3	1.4	2.3	2.2	4.2
LnGrp Delay(d), s/veh	16.5	24.4	24.4	20.3	23.0	23.0	19.3	21.7	21.8	16.6	19.7	22.7
LnGrp LOS	B	C	C	C	C	C	B	C	C	B	B	C
Approach Vol, veh/h		1321			605			198			499	
Approach Delay, s/veh		23.4			22.9			21.2			20.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	31.0	5.6	38.9	6.7	35.0	11.1	33.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	23.0	4.0	62.0	7.0	31.0	15.0	51.0
Max Q Clear Time (g_c+I1), s	6.7	4.7	2.7	26.1	3.5	11.2	7.0	13.1
Green Ext Time (p_c), s	0.2	0.7	0.0	8.8	0.0	2.0	0.3	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	798	247	232	506	42	239	292	242	33	105	52
Future Volume (veh/h)	105	798	247	232	506	42	239	292	242	33	105	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	119	907	281	264	575	48	272	332	275	38	119	59
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	149	1180	364	342	1544	128	625	743	603	333	1069	465
Arrive On Green	0.08	0.31	0.31	0.10	0.33	0.33	0.13	0.41	0.41	0.03	0.30	0.30
Sat Flow, veh/h	1757	3798	1172	3408	4732	391	1757	1833	1488	1757	3505	1524
Grp Volume(v), veh/h	119	801	387	264	406	217	272	317	290	38	119	59
Grp Sat Flow(s),veh/h/ln	1757	1679	1613	1704	1679	1766	1757	1752	1569	1757	1752	1524
Q Serve(g_s), s	6.7	21.9	22.0	7.6	9.4	9.5	10.2	13.3	13.7	1.5	2.5	2.8
Cycle Q Clear(g_c), s	6.7	21.9	22.0	7.6	9.4	9.5	10.2	13.3	13.7	1.5	2.5	2.8
Prop In Lane	1.00		0.73	1.00		0.22	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	149	1043	501	342	1095	576	625	710	635	333	1069	465
V/C Ratio(X)	0.80	0.77	0.77	0.77	0.37	0.38	0.44	0.45	0.46	0.11	0.11	0.13
Avail Cap(c_a), veh/h	295	1393	669	572	1393	733	802	710	635	357	1069	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	31.6	31.6	44.4	26.1	26.2	18.2	21.9	22.0	23.2	25.3	25.4
Incr Delay (d2), s/veh	9.4	1.9	3.9	3.7	0.2	0.4	0.5	2.0	2.4	0.2	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	10.4	10.3	3.8	4.4	4.7	5.0	6.8	6.3	0.7	1.2	1.3
LnGrp Delay(d), s/veh	54.9	33.5	35.6	48.2	26.3	26.6	18.7	23.9	24.3	23.4	25.5	26.0
LnGrp LOS	D	C	D	D	C	C	B	C	C	C	C	C
Approach Vol, veh/h		1307			887			879			216	
Approach Delay, s/veh		36.0			32.9			22.4			25.3	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	45.0	14.1	35.5	16.8	34.9	12.6	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	41.0	17.0	42.0	23.0	22.0	17.0	42.0
Max Q Clear Time (g_c+I1), s	3.5	15.7	9.6	24.0	12.2	4.8	8.7	11.5
Green Ext Time (p_c), s	0.0	3.8	0.5	7.5	0.6	0.7	0.2	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	393	741	74	89	932	261	45	432	82	245	410	381
Future Volume (veh/h)	393	741	74	89	932	261	45	432	82	245	410	381
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	418	788	79	95	991	278	48	460	87	261	436	405
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	510	1507	660	121	1224	533	62	901	382	337	1125	715
Arrive On Green	0.15	0.42	0.42	0.07	0.34	0.34	0.03	0.25	0.25	0.10	0.31	0.31
Sat Flow, veh/h	3476	3574	1564	1792	3574	1557	1792	3574	1514	3476	3574	1526
Grp Volume(v), veh/h	418	788	79	95	991	278	48	460	87	261	436	405
Grp Sat Flow(s),veh/h/ln	1738	1787	1564	1792	1787	1557	1792	1787	1514	1738	1787	1526
Q Serve(g_s), s	11.6	16.2	3.0	5.2	25.0	14.2	2.6	11.0	4.5	7.3	9.4	19.3
Cycle Q Clear(g_c), s	11.6	16.2	3.0	5.2	25.0	14.2	2.6	11.0	4.5	7.3	9.4	19.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	510	1507	660	121	1224	533	62	901	382	337	1125	715
V/C Ratio(X)	0.82	0.52	0.12	0.78	0.81	0.52	0.78	0.51	0.23	0.77	0.39	0.57
Avail Cap(c_a), veh/h	771	1911	836	217	1550	675	145	901	382	491	1125	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	21.3	17.5	45.5	29.6	26.1	47.5	31.8	29.4	43.7	26.5	19.6
Incr Delay (d2), s/veh	4.3	0.3	0.1	10.4	2.6	0.8	18.7	2.1	1.4	4.6	1.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	8.0	1.3	2.9	12.7	6.2	1.6	5.7	2.0	3.7	4.8	8.7
LnGrp Delay(d), s/veh	45.3	21.6	17.5	55.9	32.3	26.9	66.1	33.9	30.8	48.3	27.5	22.8
LnGrp LOS	D	C	B	E	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1285			1364			595			1102	
Approach Delay, s/veh		29.0			32.8			36.0			30.7	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	29.0	10.7	45.8	7.4	35.2	18.5	38.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	25.0	12.0	53.0	8.0	31.0	22.0	43.0
Max Q Clear Time (g_c+I1), s	9.3	13.0	7.2	18.2	4.6	21.3	13.6	27.0
Green Ext Time (p_c), s	0.4	2.5	0.1	6.2	0.0	3.0	1.0	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	278	92	112	197	26	104	711	117	19	1004	178
Future Volume (veh/h)	190	278	92	112	197	26	104	711	117	19	1004	178
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.91	0.97		0.90	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	302	100	122	214	28	113	773	127	21	1091	193
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	358	115	170	381	49	178	2000	329	424	1194	993
Arrive On Green	0.07	0.14	0.14	0.05	0.12	0.12	0.03	0.66	0.66	0.02	0.64	0.64
Sat Flow, veh/h	1774	2568	824	1774	3111	398	1774	3039	499	1774	1863	1549
Grp Volume(v), veh/h	207	205	197	122	120	122	113	450	450	21	1091	193
Grp Sat Flow(s),veh/h/ln	1774	1770	1622	1774	1770	1740	1774	1770	1769	1774	1863	1549
Q Serve(g_s), s	8.0	13.4	14.1	6.0	7.5	7.9	2.6	13.8	13.8	0.5	60.1	6.1
Cycle Q Clear(g_c), s	8.0	13.4	14.1	6.0	7.5	7.9	2.6	13.8	13.8	0.5	60.1	6.1
Prop In Lane	1.00		0.51	1.00		0.23	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	241	247	226	170	217	213	178	1165	1164	424	1194	993
V/C Ratio(X)	0.86	0.83	0.87	0.72	0.55	0.57	0.63	0.39	0.39	0.05	0.91	0.19
Avail Cap(c_a), veh/h	241	269	246	170	239	235	178	1165	1164	454	1194	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	49.6	50.0	46.2	48.9	49.1	27.0	9.3	9.3	7.6	18.4	8.7
Incr Delay (d2), s/veh	25.2	18.3	25.5	13.5	2.2	2.8	7.2	1.0	1.0	0.0	12.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	7.8	7.9	4.1	3.8	3.9	2.7	7.1	7.1	0.2	34.6	2.7
LnGrp Delay(d), s/veh	72.7	67.9	75.4	59.7	51.1	51.9	34.2	10.3	10.3	7.7	30.5	9.2
LnGrp LOS	E	E	E	E	D	D	C	B	B	A	C	A
Approach Vol, veh/h		609			364			1013			1305	
Approach Delay, s/veh		72.0			54.2			12.9			27.0	
Approach LOS		E			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	82.0	10.0	20.5	8.0	80.0	12.0	18.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	76.0	6.0	18.0	4.0	76.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	15.8	8.0	16.1	4.6	62.1	10.0	9.9
Green Ext Time (p_c), s	0.0	6.9	0.0	0.4	0.0	7.7	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	596	316	234	646	31	366	224	153	42	142	20
Future Volume (veh/h)	74	596	316	234	646	31	366	224	153	42	142	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	79	634	336	249	687	33	389	238	163	45	151	21
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	314	871	397	313	1650	79	681	1502	658	388	1254	168
Arrive On Green	0.05	0.26	0.26	0.12	0.34	0.34	0.18	0.43	0.43	0.03	0.28	0.28
Sat Flow, veh/h	1740	3325	1514	1740	4872	233	1740	3471	1520	1740	4436	593
Grp Volume(v), veh/h	79	634	336	249	468	252	389	238	163	45	112	60
Grp Sat Flow(s),veh/h/ln	1740	1663	1514	1740	1663	1780	1740	1736	1520	1740	1663	1704
Q Serve(g_s), s	3.4	18.1	21.9	10.3	11.3	11.4	15.6	4.3	7.1	1.9	2.6	2.7
Cycle Q Clear(g_c), s	3.4	18.1	21.9	10.3	11.3	11.4	15.6	4.3	7.1	1.9	2.6	2.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	314	871	397	313	1126	603	681	1502	658	388	940	482
V/C Ratio(X)	0.25	0.73	0.85	0.79	0.42	0.42	0.57	0.16	0.25	0.12	0.12	0.13
Avail Cap(c_a), veh/h	333	991	451	500	1566	838	856	1502	658	406	940	482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	35.0	36.4	25.3	26.5	26.5	18.3	18.0	18.7	25.4	27.7	27.7
Incr Delay (d2), s/veh	0.4	2.4	12.7	4.6	0.2	0.5	0.8	0.2	0.9	0.1	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	8.6	10.5	5.3	5.2	5.6	7.5	2.1	3.1	0.9	1.2	1.4
LnGrp Delay(d), s/veh	26.5	37.4	49.1	29.9	26.7	27.0	19.0	18.2	19.6	25.5	27.9	28.3
LnGrp LOS	C	D	D	C	C	C	B	B	B	C	C	C
Approach Vol, veh/h		1049			969			790			217	
Approach Delay, s/veh		40.3			27.6			18.9			27.5	
Approach LOS		D			C			B			C	

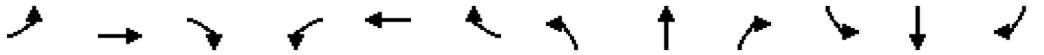
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	49.0	16.9	31.2	22.5	33.4	8.9	39.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	45.0	24.0	31.0	29.0	20.0	6.0	49.0
Max Q Clear Time (g_c+I1), s	3.9	9.1	12.3	23.9	17.6	4.7	5.4	13.4
Green Ext Time (p_c), s	0.0	2.1	0.5	3.4	0.9	0.7	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	856	33	143	1328	403	12	216	164	32	74	63
Future Volume (veh/h)	132	856	33	143	1328	403	12	216	164	32	74	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.94		0.89	0.98		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	140	911	35	152	1413	429	13	230	174	34	79	67
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	240	1830	70	402	1876	814	374	537	376	249	530	403
Arrive On Green	0.06	0.52	0.52	0.06	0.52	0.52	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1792	3507	135	1792	3574	1550	1170	1905	1337	963	1881	1430
Grp Volume(v), veh/h	140	464	482	152	1413	429	13	215	189	34	79	67
Grp Sat Flow(s),veh/h/ln	1792	1787	1855	1792	1787	1550	1170	1787	1455	963	1881	1430
Q Serve(g_s), s	3.2	14.9	14.9	3.4	27.6	16.1	0.7	8.7	9.5	2.7	2.8	3.1
Cycle Q Clear(g_c), s	3.2	14.9	14.9	3.4	27.6	16.1	3.5	8.7	9.5	12.2	2.8	3.1
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.92	1.00		1.00
Lane Grp Cap(c), veh/h	240	932	968	402	1876	814	374	503	410	249	530	403
V/C Ratio(X)	0.58	0.50	0.50	0.38	0.75	0.53	0.03	0.43	0.46	0.14	0.15	0.17
Avail Cap(c_a), veh/h	398	1449	1504	514	2818	1222	374	503	410	249	530	403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	13.7	13.7	10.1	16.6	13.9	25.2	26.0	26.3	31.4	23.9	24.0
Incr Delay (d2), s/veh	2.2	0.4	0.4	0.6	0.6	0.5	0.2	2.6	3.7	1.1	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.5	7.7	1.7	13.7	6.9	0.3	4.7	4.3	0.8	1.5	1.3
LnGrp Delay(d), s/veh	19.1	14.1	14.1	10.7	17.2	14.4	25.4	28.7	30.1	32.5	24.5	24.9
LnGrp LOS	B	B	B	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1086			1994			417			180	
Approach Delay, s/veh		14.8			16.1			29.2			26.2	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	9.5	50.3		29.0	9.2	50.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	11.0	72.0		25.0	13.0	70.0
Max Q Clear Time (g_c+I1), s		11.5	5.4	16.9		14.2	5.2	29.6
Green Ext Time (p_c), s		2.0	0.2	6.8		0.5	0.2	17.0

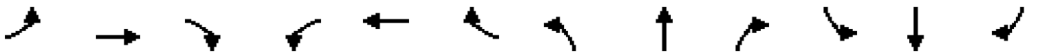
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	512	553	306	1799	0	0	0	0	61	48	139
Future Volume (veh/h)	0	512	553	306	1799	0	0	0	0	61	48	139
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	522	564	312	1836	0				62	49	142
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1446	661	359	2384	0				250	197	390
Arrive On Green	0.00	0.42	0.42	0.20	0.67	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	3593	1566	1792	3668	0				1022	808	1599
Grp Volume(v), veh/h	0	522	564	312	1836	0				111	0	142
Grp Sat Flow(s),veh/h/ln	0	1712	1566	1792	1787	0				1830	0	1599
Q Serve(g_s), s	0.0	9.4	29.3	15.2	31.7	0.0				4.4	0.0	6.6
Cycle Q Clear(g_c), s	0.0	9.4	29.3	15.2	31.7	0.0				4.4	0.0	6.6
Prop In Lane	0.00		1.00	1.00		0.00				0.56		1.00
Lane Grp Cap(c), veh/h	0	1446	661	359	2384	0				447	0	390
V/C Ratio(X)	0.00	0.36	0.85	0.87	0.77	0.00				0.25	0.00	0.36
Avail Cap(c_a), veh/h	0	1824	834	756	3571	0				447	0	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.7	23.5	34.9	10.3	0.0				27.4	0.0	28.2
Incr Delay (d2), s/veh	0.0	0.2	7.0	6.5	0.6	0.0				1.3	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	13.8	8.2	15.5	0.0				2.4	0.0	3.2
LnGrp Delay(d), s/veh	0.0	17.9	30.5	41.4	10.9	0.0				28.7	0.0	30.8
LnGrp LOS		B	C	D	B					C		C
Approach Vol, veh/h		1086			2148						253	
Approach Delay, s/veh		24.4			15.3						29.9	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.0	42.0		26.0		64.1
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			38.0	48.0		22.0		90.0
Max Q Clear Time (g_c+I1), s			17.2	31.3		8.6		33.7
Green Ext Time (p_c), s			0.9	6.8		0.8		24.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.2
HCM 2010 LOS	B



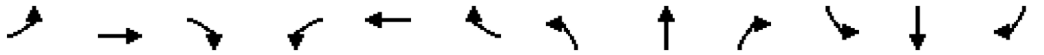
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	468	0	0	1111	124	964	0	244	0	0	0
Future Volume (vph)	106	468	0	0	1111	124	964	0	244	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)	1787	3574			3500		1698	1622	1519			
Flt Permitted	0.95	1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)	1787	3574			3500		1698	1622	1519			
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	107	473	0	0	1122	125	974	0	246	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	26	130	0	0	0
Lane Group Flow (vph)	107	473	0	0	1240	0	497	476	91	0	0	0
Confl. Peds. (#/hr)	8		14	14		8						
Confl. Bikes (#/hr)			10			11						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	10.7	60.2			45.5		48.1	48.1	48.1			
Effective Green, g (s)	10.7	60.2			45.5		48.1	48.1	48.1			
Actuated g/C Ratio	0.09	0.52			0.39		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	164	1849			1369		702	670	628			
v/s Ratio Prot	c0.06	0.13			c0.35		0.29	c0.29	0.06			
v/s Ratio Perm												
v/c Ratio	0.65	0.26			0.91		0.71	0.71	0.15			
Uniform Delay, d1	51.0	15.6			33.4		28.3	28.3	21.3			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	9.0	0.1			8.8		5.9	6.3	0.5			
Delay (s)	60.0	15.7			42.2		34.2	34.6	21.8			
Level of Service	E	B			D		C	C	C			
Approach Delay (s/veh)		23.8			42.2			32.1			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	116.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	428	154	104	687	49	340	415	69	138	643	191
Future Volume (veh/h)	135	428	154	104	687	49	340	415	69	138	643	191
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	150	476	171	116	763	54	378	461	77	153	714	212
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	213	840	571	145	910	391	456	1316	218	185	1089	323
Arrive On Green	0.06	0.24	0.24	0.08	0.25	0.25	0.13	0.43	0.43	0.10	0.40	0.40
Sat Flow, veh/h	3476	3574	1535	1792	3574	1537	3476	3055	507	1792	2702	802
Grp Volume(v), veh/h	150	476	171	116	763	54	378	268	270	153	472	454
Grp Sat Flow(s),veh/h/ln	1738	1787	1535	1792	1787	1537	1738	1787	1775	1792	1787	1717
Q Serve(g_s), s	4.5	12.5	8.5	6.8	21.6	2.9	11.3	10.7	10.9	8.9	22.9	22.9
Cycle Q Clear(g_c), s	4.5	12.5	8.5	6.8	21.6	2.9	11.3	10.7	10.9	8.9	22.9	22.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		0.47
Lane Grp Cap(c), veh/h	213	840	571	145	910	391	456	770	765	185	720	692
V/C Ratio(X)	0.70	0.57	0.30	0.80	0.84	0.14	0.83	0.35	0.35	0.83	0.66	0.66
Avail Cap(c_a), veh/h	293	904	598	252	1105	475	619	770	765	302	720	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	36.0	24.1	48.2	37.7	30.7	45.2	20.3	20.4	46.9	25.8	25.8
Incr Delay (d2), s/veh	4.6	0.7	0.3	9.7	4.9	0.2	6.9	1.2	1.3	9.4	4.6	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.3	3.6	3.7	11.2	1.2	5.9	5.6	5.6	4.9	12.2	11.8
LnGrp Delay(d), s/veh	53.7	36.7	24.4	57.9	42.6	30.9	52.1	21.6	21.7	56.3	30.5	30.7
LnGrp LOS	D	D	C	E	D	C	D	C	C	E	C	C
Approach Vol, veh/h		797			933			916			1079	
Approach Delay, s/veh		37.3			43.8			34.2			34.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	50.0	12.6	29.1	18.0	47.0	10.5	31.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	44.0	15.0	27.0	19.0	43.0	9.0	33.0
Max Q Clear Time (g_c+I1), s	10.9	12.9	8.8	14.5	13.3	24.9	6.5	23.6
Green Ext Time (p_c), s	0.2	3.2	0.1	2.9	0.7	5.5	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	232	72	106	132	79	77	1065	131	116	1302	136
Future Volume (veh/h)	222	232	72	106	132	79	77	1065	131	116	1302	136
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	239	249	77	114	142	85	83	1145	141	125	1400	146
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	333	274	229	200	162	211	1798	221	286	1875	194
Arrive On Green	0.13	0.18	0.18	0.06	0.11	0.11	0.03	0.57	0.57	0.05	0.58	0.58
Sat Flow, veh/h	1774	1863	1533	1774	1863	1507	1774	3163	388	1774	3228	334
Grp Volume(v), veh/h	239	249	77	114	142	85	83	639	647	125	763	783
Grp Sat Flow(s),veh/h/ln	1774	1863	1533	1774	1863	1507	1774	1770	1781	1774	1770	1793
Q Serve(g_s), s	12.9	14.2	4.9	6.4	8.2	6.0	2.2	27.3	27.5	3.3	35.5	36.4
Cycle Q Clear(g_c), s	12.9	14.2	4.9	6.4	8.2	6.0	2.2	27.3	27.5	3.3	35.5	36.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.19
Lane Grp Cap(c), veh/h	340	333	274	229	200	162	211	1006	1013	286	1028	1042
V/C Ratio(X)	0.70	0.75	0.28	0.50	0.71	0.53	0.39	0.64	0.64	0.44	0.74	0.75
Avail Cap(c_a), veh/h	356	416	343	229	266	215	261	1006	1013	393	1028	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	43.6	39.7	41.4	48.3	47.2	16.5	16.3	16.4	13.7	17.3	17.4
Incr Delay (d2), s/veh	5.8	5.7	0.6	1.7	5.6	2.6	1.2	3.1	3.1	1.0	4.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.8	2.1	3.2	4.6	2.6	1.1	14.2	14.3	1.6	18.5	19.3
LnGrp Delay(d), s/veh	41.9	49.2	40.3	43.0	53.9	49.9	17.7	19.4	19.4	14.7	22.1	22.5
LnGrp LOS	D	D	D	D	D	D	B	B	B	B	C	C
Approach Vol, veh/h		565			341			1369			1671	
Approach Delay, s/veh		44.9			49.3			19.3			21.7	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	67.6	11.0	24.0	7.9	69.0	19.0	16.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	60.0	7.0	25.0	7.0	65.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	5.3	29.5	8.4	16.2	4.2	38.4	14.9	10.2
Green Ext Time (p_c), s	0.1	10.6	0.0	1.1	0.0	13.1	0.1	0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	16	7	14	12	28	4	270	11	55	292	55
Future Volume (veh/h)	104	16	7	14	12	28	4	270	11	55	292	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.97		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	124	19	8	17	14	33	5	321	13	65	348	65
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	237	182	77	256	71	168	773	1447	1179	829	1447	1180
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.77	0.77	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1334	1246	525	1356	488	1151	972	1881	1532	1043	1881	1533
Grp Volume(v), veh/h	124	0	27	17	0	47	5	321	13	65	348	65
Grp Sat Flow(s),veh/h/ln	1334	0	1771	1356	0	1640	972	1881	1532	1043	1881	1533
Q Serve(g_s), s	8.5	0.0	1.3	1.0	0.0	2.4	0.1	4.5	0.2	1.8	5.0	1.0
Cycle Q Clear(g_c), s	10.9	0.0	1.3	2.3	0.0	2.4	5.1	4.5	0.2	6.3	5.0	1.0
Prop In Lane	1.00		0.30	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	0	259	256	0	240	773	1447	1179	829	1447	1180
V/C Ratio(X)	0.52	0.00	0.10	0.07	0.00	0.20	0.01	0.22	0.01	0.08	0.24	0.06
Avail Cap(c_a), veh/h	591	0	728	616	0	674	773	1447	1179	829	1447	1180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	35.1	36.1	0.0	35.6	3.8	3.0	2.5	3.9	3.1	2.6
Incr Delay (d2), s/veh	1.8	0.0	0.2	0.1	0.0	0.4	0.0	0.4	0.0	0.2	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.6	0.4	0.0	1.1	0.0	2.5	0.1	0.5	2.7	0.4
LnGrp Delay(d), s/veh	42.2	0.0	35.3	36.2	0.0	36.0	3.8	3.4	2.6	4.1	3.5	2.7
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		151			64			339			478	
Approach Delay, s/veh		40.9			36.0			3.4			3.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		17.9		77.0		17.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		7.1		12.9		8.3		4.4
Green Ext Time (p_c), s		2.2		0.5		2.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.9
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	24	13	18	17	13	3	4	11	56	53	4
Future Vol, veh/h	10	24	13	18	17	13	3	4	11	56	53	4
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	14	33	18	25	23	18	4	5	15	77	73	5
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	8	8.1	7.9	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	29%	0%	51%	0%	51%	0%
Vol Thru, %	22%	71%	0%	49%	0%	49%	0%
Vol Right, %	61%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	34	13	35	13	109	4
LT Vol	3	10	0	18	0	56	0
Through Vol	4	24	0	17	0	53	0
RT Vol	11	0	13	0	13	0	4
Lane Flow Rate	25	47	18	48	18	149	5
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.032	0.067	0.022	0.071	0.022	0.212	0.006
Departure Headway (Hd)	4.704	5.202	4.351	5.31	4.349	5.122	4.163
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	763	691	825	677	826	703	862
Service Time	2.721	2.915	2.064	3.022	2.061	2.836	1.877
HCM Lane V/C Ratio	0.033	0.068	0.022	0.071	0.022	0.212	0.006
HCM Control Delay, s/veh	7.9	8.3	7.2	8.4	7.2	9.2	6.9
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.2	0.1	0.8	0

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	5	3	9	19	16
Future Vol, veh/h	17	5	3	9	19	16
Conflicting Peds, #/hr	0	2	2	0	3	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	26	8	5	14	29	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	59	34
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	-	-	4.16	-	6.46	6.26
Critical Hdwy Stg 1	-	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.254	-	3.554	3.354
Pot Cap-1 Maneuver	-	-	1549	-	938	1028
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1546	-	931	1025
Mov Cap-2 Maneuver	-	-	-	-	931	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.8	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	931	1025	-	-	1546	-
HCM Lane V/C Ratio	0.031	0.024	-	-	0.003	-
HCM Control Delay (s/veh)	9	8.6	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	265	96	14	124	7	18	12	40	4	4	4
Future Vol, veh/h	14	265	96	14	124	7	18	12	40	4	4	4
Conflicting Peds, #/hr	4	0	19	19	0	4	5	0	2	2	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	298	108	16	139	8	20	13	45	4	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	151	0	0	425	0	0	587	586	373	594	636	152
Stage 1	-	-	-	-	-	-	403	403	-	179	179	-
Stage 2	-	-	-	-	-	-	184	183	-	415	457	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1430	-	-	1134	-	-	421	422	673	417	395	894
Stage 1	-	-	-	-	-	-	624	600	-	823	751	-
Stage 2	-	-	-	-	-	-	818	748	-	615	568	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1425	-	-	1116	-	-	397	401	661	368	376	887
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	401	-	368	376	-
Stage 1	-	-	-	-	-	-	605	581	-	808	737	-
Stage 2	-	-	-	-	-	-	793	734	-	551	550	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.8	13.2	13
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	516	1425	-	-	1116	-	-	461
HCM Lane V/C Ratio	0.152	0.011	-	-	0.014	-	-	0.029
HCM Control Delay (s/veh)	13.2	7.6	0	-	8.3	0	-	13
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	149	59	61	80	21	23	999	37	15	1619	42
Future Volume (veh/h)	96	149	59	61	80	21	23	999	37	15	1619	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.94	1.00		0.90	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	100	155	61	64	83	22	24	1041	39	16	1686	44
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	169	224	379	147	352	93	171	2382	89	347	2415	63
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	498	887	1504	1172	1396	370	282	3509	131	525	3556	92
Grp Volume(v), veh/h	255	0	61	64	0	105	24	530	550	16	845	885
Grp Sat Flow(s),veh/h/ln	1385	0	1504	1172	0	1766	282	1787	1853	525	1787	1861
Q Serve(g_s), s	15.5	0.0	3.7	6.2	0.0	5.5	6.6	15.8	15.8	1.7	33.5	33.9
Cycle Q Clear(g_c), s	20.9	0.0	3.7	27.1	0.0	5.5	40.5	15.8	15.8	17.4	33.5	33.9
Prop In Lane	0.39		1.00	1.00		0.21	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	392	0	379	147	0	445	171	1214	1258	347	1214	1264
V/C Ratio(X)	0.65	0.00	0.16	0.44	0.00	0.24	0.14	0.44	0.44	0.05	0.70	0.70
Avail Cap(c_a), veh/h	442	0	427	184	0	501	171	1214	1258	347	1214	1264
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	33.9	52.9	0.0	34.6	23.8	8.5	8.5	12.5	11.4	11.4
Incr Delay (d2), s/veh	2.8	0.0	0.2	2.0	0.0	0.3	1.7	1.1	1.1	0.2	3.3	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	1.5	2.1	0.0	2.7	0.6	8.0	8.3	0.3	17.5	18.4
LnGrp Delay(d), s/veh	44.3	0.0	34.1	54.9	0.0	34.9	25.6	9.7	9.6	12.8	14.7	14.7
LnGrp LOS	D		C	D		C	C	A	A	B	B	B
Approach Vol, veh/h		316			169			1104			1746	
Approach Delay, s/veh		42.3			42.5			10.0			14.7	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		33.4		83.0		33.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		42.5		22.9		35.9		29.1
Green Ext Time (p_c), s		8.8		1.2		19.9		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	25	41	1204	1283	28
Future Vol, veh/h	21	25	41	1204	1283	28
Conflicting Peds, #/hr	1	1	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	26	43	1267	1351	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2084	689	1392	0	-	0
Stage 1	1363	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	46	390	493	-	-	-
Stage 1	205	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	41	386	488	-	-	-
Mov Cap-2 Maneuver	41	-	-	-	-	-
Stage 1	185	-	-	-	-	-
Stage 2	441	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	84.9	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	488	-	41	386	-	-
HCM Lane V/C Ratio	0.088	-	0.539	0.068	-	-
HCM Control Delay (s/veh)	13.1	-	168.2	15	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	44	71	71	57	53	30	1081	12	17	1187	81
Future Volume (veh/h)	94	44	71	71	57	53	30	1081	12	17	1187	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.75	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	100	47	76	76	61	56	32	1150	13	18	1263	86
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	15	384	47	25	339	239	2351	27	296	2198	149
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	0	52	1356	0	89	1196	407	3617	41	486	3382	230
Grp Volume(v), veh/h	147	0	76	137	0	56	32	568	595	18	666	683
Grp Sat Flow(s),veh/h/ln	52	0	1356	89	0	1196	407	1787	1871	486	1787	1825
Q Serve(g_s), s	0.0	0.0	5.1	0.0	0.0	4.2	5.7	19.6	19.6	2.4	24.9	25.1
Cycle Q Clear(g_c), s	34.0	0.0	5.1	34.0	0.0	4.2	30.9	19.6	19.6	21.9	24.9	25.1
Prop In Lane	0.68		1.00	0.55		1.00	1.00		0.02	1.00		0.13
Lane Grp Cap(c), veh/h	65	0	384	72	0	339	239	1162	1216	296	1162	1186
V/C Ratio(X)	2.26	0.00	0.20	1.91	0.00	0.17	0.13	0.49	0.49	0.06	0.57	0.58
Avail Cap(c_a), veh/h	65	0	384	72	0	339	239	1162	1216	296	1162	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	32.6	48.4	0.0	32.3	20.4	10.8	10.8	16.4	11.7	11.7
Incr Delay (d2), s/veh	611.3	0.0	0.2	455.8	0.0	0.2	1.2	1.5	1.4	0.4	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	0.0	1.9	11.5	0.0	1.4	0.7	10.1	10.6	0.3	12.9	13.2
LnGrp Delay(d), s/veh	663.7	0.0	32.9	504.1	0.0	32.6	21.5	12.2	12.2	16.8	13.8	13.8
LnGrp LOS	F		C	F		C	C	B	B	B	B	B
Approach Vol, veh/h		223			193			1195			1367	
Approach Delay, s/veh		448.7			367.3			12.5			13.8	
Approach LOS		F			F			B			B	

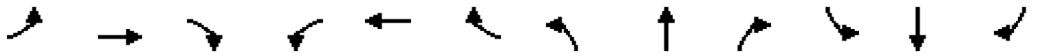
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		82.0		38.0		82.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		78.0		34.0		78.0		34.0
Max Q Clear Time (g_c+I1), s		32.9		36.0		27.1		36.0
Green Ext Time (p_c), s		10.0		0.0		12.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	519	25	115	646	171	48	332	78	156	493	331
Future Volume (veh/h)	220	519	25	115	646	171	48	332	78	156	493	331
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	234	552	27	122	687	0	51	353	83	166	524	352
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	272	1218	59	152	905	282	65	1524	668	234	929	623
Arrive On Green	0.15	0.25	0.25	0.09	0.18	0.00	0.04	0.43	0.43	0.07	0.47	0.47
Sat Flow, veh/h	1757	4915	239	1757	5036	1568	1757	3505	1537	3408	1992	1336
Grp Volume(v), veh/h	234	376	203	122	687	0	51	353	83	166	461	415
Grp Sat Flow(s),veh/h/ln	1757	1679	1796	1757	1679	1568	1757	1752	1537	1704	1752	1576
Q Serve(g_s), s	12.8	9.4	9.5	6.7	12.8	0.0	2.8	6.3	3.2	4.7	18.8	18.9
Cycle Q Clear(g_c), s	12.8	9.4	9.5	6.7	12.8	0.0	2.8	6.3	3.2	4.7	18.8	18.9
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		0.85
Lane Grp Cap(c), veh/h	272	832	445	152	905	282	65	1524	668	234	817	735
V/C Ratio(X)	0.86	0.45	0.46	0.80	0.76	0.00	0.78	0.23	0.12	0.71	0.56	0.56
Avail Cap(c_a), veh/h	480	1189	636	284	1222	381	142	1524	668	345	817	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	31.5	31.5	44.3	38.5	0.0	47.2	17.6	16.7	45.1	19.1	19.1
Incr Delay (d2), s/veh	7.8	0.4	0.7	9.3	1.9	0.0	18.2	0.4	0.4	3.9	2.8	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	4.4	4.8	3.6	6.1	0.0	1.7	3.1	1.4	2.3	9.7	8.8
LnGrp Delay(d), s/veh	48.6	31.9	32.3	53.6	40.4	0.0	65.4	17.9	17.1	49.0	21.9	22.2
LnGrp LOS	D	C	C	D	D		E	B	B	D	C	C
Approach Vol, veh/h		813			809			487			1042	
Approach Delay, s/veh		36.8			42.4			22.7			26.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	47.0	12.6	28.5	7.7	50.1	19.3	21.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	43.0	16.0	35.0	8.0	45.0	27.0	24.0
Max Q Clear Time (g_c+I1), s	6.7	8.3	8.7	11.5	4.8	20.9	14.8	14.8
Green Ext Time (p_c), s	0.1	2.6	0.1	3.4	0.0	5.8	0.5	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.6
HCM 2010 LOS	C

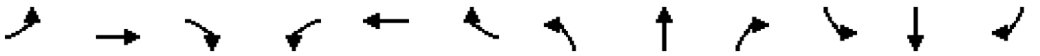


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	264	195	293	1801	0	0	0	0	76	175	387
Future Volume (vph)	0	264	195	293	1801	0	0	0	0	76	175	387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.99	0.96	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.97	0.85	1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3347	1415	3502	3610					1715	1626	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3347	1415	3502	3610					1715	1626	1534
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	275	203	305	1876	0	0	0	0	79	182	403
RTOR Reduction (vph)	0	14	80	0	0	0	0	0	0	0	5	31
Lane Group Flow (vph)	0	318	66	305	1876	0	0	0	0	71	306	251
Confl. Peds. (#/hr)	182		12	12		182						
Confl. Bikes (#/hr)						77						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		51.7	51.7	14.2	69.9					36.2	36.2	36.2
Effective Green, g (s)		51.7	51.7	14.2	69.9					36.2	36.2	36.2
Actuated g/C Ratio		0.45	0.45	0.12	0.61					0.32	0.32	0.32
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1516	641	435	2211					544	515	486
v/s Ratio Prot		0.09		0.09	c0.52					0.04	c0.19	0.16
v/s Ratio Perm			0.05									
v/c Ratio		0.21	0.10	0.70	0.85					0.13	0.59	0.52
Uniform Delay, d1		18.9	17.9	47.9	17.8					27.7	32.8	31.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.1	3.2					0.5	5.0	3.9
Delay (s)		18.9	18.0	53.0	21.1					28.2	37.7	35.7
Level of Service		B	B	D	C					C	D	D
Approach Delay (s/veh)		18.6			25.5			0.0			35.9	
Approach LOS		B			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

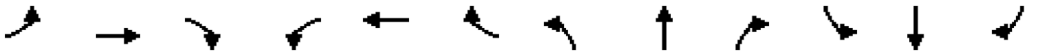
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	622	3	7	840	294	5	7	17	265	1	189
Future Volume (vph)	117	622	3	7	840	294	5	7	17	265	1	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.99	
Satd. Flow (prot)	3367	4983		1714	4988	1525		1792	1553	1649	1499	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.99	
Satd. Flow (perm)	3367	4983		1714	4988	1525		1792	1553	1649	1499	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	126	669	3	8	903	316	5	8	18	285	1	203
RTOR Reduction (vph)	0	1	0	0	0	169	0	0	14	0	160	0
Lane Group Flow (vph)	126	671	0	8	903	147	0	13	4	256	73	0
Confl. Peds. (#/hr)	2		11	11		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	8.7	37.9		0.7	29.9	29.9		21.5	21.5	20.7	20.7	
Effective Green, g (s)	8.7	37.9		0.7	29.9	29.9		21.5	21.5	20.7	20.7	
Actuated g/C Ratio	0.09	0.39		0.01	0.31	0.31		0.22	0.22	0.21	0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	302	1950		12	1540	471		398	344	352	320	
v/s Ratio Prot	c0.04	0.13		0.00	c0.18			c0.01		c0.16	0.05	
v/s Ratio Perm						0.10			0.00			
v/c Ratio	0.42	0.34		0.67	0.59	0.31		0.03	0.01	0.73	0.23	
Uniform Delay, d1	41.7	20.7		47.9	28.2	25.6		29.5	29.4	35.4	31.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.1		89.5	0.6	0.4		0.2	0.1	7.3	0.4	
Delay (s)	42.6	20.8		137.4	28.8	26.0		29.7	29.4	42.7	31.8	
Level of Service	D	C		F	C	C		C	C	D	C	
Approach Delay (s/veh)		24.3			28.8			29.5			37.5	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	96.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	220	0	0	829	63	1247	241	77	0	0	0
Future Volume (vph)	106	220	0	0	829	63	1247	241	77	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.98		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3497		1643	3151	1470			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3497		1643	3151	1470			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	232	0	0	873	66	1313	254	81	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	28	0	0	0
Lane Group Flow (vph)	112	232	0	0	939	0	656	919	45	0	0	0
Confl. Peds. (#/hr)	124		12	12		124						
Confl. Bikes (#/hr)			3			49						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	6.0	46.3			36.3		63.1	63.1	63.1			
Effective Green, g (s)	6.0	46.3			36.3		63.1	63.1	63.1			
Actuated g/C Ratio	0.05	0.39			0.31		0.54	0.54	0.54			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	178	1423			1081		883	1693	790			
v/s Ratio Prot	c0.03	0.06			c0.27		c0.40	0.29				
v/s Ratio Perm									0.03			
v/c Ratio	0.63	0.16			0.87		0.74	0.54	0.06			
Uniform Delay, d1	54.6	23.0			38.3		20.9	17.7	13.0			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	6.8	0.1			7.6		5.6	1.3	0.1			
Delay (s)	61.4	23.1			45.9		26.5	19.0	13.1			
Level of Service	E	C			D		C	B	B			
Approach Delay (s/veh)		35.5			45.9			21.7			0.0	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	117.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	785	0	0	825	190	315	0	462	0	0	0
Future Volume (veh/h)	122	785	0	0	825	190	315	0	462	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1827	0	0	1827	1900	1827	0	1827			
Adj Flow Rate, veh/h	131	844	0	0	887	204	339	0	497			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	4	4	4	0	4			
Cap, veh/h	191	1852	0	0	1121	257	1873	0	861			
Arrive On Green	0.06	0.37	0.00	0.00	0.28	0.28	0.55	0.00	0.55			
Sat Flow, veh/h	3375	5152	0	0	4202	924	3375	0	1553			
Grp Volume(v), veh/h	131	844	0	0	730	361	339	0	497			
Grp Sat Flow(s),veh/h/ln	1688	1663	0	0	1663	1636	1688	0	1553			
Q Serve(g_s), s	4.1	13.9	0.0	0.0	22.0	22.1	5.4	0.0	22.7			
Cycle Q Clear(g_c), s	4.1	13.9	0.0	0.0	22.0	22.1	5.4	0.0	22.7			
Prop In Lane	1.00		0.00	0.00		0.56	1.00		1.00			
Lane Grp Cap(c), veh/h	191	1852	0	0	923	454	1873	0	861			
V/C Ratio(X)	0.69	0.46	0.00	0.00	0.79	0.80	0.18	0.00	0.58			
Avail Cap(c_a), veh/h	312	2398	0	0	1168	575	1873	0	861			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.1	25.7	0.0	0.0	36.1	36.2	11.9	0.0	15.8			
Incr Delay (d2), s/veh	4.3	0.2	0.0	0.0	2.9	6.0	0.2	0.0	2.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.0	6.4	0.0	0.0	10.4	10.8	2.6	0.0	10.3			
LnGrp Delay(d), s/veh	54.4	25.9	0.0	0.0	39.1	42.2	12.1	0.0	18.6			
LnGrp LOS	D	C			D	D	B		B			
Approach Vol, veh/h		975			1091			836				
Approach Delay, s/veh		29.7			40.1			16.0				
Approach LOS		C			D			B				

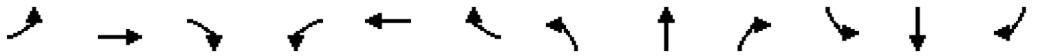
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		64.0		44.2			10.1	34.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		60.0		52.0			10.0	38.0
Max Q Clear Time (g_c+I1), s		24.7		15.9			6.1	24.1
Green Ext Time (p_c), s		3.4		6.4			0.1	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1524	411	231	1422	55	417	484	153	162	936	275
Future Volume (veh/h)	207	1524	411	231	1422	55	417	484	153	162	936	275
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	220	1621	437	246	1513	59	444	515	163	172	996	293
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1694	517	287	1712	529	488	1951	597	229	1092	471
Arrive On Green	0.08	0.33	0.33	0.08	0.34	0.34	0.14	0.38	0.38	0.07	0.31	0.31
Sat Flow, veh/h	3442	5085	1551	3442	5085	1571	3442	5085	1555	3442	3539	1529
Grp Volume(v), veh/h	220	1621	437	246	1513	59	444	515	163	172	996	293
Grp Sat Flow(s),veh/h/ln	1721	1695	1551	1721	1695	1571	1721	1695	1555	1721	1770	1529
Q Serve(g_s), s	7.5	37.4	31.4	8.5	33.7	3.1	15.2	8.3	8.7	5.9	32.5	19.7
Cycle Q Clear(g_c), s	7.5	37.4	31.4	8.5	33.7	3.1	15.2	8.3	8.7	5.9	32.5	19.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	1694	517	287	1712	529	488	1951	597	229	1092	471
V/C Ratio(X)	0.80	0.96	0.85	0.86	0.88	0.11	0.91	0.26	0.27	0.75	0.91	0.62
Avail Cap(c_a), veh/h	287	1696	517	287	1712	529	488	1951	597	287	1092	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	39.2	37.1	54.3	37.6	27.4	50.7	25.3	25.4	55.0	39.9	35.5
Incr Delay (d2), s/veh	14.4	13.1	12.3	21.8	5.9	0.1	21.1	0.3	1.1	8.3	12.9	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	19.5	15.1	4.9	16.6	1.4	8.7	4.0	3.9	3.1	17.9	9.1
LnGrp Delay(d), s/veh	68.7	52.3	49.5	76.1	43.4	27.5	71.9	25.7	26.6	63.3	52.8	41.5
LnGrp LOS	E	D	D	E	D	C	E	C	C	E	D	D
Approach Vol, veh/h		2278			1818			1122			1461	
Approach Delay, s/veh		53.3			47.3			44.1			51.8	
Approach LOS		D			D			D			D	

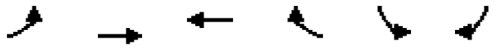
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	50.0	14.0	44.0	21.0	41.0	13.6	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	44.0	10.0	40.0	17.0	37.0	10.0	40.0
Max Q Clear Time (g_c+I1), s	7.9	10.7	10.5	39.4	17.2	34.5	9.5	35.7
Green Ext Time (p_c), s	0.1	4.0	0.0	0.5	0.0	1.7	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	222	38	831	296	132	32	292	197	305	1409	165
Future Volume (vph)	81	222	38	831	296	132	32	292	197	305	1409	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4922		3253	1679	1575	1787	3574	1573	3467	5035	
Flt Permitted		0.76		0.95	0.70	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3790		3253	1196	1575	1787	3574	1573	3467	5035	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	90	247	42	923	329	147	36	324	219	339	1566	183
RTOR Reduction (vph)	0	13	0	0	0	78	0	0	34	0	12	0
Lane Group Flow (vph)	0	366	0	821	431	69	36	324	185	339	1737	0
Confl. Peds. (#/hr)	1		47	47		1	5		9	9		5
Confl. Bikes (#/hr)			5			2			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		18.2		33.9	56.1	56.1	3.2	35.7	69.6	16.0	48.5	
Effective Green, g (s)		18.2		33.9	56.1	56.1	3.2	35.7	69.6	16.0	48.5	
Actuated g/C Ratio		0.15		0.28	0.47	0.47	0.03	0.30	0.58	0.13	0.40	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		575		920	696	737	47	1065	966	463	2038	
v/s Ratio Prot				c0.25	0.18		0.02	0.09	0.05	c0.10	c0.35	
v/s Ratio Perm		0.10			c0.11	0.04			0.06			
v/c Ratio		0.64		0.89	0.62	0.09	0.77	0.30	0.19	0.73	0.85	
Uniform Delay, d1		47.7		41.2	23.9	17.7	57.9	32.5	11.8	49.8	32.4	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.3		10.9	1.6	0.1	52.3	0.7	0.1	5.9	4.8	
Delay (s)		50.0		52.1	25.5	17.8	110.2	33.2	11.9	55.7	37.2	
Level of Service		D		D	C	B	F	C	B	E	D	
Approach Delay (s/veh)		50.0			40.3			29.9			40.2	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	431	1546	0	127	260
Future Volume (veh/h)	0	431	1546	0	127	260
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	444	1594	0	131	268
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2258	2258	0	870	777
Arrive On Green	0.00	0.44	0.44	0.00	0.48	0.48
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	444	1594	0	131	268
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	5.1	24.0	0.0	3.9	9.9
Cycle Q Clear(g_c), s	0.0	5.1	24.0	0.0	3.9	9.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2258	2258	0	870	777
V/C Ratio(X)	0.00	0.20	0.71	0.00	0.15	0.35
Avail Cap(c_a), veh/h	0	3579	3579	0	870	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	22.0	0.0	13.9	15.4
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	11.5	0.0	2.0	4.7
LnGrp Delay(d), s/veh	0.0	16.7	22.4	0.0	14.3	16.7
LnGrp LOS		B	C		B	B
Approach Vol, veh/h		444	1594		399	
Approach Delay, s/veh		16.7	22.4		15.9	
Approach LOS		B	C		B	

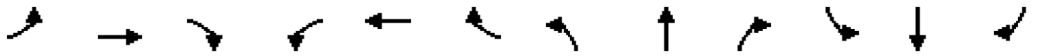
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				45.6		50.0		45.6
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				66.0		46.0		66.0
Max Q Clear Time (g_c+I1), s				7.1		11.9		26.0
Green Ext Time (p_c), s				3.1		1.3		15.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.3
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	461	0	0	1526	629	538
Future Volume (vph)	461	0	0	1526	629	538
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	0.97
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.99	0.85
Flt Protected	1.00			1.00	0.96	1.00
Satd. Flow (prot)	5136			5136	1772	1467
Flt Permitted	1.00			1.00	0.96	1.00
Satd. Flow (perm)	5136			5136	1772	1467
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	496	0	0	1641	676	578
RTOR Reduction (vph)	0	0	0	0	3	99
Lane Group Flow (vph)	496	0	0	1641	731	421
Confl. Peds. (#/hr)						10
Confl. Bikes (#/hr)						2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	45.8			45.8	64.1	64.1
Effective Green, g (s)	45.8			45.8	64.1	64.1
Actuated g/C Ratio	0.39			0.39	0.54	0.54
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1995			1995	963	797
v/s Ratio Prot	0.10			c0.32	c0.41	
v/s Ratio Perm						0.29
v/c Ratio	0.25			0.82	0.76	0.53
Uniform Delay, d1	24.4			32.4	20.9	17.2
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			2.9	5.6	2.5
Delay (s)	24.5			35.3	26.5	19.7
Level of Service	C			D	C	B
Approach Delay (s/veh)	24.5			35.3	23.7	
Approach LOS	C			D	C	

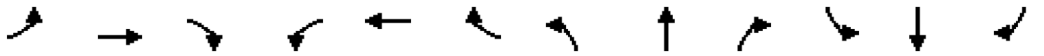
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	117.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	455	0	257	0	0	0	0	681	394	170	275	0
Future Volume (vph)	455	0	257	0	0	0	0	681	394	170	275	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.89						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1645	1534						5036	1539	1752	3505	
Flt Permitted	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1645	1534						5036	1539	1752	3505	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	469	0	265	0	0	0	0	702	406	175	284	0
RTOR Reduction (vph)	0	108	0	0	0	0	0	0	226	0	0	0
Lane Group Flow (vph)	385	241	0	0	0	0	0	702	180	175	284	0
Confl. Peds. (#/hr)							5		3	3		5
Confl. Bikes (#/hr)									1			7
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	3	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA						NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	31.0	31.0						46.8	46.8	15.7	66.5	
Effective Green, g (s)	31.0	31.0						46.8	46.8	15.7	66.5	
Actuated g/C Ratio	0.29	0.29						0.44	0.44	0.15	0.63	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	483	450						2233	682	260	2209	
v/s Ratio Prot								c0.14		c0.10	0.08	
v/s Ratio Perm	c0.23	0.16							0.12			
v/c Ratio	0.80	0.54						0.31	0.26	0.67	0.13	
Uniform Delay, d1	34.3	31.2						19.0	18.5	42.5	7.8	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.9	1.2						0.4	0.9	6.7	0.1	
Delay (s)	43.2	32.4						19.3	19.4	49.2	8.0	
Level of Service	D	C						B	B	D	A	
Approach Delay (s/veh)		38.1			0.0			19.4			23.7	
Approach LOS		D			A			B			C	

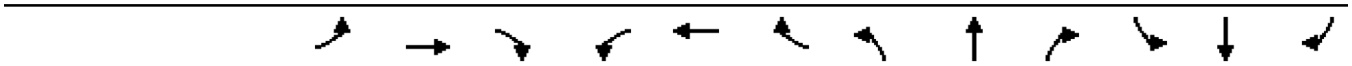
Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	105.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	107	0	295	369	793	0	0	350	271
Future Volume (vph)	0	0	0	107	0	295	369	793	0	0	350	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1752		1568	1752	3505			5036	1521
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1752		1568	1752	3505			5036	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	111	0	307	384	826	0	0	365	282
RTOR Reduction (vph)	0	0	0	0	0	192	0	0	0	0	0	145
Lane Group Flow (vph)	0	0	0	111	0	115	384	826	0	0	365	137
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												5
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm		Perm	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases				8		8						6
Actuated Green, G (s)				13.2		13.2	27.3	81.2			49.9	49.9
Effective Green, g (s)				13.2		13.2	27.3	81.2			49.9	49.9
Actuated g/C Ratio				0.13		0.13	0.27	0.79			0.49	0.49
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				225		202	467	2779			2454	741
v/s Ratio Prot							c0.22	c0.24			0.07	
v/s Ratio Perm				0.06		c0.07						0.09
v/c Ratio				0.49		0.57	0.82	0.30			0.15	0.19
Uniform Delay, d1				41.5		41.9	35.3	2.9			14.5	14.8
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				1.7		3.9	11.1	0.3			0.1	0.6
Delay (s)				43.2		45.8	46.4	3.1			14.6	15.3
Level of Service				D		D	D	A			B	B
Approach Delay (s/veh)		0.0			45.1			16.9			14.9	
Approach LOS		A			D			B			B	

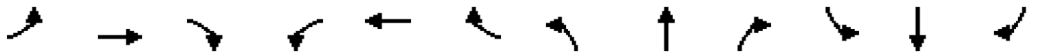
Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	451	0	196	108	1081	0	0	1429	329
Future Volume (veh/h)	0	0	0	451	0	196	108	1081	0	0	1429	329
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				480	0	209	115	1150	0	0	1520	350
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				92	0	144	189	3024	0	0	3804	1152
Arrive On Green				0.05	0.00	0.05	0.05	0.85	0.00	0.00	0.74	0.74
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1555
Grp Volume(v), veh/h				480	0	209	115	1150	0	0	1520	350
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1555
Q Serve(g_s), s				4.0	0.0	4.0	2.5	5.7	0.0	0.0	8.5	5.9
Cycle Q Clear(g_c), s				4.0	0.0	4.0	2.5	5.7	0.0	0.0	8.5	5.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				92	0	144	189	3024	0	0	3804	1152
V/C Ratio(X)				5.22	0.00	1.45	0.61	0.38	0.00	0.00	0.40	0.30
Avail Cap(c_a), veh/h				92	0	144	356	3024	0	0	3804	1152
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				37.0	0.0	37.0	36.1	1.4	0.0	0.0	3.7	3.4
Incr Delay (d2), s/veh				1924.9	0.0	236.1	3.2	0.4	0.0	0.0	0.3	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				51.1	0.0	6.3	1.3	2.9	0.0	0.0	4.1	2.6
LnGrp Delay(d), s/veh				1961.9	0.0	273.1	39.2	1.7	0.0	0.0	4.0	4.1
LnGrp LOS				F		F	D	A			A	A
Approach Vol, veh/h					689			1265			1870	
Approach Delay, s/veh					1449.6			5.1			4.0	
Approach LOS					F			A			A	

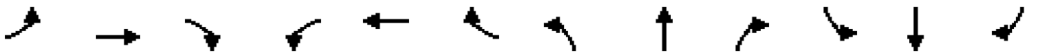
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		70.0			8.2	61.8		8.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		66.0			8.0	54.0		4.0
Max Q Clear Time (g_c+I1), s		7.7			4.5	10.5		6.0
Green Ext Time (p_c), s		11.2			0.1	18.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh	264.9	
HCM 2010 LOS	F	



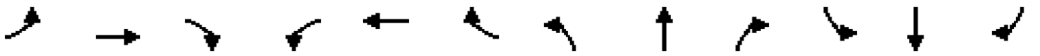
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	0	117	0	0	0	0	1028	654	351	1528	0
Future Volume (vph)	158	0	117	0	0	0	0	1028	654	351	1528	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.95	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1575	1519					5136	1557	3467	3574	
Flt Permitted	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1575	1519					5136	1557	3467	3574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	166	0	123	0	0	0	0	1082	688	369	1608	0
RTOR Reduction (vph)	0	40	62	0	0	0	0	0	194	0	0	0
Lane Group Flow (vph)	100	58	29	0	0	0	0	1082	494	369	1608	0
Confl. Peds. (#/hr)							6		6	6		6
Confl. Bikes (#/hr)									5			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	12.2	12.2	12.2					73.1	73.1	17.0	94.1	
Effective Green, g (s)	12.2	12.2	12.2					73.1	73.1	17.0	94.1	
Actuated g/C Ratio	0.11	0.11	0.11					0.64	0.64	0.15	0.82	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	181	168	162					3284	995	515	2942	
v/s Ratio Prot								0.21		c0.11	c0.45	
v/s Ratio Perm	c0.06	0.04	0.02						0.32			
v/c Ratio	0.55	0.34	0.18					0.33	0.50	0.72	0.55	
Uniform Delay, d1	48.5	47.3	46.5					9.4	10.9	46.4	3.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.6	1.2	0.5					0.3	1.8	4.7	0.7	
Delay (s)	52.1	48.6	47.0					9.7	12.6	51.1	4.0	
Level of Service	D	D	D					A	B	D	A	
Approach Delay (s/veh)		49.3			0.0			10.8			12.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	114.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	292	0	271	0	0	0	0	572	395	208	407	0
Future Volume (vph)	292	0	271	0	0	0	0	572	395	208	407	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.93	0.85					0.94		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1649	1502	1475					4640		3367	4988	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1649	1502	1475					4640		3367	4988	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	314	0	291	0	0	0	0	615	425	224	438	0
RTOR Reduction (vph)	0	36	156	0	0	0	0	75	0	0	0	0
Lane Group Flow (vph)	210	167	36	0	0	0	0	965	0	224	438	0
Confl. Peds. (#/hr)							6		4	4		6
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.4	19.4	19.4					59.2		12.1	75.3	
Effective Green, g (s)	19.4	19.4	19.4					59.2		12.1	75.3	
Actuated g/C Ratio	0.19	0.19	0.19					0.58		0.12	0.73	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	311	283	278					2674		396	3657	
v/s Ratio Prot								c0.21		c0.07	0.09	
v/s Ratio Perm	c0.13	0.11	0.02									
v/c Ratio	0.68	0.59	0.13					0.36		0.57	0.12	
Uniform Delay, d1	38.7	38.0	34.6					11.6		42.8	4.0	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	5.7	3.1	0.2					0.4		1.9	0.1	
Delay (s)	44.4	41.1	34.8					12.0		44.7	4.1	
Level of Service	D	D	C					B		D	A	
Approach Delay (s/veh)		40.3			0.0			12.0			17.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	102.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



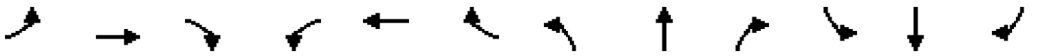
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	152	0	295	271	565	0	0	463	294
Future Volume (vph)	0	0	0	152	0	295	271	565	0	0	463	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.86	0.85	1.00	1.00			0.94	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1430	1475	3367	4988			4641	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1649	1430	1475	3367	4988			4641	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	171	0	331	304	635	0	0	520	330
RTOR Reduction (vph)	0	0	0	0	135	146	0	0	0	0	63	0
Lane Group Flow (vph)	0	0	0	154	41	26	304	635	0	0	787	0
Confl. Peds. (#/hr)							3		4	4		3
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm	NA	Perm	Prot	NA			NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				15.5	15.5	15.5	14.3	78.2			59.9	
Effective Green, g (s)				15.5	15.5	15.5	14.3	78.2			59.9	
Actuated g/C Ratio				0.15	0.15	0.15	0.14	0.77			0.59	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				251	217	224	473	3835			2733	
v/s Ratio Prot							c0.09	0.13			c0.17	
v/s Ratio Perm				c0.09	0.03	0.02						
v/c Ratio				0.61	0.19	0.12	0.64	0.17			0.29	
Uniform Delay, d1				40.3	37.6	37.2	41.3	3.1			10.3	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				4.4	0.4	0.2	3.0	0.1			0.3	
Delay (s)				44.7	38.0	37.4	44.3	3.2			10.6	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			39.9			16.5			10.6	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	101.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h						
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	1583	-70952	0	1774	5253
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	0	1774	1695
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h						
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h						
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0		0			0
Approach Delay, s/veh	0.0		0.0			0.0
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		0.0				0.0		0.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		55.0				55.0		57.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

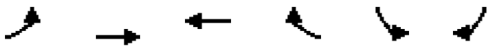
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type							Perm					
Protected Phases		4!			8!			4!			8!	
Permitted Phases	4!			8!			4!					
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	3.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type	Perm			Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

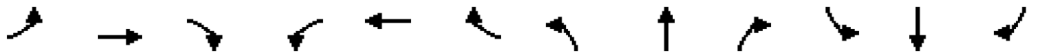
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type			Perm			Perm
Protected Phases	4			8		
Permitted Phases			8			2
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

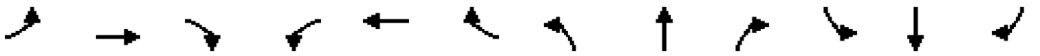
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1710	1676	1676	1676	1676
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	--2147483648	--2147483648	2147483648	2147483648	2147483648	2147483648
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	-65382	0	1597	1676	1597	1425
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1593	0	1597	1676	1597	1425
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	45602443264	1030792151244001288228583692024010926 08				
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	25993393733632	1497439				1012224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0			0	0	
Approach Delay, s/veh	0.0			0.0	0.0	
Approach LOS						

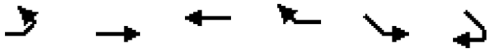
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		0.0		0.0				0.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		55.0		57.0				57.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324	16 0	844525375324	16		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	4748	4748	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	728	3909	3909	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	8445	3784	3784	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

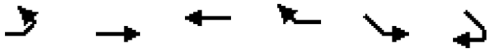
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324 16	0	844525375324 16			
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	4748	4748	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	728	3909	3909	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	8445	3784	3784	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	400	0	0	0	0	0
Future Volume (veh/h)	400	0	0	0	0	0
Number	4	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1600	0			0	0
Adj No. of Lanes	2	0			0	1
Peak Hour Factor	0.25	0.25			0.25	0.25
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	2977	0			0	0
Arrive On Green	0.84	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1600	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	3.3	0.0				
Cycle Q Clear(g_c), s	3.3	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	2977	0				
V/C Ratio(X)	0.54	0.00				
Avail Cap(c_a), veh/h	6048	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.6	0.0				
Incr Delay (d2), s/veh	0.2	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	1.4	0.0				
LnGrp Delay(d), s/veh	0.7	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1600					
Approach Delay, s/veh	0.7					
Approach LOS	A					

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				25.2				
Change Period (Y+Rc), s				4.0				
Max Green Setting (Gmax), s				43.0				
Max Q Clear Time (g_c+I1), s				5.3				
Green Ext Time (p_c), s				15.9				

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.7
HCM 2010 LOS	A

FULLERTON STATION - 2015 EXISTING PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	704	171	160	729	196	215	1344	124	109	918	24
Future Volume (veh/h)	44	704	171	160	729	196	215	1344	124	109	918	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	49	782	190	178	810	218	239	1493	138	121	1020	27
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	144	816	198	205	924	249	327	1560	143	145	1499	40
Arrive On Green	0.03	0.28	0.28	0.08	0.33	0.33	0.09	0.47	0.47	0.04	0.42	0.42
Sat Flow, veh/h	1810	2879	700	1810	2804	754	1810	3343	307	1810	3593	95
Grp Volume(v), veh/h	49	490	482	178	521	507	239	801	830	121	512	535
Grp Sat Flow(s),veh/h/ln	1810	1805	1774	1810	1805	1753	1810	1805	1844	1810	1805	1883
Q Serve(g_s), s	2.3	32.1	32.1	8.2	32.7	32.7	8.7	51.1	52.3	4.7	27.7	27.7
Cycle Q Clear(g_c), s	2.3	32.1	32.1	8.2	32.7	32.7	8.7	51.1	52.3	4.7	27.7	27.7
Prop In Lane	1.00		0.39	1.00		0.43	1.00		0.17	1.00		0.05
Lane Grp Cap(c), veh/h	144	511	503	205	595	578	327	842	861	145	753	785
V/C Ratio(X)	0.34	0.96	0.96	0.87	0.88	0.88	0.73	0.95	0.96	0.83	0.68	0.68
Avail Cap(c_a), veh/h	152	511	503	205	595	578	388	842	861	145	753	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	42.3	42.3	31.3	37.9	37.9	22.1	30.7	31.0	29.1	28.5	28.5
Incr Delay (d2), s/veh	1.4	29.5	29.8	30.2	13.9	14.3	5.7	21.2	23.1	32.4	4.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	20.1	19.8	5.8	18.5	18.0	4.8	30.3	32.0	3.6	14.8	15.4
LnGrp Delay(d), s/veh	33.9	71.8	72.1	61.5	51.8	52.2	27.8	51.9	54.1	61.5	33.4	33.2
LnGrp LOS	C	E	E	E	D	D	C	D	D	E	C	C
Approach Vol, veh/h		1021			1206			1870			1168	
Approach Delay, s/veh		70.1			53.4			49.8			36.2	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	60.0	13.0	38.0	14.9	54.1	7.5	43.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	56.0	9.0	34.0	15.0	46.0	4.0	39.0
Max Q Clear Time (g_c+I1), s	6.7	54.3	10.2	34.1	10.7	29.7	4.3	34.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.3	6.1	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	425	79	208	537	129	93	1330	174	82	960	184
Future Volume (veh/h)	178	425	79	208	537	129	93	1330	174	82	960	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	187	447	83	219	565	136	98	1400	183	86	1011	194
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	267	633	117	332	643	154	252	1794	791	192	1486	285
Arrive On Green	0.10	0.21	0.21	0.11	0.22	0.22	0.04	0.50	0.50	0.04	0.49	0.49
Sat Flow, veh/h	1810	3028	558	1810	2870	688	1810	3610	1591	1810	3016	578
Grp Volume(v), veh/h	187	265	265	219	355	346	98	1400	183	86	604	601
Grp Sat Flow(s),veh/h/ln	1810	1805	1781	1810	1805	1753	1810	1805	1591	1810	1805	1788
Q Serve(g_s), s	9.0	15.3	15.6	10.5	21.4	21.5	3.0	35.9	7.4	2.6	28.8	28.9
Cycle Q Clear(g_c), s	9.0	15.3	15.6	10.5	21.4	21.5	3.0	35.9	7.4	2.6	28.8	28.9
Prop In Lane	1.00		0.31	1.00		0.39	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	267	378	373	332	405	393	252	1794	791	192	889	881
V/C Ratio(X)	0.70	0.70	0.71	0.66	0.88	0.88	0.39	0.78	0.23	0.45	0.68	0.68
Avail Cap(c_a), veh/h	314	384	379	416	448	435	304	1794	791	219	889	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	41.3	41.4	30.8	42.2	42.3	17.5	23.3	16.1	20.6	21.8	21.8
Incr Delay (d2), s/veh	5.5	5.5	6.0	2.7	16.4	17.5	1.0	3.4	0.7	1.6	4.2	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	8.2	8.3	5.5	12.5	12.3	1.5	18.6	3.4	1.4	15.3	15.2
LnGrp Delay(d), s/veh	37.9	46.8	47.4	33.5	58.6	59.8	18.5	26.7	16.8	22.2	26.0	26.1
LnGrp LOS	D	D	D	C	E	E	B	C	B	C	C	C
Approach Vol, veh/h		717			920			1681			1291	
Approach Delay, s/veh		44.7			53.1			25.2			25.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	60.0	16.8	27.6	8.8	59.5	15.1	29.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	56.0	18.0	24.0	8.0	54.0	14.0	28.0
Max Q Clear Time (g_c+I1), s	4.6	37.9	12.5	17.6	5.0	30.9	11.0	23.5
Green Ext Time (p_c), s	0.0	10.4	0.3	1.6	0.1	8.7	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	827	60	117	1041	18	103	114	123	15	72	22
Future Volume (veh/h)	19	827	60	117	1041	18	103	114	123	15	72	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	853	62	121	1073	19	106	118	127	15	74	23
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	237	1677	122	291	1784	32	587	773	635	136	635	653
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	525	3411	248	620	3629	64	1312	1900	1561	204	1562	1604
Grp Volume(v), veh/h	20	451	464	121	534	558	106	118	127	89	0	23
Grp Sat Flow(s),veh/h/ln	525	1805	1854	620	1805	1888	1312	1900	1561	1766	0	1604
Q Serve(g_s), s	2.3	13.3	13.3	12.9	16.8	16.8	4.3	3.1	4.1	0.0	0.0	0.7
Cycle Q Clear(g_c), s	19.0	13.3	13.3	26.3	16.8	16.8	6.6	3.1	4.1	2.3	0.0	0.7
Prop In Lane	1.00		0.13	1.00		0.03	1.00		1.00	0.17		1.00
Lane Grp Cap(c), veh/h	237	887	911	291	887	928	587	773	635	772	0	653
V/C Ratio(X)	0.08	0.51	0.51	0.42	0.60	0.60	0.18	0.15	0.20	0.12	0.00	0.04
Avail Cap(c_a), veh/h	513	1836	1886	617	1836	1920	587	773	635	772	0	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	13.6	13.6	22.5	14.4	14.4	16.6	14.8	15.1	14.5	0.0	14.0
Incr Delay (d2), s/veh	0.2	0.5	0.4	0.9	0.7	0.6	0.7	0.4	0.7	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	6.8	6.9	2.3	8.5	8.8	1.7	1.7	1.9	1.3	0.0	0.3
LnGrp Delay(d), s/veh	21.5	14.0	14.0	23.4	15.1	15.1	17.2	15.2	15.8	14.8	0.0	14.1
LnGrp LOS	C	B	B	C	B	B	B	B	B	B		B
Approach Vol, veh/h		935			1213			351			112	
Approach Delay, s/veh		14.2			15.9			16.0			14.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		42.7		36.0		42.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		80.0		32.0		80.0
Max Q Clear Time (g_c+I1), s		8.6		21.0		4.3		28.3
Green Ext Time (p_c), s		1.4		6.9		0.6		10.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	616	115	137	632	36	128	264	108	38	241	41
Future Volume (veh/h)	51	616	115	137	632	36	128	264	108	38	241	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	662	124	147	680	39	138	284	116	41	259	44
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	286	1506	638	276	1506	639	533	946	786	485	946	785
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	743	3610	1529	698	3610	1531	1090	1900	1578	998	1900	1576
Grp Volume(v), veh/h	55	662	124	147	680	39	138	284	116	41	259	44
Grp Sat Flow(s),veh/h/ln	743	1805	1529	698	1805	1531	1090	1900	1578	998	1900	1576
Q Serve(g_s), s	5.4	12.4	4.9	18.0	12.8	1.4	7.9	8.3	3.8	2.4	7.5	1.4
Cycle Q Clear(g_c), s	18.2	12.4	4.9	30.3	12.8	1.4	15.4	8.3	3.8	10.7	7.5	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	1506	638	276	1506	639	533	946	786	485	946	785
V/C Ratio(X)	0.19	0.44	0.19	0.53	0.45	0.06	0.26	0.30	0.15	0.08	0.27	0.06
Avail Cap(c_a), veh/h	488	2486	1053	466	2486	1054	533	946	786	485	946	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	19.6	17.4	30.4	19.7	16.4	18.3	14.0	12.8	17.1	13.8	12.2
Incr Delay (d2), s/veh	0.3	0.2	0.1	1.6	0.2	0.0	1.2	0.8	0.4	0.3	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.2	2.1	3.6	6.4	0.6	2.6	4.6	1.7	0.7	4.1	0.6
LnGrp Delay(d), s/veh	26.6	19.8	17.6	32.0	20.0	16.5	19.4	14.8	13.2	17.5	14.5	12.4
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		841			866			538			344	
Approach Delay, s/veh		19.9			21.9			15.6			14.6	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		43.4		51.0		43.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		47.0		65.0		47.0		65.0
Max Q Clear Time (g_c+I1), s		17.4		20.2		12.7		32.3
Green Ext Time (p_c), s		2.8		6.1		2.1		7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	37	464	23	19	474
Future Vol, veh/h	31	37	464	23	19	474
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	42	527	26	22	539

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1113	530	0	0	556	0
Stage 1	530	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	233	553	-	-	1025	-
Stage 1	594	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	227	552	-	-	1022	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	550	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	17.4	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	227	552	1022	-
HCM Lane V/C Ratio	-	-	0.155	0.076	0.021	-
HCM Control Delay (s/veh)	-	-	23.8	12.1	8.6	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	0.1	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	3	7	8	4	25	7	423	14	9	356	6
Future Vol, veh/h	6	3	7	8	4	25	7	423	14	9	356	6
Conflicting Peds, #/hr	5	0	0	0	0	5	4	0	18	18	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	3	8	9	5	28	8	481	16	10	405	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	956	960	409	949	951	504	416	0	0	515	0	0
Stage 1	429	429	-	515	515	-	-	-	-	-	-	-
Stage 2	527	531	-	434	436	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	240	259	647	242	262	572	1154	-	-	1061	-	-
Stage 1	608	587	-	546	538	-	-	-	-	-	-	-
Stage 2	538	529	-	604	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	220	250	645	230	253	561	1150	-	-	1045	-	-
Mov Cap-2 Maneuver	220	250	-	230	253	-	-	-	-	-	-	-
Stage 1	602	579	-	534	526	-	-	-	-	-	-	-
Stage 2	501	517	-	587	575	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.8	14.8	0.1	0.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1150	-	-	229	645	237	561	1045	-	-
HCM Lane V/C Ratio	0.007	-	-	0.045	0.012	0.058	0.051	0.01	-	-
HCM Control Delay (s/veh)	8.2	-	-	21.5	10.7	21.1	11.8	8.5	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.2	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	131	48	33	149	43	50	284	30	38	303	89
Future Volume (veh/h)	67	131	48	33	149	43	50	284	30	38	303	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.94	0.98		0.94	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	71	139	51	35	159	46	53	302	32	40	322	95
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	184	319	254	197	319	254	758	1421	1164	815	1421	1165
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1169	1900	1511	1183	1900	1511	980	1900	1556	1056	1900	1558
Grp Volume(v), veh/h	71	139	51	35	159	46	53	302	32	40	322	95
Grp Sat Flow(s),veh/h/ln	1169	1900	1511	1183	1900	1511	980	1900	1556	1056	1900	1558
Q Serve(g_s), s	5.6	6.2	2.8	2.6	7.2	2.5	1.7	4.5	0.5	1.1	4.9	1.6
Cycle Q Clear(g_c), s	12.8	6.2	2.8	8.8	7.2	2.5	6.5	4.5	0.5	5.7	4.9	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	319	254	197	319	254	758	1421	1164	815	1421	1165
V/C Ratio(X)	0.39	0.44	0.20	0.18	0.50	0.18	0.07	0.21	0.03	0.05	0.23	0.08
Avail Cap(c_a), veh/h	492	820	652	509	820	652	758	1421	1164	815	1421	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	35.5	34.0	39.4	35.9	33.9	4.6	3.6	3.1	4.4	3.6	3.2
Incr Delay (d2), s/veh	1.3	0.9	0.4	0.4	1.2	0.3	0.2	0.3	0.0	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.4	1.2	0.9	3.9	1.1	0.5	2.5	0.2	0.3	2.7	0.7
LnGrp Delay(d), s/veh	43.0	36.4	34.4	39.8	37.1	34.2	4.8	3.9	3.1	4.6	4.0	3.4
LnGrp LOS	D	D	C	D	D	C	A	A	A	A	A	A
Approach Vol, veh/h		261			240			387			457	
Approach Delay, s/veh		37.8			36.9			4.0			3.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		20.0		75.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		41.0		71.0		41.0
Max Q Clear Time (g_c+I1), s		8.5		14.8		7.7		10.8
Green Ext Time (p_c), s		2.4		1.2		2.7		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	810	49	93	1028	180	108	143	95	120	136	199
Future Volume (veh/h)	141	810	49	93	1028	180	108	143	95	120	136	199
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.93	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	145	835	51	96	1060	186	111	147	98	124	140	205
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	1831	111	331	1516	265	486	818	671	521	818	669
Arrive On Green	0.07	0.37	0.37	0.05	0.35	0.35	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1792	4926	299	1792	4341	760	1031	1881	1542	1128	1881	1539
Grp Volume(v), veh/h	145	579	307	96	836	410	111	147	98	124	140	205
Grp Sat Flow(s),veh/h/ln	1792	1712	1802	1792	1712	1678	1031	1881	1542	1128	1881	1539
Q Serve(g_s), s	4.3	10.9	11.0	2.9	17.9	17.9	6.3	4.1	3.3	6.4	3.9	7.4
Cycle Q Clear(g_c), s	4.3	10.9	11.0	2.9	17.9	17.9	10.1	4.1	3.3	10.5	3.9	7.4
Prop In Lane	1.00		0.17	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1273	670	331	1195	586	486	818	671	521	818	669
V/C Ratio(X)	0.52	0.46	0.46	0.29	0.70	0.70	0.23	0.18	0.15	0.24	0.17	0.31
Avail Cap(c_a), veh/h	568	2414	1270	468	2052	1006	486	818	671	521	818	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	20.2	20.2	16.7	23.8	23.9	17.8	14.7	14.5	18.0	14.7	15.7
Incr Delay (d2), s/veh	1.5	0.3	0.5	0.5	0.8	1.5	1.1	0.5	0.5	1.1	0.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	5.2	5.5	1.5	8.5	8.6	1.9	2.2	1.5	2.2	2.1	3.4
LnGrp Delay(d), s/veh	19.6	20.5	20.7	17.1	24.6	25.4	18.9	15.2	15.0	19.0	15.1	16.9
LnGrp LOS	B	C	C	B	C	C	B	B	B	B	B	B
Approach Vol, veh/h		1031			1342			356			469	
Approach Delay, s/veh		20.4			24.3			16.3			16.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		41.0	8.5	35.6		41.0	10.4	33.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		37.0	11.0	60.0		37.0	20.0	51.0
Max Q Clear Time (g_c+I1), s		12.1	4.9	13.0		12.5	6.3	19.9
Green Ext Time (p_c), s		1.7	0.1	6.2		2.0	0.3	9.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	880	32	37	1093	26	29	14	104	8	10	76
Future Vol, veh/h	37	880	32	37	1093	26	29	14	104	8	10	76
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	38	907	33	38	1127	27	30	14	107	8	10	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1154	0	0	946	0	0	1651	2236	477	1755	2239	577
Stage 1	-	-	-	-	-	-	1006	1006	-	1217	1217	-
Stage 2	-	-	-	-	-	-	645	1230	-	538	1022	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	613	-	-	734	-	-	66	43	540	55	43	465
Stage 1	-	-	-	-	-	-	262	321	-	195	256	-
Stage 2	-	-	-	-	-	-	432	252	-	500	316	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	613	-	-	730	-	-	40	38	537	29	38	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	38	-	29	38	-
Stage 1	-	-	-	-	-	-	244	299	-	183	243	-
Stage 2	-	-	-	-	-	-	326	239	-	357	295	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.3	111.1	81.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	39	537	613	-	-	730	-	-	134
HCM Lane V/C Ratio	1.137	0.2	0.062	-	-	0.052	-	-	0.723
HCM Control Delay (s/veh)	$ 347.5	13.4	11.3	-	-	10.2	-	-	81.9
HCM Lane LOS	F	B	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	4.4	0.7	0.2	-	-	0.2	-	-	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	682	24	25	687	35	51	28	47	31	19	55
Future Volume (veh/h)	47	682	24	25	687	35	51	28	47	31	19	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	48	696	24	26	701	36	52	29	48	32	19	56
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	267	1106	472	258	1060	455	290	143	778	279	147	778
Arrive On Green	0.04	0.31	0.31	0.02	0.29	0.29	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1810	3610	1542	1810	3610	1548	408	296	1610	388	303	1610
Grp Volume(v), veh/h	48	696	24	26	701	36	81	0	48	51	0	56
Grp Sat Flow(s),veh/h/ln	1810	1805	1542	1810	1805	1548	704	0	1610	692	0	1610
Q Serve(g_s), s	1.2	10.6	0.7	0.6	10.9	1.1	1.4	0.0	1.0	0.6	0.0	1.2
Cycle Q Clear(g_c), s	1.2	10.6	0.7	0.6	10.9	1.1	19.3	0.0	1.0	18.9	0.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	0.64		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	267	1106	472	258	1060	455	433	0	778	426	0	778
V/C Ratio(X)	0.18	0.63	0.05	0.10	0.66	0.08	0.19	0.00	0.06	0.12	0.00	0.07
Avail Cap(c_a), veh/h	569	3772	1611	499	3603	1545	433	0	778	426	0	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	19.1	15.7	16.0	19.9	16.4	13.5	0.0	8.8	11.1	0.0	8.9
Incr Delay (d2), s/veh	0.3	0.6	0.0	0.2	0.7	0.1	1.0	0.0	0.2	0.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.3	0.3	0.3	5.5	0.5	1.3	0.0	0.5	0.5	0.0	0.6
LnGrp Delay(d), s/veh	16.1	19.7	15.7	16.1	20.6	16.5	14.4	0.0	9.0	11.7	0.0	9.0
LnGrp LOS	B	B	B	B	C	B	B		A	B		A
Approach Vol, veh/h		768			763			129			107	
Approach Delay, s/veh		19.4			20.2			12.4			10.3	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	5.5	23.6		35.0	6.3	22.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	13.0	64.0
Max Q Clear Time (g_c+I1), s		21.3	2.6	12.6		20.9	3.2	12.9
Green Ext Time (p_c), s		0.3	0.0	5.8		0.2	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	1231	319	403	1678	164	479	879	260	221	723	186
Future Volume (veh/h)	288	1231	319	403	1678	164	479	879	260	221	723	186
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	306	1310	339	429	1785	174	510	935	277	235	769	198
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	364	1442	373	491	2017	624	574	1430	435	297	1022	310
Arrive On Green	0.10	0.36	0.36	0.14	0.39	0.39	0.17	0.28	0.28	0.09	0.20	0.20
Sat Flow, veh/h	3476	4047	1046	3476	5136	1588	3476	5136	1563	3476	5136	1557
Grp Volume(v), veh/h	306	1108	541	429	1785	174	510	935	277	235	769	198
Grp Sat Flow(s),veh/h/ln	1738	1712	1669	1738	1712	1588	1738	1712	1563	1738	1712	1557
Q Serve(g_s), s	10.0	35.6	35.7	14.0	37.4	8.6	16.6	18.6	18.0	7.7	16.3	13.5
Cycle Q Clear(g_c), s	10.0	35.6	35.7	14.0	37.4	8.6	16.6	18.6	18.0	7.7	16.3	13.5
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	1220	595	491	2017	624	574	1430	435	297	1022	310
V/C Ratio(X)	0.84	0.91	0.91	0.87	0.88	0.28	0.89	0.65	0.64	0.79	0.75	0.64
Avail Cap(c_a), veh/h	391	1244	606	541	2088	646	631	1430	435	391	1022	310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	35.4	35.4	48.6	32.7	23.9	47.2	36.8	36.6	51.8	43.6	42.5
Incr Delay (d2), s/veh	14.3	9.8	17.7	13.8	4.8	0.2	13.7	2.3	6.9	7.9	5.1	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	18.4	19.3	7.7	18.6	3.8	9.1	9.1	8.6	4.0	8.2	6.6
LnGrp Delay(d), s/veh	65.2	45.2	53.1	62.5	37.5	24.2	60.9	39.1	43.5	59.7	48.8	52.2
LnGrp LOS	E	D	D	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1955			2388			1722			1202	
Approach Delay, s/veh		50.5			41.0			46.3			51.5	
Approach LOS		D			D			D			D	

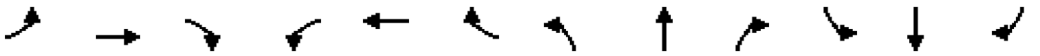
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	36.2	20.3	45.2	23.1	27.0	16.1	49.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	31.0	18.0	42.0	21.0	23.0	13.0	47.0
Max Q Clear Time (g_c+I1), s	9.7	20.6	16.0	37.7	18.6	18.3	12.0	39.4
Green Ext Time (p_c), s	0.2	5.0	0.3	3.3	0.5	2.3	0.1	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	267	1320	166	166	1089	247	234	1110	167	331	880	288
Future Volume (veh/h)	267	1320	166	166	1089	247	234	1110	167	331	880	288
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	284	1404	177	177	1159	263	249	1181	178	352	936	306
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	316	1709	215	236	1343	408	309	1589	485	415	1296	422
Arrive On Green	0.17	0.37	0.37	0.07	0.26	0.26	0.09	0.31	0.31	0.12	0.34	0.34
Sat Flow, veh/h	1810	4661	587	3510	5187	1576	3510	5187	1582	3510	3851	1256
Grp Volume(v), veh/h	284	1041	540	177	1159	263	249	1181	178	352	840	402
Grp Sat Flow(s),veh/h/ln	1810	1729	1791	1755	1729	1576	1755	1729	1582	1755	1729	1649
Q Serve(g_s), s	17.4	30.8	30.9	5.6	24.1	16.8	7.9	23.1	9.9	11.1	24.1	24.2
Cycle Q Clear(g_c), s	17.4	30.8	30.9	5.6	24.1	16.8	7.9	23.1	9.9	11.1	24.1	24.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	316	1268	656	236	1343	408	309	1589	485	415	1163	555
V/C Ratio(X)	0.90	0.82	0.82	0.75	0.86	0.64	0.80	0.74	0.37	0.85	0.72	0.72
Avail Cap(c_a), veh/h	401	1439	745	249	1378	419	342	1589	485	466	1163	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	32.4	32.4	51.8	39.9	37.2	50.5	35.2	30.6	48.8	32.8	32.9
Incr Delay (d2), s/veh	19.1	3.5	6.6	11.4	5.8	3.3	12.1	3.2	2.1	12.6	3.9	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	15.4	16.5	3.1	12.2	7.7	4.3	11.5	4.6	6.1	12.1	12.2
LnGrp Delay(d), s/veh	64.7	36.0	39.1	63.2	45.7	40.5	62.6	38.4	32.8	61.4	36.8	40.9
LnGrp LOS	E	D	D	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		1865			1599			1608			1594	
Approach Delay, s/veh		41.2			46.8			41.5			43.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	38.6	11.6	45.4	14.0	42.0	23.8	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	34.0	8.0	47.0	11.0	38.0	25.0	30.0
Max Q Clear Time (g_c+I1), s	13.1	25.1	7.6	32.9	9.9	26.2	19.4	26.1
Green Ext Time (p_c), s	0.2	5.1	0.0	8.6	0.1	5.8	0.4	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	186	28	512	132	87	27	1199	540	84	1177	38
Future Volume (vph)	77	186	28	512	132	87	27	1199	540	84	1177	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1900	1615	1715	1753	1564	1805	5187	1595	1805	5155	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1900	1615	1715	1753	1564	1805	5187	1595	1805	5155	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	80	194	29	533	138	91	28	1249	562	88	1226	40
RTOR Reduction (vph)	0	0	25	0	0	69	0	0	351	0	2	0
Lane Group Flow (vph)	80	194	4	330	341	22	28	1249	212	88	1264	0
Confl. Peds. (#/hr)	9					9	6					6
Confl. Bikes (#/hr)						3			1			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	14.8	14.8	14.8	25.3	25.3	25.3	4.5	39.1	39.1	8.8	43.4	
Effective Green, g (s)	14.8	14.8	14.8	25.3	25.3	25.3	4.5	39.1	39.1	8.8	43.4	
Actuated g/C Ratio	0.14	0.14	0.14	0.24	0.24	0.24	0.04	0.38	0.38	0.08	0.42	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	256	270	229	417	426	380	78	1950	599	152	2151	
v/s Ratio Prot	0.04	c0.10		0.19	c0.19		0.02	c0.24		c0.05	0.25	
v/s Ratio Perm			0.00			0.01			0.13			
v/c Ratio	0.31	0.72	0.02	0.79	0.80	0.06	0.36	0.64	0.35	0.58	0.59	
Uniform Delay, d1	40.0	42.6	38.4	36.9	37.0	30.2	48.3	26.7	23.4	45.8	23.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	8.8	0.0	9.9	10.3	0.1	2.8	1.6	1.6	5.3	0.4	
Delay (s)	40.7	51.4	38.4	46.7	47.3	30.3	51.2	28.3	25.0	51.1	23.8	
Level of Service	D	D	D	D	D	C	D	C	C	D	C	
Approach Delay (s/veh)		47.4			45.0			27.6			25.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	125	57	66	197	354	103	1272	27	335	1089	21
Future Volume (veh/h)	42	125	57	66	197	354	103	1272	27	335	1089	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	43	128	58	67	201	361	105	1298	28	342	1111	21
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	144	362	301	223	362	493	131	2079	45	422	2250	977
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.58	0.58	0.12	0.63	0.63
Sat Flow, veh/h	852	1881	1565	1201	1881	1555	1792	3576	77	3476	3574	1552
Grp Volume(v), veh/h	43	128	58	67	201	361	105	648	678	342	1111	21
Grp Sat Flow(s),veh/h/ln	852	1881	1565	1201	1881	1555	1792	1787	1866	1738	1787	1552
Q Serve(g_s), s	5.5	6.7	3.6	5.9	11.1	22.0	6.6	27.3	27.3	11.0	19.1	0.6
Cycle Q Clear(g_c), s	16.5	6.7	3.6	12.6	11.1	22.0	6.6	27.3	27.3	11.0	19.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	144	362	301	223	362	493	131	1039	1085	422	2250	977
V/C Ratio(X)	0.30	0.35	0.19	0.30	0.56	0.73	0.80	0.62	0.62	0.81	0.49	0.02
Avail Cap(c_a), veh/h	144	362	301	223	362	493	219	1039	1085	729	2250	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	40.0	38.7	45.5	41.8	35.1	52.2	15.7	15.7	49.0	11.4	8.0
Incr Delay (d2), s/veh	1.1	0.6	0.3	0.7	1.9	5.5	10.6	2.8	2.7	3.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.6	1.6	2.0	5.9	10.9	3.7	14.1	14.7	5.5	9.7	0.3
LnGrp Delay(d), s/veh	50.4	40.6	39.1	46.2	43.6	40.6	62.7	18.5	18.4	52.8	12.2	8.0
LnGrp LOS	D	D	D	D	D	D	E	B	B	D	B	A
Approach Vol, veh/h		229			629			1431			1474	
Approach Delay, s/veh		42.1			42.2			21.7			21.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.9	70.5		26.0	12.4	76.0		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	62.0		22.0	14.0	72.0		22.0
Max Q Clear Time (g_c+I1), s	13.0	29.3		18.5	8.6	21.1		24.0
Green Ext Time (p_c), s	0.9	11.2		0.3	0.1	10.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	640	108	184	945	119	85	930	115	120	941	149
Future Volume (veh/h)	219	640	108	184	945	119	85	930	115	120	941	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	226	660	111	190	974	123	88	959	119	124	970	154
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	274	973	163	318	1093	472	207	1248	155	235	1241	197
Arrive On Green	0.10	0.32	0.32	0.09	0.31	0.31	0.04	0.39	0.39	0.06	0.41	0.41
Sat Flow, veh/h	1792	3045	511	1792	3574	1545	1792	3189	396	1792	3063	486
Grp Volume(v), veh/h	226	387	384	190	974	123	88	537	541	124	566	558
Grp Sat Flow(s),veh/h/ln	1792	1787	1769	1792	1787	1545	1792	1787	1797	1792	1787	1762
Q Serve(g_s), s	9.7	21.4	21.4	8.1	29.5	6.8	3.3	29.7	29.7	4.7	31.3	31.4
Cycle Q Clear(g_c), s	9.7	21.4	21.4	8.1	29.5	6.8	3.3	29.7	29.7	4.7	31.3	31.4
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.22	1.00		0.28
Lane Grp Cap(c), veh/h	274	571	565	318	1093	472	207	699	703	235	724	714
V/C Ratio(X)	0.82	0.68	0.68	0.60	0.89	0.26	0.42	0.77	0.77	0.53	0.78	0.78
Avail Cap(c_a), veh/h	324	598	592	376	1164	503	223	699	703	258	724	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	33.6	33.6	25.5	37.6	29.7	23.8	30.1	30.1	23.6	29.4	29.4
Incr Delay (d2), s/veh	13.8	2.9	3.0	1.9	8.5	0.3	1.4	7.9	7.9	1.8	8.2	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	11.0	10.9	4.2	15.9	2.9	1.7	16.2	16.3	2.4	17.0	16.9
LnGrp Delay(d), s/veh	41.5	36.5	36.5	27.4	46.2	30.0	25.2	38.0	38.0	25.5	37.6	37.8
LnGrp LOS	D	D	D	C	D	C	C	D	D	C	D	D
Approach Vol, veh/h		997			1287			1166			1248	
Approach Delay, s/veh		37.6			41.9			37.1			36.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	48.4	14.3	40.3	9.0	50.0	15.9	38.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	14.0	38.0	6.0	46.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	6.7	31.7	10.1	23.4	5.3	33.4	11.7	31.5
Green Ext Time (p_c), s	0.0	5.9	0.2	4.0	0.0	5.9	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	546	97	255	574	43	110	957	178	58	986	70
Future Volume (veh/h)	106	546	97	255	574	43	110	957	178	58	986	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.92	1.00		0.94	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	112	575	102	268	604	45	116	1007	187	61	1038	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	274	692	284	342	946	396	277	1752	747	259	1588	113
Arrive On Green	0.07	0.19	0.19	0.14	0.26	0.26	0.05	0.49	0.49	0.03	0.47	0.47
Sat Flow, veh/h	1792	3574	1469	1792	3574	1497	1792	3574	1523	1792	3372	240
Grp Volume(v), veh/h	112	575	102	268	604	45	116	1007	187	61	550	562
Grp Sat Flow(s),veh/h/ln	1792	1787	1469	1792	1787	1497	1792	1787	1523	1792	1787	1825
Q Serve(g_s), s	5.3	16.7	6.5	12.4	16.2	2.5	3.6	21.6	7.7	1.9	25.4	25.5
Cycle Q Clear(g_c), s	5.3	16.7	6.5	12.4	16.2	2.5	3.6	21.6	7.7	1.9	25.4	25.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	274	692	284	342	946	396	277	1752	747	259	841	859
V/C Ratio(X)	0.41	0.83	0.36	0.78	0.64	0.11	0.42	0.57	0.25	0.24	0.65	0.65
Avail Cap(c_a), veh/h	305	827	340	445	1223	512	319	1752	747	286	841	859
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	41.9	37.8	29.1	35.2	30.1	17.1	19.6	16.0	15.9	21.9	21.9
Incr Delay (d2), s/veh	1.0	6.2	0.8	6.7	0.7	0.1	1.0	1.4	0.8	0.5	3.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.8	2.7	6.7	8.1	1.0	1.8	11.0	3.4	0.9	13.4	13.7
LnGrp Delay(d), s/veh	33.0	48.0	38.5	35.8	35.9	30.2	18.1	20.9	16.8	16.4	25.8	25.7
LnGrp LOS	C	D	D	D	D	C	B	C	B	B	C	C
Approach Vol, veh/h		789			917			1310			1173	
Approach Delay, s/veh		44.7			35.6			20.1			25.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	57.0	18.8	24.9	9.5	54.9	11.1	32.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	21.0	25.0	8.0	50.0	9.0	37.0
Max Q Clear Time (g_c+I1), s	3.9	23.6	14.4	18.7	5.6	27.5	7.3	18.2
Green Ext Time (p_c), s	0.0	9.0	0.4	2.2	0.1	8.5	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	16	32	52	11	31	33	1161	59	34	1395	18
Future Volume (veh/h)	22	16	32	52	11	31	33	1161	59	34	1395	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	23	16	33	54	11	32	34	1197	61	35	1438	19
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	49	22	260	56	7	256	292	2542	1100	354	2543	1097
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.71	0.71	0.02	0.71	0.71
Sat Flow, veh/h	0	138	1594	0	40	1575	1792	3574	1546	1792	3574	1542
Grp Volume(v), veh/h	39	0	33	65	0	32	34	1197	61	35	1438	19
Grp Sat Flow(s),veh/h/ln	138	0	1594	40	0	1575	1792	1787	1546	1792	1787	1542
Q Serve(g_s), s	0.0	0.0	2.1	0.0	0.0	2.0	0.6	17.0	1.4	0.6	22.7	0.4
Cycle Q Clear(g_c), s	19.0	0.0	2.1	19.0	0.0	2.0	0.6	17.0	1.4	0.6	22.7	0.4
Prop In Lane	0.59		1.00	0.83		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	260	63	0	256	292	2542	1100	354	2543	1097
V/C Ratio(X)	0.55	0.00	0.13	1.03	0.00	0.12	0.12	0.47	0.06	0.10	0.57	0.02
Avail Cap(c_a), veh/h	71	0	260	63	0	256	344	2542	1100	405	2543	1097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	0.0	41.8	56.4	0.0	41.8	6.6	7.3	5.1	5.5	8.1	4.9
Incr Delay (d2), s/veh	8.4	0.0	0.2	122.3	0.0	0.2	0.2	0.6	0.1	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.9	4.2	0.0	0.9	0.3	8.5	0.6	0.3	11.3	0.2
LnGrp Delay(d), s/veh	56.2	0.0	42.0	179.2	0.0	42.0	6.8	7.9	5.2	5.7	9.0	4.9
LnGrp LOS	E		D	F		D	A	A	A	A	A	A
Approach Vol, veh/h		72			97			1292			1492	
Approach Delay, s/veh		49.7			134.0			7.8			8.9	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	87.0		23.0	6.7	87.0		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	83.0		19.0	6.0	83.0		19.0
Max Q Clear Time (g_c+I1), s	2.6	19.0		21.0	2.6	24.7		21.0
Green Ext Time (p_c), s	0.0	12.4		0.0	0.0	16.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	17	0	0	13	0	1240	19	0	1466	13
Future Vol, veh/h	0	0	17	0	0	13	0	1240	19	0	1466	13
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	6	6	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	18	0	0	13	0	1278	20	0	1511	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	756	-	-	639	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	353	0	0	421	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	353	-	-	421	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.7	13.8	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	353	421	-
HCM Lane V/C Ratio	-	0.05	0.032	-
HCM Control Delay (s/veh)	-	15.7	13.8	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.2	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	626	216	244	799	151	295	1338	374	207	1200	210
Future Volume (veh/h)	234	626	216	244	799	151	295	1338	374	207	1200	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	236	632	218	246	807	153	298	1352	378	209	1212	212
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	291	1277	357	309	907	366	363	1610	687	264	1840	322
Arrive On Green	0.08	0.25	0.25	0.09	0.25	0.25	0.10	0.45	0.45	0.08	0.42	0.42
Sat Flow, veh/h	3476	5136	1435	3476	3574	1444	3476	3574	1524	3476	4357	762
Grp Volume(v), veh/h	236	632	218	246	807	153	298	1352	378	209	952	472
Grp Sat Flow(s),veh/h/ln	1738	1712	1435	1738	1787	1444	1738	1787	1524	1738	1712	1696
Q Serve(g_s), s	7.9	12.4	15.8	8.2	25.6	10.4	9.9	39.3	21.3	7.0	26.2	26.2
Cycle Q Clear(g_c), s	7.9	12.4	15.8	8.2	25.6	10.4	9.9	39.3	21.3	7.0	26.2	26.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	291	1277	357	309	907	366	363	1610	687	264	1445	716
V/C Ratio(X)	0.81	0.49	0.61	0.80	0.89	0.42	0.82	0.84	0.55	0.79	0.66	0.66
Avail Cap(c_a), veh/h	295	1277	357	414	972	393	473	1610	687	266	1445	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	37.9	39.2	52.6	42.3	36.6	51.6	28.6	23.6	53.4	27.2	27.2
Incr Delay (d2), s/veh	15.3	0.3	3.0	7.7	9.8	0.8	8.7	5.4	3.2	14.8	2.4	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	5.9	6.6	4.3	13.9	4.2	5.2	20.6	9.5	3.9	12.8	13.1
LnGrp Delay(d), s/veh	68.3	38.2	42.2	60.3	52.2	37.4	60.3	34.0	26.8	68.2	29.6	31.9
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1086			1206			2028			1633	
Approach Delay, s/veh		45.5			51.9			36.5			35.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	57.0	14.4	33.3	16.3	53.7	13.9	33.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	53.0	14.0	28.0	16.0	46.0	10.0	32.0
Max Q Clear Time (g_c+I1), s	9.0	41.3	10.2	17.8	11.9	28.2	9.9	27.6
Green Ext Time (p_c), s	0.0	7.8	0.3	3.5	0.4	9.0	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	180	375	217	83	1905	0	0	1348	537
Future Volume (veh/h)	0	0	0	180	375	217	83	1905	0	0	1348	537
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				184	383	221	85	1944	0	0	1376	548
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				320	638	285	138	3844	0	0	2422	950
Arrive On Green				0.18	0.18	0.18	0.04	0.75	0.00	0.00	0.67	0.67
Sat Flow, veh/h				1792	3574	1596	3476	5305	0	0	3772	1413
Grp Volume(v), veh/h				184	383	221	85	1944	0	0	1307	617
Grp Sat Flow(s),veh/h/ln				1792	1787	1596	1738	1712	0	0	1712	1592
Q Serve(g_s), s				10.3	10.8	14.5	2.6	16.8	0.0	0.0	22.2	22.7
Cycle Q Clear(g_c), s				10.3	10.8	14.5	2.6	16.8	0.0	0.0	22.2	22.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.89
Lane Grp Cap(c), veh/h				320	638	285	138	3844	0	0	2302	1071
V/C Ratio(X)				0.58	0.60	0.78	0.62	0.51	0.00	0.00	0.57	0.58
Avail Cap(c_a), veh/h				491	979	437	254	3844	0	0	2302	1071
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.2	41.4	42.9	51.8	5.6	0.0	0.0	9.5	9.6
Incr Delay (d2), s/veh				1.6	0.9	4.7	4.5	0.5	0.0	0.0	1.0	2.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	5.4	6.8	1.3	7.9	0.0	0.0	10.7	10.4
LnGrp Delay(d), s/veh				42.8	42.3	47.6	56.2	6.1	0.0	0.0	10.5	11.9
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					788			2029			1924	
Approach Delay, s/veh					43.9			8.2			11.0	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		86.0			8.3	77.7		23.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		82.0			8.0	70.0		30.0
Max Q Clear Time (g_c+I1), s		18.8			4.6	24.7		16.5
Green Ext Time (p_c), s		25.7			0.1	21.6		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	795	348	129	0	0	0	0	1272	209	270	1265	0
Future Volume (veh/h)	795	348	129	0	0	0	0	1272	209	270	1265	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881				0	1881	1881	1881	1881	0
Adj Flow Rate, veh/h	811	355	132				0	1298	213	276	1291	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	994	538	457				0	2569	784	351	3281	0
Arrive On Green	0.29	0.29	0.29				0.00	0.50	0.50	0.10	0.64	0.00
Sat Flow, veh/h	3476	1881	1599				0	5305	1567	3476	5305	0
Grp Volume(v), veh/h	811	355	132				0	1298	213	276	1291	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1599				0	1712	1567	1738	1712	0
Q Serve(g_s), s	23.1	17.7	6.8				0.0	18.0	8.4	8.3	12.9	0.0
Cycle Q Clear(g_c), s	23.1	17.7	6.8				0.0	18.0	8.4	8.3	12.9	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	994	538	457				0	2569	784	351	3281	0
V/C Ratio(X)	0.82	0.66	0.29				0.00	0.51	0.27	0.79	0.39	0.00
Avail Cap(c_a), veh/h	1437	778	661				0	2569	784	555	3281	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.4	33.4	29.6				0.0	17.8	15.4	46.7	9.3	0.0
Incr Delay (d2), s/veh	2.5	1.4	0.3				0.0	0.7	0.9	3.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	9.4	3.1				0.0	8.6	3.8	4.1	6.2	0.0
LnGrp Delay(d), s/veh	37.9	34.8	29.9				0.0	18.5	16.2	50.6	9.6	0.0
LnGrp LOS	D	C	C					B	B	D	A	
Approach Vol, veh/h		1298						1511			1567	
Approach Delay, s/veh		36.2						18.2			16.8	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.8	57.2		34.4		72.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	17.0	47.0		44.0		68.0		
Max Q Clear Time (g_c+I1), s	10.3	20.0		25.1		14.9		
Green Ext Time (p_c), s	0.5	11.7		5.3		12.1		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	1311	96	369	1068	201	79	712	306	192	678	290
Future Volume (veh/h)	530	1311	96	369	1068	201	79	712	306	192	678	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	558	1380	101	388	1124	212	83	749	322	202	714	305
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	646	1667	512	464	1398	434	107	1165	727	268	1227	837
Arrive On Green	0.18	0.32	0.32	0.13	0.27	0.27	0.06	0.32	0.32	0.08	0.34	0.34
Sat Flow, veh/h	3510	5187	1592	3510	5187	1611	1810	3610	1590	3510	3610	1587
Grp Volume(v), veh/h	558	1380	101	388	1124	212	83	749	322	202	714	305
Grp Sat Flow(s),veh/h/ln	1755	1729	1592	1755	1729	1611	1810	1805	1590	1755	1805	1587
Q Serve(g_s), s	16.7	26.7	5.0	11.7	21.9	12.0	4.9	19.2	15.0	6.1	17.7	12.3
Cycle Q Clear(g_c), s	16.7	26.7	5.0	11.7	21.9	12.0	4.9	19.2	15.0	6.1	17.7	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	646	1667	512	464	1398	434	107	1165	727	268	1227	837
V/C Ratio(X)	0.86	0.83	0.20	0.84	0.80	0.49	0.78	0.64	0.44	0.76	0.58	0.36
Avail Cap(c_a), veh/h	841	1865	572	615	1530	475	183	1165	727	356	1227	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	34.0	26.7	45.9	36.9	33.3	50.3	31.4	20.2	49.1	29.5	15.2
Incr Delay (d2), s/veh	7.4	3.0	0.2	7.5	3.0	0.9	11.5	2.7	2.0	6.3	2.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	13.2	2.2	6.1	10.8	5.4	2.8	10.0	6.9	3.2	9.2	5.7
LnGrp Delay(d), s/veh	50.3	37.0	26.9	53.5	39.9	34.2	61.9	34.1	22.2	55.4	31.5	16.4
LnGrp LOS	D	D	C	D	D	C	E	C	C	E	C	B
Approach Vol, veh/h		2039			1724			1154			1221	
Approach Delay, s/veh		40.1			42.3			32.8			31.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	39.0	18.3	38.9	10.4	40.9	24.0	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	35.0	19.0	39.0	11.0	35.0	26.0	32.0
Max Q Clear Time (g_c+I1), s	8.1	21.2	13.7	28.7	6.9	19.7	18.7	23.9
Green Ext Time (p_c), s	0.2	5.0	0.6	6.2	0.1	4.9	1.2	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	682	137	312	806	141	136	746	175	100	458	124
Future Volume (veh/h)	206	682	137	312	806	141	136	746	175	100	458	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.82	1.00		0.85	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	226	749	151	343	886	155	149	820	192	110	503	136
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	261	919	185	421	1063	392	347	1285	491	263	920	246
Arrive On Green	0.14	0.32	0.32	0.12	0.29	0.29	0.07	0.36	0.36	0.06	0.34	0.34
Sat Flow, veh/h	1810	2886	581	3510	3610	1331	1810	3610	1380	1810	2702	722
Grp Volume(v), veh/h	226	468	432	343	886	155	149	820	192	110	334	305
Grp Sat Flow(s),veh/h/ln	1810	1805	1662	1755	1805	1331	1810	1805	1380	1810	1805	1619
Q Serve(g_s), s	13.0	25.5	25.5	10.2	24.5	9.9	5.6	20.2	11.1	4.2	16.0	16.3
Cycle Q Clear(g_c), s	13.0	25.5	25.5	10.2	24.5	9.9	5.6	20.2	11.1	4.2	16.0	16.3
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	261	575	530	421	1063	392	347	1285	491	263	615	552
V/C Ratio(X)	0.87	0.81	0.82	0.81	0.83	0.40	0.43	0.64	0.39	0.42	0.54	0.55
Avail Cap(c_a), veh/h	373	693	638	592	1251	461	370	1285	491	280	615	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	33.5	33.5	45.8	35.2	30.1	21.7	28.7	25.7	22.7	28.5	28.6
Incr Delay (d2), s/veh	14.0	6.3	6.8	6.0	4.3	0.6	0.8	2.4	2.3	1.1	3.4	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	13.6	12.6	5.3	12.8	3.7	2.9	10.5	4.5	2.2	8.6	7.9
LnGrp Delay(d), s/veh	58.7	39.8	40.3	51.8	39.6	30.7	22.5	31.1	28.1	23.8	31.9	32.6
LnGrp LOS	E	D	D	D	D	C	C	C	C	C	C	C
Approach Vol, veh/h		1126			1384			1161			749	
Approach Delay, s/veh		43.8			41.6			29.5			31.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	42.0	16.8	38.0	11.6	40.4	19.4	35.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	38.0	18.0	41.0	9.0	36.0	22.0	37.0
Max Q Clear Time (g_c+I1), s	6.2	22.2	12.2	27.5	7.6	18.3	15.0	26.5
Green Ext Time (p_c), s	0.0	5.8	0.6	5.0	0.0	3.9	0.4	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	414	199	316	442	107	285	719	365	102	758	151
Future Volume (veh/h)	117	414	199	316	442	107	285	719	365	102	758	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	122	431	207	329	460	111	297	749	380	106	790	157
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	150	587	237	398	697	298	420	1912	836	352	1416	281
Arrive On Green	0.08	0.16	0.16	0.11	0.20	0.20	0.10	0.54	0.54	0.05	0.48	0.48
Sat Flow, veh/h	1792	3574	1444	3476	3574	1530	1792	3574	1562	1792	2966	590
Grp Volume(v), veh/h	122	431	207	329	460	111	297	749	380	106	476	471
Grp Sat Flow(s),veh/h/ln	1792	1787	1444	1738	1787	1530	1792	1787	1562	1792	1787	1769
Q Serve(g_s), s	7.6	13.1	15.9	10.6	13.6	7.2	9.1	14.1	17.0	3.4	21.6	21.6
Cycle Q Clear(g_c), s	7.6	13.1	15.9	10.6	13.6	7.2	9.1	14.1	17.0	3.4	21.6	21.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	150	587	237	398	697	298	420	1912	836	352	853	845
V/C Ratio(X)	0.81	0.73	0.87	0.83	0.66	0.37	0.71	0.39	0.45	0.30	0.56	0.56
Avail Cap(c_a), veh/h	220	627	253	518	721	309	627	1912	836	364	853	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	45.3	46.5	49.4	42.4	39.8	15.9	15.6	16.3	14.1	21.2	21.2
Incr Delay (d2), s/veh	13.7	4.2	25.6	8.4	2.1	0.8	2.2	0.6	1.8	0.5	2.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	6.8	8.0	5.5	6.9	3.1	4.7	7.0	7.7	1.7	11.2	11.1
LnGrp Delay(d), s/veh	65.0	49.5	72.1	57.7	44.5	40.6	18.1	16.2	18.1	14.5	23.8	23.9
LnGrp LOS	E	D	E	E	D	D	B	B	B	B	C	C
Approach Vol, veh/h		760			900			1426			1053	
Approach Delay, s/veh		58.1			48.9			17.1			22.9	
Approach LOS		E			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	65.0	17.0	22.7	15.8	58.4	13.5	26.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	61.0	17.0	20.0	25.0	42.0	14.0	23.0
Max Q Clear Time (g_c+I1), s	5.4	19.0	12.6	17.9	11.1	23.6	9.6	15.6
Green Ext Time (p_c), s	0.0	7.5	0.5	0.8	0.7	5.8	0.1	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	5.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	0	105	16	1	5	46	1403	46	6	1182	46
Future Vol, veh/h	6	0	105	16	1	5	46	1403	46	6	1182	46
Conflicting Peds, #/hr	0	0	1	1	0	0	8	0	17	17	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	150	-	50	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	6	0	112	17	1	5	49	1493	49	6	1257	49

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2147	2959	662	2250	2934	764	1314	0	0	1559	0	0
Stage 1	1302	1302	-	1608	1608	-	-	-	-	-	-	-
Stage 2	845	1657	-	642	1326	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	6.52	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	4.01	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	28	14	407	23	15	349	528	-	-	425	-	-
Stage 1	171	231	-	110	164	-	-	-	-	-	-	-
Stage 2	326	155	-	431	225	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	24	12	404	~ 15	13	344	524	-	-	419	-	-
Mov Cap-2 Maneuver	24	12	-	~ 15	13	-	-	-	-	-	-	-
Stage 1	154	226	-	98	146	-	-	-	-	-	-	-
Stage 2	289	138	-	307	220	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	27.3	$ 509.8	0.4	0.1
HCM LOS	D	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	524	-	-	24	404	15	344	419	-	-
HCM Lane V/C Ratio	0.093	-	-	0.266	0.276	1.206	0.015	0.015	-	-
HCM Control Delay (s/veh)	12.6	-	-	202.5	17.3	$ 655.1	15.6	13.7	-	-
HCM Lane LOS	B	-	-	F	C	F	C	B	-	-
HCM 95th %tile Q(veh)	0.3	-	-	0.8	1.1	2.8	0	0	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	730	154	250	693	241	239	1067	76	197	981	146
Future Volume (veh/h)	216	730	154	250	693	241	239	1067	76	197	981	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	218	737	156	253	700	243	241	1078	77	199	991	147
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	240	1352	283	314	710	246	296	1317	570	263	1262	546
Arrive On Green	0.13	0.32	0.32	0.09	0.28	0.28	0.10	0.37	0.37	0.09	0.35	0.35
Sat Flow, veh/h	1792	4226	883	3476	2568	891	1792	3574	1546	1792	3574	1547
Grp Volume(v), veh/h	218	595	298	253	487	456	241	1078	77	199	991	147
Grp Sat Flow(s),veh/h/ln	1792	1712	1685	1738	1787	1672	1792	1787	1546	1792	1787	1547
Q Serve(g_s), s	14.3	17.1	17.4	8.5	32.4	32.4	10.1	32.6	4.0	8.4	29.6	8.1
Cycle Q Clear(g_c), s	14.3	17.1	17.4	8.5	32.4	32.4	10.1	32.6	4.0	8.4	29.6	8.1
Prop In Lane	1.00		0.52	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	1096	539	314	494	462	296	1317	570	263	1262	546
V/C Ratio(X)	0.91	0.54	0.55	0.80	0.99	0.99	0.81	0.82	0.14	0.76	0.79	0.27
Avail Cap(c_a), veh/h	240	1096	539	408	494	462	323	1317	570	272	1262	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	33.4	33.5	53.3	43.0	43.0	26.5	34.1	25.0	27.1	34.6	27.6
Incr Delay (d2), s/veh	34.5	0.6	1.2	8.7	36.8	38.2	13.8	5.7	0.5	11.2	5.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	8.2	8.3	4.5	21.0	19.8	6.1	17.1	1.8	4.9	15.5	3.7
LnGrp Delay(d), s/veh	85.4	34.0	34.7	62.0	79.8	81.1	40.3	39.8	25.5	38.3	39.5	28.8
LnGrp LOS	F	C	C	E	E	F	D	D	C	D	D	C
Approach Vol, veh/h		1111			1196			1396			1337	
Approach Delay, s/veh		44.3			76.5			39.1			38.2	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	48.0	14.8	42.2	16.2	46.1	20.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	44.0	14.0	35.0	14.0	41.0	16.0	33.0
Max Q Clear Time (g_c+I1), s	10.4	34.6	10.5	19.4	12.1	31.6	16.3	34.4
Green Ext Time (p_c), s	0.0	4.9	0.3	5.0	0.1	4.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	123	348	501	106	1069	0	0	1122	353
Future Volume (veh/h)	0	0	0	123	348	501	106	1069	0	0	1122	353
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				128	362	522	110	1114	0	0	1169	368
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				329	989	581	137	2900	0	0	1743	548
Arrive On Green				0.36	0.36	0.36	0.08	0.56	0.00	0.00	0.45	0.45
Sat Flow, veh/h				904	2719	1599	1792	5305	0	0	4021	1212
Grp Volume(v), veh/h				260	230	522	110	1114	0	0	1039	498
Grp Sat Flow(s),veh/h/ln				1836	1787	1599	1792	1712	0	0	1712	1640
Q Serve(g_s), s				11.7	10.5	34.4	6.7	13.5	0.0	0.0	26.6	26.6
Cycle Q Clear(g_c), s				11.7	10.5	34.4	6.7	13.5	0.0	0.0	26.6	26.6
Prop In Lane				0.49		1.00	1.00		0.00	0.00		0.74
Lane Grp Cap(c), veh/h				668	650	581	137	2900	0	0	1549	742
V/C Ratio(X)				0.39	0.35	0.90	0.80	0.38	0.00	0.00	0.67	0.67
Avail Cap(c_a), veh/h				806	785	702	193	2900	0	0	1549	742
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.3	25.9	33.5	50.7	13.5	0.0	0.0	24.0	24.0
Incr Delay (d2), s/veh				0.4	0.3	12.7	15.1	0.4	0.0	0.0	2.3	4.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.0	5.2	17.1	3.9	6.4	0.0	0.0	13.1	13.0
LnGrp Delay(d), s/veh				26.7	26.3	46.3	65.8	13.9	0.0	0.0	26.3	28.8
LnGrp LOS				C	C	D	E	B			C	C
Approach Vol, veh/h					1012			1224			1537	
Approach Delay, s/veh					36.7			18.6			27.1	
Approach LOS					D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			12.5	54.5		44.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			12.0	47.0		49.0
Max Q Clear Time (g_c+I1), s		15.5			8.7	28.6		36.4
Green Ext Time (p_c), s		9.5			0.1	10.0		4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	414	69	0	0	0	0	878	251	488	775	0
Future Volume (veh/h)	308	414	69	0	0	0	0	878	251	488	775	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	318	427	71				0	905	259	503	799	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	497	496	444				0	1730	493	589	2295	0
Arrive On Green	0.28	0.28	0.28				0.00	0.44	0.44	0.17	0.65	0.00
Sat Flow, veh/h	1774	1770	1583				0	4082	1116	3442	3632	0
Grp Volume(v), veh/h	318	427	71				0	783	381	503	799	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583				0	1695	1640	1721	1770	0
Q Serve(g_s), s	17.7	25.8	3.8				0.0	18.9	19.0	16.0	11.5	0.0
Cycle Q Clear(g_c), s	17.7	25.8	3.8				0.0	18.9	19.0	16.0	11.5	0.0
Prop In Lane	1.00		1.00				0.00		0.68	1.00		0.00
Lane Grp Cap(c), veh/h	497	496	444				0	1498	725	589	2295	0
V/C Ratio(X)	0.64	0.86	0.16				0.00	0.52	0.53	0.85	0.35	0.00
Avail Cap(c_a), veh/h	615	613	549				0	1498	725	826	2295	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.5	38.4	30.5				0.0	22.8	22.8	45.3	9.0	0.0
Incr Delay (d2), s/veh	1.5	10.1	0.2				0.0	1.3	2.7	6.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	14.0	1.7				0.0	9.1	9.1	8.1	5.7	0.0
LnGrp Delay(d), s/veh	37.1	48.5	30.7				0.0	24.1	25.5	51.6	9.4	0.0
LnGrp LOS	D	D	C					C	C	D	A	
Approach Vol, veh/h		816						1164			1302	
Approach Delay, s/veh		42.5						24.6			25.7	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	23.3	53.7		35.6		77.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	27.0	42.0		39.0		73.0		
Max Q Clear Time (g_c+I1), s	18.0	21.0		27.8		13.5		
Green Ext Time (p_c), s	1.3	7.8		3.8		6.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	983	103	123	1595	85	111	119	82	83	117	65
Future Volume (veh/h)	55	983	103	123	1595	85	111	119	82	83	117	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.98		0.95	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	57	1024	107	128	1661	89	116	124	85	86	122	68
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	1797	188	331	1965	105	349	379	306	331	415	213
Arrive On Green	0.03	0.55	0.55	0.05	0.56	0.56	0.07	0.20	0.20	0.05	0.18	0.18
Sat Flow, veh/h	1810	3291	344	1810	3479	185	1810	1900	1533	1810	2258	1160
Grp Volume(v), veh/h	57	561	570	128	856	894	116	124	85	86	95	95
Grp Sat Flow(s),veh/h/ln	1810	1805	1830	1810	1805	1859	1810	1900	1533	1810	1805	1614
Q Serve(g_s), s	1.4	21.5	21.6	3.2	41.3	42.4	5.4	5.9	4.9	4.0	4.8	5.3
Cycle Q Clear(g_c), s	1.4	21.5	21.6	3.2	41.3	42.4	5.4	5.9	4.9	4.0	4.8	5.3
Prop In Lane	1.00		0.19	1.00		0.10	1.00		1.00	1.00		0.72
Lane Grp Cap(c), veh/h	169	985	999	331	1019	1050	349	379	306	331	332	297
V/C Ratio(X)	0.34	0.57	0.57	0.39	0.84	0.85	0.33	0.33	0.28	0.26	0.29	0.32
Avail Cap(c_a), veh/h	217	1150	1166	413	1219	1255	381	379	306	339	332	297
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	15.7	15.7	12.2	18.9	19.2	31.6	36.0	35.7	32.3	37.0	37.2
Incr Delay (d2), s/veh	1.2	0.5	0.5	0.7	4.6	5.0	0.6	2.3	2.2	0.4	2.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	10.7	10.9	1.7	21.8	23.1	2.7	3.3	2.3	2.0	2.6	2.6
LnGrp Delay(d), s/veh	20.6	16.3	16.3	13.0	23.6	24.2	32.1	38.3	37.9	32.7	39.1	40.0
LnGrp LOS	C	B	B	B	C	C	C	D	D	C	D	D
Approach Vol, veh/h		1188			1878			325			276	
Approach Delay, s/veh		16.5			23.2			36.0			37.4	
Approach LOS		B			C			D			D	

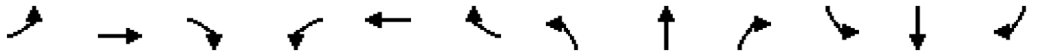
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	25.0	9.2	61.4	11.2	23.3	7.2	63.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	10.0	67.0	9.0	18.0	6.0	71.0
Max Q Clear Time (g_c+I1), s	6.0	7.9	5.2	23.6	7.4	7.3	3.4	44.4
Green Ext Time (p_c), s	0.0	0.7	0.1	8.9	0.0	0.7	0.0	15.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	661	59	22	807	46	67	91	16	81	100	157
Future Volume (veh/h)	179	661	59	22	807	46	67	91	16	81	100	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	183	674	60	22	823	47	68	93	16	83	102	160
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	335	1311	117	307	1103	63	461	1002	168	577	598	525
Arrive On Green	0.09	0.39	0.39	0.02	0.32	0.32	0.04	0.32	0.32	0.05	0.33	0.33
Sat Flow, veh/h	1810	3348	298	1810	3470	198	1810	3084	517	1810	1805	1585
Grp Volume(v), veh/h	183	363	371	22	428	442	68	53	56	83	102	160
Grp Sat Flow(s),veh/h/ln	1810	1805	1841	1810	1805	1863	1810	1805	1796	1810	1805	1585
Q Serve(g_s), s	4.7	11.3	11.3	0.6	15.7	15.7	1.8	1.5	1.6	2.2	3.0	5.5
Cycle Q Clear(g_c), s	4.7	11.3	11.3	0.6	15.7	15.7	1.8	1.5	1.6	2.2	3.0	5.5
Prop In Lane	1.00		0.16	1.00		0.11	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	335	707	721	307	574	592	461	587	584	577	598	525
V/C Ratio(X)	0.55	0.51	0.51	0.07	0.75	0.75	0.15	0.09	0.10	0.14	0.17	0.30
Avail Cap(c_a), veh/h	680	1613	1645	419	1246	1287	584	587	584	687	598	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	17.1	17.1	16.7	22.5	22.5	15.6	17.3	17.4	15.3	17.5	18.4
Incr Delay (d2), s/veh	1.4	0.6	0.6	0.1	2.0	1.9	0.1	0.3	0.3	0.1	0.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.8	5.9	0.3	8.0	8.3	0.9	0.8	0.8	1.1	1.6	2.6
LnGrp Delay(d), s/veh	17.3	17.7	17.7	16.8	24.5	24.4	15.8	17.7	17.7	15.4	18.1	19.8
LnGrp LOS	B	B	B	B	C	C	B	B	B	B	B	B
Approach Vol, veh/h		917			892			177			345	
Approach Delay, s/veh		17.6			24.3			16.9			18.3	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	28.0	5.5	32.9	7.0	28.5	10.9	27.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	24.0	6.0	66.0	8.0	24.0	21.0	51.0
Max Q Clear Time (g_c+I1), s	4.2	3.6	2.6	13.3	3.8	7.5	6.7	17.7
Green Ext Time (p_c), s	0.0	0.5	0.0	4.8	0.0	1.3	0.4	5.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	619	249	360	944	53	272	162	220	67	247	153
Future Volume (veh/h)	69	619	249	360	944	53	272	162	220	67	247	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	73	652	262	379	994	56	286	171	232	71	260	161
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	851	335	467	1584	89	564	743	652	452	1180	517
Arrive On Green	0.05	0.24	0.24	0.14	0.33	0.33	0.13	0.42	0.42	0.04	0.34	0.34
Sat Flow, veh/h	1757	3523	1386	3408	4871	274	1757	1752	1539	1757	3505	1535
Grp Volume(v), veh/h	73	621	293	379	685	365	286	171	232	71	260	161
Grp Sat Flow(s),veh/h/ln	1757	1679	1552	1704	1679	1788	1757	1752	1539	1757	1752	1535
Q Serve(g_s), s	4.2	17.5	17.9	11.0	17.5	17.6	10.2	6.3	10.4	2.7	5.4	7.9
Cycle Q Clear(g_c), s	4.2	17.5	17.9	11.0	17.5	17.6	10.2	6.3	10.4	2.7	5.4	7.9
Prop In Lane	1.00		0.89	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	811	375	467	1092	581	564	743	652	452	1180	517
V/C Ratio(X)	0.78	0.76	0.78	0.81	0.63	0.63	0.51	0.23	0.36	0.16	0.22	0.31
Avail Cap(c_a), veh/h	208	1059	489	773	1423	758	791	743	652	485	1180	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	35.8	36.0	42.5	29.0	29.0	16.6	18.7	19.8	20.6	24.1	24.9
Incr Delay (d2), s/veh	12.8	2.5	6.0	3.4	0.6	1.1	0.7	0.7	1.5	0.2	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	8.4	8.3	5.4	8.2	8.8	5.0	3.2	4.7	1.3	2.7	3.5
LnGrp Delay(d), s/veh	60.2	38.3	42.0	46.0	29.6	30.2	17.3	19.4	21.3	20.7	24.5	26.5
LnGrp LOS	E	D	D	D	C	C	B	B	C	C	C	C
Approach Vol, veh/h		987			1429			689			492	
Approach Delay, s/veh		41.0			34.1			19.2			24.6	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	47.0	17.9	28.5	16.9	38.2	9.4	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	23.0	32.0	26.0	23.0	12.0	43.0
Max Q Clear Time (g_c+I1), s	4.7	12.4	13.0	19.9	12.2	9.9	6.2	19.6
Green Ext Time (p_c), s	0.0	2.5	0.9	4.6	0.7	1.7	0.1	6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	393	890	68	168	1236	148	86	351	67	234	487	383
Future Volume (veh/h)	393	890	68	168	1236	148	86	351	67	234	487	383
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	418	947	72	179	1315	157	91	373	71	249	518	407
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	491	1588	687	211	1505	650	115	720	299	315	814	567
Arrive On Green	0.14	0.44	0.44	0.12	0.42	0.42	0.06	0.20	0.20	0.09	0.23	0.23
Sat Flow, veh/h	3476	3574	1546	1792	3574	1544	1792	3574	1485	3476	3574	1500
Grp Volume(v), veh/h	418	947	72	179	1315	157	91	373	71	249	518	407
Grp Sat Flow(s),veh/h/ln	1738	1787	1546	1792	1787	1544	1792	1787	1485	1738	1787	1500
Q Serve(g_s), s	12.9	22.0	3.0	10.7	37.0	7.2	5.5	10.2	4.4	7.7	14.4	25.0
Cycle Q Clear(g_c), s	12.9	22.0	3.0	10.7	37.0	7.2	5.5	10.2	4.4	7.7	14.4	25.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	491	1588	687	211	1505	650	115	720	299	315	814	567
V/C Ratio(X)	0.85	0.60	0.10	0.85	0.87	0.24	0.79	0.52	0.24	0.79	0.64	0.72
Avail Cap(c_a), veh/h	602	1629	704	327	1661	718	147	720	299	412	814	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	23.1	17.8	47.4	29.1	20.5	50.6	39.1	36.8	48.9	38.3	30.0
Incr Delay (d2), s/veh	9.6	0.6	0.1	11.7	5.1	0.2	19.7	2.7	1.9	7.6	3.8	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	10.9	1.3	6.0	19.3	3.1	3.4	5.3	2.0	4.0	7.5	11.9
LnGrp Delay(d), s/veh	55.6	23.6	17.8	59.2	34.2	20.7	70.3	41.7	38.6	56.4	42.0	37.6
LnGrp LOS	E	C	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1437			1651			535			1174	
Approach Delay, s/veh		32.6			35.6			46.2			43.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	26.1	16.9	52.7	11.0	29.0	19.5	50.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	21.0	20.0	50.0	9.0	25.0	19.0	51.0
Max Q Clear Time (g_c+I1), s	9.7	12.2	12.7	24.0	7.5	27.0	14.9	39.0
Green Ext Time (p_c), s	0.3	1.6	0.3	7.2	0.0	0.0	0.6	7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	313	78	95	258	26	173	938	93	32	805	225
Future Volume (veh/h)	192	313	78	95	258	26	173	938	93	32	805	225
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	206	337	84	102	277	28	186	1009	100	34	866	242
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	264	437	107	192	365	37	295	2075	206	343	1125	938
Arrive On Green	0.10	0.15	0.15	0.05	0.11	0.11	0.06	0.63	0.63	0.02	0.60	0.60
Sat Flow, veh/h	1792	2828	694	1792	3276	328	1792	3283	325	1792	1881	1567
Grp Volume(v), veh/h	206	211	210	102	150	155	186	549	560	34	866	242
Grp Sat Flow(s),veh/h/ln	1792	1787	1734	1792	1787	1817	1792	1787	1821	1792	1881	1567
Q Serve(g_s), s	11.0	13.1	13.5	5.8	9.4	9.6	4.4	18.9	18.9	0.8	39.6	8.5
Cycle Q Clear(g_c), s	11.0	13.1	13.5	5.8	9.4	9.6	4.4	18.9	18.9	0.8	39.6	8.5
Prop In Lane	1.00		0.40	1.00		0.18	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	264	276	268	192	199	202	295	1129	1151	343	1125	938
V/C Ratio(X)	0.78	0.76	0.78	0.53	0.75	0.77	0.63	0.49	0.49	0.10	0.77	0.26
Avail Cap(c_a), veh/h	264	325	315	192	248	252	348	1129	1151	364	1125	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	46.8	47.0	43.2	49.8	49.9	18.7	11.3	11.3	9.5	17.3	11.0
Incr Delay (d2), s/veh	14.1	8.7	10.4	2.8	9.7	10.5	2.8	1.5	1.5	0.1	5.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.1	7.3	3.0	5.2	5.4	3.5	9.8	10.0	0.4	22.0	3.8
LnGrp Delay(d), s/veh	54.7	55.5	57.4	46.0	59.5	60.4	21.4	12.8	12.8	9.6	22.4	11.7
LnGrp LOS	D	E	E	D	E	E	C	B	B	A	C	B
Approach Vol, veh/h		627			407			1295			1142	
Approach Delay, s/veh		55.9			56.5			14.0			19.7	
Approach LOS		E			E			B			B	

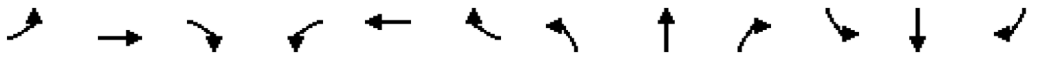
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	77.0	10.0	21.9	10.5	73.1	15.0	16.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	73.0	6.0	21.0	10.0	67.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.8	20.9	7.8	15.5	6.4	41.6	13.0	11.6
Green Ext Time (p_c), s	0.0	9.3	0.0	1.1	0.2	7.7	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	818	348	282	906	35	369	210	155	86	253	55
Future Volume (veh/h)	60	818	348	282	906	35	369	210	155	86	253	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	64	870	370	300	964	37	393	223	165	91	269	59
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	270	1003	425	335	1962	75	579	1288	565	389	973	203
Arrive On Green	0.04	0.29	0.29	0.14	0.39	0.39	0.19	0.37	0.37	0.05	0.23	0.23
Sat Flow, veh/h	1757	3434	1455	1757	4972	191	1757	3505	1537	1757	4155	869
Grp Volume(v), veh/h	64	850	390	300	651	350	393	223	165	91	215	113
Grp Sat Flow(s),veh/h/ln	1757	1679	1532	1757	1679	1805	1757	1752	1537	1757	1679	1666
Q Serve(g_s), s	2.8	26.2	26.3	12.7	15.8	15.9	17.6	4.7	8.3	4.2	5.7	6.1
Cycle Q Clear(g_c), s	2.8	26.2	26.3	12.7	15.8	15.9	17.6	4.7	8.3	4.2	5.7	6.1
Prop In Lane	1.00		0.95	1.00		0.11	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	270	980	447	335	1325	712	579	1288	565	389	786	390
V/C Ratio(X)	0.24	0.87	0.87	0.90	0.49	0.49	0.68	0.17	0.29	0.23	0.27	0.29
Avail Cap(c_a), veh/h	301	1048	478	476	1603	862	686	1288	565	391	786	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	36.6	36.6	26.0	24.8	24.8	22.5	23.3	24.4	29.1	34.1	34.3
Incr Delay (d2), s/veh	0.4	7.5	15.2	14.9	0.3	0.5	2.1	0.3	1.3	0.3	0.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	13.1	13.0	10.2	7.4	8.0	8.7	2.3	3.7	2.1	2.7	3.0
LnGrp Delay(d), s/veh	26.0	44.1	51.8	40.8	25.0	25.3	24.7	23.6	25.7	29.4	35.0	36.1
LnGrp LOS	C	D	D	D	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1304			1301			781			419	
Approach Delay, s/veh		45.5			28.7			24.6			34.1	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	44.0	19.3	35.8	24.3	29.5	8.1	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	40.0	24.0	34.0	27.0	19.0	6.0	52.0
Max Q Clear Time (g_c+I1), s	6.2	10.3	14.7	28.3	19.6	8.1	4.8	17.9
Green Ext Time (p_c), s	0.0	1.9	0.6	3.5	0.8	1.4	0.0	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1153	21	319	1417	113	19	167	187	98	196	158
Future Volume (veh/h)	99	1153	21	319	1417	113	19	167	187	98	196	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.98		0.93	0.99		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	102	1189	22	329	1461	116	20	172	193	101	202	163
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	1559	29	373	1827	794	308	561	465	288	591	466
Arrive On Green	0.05	0.43	0.43	0.13	0.51	0.51	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1792	3588	66	1792	3574	1554	1004	1787	1482	1009	1881	1483
Grp Volume(v), veh/h	102	592	619	329	1461	116	20	172	193	101	202	163
Grp Sat Flow(s),veh/h/ln	1792	1787	1867	1792	1787	1554	1004	1787	1482	1009	1881	1483
Q Serve(g_s), s	3.0	26.8	26.8	9.2	32.3	3.8	1.5	7.0	9.8	8.4	7.9	8.1
Cycle Q Clear(g_c), s	3.0	26.8	26.8	9.2	32.3	3.8	9.4	7.0	9.8	18.2	7.9	8.1
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	776	811	373	1827	794	308	561	465	288	591	466
V/C Ratio(X)	0.46	0.76	0.76	0.88	0.80	0.15	0.06	0.31	0.41	0.35	0.34	0.35
Avail Cap(c_a), veh/h	301	954	997	653	2581	1122	308	561	465	288	591	466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	22.9	22.9	19.0	19.3	12.3	28.8	24.9	25.9	33.0	25.2	25.3
Incr Delay (d2), s/veh	1.5	2.9	2.8	7.1	1.2	0.1	0.4	1.4	2.7	3.3	1.6	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	13.8	14.4	9.1	16.1	1.6	0.4	3.7	4.4	2.6	4.4	3.6
LnGrp Delay(d), s/veh	19.8	25.8	25.7	26.1	20.6	12.4	29.2	26.3	28.6	36.4	26.8	27.3
LnGrp LOS	B	C	C	C	C	B	C	C	C	D	C	C
Approach Vol, veh/h		1313			1906			385			466	
Approach Delay, s/veh		25.3			21.0			27.6			29.0	
Approach LOS		C			C			C			C	

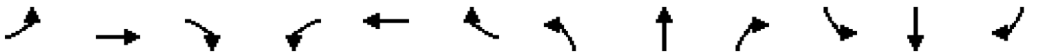
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	16.0	45.5		34.0	8.7	52.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0	27.0	51.0		30.0	9.0	69.0
Max Q Clear Time (g_c+I1), s		11.8	11.2	28.8		20.2	5.0	34.3
Green Ext Time (p_c), s		2.1	0.8	8.1		1.6	0.1	14.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	884	583	163	1663	0	0	0	0	116	95	204
Future Volume (veh/h)	0	884	583	163	1663	0	0	0	0	116	95	204
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	911	601	168	1714	0				120	98	210
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1592	725	205	2218	0				300	245	476
Arrive On Green	0.00	0.47	0.47	0.11	0.62	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3593	1559	1792	3668	0				1008	823	1599
Grp Volume(v), veh/h	0	911	601	168	1714	0				218	0	210
Grp Sat Flow(s),veh/h/ln	0	1712	1559	1792	1787	0				1831	0	1599
Q Serve(g_s), s	0.0	18.9	32.7	8.9	34.1	0.0				9.3	0.0	10.4
Cycle Q Clear(g_c), s	0.0	18.9	32.7	8.9	34.1	0.0				9.3	0.0	10.4
Prop In Lane	0.00		1.00	1.00		0.00				0.55		1.00
Lane Grp Cap(c), veh/h	0	1592	725	205	2218	0				545	0	476
V/C Ratio(X)	0.00	0.57	0.83	0.82	0.77	0.00				0.40	0.00	0.44
Avail Cap(c_a), veh/h	0	1932	880	441	3043	0				545	0	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.0	22.7	42.2	13.5	0.0				27.3	0.0	27.7
Incr Delay (d2), s/veh	0.0	0.3	5.6	7.9	0.9	0.0				2.2	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.9	15.2	4.9	16.9	0.0				5.0	0.0	4.9
LnGrp Delay(d), s/veh	0.0	19.3	28.3	50.1	14.4	0.0				29.5	0.0	30.7
LnGrp LOS		B	C	D	B					C		C
Approach Vol, veh/h		1512			1882						428	
Approach Delay, s/veh		22.9			17.5						30.1	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.1	49.3		33.0		64.5
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			24.0	55.0		29.0		83.0
Max Q Clear Time (g_c+I1), s			10.9	34.7		12.4		36.1
Green Ext Time (p_c), s			0.3	10.6		1.6		20.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C



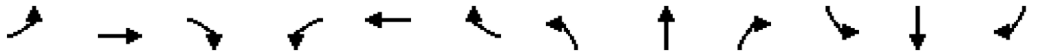
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	830	0	0	1037	213	817	0	407	0	0	0
Future Volume (vph)	153	830	0	0	1037	213	817	0	407	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (prot)	1805	3610			3496		1715	1630	1534			
Flt Permitted	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (perm)	1805	3610			3496		1715	1630	1534			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	158	856	0	0	1069	220	842	0	420	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	28	92	0	0	0
Lane Group Flow (vph)	158	856	0	0	1275	0	446	410	286	0	0	0
Confl. Peds. (#/hr)	3		10	10		3						
Confl. Bikes (#/hr)			11			6						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	14.0	64.5			46.5		43.1	43.1	43.1			
Effective Green, g (s)	14.0	64.5			46.5		43.1	43.1	43.1			
Actuated g/C Ratio	0.12	0.56			0.40		0.37	0.37	0.37			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	218	2014			1406		639	607	571			
v/s Ratio Prot	c0.09	0.24			c0.36		c0.26	0.25	0.19			
v/s Ratio Perm												
v/c Ratio	0.72	0.43			0.91		0.70	0.68	0.50			
Uniform Delay, d1	48.9	14.8			32.5		30.7	30.4	28.0			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	11.3	0.1			8.7		6.2	5.9	3.1			
Delay (s)	60.3	15.0			41.2		37.0	36.3	31.1			
Level of Service	E	B			D		D	D	C			
Approach Delay (s/veh)		22.0			41.2			35.0			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	108.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	801	172	80	534	116	494	669	90	199	437	193
Future Volume (veh/h)	260	801	172	80	534	116	494	669	90	199	437	193
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	274	843	181	84	562	122	520	704	95	209	460	203
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	348	1010	711	108	867	368	610	1187	160	244	808	353
Arrive On Green	0.10	0.28	0.28	0.06	0.24	0.24	0.17	0.37	0.37	0.13	0.33	0.33
Sat Flow, veh/h	3510	3610	1537	1810	3610	1532	3510	3182	429	1810	2419	1058
Grp Volume(v), veh/h	274	843	181	84	562	122	520	399	400	209	342	321
Grp Sat Flow(s),veh/h/ln	1755	1805	1537	1810	1805	1532	1755	1805	1806	1810	1805	1671
Q Serve(g_s), s	8.0	23.0	7.6	4.8	14.7	6.9	15.1	18.6	18.7	11.8	16.3	16.6
Cycle Q Clear(g_c), s	8.0	23.0	7.6	4.8	14.7	6.9	15.1	18.6	18.7	11.8	16.3	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.63
Lane Grp Cap(c), veh/h	348	1010	711	108	867	368	610	673	674	244	603	558
V/C Ratio(X)	0.79	0.83	0.25	0.78	0.65	0.33	0.85	0.59	0.59	0.86	0.57	0.57
Avail Cap(c_a), veh/h	503	1206	794	173	1034	439	804	673	674	363	603	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	35.4	17.7	48.6	35.8	32.8	42.0	26.4	26.4	44.3	28.7	28.7
Incr Delay (d2), s/veh	5.2	4.5	0.2	11.4	1.1	0.5	6.9	3.8	3.8	12.4	3.8	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	12.1	3.3	2.7	7.5	3.0	7.9	10.0	10.0	6.8	8.7	8.3
LnGrp Delay(d), s/veh	51.3	39.9	17.9	60.0	36.9	33.4	48.9	30.2	30.3	56.8	32.5	33.0
LnGrp LOS	D	D	B	E	D	C	D	C	C	E	C	C
Approach Vol, veh/h		1298			768			1319			872	
Approach Delay, s/veh		39.2			38.9			37.6			38.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	43.1	10.2	33.3	22.2	39.0	14.4	29.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	38.0	10.0	35.0	24.0	35.0	15.0	30.0
Max Q Clear Time (g_c+I1), s	13.8	20.7	6.8	25.0	17.1	18.6	10.0	16.7
Green Ext Time (p_c), s	0.3	4.4	0.0	4.3	1.1	3.6	0.4	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	131	60	127	184	103	88	1329	78	92	1049	115
Future Volume (veh/h)	153	131	60	127	184	103	88	1329	78	92	1049	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.98		0.95	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	158	135	62	131	190	106	91	1370	80	95	1081	119
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	272	286	229	301	250	201	317	2043	119	254	1939	213
Arrive On Green	0.09	0.15	0.15	0.07	0.13	0.13	0.04	0.59	0.59	0.04	0.59	0.59
Sat Flow, veh/h	1810	1900	1526	1810	1900	1529	1810	3461	202	1810	3278	361
Grp Volume(v), veh/h	158	135	62	131	190	106	91	713	737	95	595	605
Grp Sat Flow(s),veh/h/ln	1810	1900	1526	1810	1900	1529	1810	1805	1858	1810	1805	1834
Q Serve(g_s), s	8.0	7.0	3.9	6.7	10.4	7.0	2.1	28.9	29.2	2.2	21.7	21.8
Cycle Q Clear(g_c), s	8.0	7.0	3.9	6.7	10.4	7.0	2.1	28.9	29.2	2.2	21.7	21.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	272	286	229	301	250	201	317	1066	1097	254	1068	1085
V/C Ratio(X)	0.58	0.47	0.27	0.44	0.76	0.53	0.29	0.67	0.67	0.37	0.56	0.56
Avail Cap(c_a), veh/h	306	421	338	301	351	283	385	1066	1097	337	1068	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	42.0	40.7	36.9	45.3	43.8	10.6	15.0	15.1	13.2	13.5	13.5
Incr Delay (d2), s/veh	2.2	1.2	0.6	1.0	6.0	2.1	0.5	3.3	3.3	0.9	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.8	1.7	3.4	5.9	3.1	1.1	15.2	15.8	1.2	11.4	11.6
LnGrp Delay(d), s/veh	38.4	43.3	41.3	37.9	51.3	45.9	11.1	18.3	18.4	14.1	15.6	15.5
LnGrp LOS	D	D	D	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		355			427			1541			1295	
Approach Delay, s/veh		40.8			45.9			17.9			15.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	67.9	12.0	20.3	7.9	68.0	14.0	18.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	63.0	8.0	24.0	8.0	64.0	12.0	20.0
Max Q Clear Time (g_c+I1), s	4.2	31.2	8.7	9.0	4.1	23.8	10.0	12.4
Green Ext Time (p_c), s	0.1	12.8	0.0	0.7	0.1	10.2	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	11	8	7	21	44	4	345	7	31	397	81
Future Volume (veh/h)	93	11	8	7	21	44	4	345	7	31	397	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	12	9	7	22	47	4	367	7	33	422	86
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	134	101	245	72	153	727	1494	1229	822	1494	1226
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1345	1006	754	1403	538	1149	903	1900	1564	1020	1900	1559
Grp Volume(v), veh/h	99	0	21	7	0	69	4	367	7	33	422	86
Grp Sat Flow(s),veh/h/ln	1345	0	1760	1403	0	1687	903	1900	1564	1020	1900	1559
Q Serve(g_s), s	7.1	0.0	1.0	0.4	0.0	3.7	0.1	5.1	0.1	0.9	6.1	1.2
Cycle Q Clear(g_c), s	10.8	0.0	1.0	1.5	0.0	3.7	6.2	5.1	0.1	6.0	6.1	1.2
Prop In Lane	1.00		0.43	1.00		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	0	235	245	0	225	727	1494	1229	822	1494	1226
V/C Ratio(X)	0.49	0.00	0.09	0.03	0.00	0.31	0.01	0.25	0.01	0.04	0.28	0.07
Avail Cap(c_a), veh/h	484	0	603	539	0	578	727	1494	1229	822	1494	1226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	37.7	38.4	0.0	38.9	3.8	2.8	2.3	3.6	2.9	2.4
Incr Delay (d2), s/veh	1.8	0.0	0.2	0.0	0.0	0.8	0.0	0.4	0.0	0.1	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.5	0.2	0.0	1.8	0.0	2.8	0.0	0.3	3.4	0.6
LnGrp Delay(d), s/veh	45.6	0.0	37.9	38.4	0.0	39.6	3.8	3.2	2.3	3.7	3.4	2.5
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		120			76			378			541	
Approach Delay, s/veh		44.2			39.5			3.2			3.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		82.0		17.2		82.0		17.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		78.0		34.0		78.0		34.0
Max Q Clear Time (g_c+I1), s		8.2		12.8		8.1		5.7
Green Ext Time (p_c), s		2.6		0.3		3.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.1
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	17	6	12	40	52	19	110	32	35	7	12
Future Vol, veh/h	10	17	6	12	40	52	19	110	32	35	7	12
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	20	7	14	47	60	22	128	37	41	8	14
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	8.2	8.1	9.5	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	37%	0%	23%	0%	83%	0%
Vol Thru, %	68%	63%	0%	77%	0%	17%	0%
Vol Right, %	20%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	27	6	52	52	42	12
LT Vol	19	10	0	12	0	35	0
Through Vol	110	17	0	40	0	7	0
RT Vol	32	0	6	0	52	0	12
Lane Flow Rate	187	31	7	60	60	49	14
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.253	0.047	0.009	0.089	0.075	0.074	0.017
Departure Headway (Hd)	4.87	5.445	4.554	5.293	4.473	5.476	4.354
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	739	658	786	678	802	655	822
Service Time	2.893	3.173	2.282	3.017	2.196	3.203	2.081
HCM Lane V/C Ratio	0.253	0.047	0.009	0.088	0.075	0.075	0.017
HCM Control Delay, s/veh	9.5	8.4	7.3	8.5	7.6	8.6	7.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	1	0.1	0	0.3	0.2	0.2	0.1

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	4	6	12	12	4
Future Vol, veh/h	8	4	6	12	12	4
Conflicting Peds, #/hr	0	10	10	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	7	10	20	20	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	31	0	69	29
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1595	-	941	1052
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1582	-	927	1042
Mov Cap-2 Maneuver	-	-	-	-	927	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.4	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	927	1042	-	-	1582	-
HCM Lane V/C Ratio	0.022	0.007	-	-	0.006	-
HCM Control Delay (s/veh)	9	8.5	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	169	19	17	212	8	7	4	24	5	6	6
Future Vol, veh/h	9	169	19	17	212	8	7	4	24	5	6	6
Conflicting Peds, #/hr	6	0	4	4	0	6	3	0	3	3	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	182	20	18	228	9	8	4	26	5	6	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	243	0	0	206	0	0	494	495	199	505	501	242
Stage 1	-	-	-	-	-	-	216	216	-	275	275	-
Stage 2	-	-	-	-	-	-	278	279	-	230	226	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1335	-	-	1377	-	-	489	479	847	481	475	802
Stage 1	-	-	-	-	-	-	791	728	-	736	686	-
Stage 2	-	-	-	-	-	-	733	683	-	777	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1328	-	-	1372	-	-	468	464	842	451	460	796
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	464	-	451	460	-
Stage 1	-	-	-	-	-	-	782	719	-	726	672	-
Stage 2	-	-	-	-	-	-	708	669	-	740	712	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.5	10.7	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	672	1328	-	-	1372	-	-	537
HCM Lane V/C Ratio	0.056	0.007	-	-	0.013	-	-	0.034
HCM Control Delay (s/veh)	10.7	7.7	0	-	7.7	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	104	78	75	134	19	64	1212	43	28	1317	50
Future Volume (veh/h)	42	104	78	75	134	19	64	1212	43	28	1317	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	106	80	77	137	19	65	1237	44	29	1344	51
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	96	217	298	163	312	43	285	2587	92	319	2580	98
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	287	1111	1526	1197	1598	222	389	3517	125	434	3507	133
Grp Volume(v), veh/h	149	0	80	77	0	156	65	628	653	29	684	711
Grp Sat Flow(s),veh/h/ln	1398	0	1526	1197	0	1820	389	1787	1855	434	1787	1853
Q Serve(g_s), s	4.1	0.0	5.1	7.3	0.0	8.7	9.9	16.6	16.6	3.4	18.9	19.0
Cycle Q Clear(g_c), s	12.8	0.0	5.1	20.1	0.0	8.7	29.0	16.6	16.6	20.0	18.9	19.0
Prop In Lane	0.29		1.00	1.00		0.12	1.00		0.07	1.00		0.07
Lane Grp Cap(c), veh/h	313	0	298	163	0	355	285	1315	1364	319	1315	1363
V/C Ratio(X)	0.48	0.00	0.27	0.47	0.00	0.44	0.23	0.48	0.48	0.09	0.52	0.52
Avail Cap(c_a), veh/h	375	0	357	209	0	425	285	1315	1364	319	1315	1363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.2	0.0	39.5	51.8	0.0	40.9	12.8	6.2	6.2	10.3	6.5	6.6
Incr Delay (d2), s/veh	1.1	0.0	0.5	2.1	0.0	0.9	1.9	1.2	1.2	0.6	1.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	2.2	2.5	0.0	4.5	1.2	8.5	8.8	0.5	9.7	10.2
LnGrp Delay(d), s/veh	43.3	0.0	40.0	53.9	0.0	41.8	14.6	7.5	7.4	10.9	8.0	8.0
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		229			233			1346			1424	
Approach Delay, s/veh		42.1			45.8			7.8			8.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		26.5		89.0		26.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		31.0		14.8		22.0		22.1
Green Ext Time (p_c), s		13.2		0.8		15.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	56	52	1482	1286	20
Future Vol, veh/h	13	56	52	1482	1286	20
Conflicting Peds, #/hr	2	2	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	14	60	56	1594	1383	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2303	703	1414	0	-	0
Stage 1	1392	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	33	382	483	-	-	-
Stage 1	197	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	29	379	479	-	-	-
Mov Cap-2 Maneuver	29	-	-	-	-	-
Stage 1	173	-	-	-	-	-
Stage 2	353	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	53.5	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	479	-	29	379	-	-
HCM Lane V/C Ratio	0.117	-	0.482	0.159	-	-
HCM Control Delay (s/veh)	13.5	-	213.9	16.3	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	1.5	0.6	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	39	64	81	41	45	103	1380	46	56	1147	78
Future Volume (veh/h)	89	39	64	81	41	45	103	1380	46	56	1147	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	92	40	66	84	42	46	106	1423	47	58	1182	80
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	51	14	336	50	16	330	310	2527	83	250	2429	164
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	63	1549	0	72	1521	442	3527	116	362	3390	229
Grp Volume(v), veh/h	132	0	66	126	0	46	106	720	750	58	623	639
Grp Sat Flow(s),veh/h/ln	63	0	1549	72	0	1521	442	1787	1856	362	1787	1832
Q Serve(g_s), s	0.0	0.0	4.2	0.0	0.0	2.9	16.5	22.9	23.1	10.9	18.2	18.2
Cycle Q Clear(g_c), s	26.0	0.0	4.2	26.0	0.0	2.9	34.7	22.9	23.1	33.9	18.2	18.2
Prop In Lane	0.70		1.00	0.67		1.00	1.00		0.06	1.00		0.13
Lane Grp Cap(c), veh/h	65	0	336	66	0	330	310	1281	1330	250	1281	1313
V/C Ratio(X)	2.05	0.00	0.20	1.92	0.00	0.14	0.34	0.56	0.56	0.23	0.49	0.49
Avail Cap(c_a), veh/h	65	0	336	66	0	330	310	1281	1330	250	1281	1313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	0.0	38.5	53.9	0.0	38.0	15.0	8.1	8.1	16.2	7.4	7.4
Incr Delay (d2), s/veh	519.7	0.0	0.3	464.3	0.0	0.2	3.0	1.8	1.7	2.2	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	0.0	1.8	10.6	0.0	1.2	2.3	11.8	12.3	1.2	9.3	9.5
LnGrp Delay(d), s/veh	574.3	0.0	38.7	518.2	0.0	38.2	18.0	9.9	9.8	18.3	8.7	8.7
LnGrp LOS	F		D	F		D	B	A	A	B	A	A
Approach Vol, veh/h		198			172			1576			1320	
Approach Delay, s/veh		395.8			389.8			10.4			9.1	
Approach LOS		F			F			B			A	

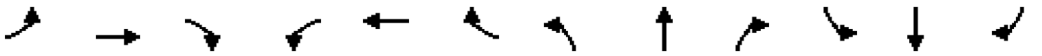
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		90.0		30.0		90.0		30.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		86.0		26.0		86.0		26.0
Max Q Clear Time (g_c+I1), s		36.7		28.0		35.9		28.0
Green Ext Time (p_c), s		17.3		0.0		12.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	618	52	142	774	107	45	355	84	238	397	339
Future Volume (veh/h)	256	618	52	142	774	107	45	355	84	238	397	339
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	269	651	55	149	815	0	47	374	88	251	418	357
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	1377	115	184	1101	343	60	1195	517	333	718	609
Arrive On Green	0.18	0.29	0.29	0.10	0.22	0.00	0.03	0.34	0.34	0.10	0.40	0.40
Sat Flow, veh/h	1774	4774	400	1774	5085	1583	1774	3539	1531	3442	1791	1519
Grp Volume(v), veh/h	269	461	245	149	815	0	47	374	88	251	413	362
Grp Sat Flow(s),veh/h/ln	1774	1695	1783	1774	1695	1583	1774	1770	1531	1721	1770	1541
Q Serve(g_s), s	13.6	10.3	10.5	7.6	13.8	0.0	2.4	7.2	3.7	6.6	16.8	17.0
Cycle Q Clear(g_c), s	13.6	10.3	10.5	7.6	13.8	0.0	2.4	7.2	3.7	6.6	16.8	17.0
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		0.99
Lane Grp Cap(c), veh/h	312	978	514	184	1101	343	60	1195	517	333	709	617
V/C Ratio(X)	0.86	0.47	0.48	0.81	0.74	0.00	0.79	0.31	0.17	0.75	0.58	0.59
Avail Cap(c_a), veh/h	596	1505	792	346	1542	480	154	1195	517	522	709	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	27.1	27.1	40.5	33.7	0.0	44.3	22.6	21.5	40.6	21.6	21.7
Incr Delay (d2), s/veh	7.0	0.4	0.7	8.1	1.2	0.0	19.8	0.7	0.7	3.5	3.5	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	4.8	5.3	4.1	6.6	0.0	1.5	3.6	1.7	3.3	8.8	7.9
LnGrp Delay(d), s/veh	44.0	27.4	27.8	48.6	35.0	0.0	64.0	23.3	22.2	44.1	25.1	25.7
LnGrp LOS	D	C	C	D	C		E	C	C	D	C	C
Approach Vol, veh/h		975			964			509			1026	
Approach Delay, s/veh		32.1			37.1			26.9			30.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	35.2	13.6	30.6	7.1	41.0	20.2	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	18.0	41.0	8.0	37.0	31.0	28.0
Max Q Clear Time (g_c+I1), s	8.6	9.2	9.6	12.5	4.4	19.0	15.6	15.8
Green Ext Time (p_c), s	0.4	2.5	0.2	4.4	0.0	4.6	0.6	4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.1
HCM 2010 LOS	C

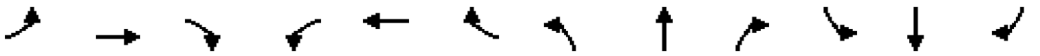


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	570	621	160	1163	0	0	0	0	141	235	312
Future Volume (vph)	0	570	621	160	1163	0	0	0	0	141	235	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.98	0.94	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.95	0.85	1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3235	1380	3502	3610					1715	1682	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3235	1380	3502	3610					1715	1682	1534
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	655	714	184	1337	0	0	0	0	162	270	359
RTOR Reduction (vph)	0	42	213	0	0	0	0	0	0	0	5	27
Lane Group Flow (vph)	0	906	208	184	1337	0	0	0	0	146	338	275
Confl. Peds. (#/hr)	174		24	24		174						
Confl. Bikes (#/hr)			4			31						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		40.6	40.6	10.7	55.3					43.5	43.5	43.5
Effective Green, g (s)		40.6	40.6	10.7	55.3					43.5	43.5	43.5
Actuated g/C Ratio		0.38	0.38	0.10	0.52					0.41	0.41	0.41
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1229	524	350	1869					698	685	624
v/s Ratio Prot		0.28		0.05	c0.37					0.09	c0.20	0.18
v/s Ratio Perm			0.15									
v/c Ratio		0.74	0.40	0.53	0.72					0.21	0.49	0.44
Uniform Delay, d1		28.5	24.2	45.6	19.7					20.5	23.5	22.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		2.3	0.5	1.4	1.3					0.7	2.5	2.3
Delay (s)		30.8	24.7	47.1	21.0					21.2	26.0	25.1
Level of Service		C	C	D	C					C	C	C
Approach Delay (s/veh)		28.9			24.2			0.0			24.8	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	106.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

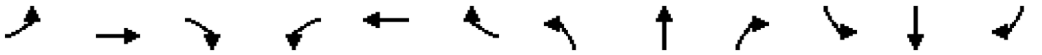
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	760	0	15	833	301	7	5	10	151	1	257
Future Volume (vph)	231	760	0	15	833	301	7	5	10	151	1	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00	0.95	1.00	
Satd. Flow (prot)	3400	5036		1752	5036	1544		1792	1568	1665	1501	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.97	1.00	0.95	1.00	
Satd. Flow (perm)	3400	5036		1752	5036	1544		1792	1568	1665	1501	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	246	809	0	16	886	320	7	5	11	161	1	273
RTOR Reduction (vph)	0	0	0	0	0	203	0	0	9	0	231	0
Lane Group Flow (vph)	246	809	0	16	886	117	0	12	2	145	59	0
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			4			2						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	12.0	37.2		2.4	27.6	27.6		19.5	19.5	13.8	13.8	
Effective Green, g (s)	12.0	37.2		2.4	27.6	27.6		19.5	19.5	13.8	13.8	
Actuated g/C Ratio	0.13	0.42		0.03	0.31	0.31		0.22	0.22	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	458	2107		47	1563	479		393	343	258	233	
v/s Ratio Prot	c0.07	0.16		0.01	c0.18			c0.01		c0.09	0.04	
v/s Ratio Perm						0.08			0.00			
v/c Ratio	0.54	0.38		0.34	0.57	0.24		0.03	0.01	0.56	0.25	
Uniform Delay, d1	35.9	17.9		42.5	25.6	22.9		27.3	27.1	34.8	33.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	0.1		4.3	0.5	0.3		0.1	0.0	2.8	0.6	
Delay (s)	37.1	18.0		46.8	26.1	23.1		27.4	27.2	37.5	33.6	
Level of Service	D	B		D	C	C		C	C	D	C	
Approach Delay (s/veh)		22.5			25.6			27.3			34.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	88.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	209	501	0	0	600	73	723	280	247	0	0	0
Future Volume (vph)	209	501	0	0	600	73	723	280	247	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.96		1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3424		1643	3162	1443			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3424		1643	3162	1443			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	235	563	0	0	674	82	812	315	278	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	2	112	0	0	0
Lane Group Flow (vph)	235	563	0	0	756	0	406	747	138	0	0	0
Confl. Peds. (#/hr)	162		26	26		162			3	3		
Confl. Bikes (#/hr)			9			51			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	12.2	46.6			30.4		52.4	52.4	52.4			
Effective Green, g (s)	12.2	46.6			30.4		52.4	52.4	52.4			
Actuated g/C Ratio	0.11	0.44			0.28		0.49	0.49	0.49			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	399	1572			972		804	1548	706			
v/s Ratio Prot	c0.07	0.16			c0.22		c0.25	0.24				
v/s Ratio Perm									0.10			
v/c Ratio	0.59	0.36			0.78		0.50	0.48	0.20			
Uniform Delay, d1	45.0	20.2			35.2		18.5	18.2	15.4			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	2.2	0.1			4.0		2.3	1.1	0.6			
Delay (s)	47.2	20.3			39.2		20.8	19.3	16.0			
Level of Service	D	C			D		C	B	B			
Approach Delay (s/veh)		28.3			39.2			19.2			0.0	
Approach LOS		C			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	701	0	0	956	541	194	0	347	0	0	0
Future Volume (veh/h)	224	701	0	0	956	541	194	0	347	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1900	1845	0	1845			
Adj Flow Rate, veh/h	241	754	0	0	1028	582	209	0	373			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	305	2772	0	0	1429	652	1292	0	594			
Arrive On Green	0.09	0.55	0.00	0.00	0.43	0.43	0.38	0.00	0.38			
Sat Flow, veh/h	3408	5202	0	0	3523	1532	3408	0	1568			
Grp Volume(v), veh/h	241	754	0	0	1028	582	209	0	373			
Grp Sat Flow(s),veh/h/ln	1704	1679	0	0	1679	1532	1704	0	1568			
Q Serve(g_s), s	7.9	9.0	0.0	0.0	28.8	39.9	4.6	0.0	22.0			
Cycle Q Clear(g_c), s	7.9	9.0	0.0	0.0	28.8	39.9	4.6	0.0	22.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	305	2772	0	0	1429	652	1292	0	594			
V/C Ratio(X)	0.79	0.27	0.00	0.00	0.72	0.89	0.16	0.00	0.63			
Avail Cap(c_a), veh/h	421	3063	0	0	1509	689	1292	0	594			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.6	13.5	0.0	0.0	27.0	30.2	23.3	0.0	28.7			
Incr Delay (d2), s/veh	6.9	0.1	0.0	0.0	1.6	13.5	0.3	0.0	5.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.0	4.1	0.0	0.0	13.6	19.3	2.2	0.0	10.4			
LnGrp Delay(d), s/veh	57.5	13.5	0.0	0.0	28.6	43.7	23.6	0.0	33.7			
LnGrp LOS	E	B			C	D	C		C			
Approach Vol, veh/h		995			1610			582				
Approach Delay, s/veh		24.2			34.0			30.0				
Approach LOS		C			C			C				

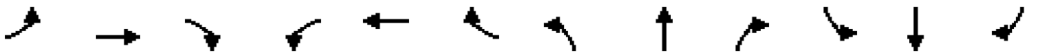
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		47.0		66.4			14.2	52.3
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		43.0		69.0			14.0	51.0
Max Q Clear Time (g_c+I1), s		24.0		11.0			9.9	41.9
Green Ext Time (p_c), s		2.0		5.8			0.3	6.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	1460	437	303	1593	158	416	736	186	163	576	200
Future Volume (veh/h)	223	1460	437	303	1593	158	416	736	186	163	576	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	251	1640	491	340	1790	178	467	827	209	183	647	225
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	308	1848	560	396	1978	600	526	1644	497	243	853	369
Arrive On Green	0.09	0.36	0.36	0.11	0.39	0.39	0.15	0.32	0.32	0.07	0.24	0.24
Sat Flow, veh/h	3476	5136	1556	3476	5136	1558	3476	5136	1553	3476	3574	1545
Grp Volume(v), veh/h	251	1640	491	340	1790	178	467	827	209	183	647	225
Grp Sat Flow(s),veh/h/ln	1738	1712	1556	1738	1712	1558	1738	1712	1553	1738	1787	1545
Q Serve(g_s), s	8.3	35.2	34.6	11.3	38.6	9.3	15.5	15.3	12.4	6.1	19.7	15.2
Cycle Q Clear(g_c), s	8.3	35.2	34.6	11.3	38.6	9.3	15.5	15.3	12.4	6.1	19.7	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	1848	560	396	1978	600	526	1644	497	243	853	369
V/C Ratio(X)	0.82	0.89	0.88	0.86	0.90	0.30	0.89	0.50	0.42	0.75	0.76	0.61
Avail Cap(c_a), veh/h	326	1882	570	415	2013	611	563	1644	497	326	853	369
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	35.3	35.1	51.1	34.0	25.0	48.8	32.3	31.3	53.6	41.5	39.8
Incr Delay (d2), s/veh	14.2	5.5	14.2	15.8	6.2	0.3	15.2	1.1	2.6	6.7	6.3	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	17.7	17.1	6.3	19.4	4.1	8.5	7.4	5.7	3.1	10.4	7.3
LnGrp Delay(d), s/veh	66.7	40.9	49.4	66.9	40.3	25.3	64.1	33.4	33.9	60.3	47.8	47.1
LnGrp LOS	E	D	D	E	D	C	E	C	C	E	D	D
Approach Vol, veh/h		2382			2308			1503			1055	
Approach Delay, s/veh		45.4			43.0			43.0			49.8	
Approach LOS		D			D			D			D	

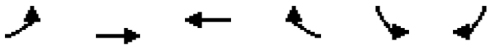
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	41.6	17.4	46.2	21.8	32.0	14.4	49.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	36.0	14.0	43.0	19.0	28.0	11.0	46.0
Max Q Clear Time (g_c+I1), s	8.1	17.3	13.3	37.2	17.5	21.7	10.3	40.6
Green Ext Time (p_c), s	0.2	5.8	0.1	5.0	0.3	2.6	0.1	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	151	19	674	180	329	22	788	644	216	522	66
Future Volume (vph)	69	151	19	674	180	329	22	788	644	216	522	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5023		3285	1683	1594	1805	3610	1578	3502	5086	
Flt Permitted		0.77		0.95	0.69	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3923		3285	1179	1594	1805	3610	1578	3502	5086	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	164	21	733	196	358	24	857	700	235	567	72
RTOR Reduction (vph)	0	8	0	0	0	128	0	0	41	0	13	0
Lane Group Flow (vph)	0	252	0	616	313	230	24	857	659	235	626	0
Confl. Peds. (#/hr)			25	25			1		11	11		1
Confl. Bikes (#/hr)			1			2			2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		19.0		28.0	51.0	51.0	3.0	45.6	73.6	12.1	54.7	
Effective Green, g (s)		19.0		28.0	51.0	51.0	3.0	45.6	73.6	12.1	54.7	
Actuated g/C Ratio		0.16		0.23	0.42	0.42	0.02	0.38	0.61	0.10	0.45	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		617		762	615	673	44	1363	1014	351	2304	
v/s Ratio Prot				c0.19	0.12		0.01	0.24	c0.15	c0.07	0.12	
v/s Ratio Perm		0.06			c0.10	0.14			0.27			
v/c Ratio		0.41		0.81	0.51	0.34	0.55	0.63	0.65	0.67	0.27	
Uniform Delay, d1		45.8		43.8	25.6	23.5	58.2	30.6	15.2	52.4	20.6	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.4		6.3	0.7	0.3	13.1	2.2	1.4	4.8	0.3	
Delay (s)		46.2		50.1	26.3	23.8	71.3	32.9	16.7	57.2	20.9	
Level of Service		D		D	C	C	E	C	B	E	C	
Approach Delay (s/veh)		46.2			37.0			26.3			30.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	120.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	958	1367	0	409	189
Future Volume (veh/h)	0	958	1367	0	409	189
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	1041	1486	0	445	205
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1998	1998	0	974	869
Arrive On Green	0.00	0.39	0.39	0.00	0.54	0.54
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	1041	1486	0	445	205
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	16.1	25.7	0.0	15.7	7.0
Cycle Q Clear(g_c), s	0.0	16.1	25.7	0.0	15.7	7.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1998	1998	0	974	869
V/C Ratio(X)	0.00	0.52	0.74	0.00	0.46	0.24
Avail Cap(c_a), veh/h	0	2791	2791	0	974	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.6	27.6	0.0	14.7	12.7
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	1.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	12.4	0.0	8.2	3.2
LnGrp Delay(d), s/veh	0.0	24.8	28.3	0.0	16.3	13.4
LnGrp LOS		C	C		B	B
Approach Vol, veh/h		1041	1486		650	
Approach Delay, s/veh		24.8	28.3		15.4	
Approach LOS		C	C		B	

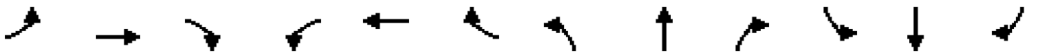
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.1		60.0		44.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s				18.1		17.7		27.7
Green Ext Time (p_c), s				8.4		2.2		12.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1255	0	0	1258	546	860
Future Volume (vph)	1255	0	0	1258	546	860
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.96	1.00
Satd. Flow (prot)	5187			5187	1761	1534
Flt Permitted	1.00			1.00	0.96	1.00
Satd. Flow (perm)	5187			5187	1761	1534
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1321	0	0	1324	575	905
RTOR Reduction (vph)	0	0	0	0	2	2
Lane Group Flow (vph)	1321	0	0	1324	772	704
Confl. Peds. (#/hr)		7	7		5	
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	36.8			36.8	73.1	73.1
Effective Green, g (s)	36.8			36.8	73.1	73.1
Actuated g/C Ratio	0.31			0.31	0.62	0.62
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1619			1619	1091	951
v/s Ratio Prot	0.25			c0.26	0.44	
v/s Ratio Perm						c0.46
v/c Ratio	0.82			0.82	0.71	0.74
Uniform Delay, d1	37.4			37.5	15.2	15.7
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	3.3			3.3	3.9	5.2
Delay (s)	40.7			40.8	19.1	20.9
Level of Service	D			D	B	C
Approach Delay (s/veh)	40.7			40.8	19.9	
Approach LOS	D			D	B	

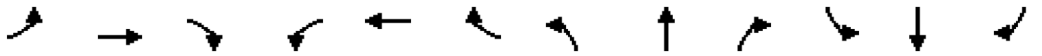
Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	117.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	0	407	0	0	0	0	619	239	314	479	0
Future Volume (vph)	265	0	407	0	0	0	0	619	239	314	479	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.86						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1516						5085	1564	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.39	1.00	
Satd. Flow (perm)	1681	1516						5085	1564	726	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	279	0	428	0	0	0	0	652	252	331	504	0
RTOR Reduction (vph)	0	340	0	0	0	0	0	0	67	0	0	0
Lane Group Flow (vph)	251	116	0	0	0	0	0	652	185	331	504	0
Confl. Peds. (#/hr)							5					5
Confl. Bikes (#/hr)									1			10
Turn Type	Perm	NA						NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4								2	6		
Actuated Green, G (s)	22.5	22.5						84.2	84.2	84.2	84.2	
Effective Green, g (s)	22.5	22.5						84.2	84.2	84.2	84.2	
Actuated g/C Ratio	0.20	0.20						0.73	0.73	0.73	0.73	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	297						3732	1148	532	2597	
v/s Ratio Prot								0.13			0.14	
v/s Ratio Perm	c0.15	0.08							0.12	c0.46		
v/c Ratio	0.76	0.39						0.17	0.16	0.62	0.19	
Uniform Delay, d1	43.6	40.1						4.7	4.6	7.5	4.7	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.0	0.9						0.1	0.3	5.4	0.2	
Delay (s)	53.6	41.0						4.8	4.9	12.9	4.9	
Level of Service	D	D						A	A	B	A	
Approach Delay (s/veh)		45.5			0.0			4.8			8.1	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



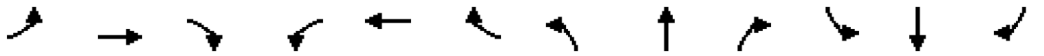
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	179	0	168	360	538	0	0	621	542
Future Volume (vph)	0	0	0	179	0	168	360	538	0	0	621	542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.95
Flpb, ped/bikes				1.00		1.00	0.99	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1736		1553	1720	3471			4988	1479
Flt Permitted				0.95		1.00	0.39	1.00			1.00	1.00
Satd. Flow (perm)				1736		1553	705	3471			4988	1479
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	190	0	179	383	572	0	0	661	577
RTOR Reduction (vph)	0	0	0	0	0	154	0	0	0	0	0	120
Lane Group Flow (vph)	0	0	0	190	0	25	383	572	0	0	661	457
Confl. Peds. (#/hr)							6		2	2		6
Confl. Bikes (#/hr)									1			12
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				16.7		16.7	93.9	93.9			93.9	93.9
Effective Green, g (s)				16.7		16.7	93.9	93.9			93.9	93.9
Actuated g/C Ratio				0.14		0.14	0.79	0.79			0.79	0.79
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				244		218	558	2748			3949	1170
v/s Ratio Prot								0.16			0.13	
v/s Ratio Perm				c0.11		0.02	c0.54					0.31
v/c Ratio				0.78		0.12	0.69	0.21			0.17	0.39
Uniform Delay, d1				49.2		44.5	5.6	3.1			3.0	3.7
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				14.5		0.2	6.7	0.2			0.1	1.0
Delay (s)				63.6		44.7	12.4	3.3			3.1	4.7
Level of Service				E		D	B	A			A	A
Approach Delay (s/veh)		0.0			54.5			6.9			3.8	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	118.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	458	0	305	188	1531	0	0	1197	310
Future Volume (veh/h)	0	0	0	458	0	305	188	1531	0	0	1197	310
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				482	0	321	198	1612	0	0	1260	326
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				541	0	849	266	2226	0	0	2611	789
Arrive On Green				0.30	0.00	0.30	0.08	0.62	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1552
Grp Volume(v), veh/h				482	0	321	198	1612	0	0	1260	326
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1552
Q Serve(g_s), s				27.2	0.0	9.5	5.9	32.9	0.0	0.0	16.9	13.8
Cycle Q Clear(g_c), s				27.2	0.0	9.5	5.9	32.9	0.0	0.0	16.9	13.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				541	0	849	266	2226	0	0	2611	789
V/C Ratio(X)				0.89	0.00	0.38	0.74	0.72	0.00	0.00	0.48	0.41
Avail Cap(c_a), veh/h				778	0	1221	394	2226	0	0	2611	789
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.3	0.0	29.2	47.9	13.7	0.0	0.0	17.0	16.2
Incr Delay (d2), s/veh				9.3	0.0	0.3	4.2	2.1	0.0	0.0	0.6	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.8	0.0	3.7	3.0	16.8	0.0	0.0	8.1	6.2
LnGrp Delay(d), s/veh				44.6	0.0	29.4	52.1	15.8	0.0	0.0	17.6	17.8
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					803			1810			1586	
Approach Delay, s/veh					38.5			19.8			17.7	
Approach LOS					D			B			B	

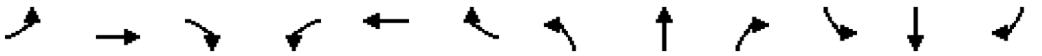
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		70.0			12.1	57.9		36.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		66.0			12.0	50.0		46.0
Max Q Clear Time (g_c+I1), s		34.9			7.9	18.9		29.2
Green Ext Time (p_c), s		15.9			0.2	12.6		2.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	374	0	210	0	0	0	0	1342	567	245	1406	0
Future Volume (vph)	374	0	210	0	0	0	0	1342	567	245	1406	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.98	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1607	1519					5136	1534	3467	3574	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1607	1519					5136	1534	3467	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	382	0	214	0	0	0	0	1369	579	250	1435	0
RTOR Reduction (vph)	0	34	48	0	0	0	0	0	270	0	0	0
Lane Group Flow (vph)	206	170	138	0	0	0	0	1369	309	250	1435	0
Confl. Peds. (#/hr)							6		12	12		6
Confl. Bikes (#/hr)									6			6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	30.0	30.0	30.0					64.1	64.1	13.9	82.0	
Effective Green, g (s)	30.0	30.0	30.0					64.1	64.1	13.9	82.0	
Actuated g/C Ratio	0.25	0.25	0.25					0.53	0.53	0.12	0.68	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	424	401	379					2743	819	401	2442	
v/s Ratio Prot	c0.12	0.11						0.27		0.07	c0.40	
v/s Ratio Perm			0.09						0.20			
v/c Ratio	0.49	0.42	0.36					0.50	0.38	0.62	0.59	
Uniform Delay, d1	38.4	37.8	37.1					17.8	16.3	50.6	10.1	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.7	0.6					0.7	1.3	3.0	1.0	
Delay (s)	39.3	38.5	37.7					18.4	17.6	53.6	11.1	
Level of Service	D	D	D					B	B	D	B	
Approach Delay (s/veh)		38.5			0.0			18.2			17.4	
Approach LOS		D			A			B			B	

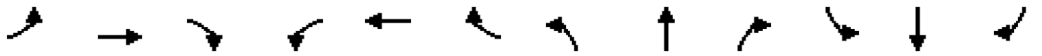
Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	0	292	0	0	0	0	780	257	343	513	0
Future Volume (vph)	127	0	292	0	0	0	0	780	257	343	513	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.86	0.85					0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1456	1504					4852		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1456	1504					4852		3433	5085	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	140	0	321	0	0	0	0	857	282	377	564	0
RTOR Reduction (vph)	0	128	139	0	0	0	0	37	0	0	0	0
Lane Group Flow (vph)	126	40	28	0	0	0	0	1102	0	377	564	0
Confl. Peds. (#/hr)							1		11	11		1
Confl. Bikes (#/hr)									4			3
Turn Type	Prot	NA	Perm					NA		Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	19.0	19.0	19.0					64.7		17.7	86.4	
Effective Green, g (s)	19.0	19.0	19.0					64.7		17.7	86.4	
Actuated g/C Ratio	0.17	0.17	0.17					0.57		0.16	0.76	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	281	243	251					2768		535	3874	
v/s Ratio Prot	c0.07	0.03						c0.23		c0.11	0.11	
v/s Ratio Perm			0.02									
v/c Ratio	0.45	0.16	0.11					0.40		0.70	0.15	
Uniform Delay, d1	42.5	40.4	40.0					13.5		45.4	3.6	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.3	0.2					0.4		4.2	0.1	
Delay (s)	43.6	40.7	40.2					14.0		49.6	3.7	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		41.3			0.0			14.0			22.1	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	181	0	203	322	579	0	0	675	530
Future Volume (vph)	0	0	0	181	0	203	322	579	0	0	675	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.91	0.85	1.00	1.00			0.93	
Flt Protected				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1665	1492	1490	3400	5036			4702	
Flt Permitted				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1665	1492	1490	3400	5036			4702	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	195	0	218	346	623	0	0	726	570
RTOR Reduction (vph)	0	0	0	0	53	106	0	0	0	0	97	0
Lane Group Flow (vph)	0	0	0	144	85	25	346	623	0	0	1199	0
Confl. Peds. (#/hr)							2		12	12		2
Confl. Bikes (#/hr)									4			4
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	0%
Turn Type				Prot	NA	Perm	Prot	NA			NA	
Protected Phases				3	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				22.3	22.3	22.3	17.1	86.3			65.2	
Effective Green, g (s)				22.3	22.3	22.3	17.1	86.3			65.2	
Actuated g/C Ratio				0.19	0.19	0.19	0.15	0.74			0.56	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				318	285	284	498	3727			2629	
v/s Ratio Prot				c0.09	0.06		c0.10	0.12			c0.25	
v/s Ratio Perm						0.02						
v/c Ratio				0.45	0.30	0.09	0.69	0.17			0.46	
Uniform Delay, d1				41.7	40.5	38.8	47.3	4.5			15.2	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.0	0.6	0.1	4.2	0.1			0.6	
Delay (s)				42.8	41.0	38.9	51.5	4.6			15.8	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			41.0			21.3			15.8	
Approach LOS		A			D			C			B	

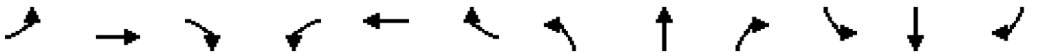
Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	116.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h						
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	1583	-70952	0	1774	5253
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	0	1774	1695
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h						
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h						
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0		0			0
Approach Delay, s/veh	0.0		0.0			0.0
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		0.0				0.0		0.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		55.0				55.0		57.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

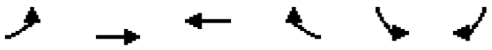
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type							Perm					
Protected Phases		4!			8!			4!			8!	
Permitted Phases	4!			8!			4!					
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	3.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type	Perm			Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

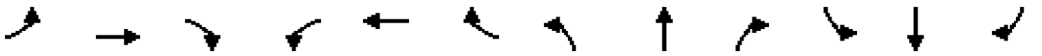
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type			Perm			Perm
Protected Phases	4			8		
Permitted Phases			8			2
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

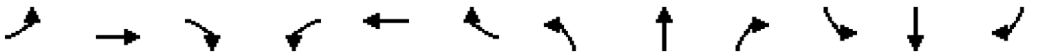
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1710	1676	1676	1676	1676
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	--2147483648	--2147483648	2147483648	2147483648	2147483648	2147483648
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	-65382	0	1597	1676	1597	1425
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1593	0	1597	1676	1597	1425
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	45602443264	1030792151244001288228583692024010926 08				
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	25993393733632	1497439				1012224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0			0	0	
Approach Delay, s/veh	0.0			0.0	0.0	
Approach LOS						

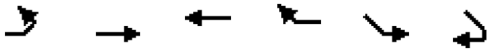
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		0.0		0.0				0.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		55.0		57.0				57.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324	16 0	844525375324	16		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	0	0	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	0	0	0	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	0	0	0	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

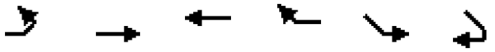
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324	16 0	844525375324	16		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	0	0	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	0	0	0	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	0	0	0	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	400	0	0	0	0	0
Future Volume (veh/h)	400	0	0	0	0	0
Number	4	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1600	0			0	0
Adj No. of Lanes	2	0			0	1
Peak Hour Factor	0.25	0.25			0.25	0.25
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3043	0			0	0
Arrive On Green	0.86	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1600	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	3.3	0.0				
Cycle Q Clear(g_c), s	3.3	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3043	0				
V/C Ratio(X)	0.53	0.00				
Avail Cap(c_a), veh/h	11908	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.5	0.0				
Incr Delay (d2), s/veh	0.1	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	1.4	0.0				
LnGrp Delay(d), s/veh	0.7	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1600					
Approach Delay, s/veh	0.7					
Approach LOS	A					

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				28.5				
Change Period (Y+Rc), s				4.0				
Max Green Setting (Gmax), s				96.0				
Max Q Clear Time (g_c+I1), s				5.3				
Green Ext Time (p_c), s				19.2				

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.7
HCM 2010 LOS	A

NORWALK STATION - 2015 EXISTING AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1126	268	3	1332	404	270	418	0	277	762	1
Future Volume (vph)	0	1126	268	3	1332	404	270	418	0	277	762	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.97		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (prot)		4924		1770	5085	1551	1522	4759		1522	4797	1560
Flt Permitted		1.00		0.11	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (perm)		4924		204	5085	1551	1522	4759		1522	4797	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1251	298	3	1480	449	300	464	0	308	847	1
RTOR Reduction (vph)	0	26	0	0	0	92	0	0	0	0	0	1
Lane Group Flow (vph)	0	1523	0	3	1480	357	186	578	0	277	878	0
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Effective Green, g (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2855		118	2949	899	294	920		223	703	228
v/s Ratio Prot		c0.31			0.29		c0.12	0.12		0.18	c0.18	
v/s Ratio Perm				0.01		0.23						0.00
v/c Ratio		0.53		0.03	0.50	0.40	0.63	0.63		1.24	1.25	0.00
Uniform Delay, d1		19.2		13.4	18.7	17.2	55.6	55.6		64.0	64.0	54.6
Progression Factor		0.92		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		0.1	0.1	0.3	9.9	3.2		141.0	123.7	0.0
Delay (s)		17.6		13.5	18.8	17.5	65.6	58.8		205.0	187.7	54.6
Level of Service		B		B	B	B	E	E		F	F	D
Approach Delay (s/veh)		17.6			18.5			60.4			191.7	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	907	167	69	1148	122	355	603	139	159	457	96
Future Volume (veh/h)	149	907	167	69	1148	122	355	603	139	159	457	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	160	975	180	74	1234	131	382	648	149	171	491	103
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	212	1545	670	230	1437	631	447	1081	431	311	926	367
Arrive On Green	0.07	0.44	0.44	0.04	0.41	0.41	0.13	0.31	0.31	0.09	0.26	0.26
Sat Flow, veh/h	1757	3505	1520	1757	3505	1538	3408	3505	1397	1757	3505	1390
Grp Volume(v), veh/h	160	975	180	74	1234	131	382	648	149	171	491	103
Grp Sat Flow(s),veh/h/ln	1757	1752	1520	1757	1752	1538	1704	1752	1397	1757	1752	1390
Q Serve(g_s), s	6.4	27.3	9.5	3.1	40.6	6.9	13.9	19.8	10.4	8.8	15.2	7.4
Cycle Q Clear(g_c), s	6.4	27.3	9.5	3.1	40.6	6.9	13.9	19.8	10.4	8.8	15.2	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	1545	670	230	1437	631	447	1081	431	311	926	367
V/C Ratio(X)	0.76	0.63	0.27	0.32	0.86	0.21	0.85	0.60	0.35	0.55	0.53	0.28
Avail Cap(c_a), veh/h	314	2023	877	248	1746	766	593	1081	431	381	926	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	27.4	22.4	22.7	34.0	24.1	53.8	37.1	33.9	30.6	39.8	37.0
Incr Delay (d2), s/veh	5.8	0.4	0.2	0.8	3.9	0.2	9.2	2.5	2.2	1.5	2.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	13.2	4.0	1.5	20.3	3.0	7.1	10.0	4.3	4.4	7.6	3.1
LnGrp Delay(d), s/veh	33.8	27.8	22.6	23.5	37.9	24.2	62.9	39.6	36.1	32.1	42.0	38.9
LnGrp LOS	C	C	C	C	D	C	E	D	D	C	D	D
Approach Vol, veh/h		1315			1439			1179			765	
Approach Delay, s/veh		27.8			35.9			46.7			39.4	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	43.0	8.7	59.8	20.6	37.4	12.6	55.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	39.0	6.0	73.0	22.0	33.0	16.0	63.0
Max Q Clear Time (g_c+I1), s	10.8	21.8	5.1	29.3	15.9	17.2	8.4	42.6
Green Ext Time (p_c), s	0.2	4.4	0.0	9.0	0.7	3.1	0.2	9.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	1022	111	137	1071	59	41	516	149	71	425	362
Future Volume (veh/h)	286	1022	111	137	1071	59	41	516	149	71	425	362
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	295	1054	114	141	1104	61	42	532	154	73	438	373
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	331	1898	578	171	1439	443	54	1262	560	120	1278	567
Arrive On Green	0.19	0.37	0.37	0.10	0.28	0.28	0.03	0.36	0.36	0.03	0.36	0.36
Sat Flow, veh/h	1774	5085	1550	1774	5085	1565	1774	3539	1571	3442	3539	1571
Grp Volume(v), veh/h	295	1054	114	141	1104	61	42	532	154	73	438	373
Grp Sat Flow(s),veh/h/ln	1774	1695	1550	1774	1695	1565	1774	1770	1571	1721	1770	1571
Q Serve(g_s), s	18.7	18.9	5.7	9.0	22.9	3.3	2.7	13.1	8.0	2.4	10.4	22.9
Cycle Q Clear(g_c), s	18.7	18.9	5.7	9.0	22.9	3.3	2.7	13.1	8.0	2.4	10.4	22.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	1898	578	171	1439	443	54	1262	560	120	1278	567
V/C Ratio(X)	0.89	0.56	0.20	0.82	0.77	0.14	0.78	0.42	0.27	0.61	0.34	0.66
Avail Cap(c_a), veh/h	632	2830	862	339	1990	612	139	1262	560	209	1278	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	28.5	24.4	51.0	37.8	30.8	55.4	28.0	26.4	54.7	26.8	30.8
Incr Delay (d2), s/veh	8.2	0.3	0.2	9.5	1.2	0.1	21.2	1.0	1.2	4.9	0.7	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	8.8	2.5	4.8	10.9	1.5	1.6	6.6	3.7	1.2	5.2	10.8
LnGrp Delay(d), s/veh	53.9	28.8	24.6	60.5	39.0	30.9	76.6	29.1	27.6	59.6	27.5	36.7
LnGrp LOS	D	C	C	E	D	C	E	C	C	E	C	D
Approach Vol, veh/h		1463			1306			728			884	
Approach Delay, s/veh		33.5			40.9			31.5			34.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	45.0	15.1	46.9	7.5	45.5	25.5	36.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	22.0	64.0	9.0	39.0	41.0	45.0
Max Q Clear Time (g_c+I1), s	4.4	15.1	11.0	20.9	4.7	24.9	20.7	24.9
Green Ext Time (p_c), s	0.0	4.0	0.2	9.3	0.0	3.5	0.8	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	1061	205	95	1421	113	184	612	89	70	503	168
Future Volume (veh/h)	219	1061	205	95	1421	113	184	612	89	70	503	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	231	1117	216	100	1496	119	194	644	94	74	529	177
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	258	2220	680	123	1728	137	221	1075	472	93	821	596
Arrive On Green	0.15	0.45	0.45	0.07	0.37	0.37	0.13	0.31	0.31	0.05	0.24	0.24
Sat Flow, veh/h	1740	4988	1527	1740	4704	374	1740	3471	1525	1740	3471	1545
Grp Volume(v), veh/h	231	1117	216	100	1057	558	194	644	94	74	529	177
Grp Sat Flow(s),veh/h/ln	1740	1663	1527	1740	1663	1753	1740	1736	1525	1740	1736	1545
Q Serve(g_s), s	17.3	21.2	12.1	7.5	39.1	39.1	14.5	20.8	6.0	5.6	18.2	10.5
Cycle Q Clear(g_c), s	17.3	21.2	12.1	7.5	39.1	39.1	14.5	20.8	6.0	5.6	18.2	10.5
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	2220	680	123	1221	644	221	1075	472	93	821	596
V/C Ratio(X)	0.89	0.50	0.32	0.81	0.87	0.87	0.88	0.60	0.20	0.79	0.64	0.30
Avail Cap(c_a), veh/h	368	2486	761	197	1331	702	315	1075	472	158	821	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	26.3	23.7	60.7	38.9	38.9	56.8	38.7	33.6	61.9	45.5	28.3
Incr Delay (d2), s/veh	17.8	0.2	0.3	12.7	5.9	10.5	17.8	2.5	0.9	13.8	3.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	9.8	5.1	4.0	18.9	20.8	8.1	10.3	2.6	3.0	9.2	4.7
LnGrp Delay(d), s/veh	73.2	26.4	24.0	73.3	44.7	49.3	74.6	41.2	34.6	75.7	49.4	29.5
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		1564			1715			932			780	
Approach Delay, s/veh		33.0			47.9			47.5			47.4	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	45.0	13.3	62.9	20.8	35.3	23.7	52.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	41.0	15.0	66.0	24.0	29.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	7.6	22.8	9.5	23.2	16.5	20.2	19.3	41.1
Green Ext Time (p_c), s	0.0	4.1	0.1	10.3	0.3	2.5	0.4	7.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	798	161	153	1106	58	179	597	114	70	519	92
Future Volume (veh/h)	168	798	161	153	1106	58	179	597	114	70	519	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	191	907	183	174	1257	66	203	678	130	80	590	105
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	229	1460	641	294	1438	632	325	1164	519	250	984	433
Arrive On Green	0.08	0.42	0.42	0.07	0.41	0.41	0.10	0.34	0.34	0.05	0.28	0.28
Sat Flow, veh/h	1740	3471	1523	1740	3471	1526	1740	3471	1547	1740	3471	1527
Grp Volume(v), veh/h	191	907	183	174	1257	66	203	678	130	80	590	105
Grp Sat Flow(s),veh/h/ln	1740	1736	1523	1740	1736	1526	1740	1736	1547	1740	1736	1527
Q Serve(g_s), s	8.0	26.3	10.1	7.3	42.7	3.4	10.2	20.7	7.8	4.1	18.8	6.8
Cycle Q Clear(g_c), s	8.0	26.3	10.1	7.3	42.7	3.4	10.2	20.7	7.8	4.1	18.8	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	1460	641	294	1438	632	325	1164	519	250	984	433
V/C Ratio(X)	0.83	0.62	0.29	0.59	0.87	0.10	0.62	0.58	0.25	0.32	0.60	0.24
Avail Cap(c_a), veh/h	347	1813	796	369	1705	749	400	1164	519	293	984	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	29.1	24.5	22.5	34.5	23.0	28.8	35.2	30.9	31.2	39.7	35.4
Incr Delay (d2), s/veh	10.3	0.4	0.2	1.9	4.7	0.1	2.1	2.1	1.2	0.7	2.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	12.7	4.3	3.6	21.4	1.4	5.0	10.2	3.5	2.0	9.4	3.0
LnGrp Delay(d), s/veh	38.7	29.6	24.7	24.4	39.2	23.1	30.9	37.4	32.1	31.9	42.4	36.7
LnGrp LOS	D	C	C	C	D	C	C	D	C	C	D	D
Approach Vol, veh/h		1281			1497			1011			775	
Approach Delay, s/veh		30.2			36.8			35.4			40.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	47.0	13.5	58.0	16.5	40.3	14.3	57.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	15.0	67.0	18.0	34.0	19.0	63.0
Max Q Clear Time (g_c+I1), s	6.1	22.7	9.3	28.3	12.2	20.8	10.0	44.7
Green Ext Time (p_c), s	0.0	4.7	0.2	8.0	0.3	3.3	0.3	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	849	185	166	1171	52	99	820	161	137	799	153
Future Volume (veh/h)	194	849	185	166	1171	52	99	820	161	137	799	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	204	894	195	175	1233	55	104	863	169	144	841	161
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	232	1558	471	202	1472	445	128	1245	724	170	1909	580
Arrive On Green	0.13	0.31	0.31	0.12	0.29	0.29	0.07	0.36	0.36	0.10	0.38	0.38
Sat Flow, veh/h	1757	5036	1523	1757	5036	1521	1757	3505	1531	1757	5036	1531
Grp Volume(v), veh/h	204	894	195	175	1233	55	104	863	169	144	841	161
Grp Sat Flow(s),veh/h/ln	1757	1679	1523	1757	1679	1521	1757	1752	1531	1757	1679	1531
Q Serve(g_s), s	14.8	19.3	13.1	12.7	29.7	3.4	7.6	27.3	8.5	10.4	16.1	9.5
Cycle Q Clear(g_c), s	14.8	19.3	13.1	12.7	29.7	3.4	7.6	27.3	8.5	10.4	16.1	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	1558	471	202	1472	445	128	1245	724	170	1909	580
V/C Ratio(X)	0.88	0.57	0.41	0.86	0.84	0.12	0.81	0.69	0.23	0.85	0.44	0.28
Avail Cap(c_a), veh/h	353	1788	541	312	1672	505	217	1245	724	258	1909	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	37.6	35.4	56.3	42.9	33.6	59.2	35.7	20.4	57.5	30.0	27.9
Incr Delay (d2), s/veh	15.0	0.3	0.6	14.3	3.5	0.1	11.6	3.2	0.8	14.8	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	9.0	5.6	7.0	14.3	1.5	4.1	13.7	3.7	5.8	7.6	4.2
LnGrp Delay(d), s/veh	70.2	37.9	36.0	70.6	46.5	33.8	70.8	38.9	21.2	72.3	30.7	29.1
LnGrp LOS	E	D	D	E	D	C	E	D	C	E	C	C
Approach Vol, veh/h		1293			1463			1136			1146	
Approach Delay, s/veh		42.7			48.9			39.2			35.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	50.0	18.9	44.1	13.4	53.1	21.1	41.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	23.0	46.0	16.0	49.0	26.0	43.0
Max Q Clear Time (g_c+I1), s	12.4	29.3	14.7	21.3	9.6	18.1	16.8	31.7
Green Ext Time (p_c), s	0.2	6.0	0.3	7.1	0.1	6.9	0.4	6.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	776	137	33	1252	170	82	580	80	53	607	231
Future Volume (veh/h)	175	776	137	33	1252	170	82	580	80	53	607	231
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	184	817	144	35	1318	179	86	611	84	56	639	243
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	214	2158	661	44	1672	512	261	1577	696	305	1577	695
Arrive On Green	0.12	0.43	0.43	0.03	0.33	0.33	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1757	5036	1543	1757	5036	1542	621	3505	1546	739	3505	1546
Grp Volume(v), veh/h	184	817	144	35	1318	179	86	611	84	56	639	243
Grp Sat Flow(s),veh/h/ln	1757	1679	1543	1757	1679	1542	621	1752	1546	739	1752	1546
Q Serve(g_s), s	12.8	13.8	7.3	2.5	29.5	10.9	13.5	14.5	3.9	6.8	15.3	12.8
Cycle Q Clear(g_c), s	12.8	13.8	7.3	2.5	29.5	10.9	28.7	14.5	3.9	21.3	15.3	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	214	2158	661	44	1672	512	261	1577	696	305	1577	695
V/C Ratio(X)	0.86	0.38	0.22	0.79	0.79	0.35	0.33	0.39	0.12	0.18	0.41	0.35
Avail Cap(c_a), veh/h	409	3034	930	99	2144	656	261	1577	696	305	1577	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	24.3	22.4	60.3	37.6	31.4	32.7	22.8	19.9	29.9	23.0	22.4
Incr Delay (d2), s/veh	9.7	0.1	0.2	25.9	1.6	0.4	3.4	0.7	0.4	1.3	0.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	6.4	3.2	1.5	13.9	4.7	2.6	7.1	1.7	1.5	7.5	5.7
LnGrp Delay(d), s/veh	63.3	24.4	22.6	86.2	39.2	31.8	36.1	23.5	20.3	31.2	23.8	23.7
LnGrp LOS	E	C	C	F	D	C	D	C	C	C	C	C
Approach Vol, veh/h		1145			1532			781			938	
Approach Delay, s/veh		30.4			39.4			24.6			24.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	7.1	57.3		60.0	19.2	45.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	7.0	75.0		56.0	29.0	53.0
Max Q Clear Time (g_c+I1), s		30.7	4.5	15.8		23.3	14.8	31.5
Green Ext Time (p_c), s		5.1	0.0	6.7		5.8	0.4	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	752	121	191	1138	60	78	650	95	52	600	99
Future Volume (veh/h)	139	752	121	191	1138	60	78	650	95	52	600	99
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	148	800	129	203	1211	64	83	691	101	55	638	105
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	175	1300	574	232	1414	624	247	1410	622	229	1410	621
Arrive On Green	0.10	0.37	0.37	0.13	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1757	3505	1546	1757	3505	1547	707	3505	1545	675	3505	1544
Grp Volume(v), veh/h	148	800	129	203	1211	64	83	691	101	55	638	105
Grp Sat Flow(s),veh/h/ln	1757	1752	1546	1757	1752	1547	707	1752	1545	675	1752	1544
Q Serve(g_s), s	10.5	23.6	7.3	14.4	39.9	3.3	12.3	18.6	5.3	8.4	16.9	5.5
Cycle Q Clear(g_c), s	10.5	23.6	7.3	14.4	39.9	3.3	29.2	18.6	5.3	27.0	16.9	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	1300	574	232	1414	624	247	1410	622	229	1410	621
V/C Ratio(X)	0.84	0.62	0.22	0.87	0.86	0.10	0.34	0.49	0.16	0.24	0.45	0.17
Avail Cap(c_a), veh/h	291	1659	732	374	1825	805	247	1410	622	229	1410	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	32.5	27.4	54.0	34.5	23.5	38.4	28.2	24.2	38.2	27.7	24.3
Incr Delay (d2), s/veh	11.1	0.5	0.2	12.6	3.4	0.1	3.6	1.2	0.6	2.5	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	11.5	3.1	7.8	20.0	1.4	2.6	9.3	2.4	1.7	8.4	2.5
LnGrp Delay(d), s/veh	67.2	33.0	27.6	66.5	37.9	23.6	42.0	29.4	24.8	40.7	28.7	24.9
LnGrp LOS	E	C	C	E	D	C	D	C	C	D	C	C
Approach Vol, veh/h		1077			1478			875			798	
Approach Delay, s/veh		37.0			41.2			30.1			29.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.0	20.7	51.0		55.0	16.6	55.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		51.0	27.0	60.0		51.0	21.0	66.0
Max Q Clear Time (g_c+I1), s		31.2	16.4	25.6		29.0	12.5	41.9
Green Ext Time (p_c), s		5.2	0.4	6.2		4.8	0.2	9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	151	109	85	372	29	67	708	50	86	714	87
Future Volume (veh/h)	95	151	109	85	372	29	67	708	50	86	714	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	104	166	120	93	409	32	74	778	55	95	785	96
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	187	608	509	341	608	516	364	2127	928	379	2127	928
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	935	1845	1547	1078	1845	1567	621	3505	1529	650	3505	1530
Grp Volume(v), veh/h	104	166	120	93	409	32	74	778	55	95	785	96
Grp Sat Flow(s),veh/h/ln	935	1845	1547	1078	1845	1567	621	1752	1529	650	1752	1530
Q Serve(g_s), s	13.5	8.3	7.1	8.7	23.9	1.8	8.6	14.1	1.8	10.8	14.2	3.3
Cycle Q Clear(g_c), s	37.4	8.3	7.1	17.0	23.9	1.8	22.8	14.1	1.8	24.9	14.2	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	608	509	341	608	516	364	2127	928	379	2127	928
V/C Ratio(X)	0.56	0.27	0.24	0.27	0.67	0.06	0.20	0.37	0.06	0.25	0.37	0.10
Avail Cap(c_a), veh/h	372	972	815	554	972	825	364	2127	928	379	2127	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	31.0	30.5	37.2	36.2	28.8	18.3	12.4	10.0	18.7	12.5	10.3
Incr Delay (d2), s/veh	2.6	0.2	0.2	0.4	1.3	0.0	1.3	0.5	0.1	1.6	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	4.3	3.0	2.6	12.4	0.8	1.6	7.0	0.8	2.1	7.0	1.4
LnGrp Delay(d), s/veh	54.9	31.2	30.8	37.7	37.5	28.8	19.5	12.9	10.2	20.3	13.0	10.6
LnGrp LOS	D	C	C	D	D	C	B	B	B	C	B	B
Approach Vol, veh/h		390			534			907			976	
Approach Delay, s/veh		37.4			37.0			13.3			13.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		45.2		80.0		45.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		66.0		76.0		66.0
Max Q Clear Time (g_c+I1), s		24.8		39.4		26.9		25.9
Green Ext Time (p_c), s		6.9		1.8		7.4		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

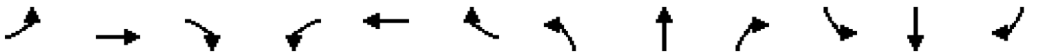
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	835	55	220	1341	103	81	783	278	72	448	184
Future Volume (veh/h)	131	835	55	220	1341	103	81	783	278	72	448	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	147	938	62	247	1507	116	91	880	312	81	503	207
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	172	1541	457	274	1732	133	113	1275	557	101	1252	554
Arrive On Green	0.10	0.31	0.31	0.16	0.36	0.36	0.06	0.36	0.36	0.06	0.36	0.36
Sat Flow, veh/h	1757	5036	1494	1757	4752	366	1757	3505	1532	1757	3505	1551
Grp Volume(v), veh/h	147	938	62	247	1064	559	91	880	312	81	503	207
Grp Sat Flow(s),veh/h/ln	1757	1679	1494	1757	1679	1761	1757	1752	1532	1757	1752	1551
Q Serve(g_s), s	11.3	21.8	4.1	19.0	40.6	40.6	7.0	29.3	22.4	6.3	14.8	13.6
Cycle Q Clear(g_c), s	11.3	21.8	4.1	19.0	40.6	40.6	7.0	29.3	22.4	6.3	14.8	13.6
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	1541	457	274	1224	642	113	1275	557	101	1252	554
V/C Ratio(X)	0.86	0.61	0.14	0.90	0.87	0.87	0.81	0.69	0.56	0.80	0.40	0.37
Avail Cap(c_a), veh/h	243	1541	457	396	1319	692	192	1275	557	141	1252	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	40.7	34.5	56.9	40.6	40.7	63.5	37.1	34.9	64.0	33.2	32.8
Incr Delay (d2), s/veh	18.5	0.7	0.1	17.5	6.2	11.1	12.6	3.1	4.0	19.6	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	10.3	1.7	10.5	19.8	21.7	3.8	14.7	10.1	3.6	7.4	6.1
LnGrp Delay(d), s/veh	79.5	41.4	34.7	74.4	46.9	51.7	76.0	40.2	39.0	83.6	34.1	34.7
LnGrp LOS	E	D	C	E	D	D	E	D	D	F	C	C
Approach Vol, veh/h		1147			1870			1283			791	
Approach Delay, s/veh		45.9			51.9			42.5			39.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	54.0	25.5	46.1	12.8	53.1	17.4	54.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	50.0	31.0	42.0	15.0	46.0	19.0	54.0
Max Q Clear Time (g_c+I1), s	8.3	31.3	21.0	23.8	9.0	16.8	13.3	42.6
Green Ext Time (p_c), s	0.0	6.8	0.5	6.2	0.1	3.9	0.2	7.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	5	1087	50	87	1633	0	22	0	9	3	0	2
Future Volume (vph)	5	1087	50	87	1633	0	22	0	9	3	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	
Frt		0.99		1.00	1.00		1.00		0.85		0.95	
Flt Protected		1.00		0.95	1.00		0.95		1.00		0.97	
Satd. Flow (prot)		4993		1752	5036		1752		1539		1711	
Flt Permitted		0.93		0.13	1.00		0.75		1.00		0.97	
Satd. Flow (perm)		4647		232	5036		1392		1539		1711	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	5	1182	54	95	1775	0	24	0	10	3	0	2
RTOR Reduction (vph)	0	5	0	0	0	0	0	0	7	0	3	0
Lane Group Flow (vph)	0	1236	0	95	1775	0	24	0	3	0	2	0
Confl. Peds. (#/hr)			10	10					5			
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	2%	3%	3%	3%	3%	2%	3%	2%	3%	2%	2%	2%
Turn Type	Perm	NA		pm+pt	NA		Perm		Perm	Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		29.0		38.8	38.8		22.2		22.2		22.2	
Effective Green, g (s)		29.0		38.8	38.8		22.2		22.2		22.2	
Actuated g/C Ratio		0.42		0.56	0.56		0.32		0.32		0.32	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)		1953		258	2831		447		495		550	
v/s Ratio Prot				0.03	c0.35							
v/s Ratio Perm		0.27		0.18			c0.02		0.00		0.00	
v/c Ratio		0.63		0.37	0.63		0.05		0.01		0.00	
Uniform Delay, d1		15.8		8.7	10.2		16.2		15.9		15.9	
Progression Factor		1.00		1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2		0.7		0.9	0.4		0.2		0.0		0.0	
Delay (s)		16.5		9.6	10.6		16.4		15.9		15.9	
Level of Service		B		A	B		B		B		B	
Approach Delay (s/veh)		16.5			10.6			16.2			15.9	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	69.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1135	59	23	1641	1	43	0	14	0	0	0
Future Volume (vph)	0	1135	59	23	1641	1	43	0	14	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.91		1.00	0.91		0.95	0.91	0.95			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		1.00	1.00		0.99	0.99	1.00			
Frt		0.99		1.00	1.00		1.00	0.99	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		4936		1735	4987		1637	1560	1475			
Flt Permitted		1.00		0.13	1.00		0.76	0.85	1.00			
Satd. Flow (perm)		4936		229	4987		1305	1388	1475			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1261	66	26	1823	1	48	0	16	0	0	0
RTOR Reduction (vph)	0	7	0	0	0	0	0	17	9	0	0	0
Lane Group Flow (vph)	0	1320	0	26	1824	0	25	8	5	0	0	0
Confl. Peds. (#/hr)	3		12	12		3	5					5
Confl. Bikes (#/hr)			14			4						1
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		36.0		42.3	42.3		24.2	24.2	24.2			
Effective Green, g (s)		36.0		42.3	42.3		24.2	24.2	24.2			
Actuated g/C Ratio		0.48		0.57	0.57		0.32	0.32	0.32			
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2385		176	2831		423	450	479			
v/s Ratio Prot		0.27		0.00	c0.37							
v/s Ratio Perm				0.08			c0.02	0.01	0.00			
v/c Ratio		0.55		0.15	0.64		0.06	0.02	0.01			
Uniform Delay, d1		13.6		8.5	11.0		17.3	17.1	17.0			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.3		0.4	0.5		0.3	0.1	0.0			
Delay (s)		13.9		8.9	11.5		17.6	17.2	17.1			
Level of Service		B		A	B		B	B	B			
Approach Delay (s/veh)		13.9			11.4			17.3			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	614	120	68	1261	70	153	496	60	19	447	49
Future Volume (veh/h)	119	614	120	68	1261	70	153	496	60	19	447	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	128	660	129	73	1356	75	165	533	65	20	481	53
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	2161	954	406	2161	953	237	1184	522	226	1074	118
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	372	3539	1562	684	3539	1561	867	3539	1559	817	3211	352
Grp Volume(v), veh/h	128	660	129	73	1356	75	165	533	65	20	264	270
Grp Sat Flow(s),veh/h/ln	372	1770	1562	684	1770	1561	867	1770	1559	817	1770	1794
Q Serve(g_s), s	48.4	13.1	5.1	8.4	35.4	2.9	27.0	17.3	4.2	2.9	17.1	17.3
Cycle Q Clear(g_c), s	83.8	13.1	5.1	21.4	35.4	2.9	44.2	17.3	4.2	20.2	17.1	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	187	2161	954	406	2161	953	237	1184	522	226	592	600
V/C Ratio(X)	0.69	0.31	0.14	0.18	0.63	0.08	0.70	0.45	0.12	0.09	0.45	0.45
Avail Cap(c_a), veh/h	196	2248	992	423	2248	992	237	1184	522	226	592	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	13.6	12.1	18.8	18.0	11.7	55.5	38.2	33.8	46.0	38.1	38.1
Incr Delay (d2), s/veh	9.1	0.1	0.1	0.2	0.5	0.0	15.6	1.2	0.5	0.8	2.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	6.3	2.2	1.6	17.3	1.2	7.5	8.6	1.9	0.7	8.8	8.9
LnGrp Delay(d), s/veh	53.5	13.7	12.2	19.0	18.5	11.7	71.1	39.4	34.3	46.8	40.5	40.6
LnGrp LOS	D	B	B	B	B	B	E	D	C	D	D	D
Approach Vol, veh/h		917			1504			763			554	
Approach Delay, s/veh		19.1			18.2			45.8			40.8	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		93.4		53.0		93.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		46.2		85.8		22.2		37.4
Green Ext Time (p_c), s		1.2		3.6		3.2		15.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	948	57	16	1498	148	54	39	14	210	57	135
Future Volume (veh/h)	110	948	57	16	1498	148	54	39	14	210	57	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	115	988	59	17	1560	154	56	41	15	219	59	141
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	141	2415	144	25	2006	198	394	437	364	543	576	481
Arrive On Green	0.08	0.50	0.50	0.01	0.44	0.44	0.03	0.24	0.24	0.11	0.32	0.32
Sat Flow, veh/h	1740	4805	286	1740	4602	454	1740	1827	1519	1740	1827	1523
Grp Volume(v), veh/h	115	683	364	17	1127	587	56	41	15	219	59	141
Grp Sat Flow(s),veh/h/ln	1740	1663	1766	1740	1663	1731	1740	1827	1519	1740	1827	1523
Q Serve(g_s), s	7.8	15.5	15.5	1.2	34.8	34.9	2.9	2.1	0.9	11.0	2.8	8.4
Cycle Q Clear(g_c), s	7.8	15.5	15.5	1.2	34.8	34.9	2.9	2.1	0.9	11.0	2.8	8.4
Prop In Lane	1.00		0.16	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	1672	888	25	1449	754	394	437	364	543	576	481
V/C Ratio(X)	0.81	0.41	0.41	0.68	0.78	0.78	0.14	0.09	0.04	0.40	0.10	0.29
Avail Cap(c_a), veh/h	289	2374	1261	72	1960	1021	407	437	364	653	576	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	18.7	18.8	59.1	29.0	29.0	32.8	35.6	35.2	27.7	29.2	31.1
Incr Delay (d2), s/veh	10.6	0.2	0.3	27.5	1.4	2.7	0.2	0.4	0.2	0.5	0.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	7.2	7.7	0.8	16.2	17.2	1.4	1.1	0.4	5.3	1.5	3.7
LnGrp Delay(d), s/veh	65.0	18.9	19.1	86.6	30.4	31.7	33.0	36.1	35.4	28.2	29.5	32.6
LnGrp LOS	E	B	B	F	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1162			1731			112			419	
Approach Delay, s/veh		23.5			31.4			34.4			29.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	32.8	5.7	64.5	8.2	42.0	13.8	56.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	22.0	5.0	86.0	5.0	38.0	20.0	71.0
Max Q Clear Time (g_c+I1), s	13.0	4.1	3.2	17.5	4.9	10.4	9.8	36.9
Green Ext Time (p_c), s	0.4	0.2	0.0	8.3	0.0	0.7	0.2	15.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	949	115	44	1100	10	110	19	15	16	59	566
Future Volume (veh/h)	184	949	115	44	1100	10	110	19	15	16	59	566
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	190	978	119	45	1134	10	113	20	15	16	61	584
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	264	1565	190	57	1546	14	442	921	781	736	921	1374
Arrive On Green	0.08	0.35	0.35	0.03	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	3375	4491	545	1740	5099	45	766	1827	1548	1338	1827	2725
Grp Volume(v), veh/h	190	723	374	45	739	405	113	20	15	16	61	584
Grp Sat Flow(s),veh/h/ln	1688	1663	1711	1740	1663	1819	766	1827	1548	1338	1827	1362
Q Serve(g_s), s	5.8	19.0	19.1	2.7	20.9	20.9	9.3	0.6	0.5	0.6	1.8	14.2
Cycle Q Clear(g_c), s	5.8	19.0	19.1	2.7	20.9	20.9	11.1	0.6	0.5	1.2	1.8	14.2
Prop In Lane	1.00		0.32	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	1159	596	57	1008	551	442	921	781	736	921	1374
V/C Ratio(X)	0.72	0.62	0.63	0.78	0.73	0.73	0.26	0.02	0.02	0.02	0.07	0.42
Avail Cap(c_a), veh/h	707	2215	1140	248	1993	1090	442	921	781	736	921	1374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	28.5	28.5	50.4	32.8	32.8	16.2	13.1	13.0	13.4	13.4	16.4
Incr Delay (d2), s/veh	3.7	0.6	1.1	20.4	1.1	1.9	1.4	0.0	0.0	0.1	0.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	8.8	9.2	1.6	9.7	10.7	2.1	0.3	0.2	0.2	0.9	5.5
LnGrp Delay(d), s/veh	51.0	29.1	29.6	70.8	33.9	34.7	17.6	13.1	13.1	13.4	13.5	17.4
LnGrp LOS	D	C	C	E	C	C	B	B	B	B	B	B
Approach Vol, veh/h		1287			1189			148			661	
Approach Delay, s/veh		32.5			35.6			16.5			16.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	7.5	40.6		57.0	12.2	35.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	15.0	70.0		53.0	22.0	63.0
Max Q Clear Time (g_c+I1), s		13.1	4.7	21.1		16.2	7.8	22.9
Green Ext Time (p_c), s		1.0	0.0	8.8		2.9	0.5	8.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	224	558	19	189	646	104	82	542	99	76	1383	183
Future Volume (veh/h)	224	558	19	189	646	104	82	542	99	76	1383	183
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	233	581	20	197	673	108	85	565	103	79	1441	191
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	1110	491	225	1036	452	107	1646	294	100	1705	226
Arrive On Green	0.15	0.31	0.31	0.13	0.29	0.29	0.06	0.38	0.38	0.06	0.38	0.38
Sat Flow, veh/h	1774	3539	1565	1774	3539	1544	1774	4322	772	1774	4521	599
Grp Volume(v), veh/h	233	581	20	197	673	108	85	441	227	79	1080	552
Grp Sat Flow(s),veh/h/ln	1774	1770	1565	1774	1770	1544	1774	1695	1704	1774	1695	1729
Q Serve(g_s), s	16.9	17.6	1.2	14.3	21.7	7.0	6.2	12.1	12.5	5.8	38.1	38.2
Cycle Q Clear(g_c), s	16.9	17.6	1.2	14.3	21.7	7.0	6.2	12.1	12.5	5.8	38.1	38.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.35
Lane Grp Cap(c), veh/h	262	1110	491	225	1036	452	107	1291	649	100	1278	652
V/C Ratio(X)	0.89	0.52	0.04	0.87	0.65	0.24	0.80	0.34	0.35	0.79	0.85	0.85
Avail Cap(c_a), veh/h	393	1110	491	353	1036	452	163	1400	703	176	1426	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	36.9	31.2	56.1	40.4	35.2	60.7	28.8	28.9	60.9	37.2	37.3
Incr Delay (d2), s/veh	15.3	1.8	0.2	13.8	3.2	1.2	14.4	0.2	0.3	12.9	4.5	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	8.9	0.5	7.9	11.0	3.1	3.5	5.7	5.9	3.2	18.7	19.8
LnGrp Delay(d), s/veh	70.0	38.6	31.4	69.8	43.5	36.4	75.1	29.0	29.2	73.9	41.7	45.7
LnGrp LOS	E	D	C	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		834			978			753			1711	
Approach Delay, s/veh		47.2			48.0			34.3			44.5	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	45.0	11.4	53.8	23.3	42.3	11.9	53.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	41.0	13.0	54.0	29.0	38.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	16.3	19.6	7.8	14.5	18.9	23.7	8.2	40.2
Green Ext Time (p_c), s	0.4	3.9	0.1	4.6	0.5	4.2	0.0	9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	445	75	105	1296	24	200	623	91	37	692	105
Future Volume (veh/h)	104	445	75	105	1296	24	200	623	91	37	692	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	108	464	78	109	1350	25	208	649	95	39	721	109
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	1477	648	132	1481	658	298	1319	579	256	1068	460
Arrive On Green	0.07	0.42	0.42	0.07	0.42	0.42	0.09	0.37	0.37	0.02	0.30	0.30
Sat Flow, veh/h	1774	3539	1553	1774	3539	1573	1774	3539	1553	1774	3539	1525
Grp Volume(v), veh/h	108	464	78	109	1350	25	208	649	95	39	721	109
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1573	1774	1770	1553	1774	1770	1525
Q Serve(g_s), s	8.5	12.5	4.4	8.6	51.0	1.3	11.1	20.0	5.8	2.2	25.4	7.6
Cycle Q Clear(g_c), s	8.5	12.5	4.4	8.6	51.0	1.3	11.1	20.0	5.8	2.2	25.4	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	1477	648	132	1481	658	298	1319	579	256	1068	460
V/C Ratio(X)	0.83	0.31	0.12	0.83	0.91	0.04	0.70	0.49	0.16	0.15	0.67	0.24
Avail Cap(c_a), veh/h	162	1493	655	212	1593	708	344	1319	579	265	1068	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	27.8	25.4	64.9	38.9	24.4	31.9	34.3	29.8	33.5	43.5	37.3
Incr Delay (d2), s/veh	24.3	0.1	0.1	13.2	8.0	0.0	5.1	1.3	0.6	0.3	3.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	6.1	1.9	4.7	26.6	0.6	5.8	10.1	2.6	1.1	12.9	3.4
LnGrp Delay(d), s/veh	89.3	27.9	25.5	78.1	46.8	24.5	37.0	35.6	30.4	33.8	46.9	38.5
LnGrp LOS	F	C	C	E	D	C	D	D	C	C	D	D
Approach Vol, veh/h		650			1484			952			869	
Approach Delay, s/veh		37.8			48.8			35.4			45.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	57.0	14.6	63.4	17.3	46.9	14.4	63.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	53.0	17.0	60.0	17.0	40.0	13.0	64.0
Max Q Clear Time (g_c+I1), s	4.2	22.0	10.6	14.5	13.1	27.4	10.5	53.0
Green Ext Time (p_c), s	0.0	5.1	0.1	3.4	0.2	4.2	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	184	13	288	570	46	23	628	126	107	700	42
Future Volume (veh/h)	25	184	13	288	570	46	23	628	126	107	700	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	196	14	306	606	49	24	668	134	114	745	45
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	1239	547	425	1239	547	383	2062	909	389	2062	908
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	775	3539	1562	1166	3539	1562	683	3539	1560	676	3539	1559
Grp Volume(v), veh/h	27	196	14	306	606	49	24	668	134	114	745	45
Grp Sat Flow(s),veh/h/ln	775	1770	1562	1166	1770	1562	683	1770	1560	676	1770	1559
Q Serve(g_s), s	3.4	4.5	0.7	29.0	15.9	2.5	2.3	11.5	4.6	12.4	13.2	1.5
Cycle Q Clear(g_c), s	19.3	4.5	0.7	33.5	15.9	2.5	15.5	11.5	4.6	23.9	13.2	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	1239	547	425	1239	547	383	2062	909	389	2062	908
V/C Ratio(X)	0.12	0.16	0.03	0.72	0.49	0.09	0.06	0.32	0.15	0.29	0.36	0.05
Avail Cap(c_a), veh/h	434	2181	963	735	2181	963	383	2062	909	389	2062	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	26.5	25.3	38.0	30.2	25.8	17.2	12.7	11.3	18.9	13.1	10.6
Incr Delay (d2), s/veh	0.2	0.1	0.0	2.3	0.3	0.1	0.3	0.4	0.3	1.9	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.2	0.3	9.6	7.8	1.1	0.5	5.7	2.1	2.5	6.6	0.7
LnGrp Delay(d), s/veh	38.0	26.6	25.3	40.3	30.5	25.9	17.5	13.1	11.6	20.8	13.6	10.7
LnGrp LOS	D	C	C	D	C	C	B	B	B	C	B	B
Approach Vol, veh/h		237			961			826			904	
Approach Delay, s/veh		27.8			33.4			13.0			14.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		45.5		73.0		45.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		17.5		21.3		25.9		35.5
Green Ext Time (p_c), s		6.0		1.5		7.4		6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	775	138	147	987	50	177	664	67	90	869	26
Future Volume (veh/h)	61	775	138	147	987	50	177	664	67	90	869	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	66	842	150	160	1073	54	192	722	73	98	945	28
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	84	1004	178	186	1434	72	336	1753	773	377	1651	728
Arrive On Green	0.05	0.23	0.23	0.11	0.29	0.29	0.07	0.50	0.50	0.04	0.47	0.47
Sat Flow, veh/h	1757	4291	759	1757	4910	247	1757	3505	1547	1757	3505	1546
Grp Volume(v), veh/h	66	658	334	160	733	394	192	722	73	98	945	28
Grp Sat Flow(s),veh/h/ln	1757	1679	1693	1757	1679	1800	1757	1752	1547	1757	1752	1546
Q Serve(g_s), s	5.1	25.4	25.6	12.2	26.9	27.0	7.4	17.6	3.4	3.9	26.6	1.3
Cycle Q Clear(g_c), s	5.1	25.4	25.6	12.2	26.9	27.0	7.4	17.6	3.4	3.9	26.6	1.3
Prop In Lane	1.00		0.45	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	84	786	396	186	980	525	336	1753	773	377	1651	728
V/C Ratio(X)	0.78	0.84	0.84	0.86	0.75	0.75	0.57	0.41	0.09	0.26	0.57	0.04
Avail Cap(c_a), veh/h	155	914	461	297	1185	635	456	1753	773	380	1651	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	49.6	49.7	59.8	43.6	43.6	19.5	21.4	17.8	17.9	26.0	19.4
Incr Delay (d2), s/veh	14.6	6.1	12.0	13.5	2.2	4.0	1.5	0.7	0.2	0.4	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	12.4	13.3	6.6	12.7	13.9	3.7	8.7	1.5	1.9	13.2	0.6
LnGrp Delay(d), s/veh	78.7	55.7	61.7	73.3	45.8	47.6	21.0	22.1	18.1	18.2	27.5	19.5
LnGrp LOS	E	E	E	E	D	D	C	C	B	B	C	B
Approach Vol, veh/h		1058			1287			987			1071	
Approach Delay, s/veh		59.0			49.8			21.6			26.4	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	72.0	18.4	35.8	13.7	68.0	10.5	43.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	68.0	23.0	37.0	19.0	55.0	12.0	48.0
Max Q Clear Time (g_c+I1), s	5.9	19.6	14.2	27.6	9.4	28.6	7.1	29.0
Green Ext Time (p_c), s	0.0	5.4	0.2	4.2	0.3	7.4	0.0	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	21	414	162	136	1095	128	76	596	22	354	1142	47
Future Volume (veh/h)	21	414	162	136	1095	128	76	596	22	354	1142	47
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	22	436	171	143	1153	135	80	627	0	373	1202	49
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1279	569	387	1305	152	101	1201	0	404	2038	83
Arrive On Green	0.02	0.36	0.36	0.06	0.40	0.40	0.06	0.23	0.00	0.23	0.40	0.40
Sat Flow, veh/h	1792	3574	1591	1792	3223	377	1792	5305	0	1792	5061	206
Grp Volume(v), veh/h	22	436	171	143	638	650	80	627	0	373	813	438
Grp Sat Flow(s),veh/h/ln	1792	1787	1591	1792	1787	1813	1792	1712	0	1792	1712	1843
Q Serve(g_s), s	1.0	12.0	10.4	6.6	44.3	44.6	5.9	14.3	0.0	27.3	24.9	24.9
Cycle Q Clear(g_c), s	1.0	12.0	10.4	6.6	44.3	44.6	5.9	14.3	0.0	27.3	24.9	24.9
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.00	1.00		0.11
Lane Grp Cap(c), veh/h	115	1279	569	387	723	734	101	1201	0	404	1379	742
V/C Ratio(X)	0.19	0.34	0.30	0.37	0.88	0.89	0.79	0.52	0.00	0.92	0.59	0.59
Avail Cap(c_a), veh/h	138	1546	688	394	840	852	174	1201	0	561	1379	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	31.5	31.0	24.0	36.9	37.0	62.5	44.8	0.0	50.8	31.3	31.4
Incr Delay (d2), s/veh	0.8	0.2	0.3	0.6	9.8	10.0	12.8	1.6	0.0	17.1	1.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.9	4.6	3.3	23.8	24.2	3.3	6.9	0.0	15.4	12.1	13.4
LnGrp Delay(d), s/veh	33.1	31.6	31.3	24.6	46.8	47.0	75.3	46.4	0.0	67.9	33.2	34.8
LnGrp LOS	C	C	C	C	D	D	E	D		E	C	C
Approach Vol, veh/h		629			1431			707			1624	
Approach Delay, s/veh		31.6			44.7			49.7			41.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	58.0	12.5	52.0	34.2	35.4	6.2	58.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	9.0	58.0	42.0	25.0	4.0	63.0
Max Q Clear Time (g_c+I1), s	7.9	26.9	8.6	14.0	29.3	16.3	3.0	46.6
Green Ext Time (p_c), s	0.1	8.8	0.0	3.5	0.9	2.5	0.0	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1220	100	50	1100	610	610	190	20	0	0	0
Future Volume (veh/h)	120	1220	100	50	1100	610	610	190	20	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	130	1326	109	54	1196	663	663	207	22			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	176	2400	197	69	2486	774	670	668	598			
Arrive On Green	0.05	0.50	0.50	0.04	0.49	0.49	0.38	0.38	0.38			
Sat Flow, veh/h	3442	4790	394	1774	5085	1583	1774	1770	1583			
Grp Volume(v), veh/h	130	939	496	54	1196	663	663	207	22			
Grp Sat Flow(s),veh/h/ln	1721	1695	1793	1774	1695	1583	1774	1770	1583			
Q Serve(g_s), s	5.4	27.8	27.8	4.4	22.9	53.6	54.1	12.0	1.3			
Cycle Q Clear(g_c), s	5.4	27.8	27.8	4.4	22.9	53.6	54.1	12.0	1.3			
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	176	1699	898	69	2486	774	670	668	598			
V/C Ratio(X)	0.74	0.55	0.55	0.78	0.48	0.86	0.99	0.31	0.04			
Avail Cap(c_a), veh/h	236	1699	898	122	2548	793	670	668	598			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	68.1	25.1	25.1	69.4	24.9	32.7	45.1	32.0	28.6			
Incr Delay (d2), s/veh	7.9	1.3	2.4	16.9	0.1	9.0	32.2	0.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.8	13.3	14.4	2.5	10.8	25.3	32.5	5.9	0.6			
LnGrp Delay(d), s/veh	76.1	26.4	27.5	86.2	25.0	41.8	77.2	32.2	28.7			
LnGrp LOS	E	C	C	F	C	D	E	C	C			
Approach Vol, veh/h		1565			1913			892				
Approach Delay, s/veh		30.9			32.6			65.6				
Approach LOS		C			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.7	77.0			11.5	75.2		59.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	73.0			10.0	73.0		55.0
Max Q Clear Time (g_c+I1), s	6.4	29.8			7.4	55.6		56.1
Green Ext Time (p_c), s	0.0	12.8			0.1	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	970	90	130	1710	0	0	0	0	350	10	10
Future Volume (vph)	0	970	90	130	1710	0	0	0	0	350	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3237	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3237	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1054	98	141	1859	0	0	0	0	380	11	11
RTOR Reduction (vph)	0	0	31	0	0	0	0	0	0	0	0	9
Lane Group Flow (vph)	0	1054	67	141	1859	0	0	0	0	190	201	2
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		84.7	84.7	10.5	99.2					20.3	20.3	20.3
Effective Green, g (s)		84.7	84.7	10.5	99.2					20.3	20.3	20.3
Actuated g/C Ratio		0.66	0.66	0.08	0.78					0.16	0.16	0.16
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		3378	1051	282	3956					256	515	252
v/s Ratio Prot		0.21		0.04	c0.37					c0.12	0.06	
v/s Ratio Perm			0.04									0.00
v/c Ratio		0.31	0.06	0.50	0.47					0.74	0.39	0.01
Uniform Delay, d1		9.1	7.5	56.0	5.0					51.1	48.1	45.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0	1.4	0.4					11.0	0.5	0.0
Delay (s)		9.1	7.5	57.4	5.4					62.1	48.5	45.1
Level of Service		A	A	E	A					E	D	D
Approach Delay (s/veh)		9.0			9.0			0.0			54.9	
Approach LOS		A			A			A			D	

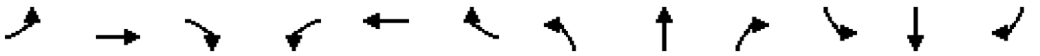
Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	127.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	30	20	650	560	180	600	0	0	940	20
Future Volume (veh/h)	40	0	30	20	650	560	180	600	0	0	940	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	33	22	707	609	196	652	0	0	1022	22
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	45	1526	686	257	2543	0	0	2008	43
Arrive On Green	0.00	0.00	0.00	0.43	0.43	0.43	0.07	0.50	0.00	0.00	0.39	0.39
Sat Flow, veh/h		0		105	3522	1583	3442	5253	0	0	5291	110
Grp Volume(v), veh/h		0.0		391	338	609	196	652	0	0	676	368
Grp Sat Flow(s),veh/h/ln				1858	1770	1583	1721	1695	0	0	1695	1843
Q Serve(g_s), s				18.1	16.1	42.5	6.7	8.8	0.0	0.0	18.2	18.2
Cycle Q Clear(g_c), s				18.1	16.1	42.5	6.7	8.8	0.0	0.0	18.2	18.2
Prop In Lane				0.06		1.00	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h				805	767	686	257	2543	0	0	1329	722
V/C Ratio(X)				0.49	0.44	0.89	0.76	0.26	0.00	0.00	0.51	0.51
Avail Cap(c_a), veh/h				1068	1017	910	402	2543	0	0	1329	722
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				24.4	23.8	31.3	54.5	17.2	0.0	0.0	27.7	27.7
Incr Delay (d2), s/veh				0.5	0.4	8.5	4.6	0.2	0.0	0.0	1.4	2.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.3	7.9	20.1	3.4	4.2	0.0	0.0	8.7	9.7
LnGrp Delay(d), s/veh				24.8	24.2	39.8	59.1	17.5	0.0	0.0	29.1	30.3
LnGrp LOS				C	C	D	E	B			C	C
Approach Vol, veh/h					1338			848			1044	
Approach Delay, s/veh					31.5			27.1			29.5	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		64.0			13.0	51.0		56.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		60.0			14.0	42.0		69.0
Max Q Clear Time (g_c+I1), s		10.8			8.7	20.2		44.5
Green Ext Time (p_c), s		5.0			0.3	7.0		7.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	90	0	0	0	0	690	170	380	600	0
Future Volume (vph)	20	10	90	0	0	0	0	690	170	380	600	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.88	0.85					0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2975	1441					4934		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2975	1441					4934		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	11	98	0	0	0	0	750	185	413	652	0
RTOR Reduction (vph)	0	47	47	0	0	0	0	16	0	0	0	0
Lane Group Flow (vph)	22	13	2	0	0	0	0	919	0	413	652	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	6.2	6.2	6.2					100.0		22.2	126.2	
Effective Green, g (s)	6.2	6.2	6.2					100.0		22.2	126.2	
Actuated g/C Ratio	0.04	0.04	0.04					0.71		0.16	0.90	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	78	131	63					3514		542	4570	
v/s Ratio Prot	c0.01	0.00						c0.19		c0.12	0.13	
v/s Ratio Perm			0.00									
v/c Ratio	0.28	0.10	0.03					0.26		0.76	0.14	
Uniform Delay, d1	64.9	64.4	64.2					7.1		56.6	0.8	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	2.0	0.3	0.2					0.2		6.3	0.1	
Delay (s)	66.9	64.8	64.5					7.3		62.8	0.9	
Level of Service	E	E	E					A		E	A	
Approach Delay (s/veh)		65.0			0.0			7.3			24.9	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	140.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	614	167	59	1369	36	185	395	35	29	360	46
Future Volume (veh/h)	107	614	167	59	1369	36	185	395	35	29	360	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	111	640	174	61	1426	38	193	411	36	30	375	48
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	189	2159	576	360	2760	74	347	1268	111	337	1217	155
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	357	3945	1053	662	5042	134	951	3258	284	930	3128	398
Grp Volume(v), veh/h	111	543	271	61	950	514	193	220	227	30	209	214
Grp Sat Flow(s),veh/h/ln	357	1679	1641	662	1679	1819	951	1752	1790	930	1752	1774
Q Serve(g_s), s	35.8	11.0	11.3	6.9	22.5	22.5	22.3	11.1	11.2	2.9	10.4	10.6
Cycle Q Clear(g_c), s	58.3	11.0	11.3	18.2	22.5	22.5	32.8	11.1	11.2	14.1	10.4	10.6
Prop In Lane	1.00		0.64	1.00		0.07	1.00		0.16	1.00		0.22
Lane Grp Cap(c), veh/h	189	1838	898	360	1838	996	347	682	696	337	682	690
V/C Ratio(X)	0.59	0.30	0.30	0.17	0.52	0.52	0.56	0.32	0.33	0.09	0.31	0.31
Avail Cap(c_a), veh/h	257	2479	1212	486	2479	1343	347	682	696	337	682	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	15.4	15.5	20.4	18.0	18.0	38.1	26.9	26.9	31.8	26.7	26.7
Incr Delay (d2), s/veh	2.9	0.1	0.2	0.2	0.2	0.4	6.3	1.3	1.2	0.5	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	5.1	5.2	1.3	10.5	11.4	6.4	5.6	5.8	0.8	5.3	5.4
LnGrp Delay(d), s/veh	39.3	15.5	15.6	20.6	18.2	18.4	44.4	28.1	28.1	32.4	27.8	27.9
LnGrp LOS	D	B	B	C	B	B	D	C	C	C	C	C
Approach Vol, veh/h		925			1525			640			453	
Approach Delay, s/veh		18.4			18.4			33.0			28.2	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		72.9		53.0		72.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		34.8		60.3		16.1		24.5
Green Ext Time (p_c), s		3.0		8.6		2.6		15.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	61	35	186	48	238	18	557	137	130	361	92
Future Volume (veh/h)	121	61	35	186	48	238	18	557	137	130	361	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	130	66	38	200	52	256	19	599	147	140	388	99
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	128	66	255	60	278	509	1551	380	366	1964	863
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	560	335	174	563	157	731	901	2796	684	712	3539	1556
Grp Volume(v), veh/h	234	0	0	508	0	0	19	379	367	140	388	99
Grp Sat Flow(s),veh/h/ln	1069	0	0	1451	0	0	901	1770	1710	712	1770	1556
Q Serve(g_s), s	0.0	0.0	0.0	19.9	0.0	0.0	1.3	15.1	15.1	17.3	6.8	3.8
Cycle Q Clear(g_c), s	21.7	0.0	0.0	41.6	0.0	0.0	8.2	15.1	15.1	32.4	6.8	3.8
Prop In Lane	0.56		0.16	0.39		0.50	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	452	0	0	593	0	0	509	982	949	366	1964	863
V/C Ratio(X)	0.52	0.00	0.00	0.86	0.00	0.00	0.04	0.39	0.39	0.38	0.20	0.11
Avail Cap(c_a), veh/h	718	0	0	896	0	0	509	982	949	366	1964	863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	0.0	36.8	0.0	0.0	15.9	15.7	15.7	24.9	13.8	13.2
Incr Delay (d2), s/veh	0.9	0.0	0.0	5.4	0.0	0.0	0.1	1.1	1.2	3.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	0.0	17.5	0.0	0.0	0.4	7.7	7.5	3.7	3.4	1.7
LnGrp Delay(d), s/veh	31.0	0.0	0.0	42.2	0.0	0.0	16.0	16.8	16.9	27.9	14.1	13.4
LnGrp LOS	C			D			B	B	B	C	B	B
Approach Vol, veh/h		234			508			765			627	
Approach Delay, s/veh		31.0			42.2			16.8			17.1	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		51.4		73.0		51.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		17.1		23.7		34.4		43.6
Green Ext Time (p_c), s		5.2		1.9		4.2		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	180	16	73	275	130	44	935	160	90	960	43
Future Volume (veh/h)	29	180	16	73	275	130	44	935	160	90	960	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	32	196	17	79	299	141	48	1016	174	98	1043	47
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	50	251	20	169	442	374	347	2452	1071	323	2452	1072
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	81	1047	84	1152	1845	1560	510	3505	1531	464	3505	1531
Grp Volume(v), veh/h	245	0	0	79	299	141	48	1016	174	98	1043	47
Grp Sat Flow(s),veh/h/ln	1212	0	0	1152	1845	1560	510	1752	1531	464	1752	1531
Q Serve(g_s), s	7.8	0.0	0.0	0.0	19.3	9.9	5.8	16.1	5.1	14.9	16.7	1.3
Cycle Q Clear(g_c), s	27.1	0.0	0.0	27.2	19.3	9.9	22.6	16.1	5.1	31.0	16.7	1.3
Prop In Lane	0.13		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	0	0	169	442	374	347	2452	1071	323	2452	1072
V/C Ratio(X)	0.76	0.00	0.00	0.47	0.68	0.38	0.14	0.41	0.16	0.30	0.43	0.04
Avail Cap(c_a), veh/h	549	0	0	331	701	593	347	2452	1071	323	2452	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	0.0	0.0	48.4	45.4	41.8	13.3	8.3	6.7	14.9	8.4	6.1
Incr Delay (d2), s/veh	3.8	0.0	0.0	2.0	1.8	0.6	0.8	0.5	0.3	2.4	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.0	0.0	2.9	10.1	4.3	0.9	7.9	2.2	2.1	8.2	0.5
LnGrp Delay(d), s/veh	51.0	0.0	0.0	50.4	47.2	42.4	14.1	8.9	7.0	17.3	9.0	6.2
LnGrp LOS	D			D	D	D	B	A	A	B	A	A
Approach Vol, veh/h		245			519			1238			1188	
Approach Delay, s/veh		51.0			46.4			8.8			9.6	
Approach LOS		D			D			A			A	

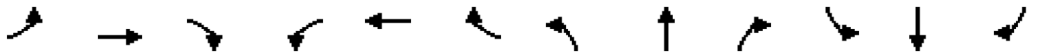
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		35.5		96.0		35.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		24.6		29.1		33.0		29.2
Green Ext Time (p_c), s		10.9		1.4		11.9		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	870	330	1010	580	0	0	0	0	250	0	510
Future Volume (veh/h)	0	870	330	1010	580	0	0	0	0	250	0	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	946	359	1098	630	0	0	0	0	272	0	554
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	689	261	1159	1958	0	0	731	0	1449	0	622
Arrive On Green	0.00	0.19	0.19	0.34	0.55	0.00	0.00	0.00	0.00	0.39	0.00	0.39
Sat Flow, veh/h	0	3801	1377	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	883	422	1098	630	0	0	0	0	272	0	554
Grp Sat Flow(s),veh/h/ln	0	1695	1620	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	28.0	28.0	45.9	14.3	0.0	0.0	0.0	0.0	7.7	0.0	48.3
Cycle Q Clear(g_c), s	0.0	28.0	28.0	45.9	14.3	0.0	0.0	0.0	0.0	7.7	0.0	48.3
Prop In Lane	0.00		0.85	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	642	307	1159	1958	0	0	731	0	1449	0	622
V/C Ratio(X)	0.00	1.37	1.38	0.95	0.32	0.00	0.00	0.00	0.00	0.19	0.00	0.89
Avail Cap(c_a), veh/h	0	642	307	1211	2012	0	0	731	0	1449	0	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	59.9	59.9	47.7	17.9	0.0	0.0	0.0	0.0	29.6	0.0	41.9
Incr Delay (d2), s/veh	0.0	178.0	188.4	14.7	0.1	0.0	0.0	0.0	0.0	0.3	0.0	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	28.9	28.5	24.2	7.0	0.0	0.0	0.0	0.0	3.7	0.0	24.1
LnGrp Delay(d), s/veh	0.0	237.8	248.3	62.5	18.0	0.0	0.0	0.0	0.0	29.9	0.0	59.4
LnGrp LOS		F	F	E	B					C		E
Approach Vol, veh/h		1305			1728			0			826	
Approach Delay, s/veh		241.2			46.3			0.0			49.7	
Approach LOS		F			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		62.0	53.7	32.0		62.0		85.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0	52.0	28.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		0.0	47.9	30.0		50.3		16.3
Green Ext Time (p_c), s		0.0	1.8	0.0		2.9		4.6

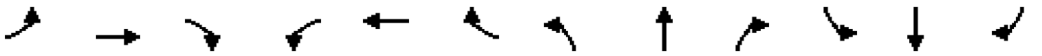
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	112.9
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	880	230	220	1360	10	230	10	210	10	10	10
Future Volume (vph)	10	880	230	220	1360	10	230	10	210	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3377	1441	3433	3535		1681	1692	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.69	1.00	0.67	1.00	
Satd. Flow (perm)	1770	3377	1441	3433	3535		1681	1223	2787	1246	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	957	250	239	1478	11	250	11	228	11	11	11
RTOR Reduction (vph)	0	1	135	0	0	0	0	0	142	0	9	0
Lane Group Flow (vph)	11	981	90	239	1489	0	130	131	86	11	13	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	0.7	44.4	44.4	13.0	56.7		13.7	41.7	41.7	24.0	24.0	
Effective Green, g (s)	0.7	44.4	44.4	13.0	56.7		13.7	41.7	41.7	24.0	24.0	
Actuated g/C Ratio	0.01	0.40	0.40	0.12	0.51		0.12	0.38	0.38	0.22	0.22	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	11	1349	575	401	1804		207	516	1046	269	372	
v/s Ratio Prot	0.01	0.29		c0.07	c0.42		c0.08	0.03			0.01	
v/s Ratio Perm			0.06					c0.06	0.03	0.01		
v/c Ratio	1.00	0.73	0.16	0.60	0.83		0.63	0.25	0.08	0.04	0.04	
Uniform Delay, d1	55.2	28.2	21.4	46.6	23.0		46.3	24.0	22.4	34.4	34.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	271.4	2.0	0.1	2.4	3.2		5.8	0.3	0.2	0.3	0.2	
Delay (s)	326.6	30.2	21.5	48.9	26.2		52.1	24.2	22.5	34.7	34.6	
Level of Service	F	C	C	D	C		D	C	C	C	C	
Approach Delay (s/veh)		31.3			29.4			30.8			34.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	10	10	10	10	10	590	380	10	10	230	220
Future Volume (vph)	70	10	10	10	10	10	590	380	10	10	230	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.97			0.98		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1664			1750		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.88			0.91		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1506			1610		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	11	11	11	11	11	641	413	11	11	250	239
RTOR Reduction (vph)	0	7	0	0	10	0	0	0	3	0	0	157
Lane Group Flow (vph)	49	42	0	0	23	0	641	413	8	11	250	82
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	7.8	23.9			12.1		53.9	99.7	99.7	1.5	47.3	47.3
Effective Green, g (s)	7.8	23.9			12.1		53.9	99.7	99.7	1.5	47.3	47.3
Actuated g/C Ratio	0.06	0.17			0.09		0.39	0.73	0.73	0.01	0.35	0.35
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	95	271			142		695	2573	1151	19	1220	546
v/s Ratio Prot	c0.03	0.01					c0.36	0.12		0.01	c0.07	
v/s Ratio Perm		c0.02			0.01				0.01			0.05
v/c Ratio	0.52	0.16			0.16		0.92	0.16	0.01	0.58	0.20	0.15
Uniform Delay, d1	62.8	48.0			57.8		39.6	5.8	5.1	67.5	31.6	31.0
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.7	0.3			0.5		17.8	0.1	0.0	36.3	0.4	0.6
Delay (s)	67.5	48.3			58.3		57.4	5.9	5.1	103.8	32.0	31.6
Level of Service	E	D			E		E	A	A	F	C	C
Approach Delay (s/veh)		57.9			58.3			36.9			33.4	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	137.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1050	40	120	1460	170	110	10	240	0	0	0
Future Volume (veh/h)	110	1050	40	120	1460	170	110	10	240	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	120	1141	43	130	1587	185	120	11	261			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	170	2217	84	155	2391	1070	304	28	295			
Arrive On Green	0.05	0.64	0.64	0.09	0.68	0.68	0.19	0.19	0.19			
Sat Flow, veh/h	3442	3478	131	1774	3539	1583	1632	150	1583			
Grp Volume(v), veh/h	120	580	604	130	1587	185	131	0	261			
Grp Sat Flow(s),veh/h/ln	1721	1770	1840	1774	1770	1583	1781	0	1583			
Q Serve(g_s), s	4.6	23.8	23.9	9.7	35.5	5.8	8.7	0.0	21.6			
Cycle Q Clear(g_c), s	4.6	23.8	23.9	9.7	35.5	5.8	8.7	0.0	21.6			
Prop In Lane	1.00		0.07	1.00		1.00	0.92		1.00			
Lane Grp Cap(c), veh/h	170	1128	1172	155	2391	1070	331	0	295			
V/C Ratio(X)	0.71	0.51	0.51	0.84	0.66	0.17	0.40	0.00	0.89			
Avail Cap(c_a), veh/h	255	1128	1172	250	2391	1070	489	0	435			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.1	13.2	13.2	60.5	12.9	8.0	48.2	0.0	53.4			
Incr Delay (d2), s/veh	5.3	1.7	1.6	12.6	1.5	0.4	0.8	0.0	13.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.3	12.1	12.6	5.3	17.7	2.6	4.4	0.0	10.6			
LnGrp Delay(d), s/veh	68.4	14.9	14.8	73.1	14.3	8.4	48.9	0.0	67.4			
LnGrp LOS	E	B	B	E	B	A	D		E			
Approach Vol, veh/h		1304			1902			392				
Approach Delay, s/veh		19.8			17.8			61.2				
Approach LOS		B			B			E				

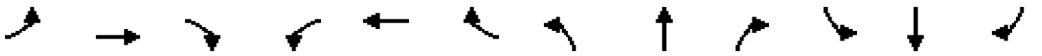
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	15.8	89.9			10.6	95.0		29.1
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	19.0	82.0			10.0	91.0		37.0
Max Q Clear Time (g_c+I1), s	11.7	25.9			6.6	37.5		23.6
Green Ext Time (p_c), s	0.2	9.7			0.1	19.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1280	0	0	1470	720	280	10	160	0	0	0
Future Volume (veh/h)	10	1280	0	0	1470	720	280	10	160	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	11	1391	0	0	1598	783	304	11	174			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	35	3792	0	0	3586	1117	343	360	306			
Arrive On Green	0.01	0.75	0.00	0.00	0.71	0.71	0.19	0.19	0.19			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	11	1391	0	0	1598	783	304	11	174			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	0.4	12.6	0.0	0.0	17.7	37.9	21.9	0.6	13.1			
Cycle Q Clear(g_c), s	0.4	12.6	0.0	0.0	17.7	37.9	21.9	0.6	13.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	35	3792	0	0	3586	1117	343	360	306			
V/C Ratio(X)	0.32	0.37	0.00	0.00	0.45	0.70	0.89	0.03	0.57			
Avail Cap(c_a), veh/h	105	3792	0	0	3586	1117	594	624	530			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	64.6	5.8	0.0	0.0	8.3	11.3	51.6	43.0	48.0			
Incr Delay (d2), s/veh	5.1	0.3	0.0	0.0	0.4	3.7	8.2	0.0	1.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	5.9	0.0	0.0	8.4	17.5	11.5	0.3	5.8			
LnGrp Delay(d), s/veh	69.7	6.1	0.0	0.0	8.7	15.0	59.8	43.0	49.7			
LnGrp LOS	E	A			A	B	E	D	D			
Approach Vol, veh/h		1402			2381			489				
Approach Delay, s/veh		6.6			10.8			55.9				
Approach LOS		A			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		102.0			5.3	96.7		29.4
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		98.0			4.0	90.0		44.0
Max Q Clear Time (g_c+I1), s		14.6			2.4	39.9		23.9
Green Ext Time (p_c), s		14.2			0.0	25.2		1.5

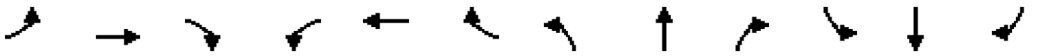
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1020	90	10	1830	210	20	10	300	10	10	360
Future Volume (vph)	340	1020	90	10	1830	210	20	10	300	10	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5023		1770	5007		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5023		1770	5007		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	1109	98	11	1989	228	22	11	326	11	11	391
RTOR Reduction (vph)	0	4	0	0	7	0	0	0	258	0	0	323
Lane Group Flow (vph)	370	1203	0	11	2210	0	22	11	68	11	11	68
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	16.9	81.6		0.7	65.4		10.4	10.4	10.4	2.5	2.5	19.4
Effective Green, g (s)	16.9	81.6		0.7	65.4		10.4	10.4	10.4	2.5	2.5	19.4
Actuated g/C Ratio	0.15	0.73		0.01	0.59		0.09	0.09	0.09	0.02	0.02	0.17
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	521	3685		11	2944		165	174	148	39	41	486
v/s Ratio Prot	c0.11	0.24		0.01	c0.44		0.01	0.01		c0.01	0.01	0.02
v/s Ratio Perm									c0.04			0.00
v/c Ratio	0.71	0.33		1.00	0.75		0.13	0.06	0.46	0.28	0.27	0.14
Uniform Delay, d1	44.8	5.2		55.3	16.9		46.3	46.0	47.7	53.5	53.5	38.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	0.2		271.4	1.8		0.4	0.2	2.2	3.9	3.5	0.1
Delay (s)	49.4	5.4		326.6	18.7		46.6	46.1	50.0	57.4	57.0	39.0
Level of Service	D	A		F	B		D	D	D	E	E	D
Approach Delay (s/veh)		15.7			20.2			49.6			39.9	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



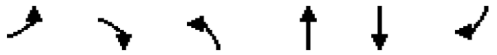
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	1187	0	8	1179	616	8	13	9	64	4	252
Future Volume (vph)	204	1187	0	8	1179	616	8	13	9	64	4	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.98	0.85		0.96			0.91	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1764	4682	1333		1767			1583	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1764	4682	1333		1767			1583	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	212	1236	0	8	1228	642	8	14	9	67	4	262
RTOR Reduction (vph)	0	0	0	0	14	225	0	8	0	0	36	141
Lane Group Flow (vph)	213	1236	0	8	1432	199	0	23	0	0	135	22
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	20.2	73.3		0.6	53.7	53.7		13.6			15.8	15.8
Effective Green, g (s)	20.2	73.3		0.6	53.7	53.7		13.6			15.8	15.8
Actuated g/C Ratio	0.17	0.61		0.01	0.45	0.45		0.11			0.13	0.13
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	299	3124		8	2107	600		201			209	199
v/s Ratio Prot	c0.12	0.24		0.00	c0.31			c0.01			c0.09	
v/s Ratio Perm						0.15						0.01
v/c Ratio	0.71	0.40		1.00	0.68	0.33		0.11			0.65	0.11
Uniform Delay, d1	46.8	11.7		59.4	26.0	21.2		47.4			49.1	45.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	7.8	0.1		318.2	0.9	0.3		1.2			6.8	0.2
Delay (s)	54.6	11.8		377.5	26.9	21.5		48.6			55.9	45.8
Level of Service	D	B		F	C	C		D			E	D
Approach Delay (s/veh)		18.1			27.2			48.6			50.9	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	119.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	991	228	179	1432	33	310	133	270	19	30	33
Future Volume (vph)	90	991	228	179	1432	33	310	133	270	19	30	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99	0.95	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00		1.00	0.97	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	4877		1752	5015		1665	1591	1408	1665	1747	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	4877		1752	5015		1665	1591	1408	1665	1747	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1043	240	188	1507	35	326	140	284	20	32	35
RTOR Reduction (vph)	0	25	0	0	2	0	0	5	154	0	0	33
Lane Group Flow (vph)	95	1258	0	188	1540	0	258	254	79	18	34	2
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.4	44.4		19.7	51.7		45.4	45.4	45.4	8.1	8.1	8.1
Effective Green, g (s)	12.4	44.4		19.7	51.7		45.4	45.4	45.4	8.1	8.1	8.1
Actuated g/C Ratio	0.09	0.33		0.15	0.39		0.34	0.34	0.34	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	162	1620		258	1940		565	540	478	100	105	95
v/s Ratio Prot	0.05	0.26		c0.11	c0.31		0.15	c0.16		0.01	c0.02	
v/s Ratio Perm									0.06			0.00
v/c Ratio	0.59	0.78		0.73	0.79		0.46	0.47	0.17	0.18	0.32	0.02
Uniform Delay, d1	58.1	40.1		54.4	36.2		34.5	34.6	30.9	59.6	60.1	59.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	2.4		9.8	2.3		2.6	2.9	0.7	3.9	8.0	0.4
Delay (s)	63.5	42.5		64.2	38.6		37.1	37.6	31.6	63.5	68.1	59.5
Level of Service	E	D		E	D		D	D	C	E	E	E
Approach Delay (s/veh)		44.0			41.3			35.6			63.7	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	133.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	373	384	191	148	443	256
Future Volume (veh/h)	373	384	191	148	443	256
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	424	0	217	168	503	291
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	523	241	253	2709	2075	908
Arrive On Green	0.15	0.00	0.14	0.77	0.59	0.59
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	424	0	217	168	503	291
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	13.1	0.0	13.1	1.2	7.4	10.4
Cycle Q Clear(g_c), s	13.1	0.0	13.1	1.2	7.4	10.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	523	241	253	2709	2075	908
V/C Ratio(X)	0.81	0.00	0.86	0.06	0.24	0.32
Avail Cap(c_a), veh/h	1819	837	614	2709	2075	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	45.4	2.9	10.6	11.2
Incr Delay (d2), s/veh	3.1	0.0	8.1	0.0	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	7.0	0.6	3.6	4.6
LnGrp Delay(d), s/veh	47.6	0.0	53.6	3.0	10.8	12.1
LnGrp LOS	D		D	A	B	B
Approach Vol, veh/h	424			385	794	
Approach Delay, s/veh	47.6			31.5	11.3	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		88.0		20.7	19.7	68.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		84.0		58.0	38.0	42.0		
Max Q Clear Time (g_c+I1), s		3.2		15.1	15.1	12.4		
Green Ext Time (p_c), s		1.1		1.6	0.6	4.6		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.7
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	772	564	310	834	470	233
Future Volume (veh/h)	772	564	310	834	470	233
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	848	0	341	916	516	256
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	975	448	376	2324	1451	628
Arrive On Green	0.28	0.00	0.21	0.65	0.41	0.41
Sat Flow, veh/h	3476	1599	1792	3668	3668	1548
Grp Volume(v), veh/h	848	0	341	916	516	256
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1548
Q Serve(g_s), s	26.8	0.0	21.4	13.9	11.6	13.6
Cycle Q Clear(g_c), s	26.8	0.0	21.4	13.9	11.6	13.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	975	448	376	2324	1451	628
V/C Ratio(X)	0.87	0.00	0.91	0.39	0.36	0.41
Avail Cap(c_a), veh/h	2019	929	528	2324	1451	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	0.0	44.5	9.5	23.8	24.4
Incr Delay (d2), s/veh	2.6	0.0	15.3	0.5	0.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	0.0	12.2	6.9	5.9	6.1
LnGrp Delay(d), s/veh	42.1	0.0	59.8	10.0	24.5	26.4
LnGrp LOS	D		E	A	C	C
Approach Vol, veh/h	848			1257	772	
Approach Delay, s/veh	42.1			23.5	25.1	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		79.0		36.4	28.2	50.8		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		75.0		67.0	34.0	37.0		
Max Q Clear Time (g_c+I1), s		15.9		28.8	23.4	15.6		
Green Ext Time (p_c), s		7.5		3.6	0.8	4.1		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	910	188	173	1511	26	169	806	576	52	293	139
Future Volume (veh/h)	114	910	188	173	1511	26	169	806	576	52	293	139
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	130	1034	214	197	1717	30	192	916	655	59	333	158
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	1660	490	222	1881	33	217	1404	611	75	1121	486
Arrive On Green	0.09	0.33	0.33	0.13	0.37	0.37	0.12	0.40	0.40	0.04	0.32	0.32
Sat Flow, veh/h	1774	5085	1502	1774	5142	90	1774	3539	1541	1774	3539	1534
Grp Volume(v), veh/h	130	1034	214	197	1132	615	192	916	655	59	333	158
Grp Sat Flow(s),veh/h/ln	1774	1695	1502	1774	1695	1842	1774	1770	1541	1774	1770	1534
Q Serve(g_s), s	10.6	25.1	16.4	16.0	46.5	46.5	15.6	30.8	58.0	4.8	10.4	11.5
Cycle Q Clear(g_c), s	10.6	25.1	16.4	16.0	46.5	46.5	15.6	30.8	58.0	4.8	10.4	11.5
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1660	490	222	1240	674	217	1404	611	75	1121	486
V/C Ratio(X)	0.85	0.62	0.44	0.89	0.91	0.91	0.89	0.65	1.07	0.78	0.30	0.33
Avail Cap(c_a), veh/h	170	1660	490	315	1275	693	315	1404	611	85	1121	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.9	41.6	38.7	63.0	44.2	44.2	63.2	35.9	44.1	69.4	37.7	38.1
Incr Delay (d2), s/veh	30.0	0.7	0.6	19.2	10.0	16.3	18.3	2.4	57.0	33.7	0.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	11.9	6.9	9.0	23.4	26.6	8.7	15.5	34.3	3.1	5.2	5.1
LnGrp Delay(d), s/veh	96.0	42.4	39.3	82.1	54.1	60.5	81.4	38.3	101.1	103.1	38.4	39.8
LnGrp LOS	F	D	D	F	D	E	F	D	F	F	D	D
Approach Vol, veh/h		1378			1944			1763			550	
Approach Delay, s/veh		46.9			59.0			66.3			45.7	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	62.0	22.3	51.7	21.9	50.3	16.5	57.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	58.0	26.0	43.0	26.0	39.0	14.0	55.0
Max Q Clear Time (g_c+I1), s	6.8	60.0	18.0	27.1	17.6	13.5	12.6	48.5
Green Ext Time (p_c), s	0.0	0.0	0.3	6.9	0.3	2.6	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	20	780	0	0	570
Future Volume (veh/h)	20	20	780	0	0	570
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	22	22	848	0	0	620
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	85	28	3156	0	1	3156
Arrive On Green	0.05	0.05	0.89	0.00	0.00	0.89
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	22	22	848	0	0	620
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	1.6	5.8	4.5	0.0	0.0	3.0
Cycle Q Clear(g_c), s	1.6	5.8	4.5	0.0	0.0	3.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	85	28	3156	0	1	3156
V/C Ratio(X)	0.26	0.79	0.27	0.00	0.00	0.20
Avail Cap(c_a), veh/h	322	239	3156	0	54	3156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	60.7	351.9	1.0	0.0	0.0	0.9
Incr Delay (d2), s/veh	1.6	37.6	0.2	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	2.2	0.0	0.0	1.5
LnGrp Delay(d), s/veh	62.3	389.5	1.2	0.0	0.0	1.1
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	44		848			620
Approach Delay, s/veh	225.9		1.2			1.1
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	122.0				122.0		10.3
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	110.0				118.0		24.0
Max Q Clear Time (g_c+I1), s	0.0	6.5				5.0		7.8
Green Ext Time (p_c), s	0.0	6.8				4.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.7
HCM 2010 LOS	A



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	390	400	660	470	110
Future Volume (veh/h)	120	390	400	660	470	110
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	424	435	717	511	120
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	308	274	621	2737	2203	515
Arrive On Green	0.17	0.17	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1774	1583	792	3632	2942	666
Grp Volume(v), veh/h	130	424	435	717	316	315
Grp Sat Flow(s),veh/h/ln	1774	1583	792	1770	1770	1745
Q Serve(g_s), s	9.8	26.0	50.5	8.6	7.4	7.5
Cycle Q Clear(g_c), s	9.8	26.0	58.0	8.6	7.4	7.5
Prop In Lane	1.00	1.00	1.00			0.38
Lane Grp Cap(c), veh/h	308	274	621	2737	1368	1350
V/C Ratio(X)	0.42	1.54	0.70	0.26	0.23	0.23
Avail Cap(c_a), veh/h	308	274	621	2737	1368	1350
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	62.0	12.7	4.8	4.7	4.7
Incr Delay (d2), s/veh	0.9	262.6	6.5	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	31.4	12.0	4.3	3.8	3.7
LnGrp Delay(d), s/veh	56.2	324.6	19.2	5.1	5.1	5.1
LnGrp LOS	E	F	B	A	A	A
Approach Vol, veh/h	554			1152	631	
Approach Delay, s/veh	261.6			10.4	5.1	
Approach LOS	F			B	A	

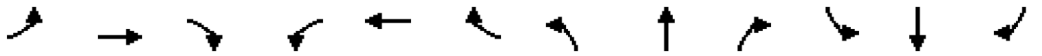
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		30.0		120.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		116.0		26.0		116.0		
Max Q Clear Time (g_c+I1), s		60.0		28.0		9.5		
Green Ext Time (p_c), s		10.5		0.0		4.1		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	750	130	670	800	240	190	310	430	480	290	90
Future Volume (veh/h)	90	750	130	670	800	240	190	310	430	480	290	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	815	141	728	870	261	207	337	467	522	315	98
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1159	519	800	1742	1844	233	554	616	583	688	308
Arrive On Green	0.07	0.33	0.33	0.23	0.49	0.49	0.13	0.16	0.16	0.17	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	98	815	141	728	870	261	207	337	467	522	315	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.7	28.3	9.2	28.9	23.2	4.9	16.1	12.5	22.0	20.9	11.1	7.5
Cycle Q Clear(g_c), s	7.7	28.3	9.2	28.9	23.2	4.9	16.1	12.5	22.0	20.9	11.1	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1159	519	800	1742	1844	233	554	616	583	688	308
V/C Ratio(X)	0.81	0.70	0.27	0.91	0.50	0.14	0.89	0.61	0.76	0.90	0.46	0.32
Avail Cap(c_a), veh/h	189	1159	519	931	1742	1844	354	554	616	686	688	308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.6	41.3	34.9	52.5	24.0	8.9	59.9	55.2	37.2	57.1	50.0	48.6
Incr Delay (d2), s/veh	13.7	3.6	1.3	11.6	1.0	0.2	16.0	4.9	8.5	12.9	2.2	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	14.4	4.2	15.0	11.6	1.9	8.9	6.5	17.1	11.0	5.6	3.5
LnGrp Delay(d), s/veh	78.3	44.8	36.1	64.1	25.0	9.0	76.0	60.1	45.7	70.0	52.2	51.3
LnGrp LOS	E	D	D	E	C	A	E	E	D	E	D	D
Approach Vol, veh/h		1054			1859			1011			935	
Approach Delay, s/veh		46.8			38.1			56.7			62.0	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.6	50.0	22.5	31.3	13.5	73.1	27.8	26.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	38.0	46.0	28.0	22.0	15.0	69.0	28.0	22.0
Max Q Clear Time (g_c+I1), s	30.9	30.3	18.1	13.1	9.7	25.2	22.9	24.0
Green Ext Time (p_c), s	1.7	5.2	0.4	1.4	0.1	8.3	0.9	0.0

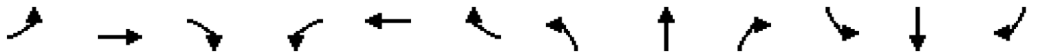
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1140	0	0	1310	100	340	10	60	0	0	0
Future Volume (vph)	110	1140	0	0	1310	100	340	10	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1690	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1690	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1239	0	0	1424	109	370	11	65	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	55	0	0	0
Lane Group Flow (vph)	120	1239	0	0	1424	109	189	192	10	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	15.1	115.2			96.1	96.1	21.2	21.2	21.2			
Effective Green, g (s)	15.1	115.2			96.1	96.1	21.2	21.2	21.2			
Actuated g/C Ratio	0.10	0.80			0.67	0.67	0.15	0.15	0.15			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	185	2823			3384	1053	246	248	232			
v/s Ratio Prot	c0.07	c0.35			0.28		0.11	c0.11				
v/s Ratio Perm						0.07			0.01			
v/c Ratio	0.65	0.44			0.42	0.10	0.77	0.77	0.04			
Uniform Delay, d1	62.1	4.5			11.2	8.7	59.2	59.3	52.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	7.6	0.5			0.4	0.2	13.4	14.0	0.1			
Delay (s)	69.7	5.0			11.6	8.9	72.7	73.3	52.9			
Level of Service	E	A			B	A	E	E	D			
Approach Delay (s/veh)		10.8			11.4			70.0			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	144.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1150	510	100	1630	0	0	0	0	90	10	80
Future Volume (vph)	0	1150	510	100	1630	0	0	0	0	90	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1702	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1702	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1250	554	109	1772	0	0	0	0	98	11	87
RTOR Reduction (vph)	0	0	274	0	0	0	0	0	0	0	0	41
Lane Group Flow (vph)	0	1250	280	109	1772	0	0	0	0	54	55	46
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		48.5	48.5	11.6	64.1					23.7	23.7	23.7
Effective Green, g (s)		48.5	48.5	11.6	64.1					23.7	23.7	23.7
Actuated g/C Ratio		0.51	0.51	0.12	0.67					0.25	0.25	0.25
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1791	801	214	3402					415	421	391
v/s Ratio Prot		c0.35		0.06	c0.35					0.03	c0.03	0.03
v/s Ratio Perm			0.18									
v/c Ratio		0.70	0.35	0.51	0.52					0.13	0.13	0.12
Uniform Delay, d1		18.1	14.2	39.4	8.1					28.0	28.0	27.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.2	0.3	1.9	0.1					0.6	0.6	0.6
Delay (s)		19.3	14.5	41.3	8.2					28.7	28.7	28.5
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		17.8			10.1			0.0			28.6	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	95.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	933	138	216	1117	130	109	349	157	142	331	113
Future Volume (veh/h)	194	933	138	216	1117	130	109	349	157	142	331	113
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.90	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	206	993	147	230	1188	138	116	371	167	151	352	120
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	237	1179	499	261	1594	185	142	643	282	179	759	253
Arrive On Green	0.13	0.34	0.34	0.15	0.35	0.35	0.08	0.28	0.28	0.10	0.30	0.30
Sat Flow, veh/h	1757	3505	1483	1757	4551	528	1757	2290	1005	1757	2517	837
Grp Volume(v), veh/h	206	993	147	230	876	450	116	282	256	151	242	230
Grp Sat Flow(s),veh/h/ln	1757	1752	1483	1757	1679	1722	1757	1752	1543	1757	1752	1602
Q Serve(g_s), s	13.9	31.8	8.8	15.5	27.8	27.8	7.9	16.7	17.4	10.2	13.6	14.1
Cycle Q Clear(g_c), s	13.9	31.8	8.8	15.5	27.8	27.8	7.9	16.7	17.4	10.2	13.6	14.1
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.65	1.00		0.52
Lane Grp Cap(c), veh/h	237	1179	499	261	1176	603	142	492	433	179	529	483
V/C Ratio(X)	0.87	0.84	0.29	0.88	0.75	0.75	0.81	0.57	0.59	0.84	0.46	0.48
Avail Cap(c_a), veh/h	406	1505	637	421	1470	754	261	492	433	276	529	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	37.2	29.6	50.5	34.6	34.6	54.7	37.3	37.6	53.4	34.3	34.5
Incr Delay (d2), s/veh	9.9	3.6	0.3	12.0	1.6	3.1	10.6	4.8	5.8	13.2	2.8	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	15.9	3.7	8.4	13.2	13.8	4.3	8.7	8.1	5.6	7.0	6.7
LnGrp Delay(d), s/veh	61.2	40.8	29.9	62.5	36.2	37.7	65.4	42.1	43.4	66.6	37.1	37.8
LnGrp LOS	E	D	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1346			1556			654			623	
Approach Delay, s/veh		42.7			40.5			46.7			44.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	38.0	22.0	44.7	13.8	40.5	20.3	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	34.0	29.0	52.0	18.0	35.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	12.2	19.4	17.5	33.8	9.9	16.1	15.9	29.8
Green Ext Time (p_c), s	0.2	2.9	0.5	7.0	0.2	2.8	0.4	9.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.8
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	120	160	190	120	150	60
Future Vol, veh/h	120	160	190	120	150	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	174	207	130	163	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	707	163	228	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	402	882	1340	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	882	1340	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	582	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.2	5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1340	-	340	882	-	-
HCM Lane V/C Ratio	0.154	-	0.384	0.197	-	-
HCM Control Delay (s/veh)	8.2	-	22	10.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.5	-	1.8	0.7	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	220	30	20	200	20	10
Future Vol, veh/h	220	30	20	200	20	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	239	33	22	217	22	11

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	77	22	0	0	239	0
Stage 1	22	-	-	-	-	-
Stage 2	55	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	926	1055	-	-	1328	-
Stage 1	1001	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	910	1055	-	-	1328	-
Mov Cap-2 Maneuver	910	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10.2	0	5.2
HCM LOS	B		

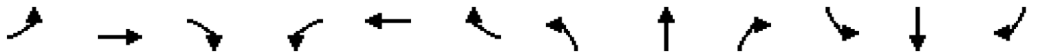
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	910	1055	1328	-	-	-
HCM Lane V/C Ratio	0.263	0.031	0.016	-	-	-
HCM Control Delay (s/veh)	10.4	8.5	7.8	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	1.1	0.1	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	352	840	61	51	888	76	101	734	58	148	684	446
Future Volume (veh/h)	352	840	61	51	888	76	101	734	58	148	684	446
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	378	903	66	55	955	82	109	789	62	159	735	480
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	444	1113	81	70	1161	99	133	1349	603	186	1454	846
Arrive On Green	0.13	0.34	0.34	0.04	0.25	0.25	0.08	0.39	0.39	0.11	0.42	0.42
Sat Flow, veh/h	3375	3274	239	1740	4668	400	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	378	479	490	55	680	357	109	789	62	159	735	480
Grp Sat Flow(s),veh/h/ln	1688	1736	1777	1740	1663	1742	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	14.1	32.4	32.4	4.0	24.9	25.0	8.0	23.2	3.3	11.6	20.1	26.4
Cycle Q Clear(g_c), s	14.1	32.4	32.4	4.0	24.9	25.0	8.0	23.2	3.3	11.6	20.1	26.4
Prop In Lane	1.00		0.13	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	590	604	70	827	433	133	1349	603	186	1454	846
V/C Ratio(X)	0.85	0.81	0.81	0.78	0.82	0.82	0.82	0.58	0.10	0.85	0.51	0.57
Avail Cap(c_a), veh/h	628	714	731	135	1006	527	229	1349	603	310	1454	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	38.8	38.8	61.3	45.7	45.8	58.6	31.2	25.1	56.6	27.6	19.0
Incr Delay (d2), s/veh	7.8	5.9	5.8	16.8	4.6	8.7	11.5	1.9	0.3	11.4	1.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	16.5	16.9	2.3	12.0	13.1	4.2	11.4	1.5	6.2	9.8	11.7
LnGrp Delay(d), s/veh	62.5	44.7	44.6	78.1	50.4	54.5	70.1	33.0	25.4	67.9	28.9	21.7
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1347			1092			960			1374	
Approach Delay, s/veh		49.7			53.1			36.8			30.9	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	54.1	9.2	47.8	13.9	58.0	21.0	36.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	48.0	10.0	53.0	17.0	54.0	24.0	39.0
Max Q Clear Time (g_c+I1), s	13.6	25.2	6.0	34.4	10.0	28.4	16.1	27.0
Green Ext Time (p_c), s	0.3	5.4	0.0	5.7	0.1	7.0	0.8	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

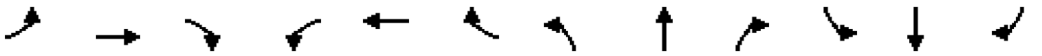
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	140	0	110	90	510	0	0	630	220
Future Volume (vph)	0	0	0	140	0	110	90	510	0	0	630	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.36	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1318	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	152	0	120	98	554	0	0	685	239
RTOR Reduction (vph)	0	0	0	0	0	104	0	0	0	0	0	51
Lane Group Flow (vph)	0	0	0	152	0	16	98	554	0	0	685	188
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				14.2		14.2	82.5	82.5			82.5	82.5
Effective Green, g (s)				14.2		14.2	82.5	82.5			82.5	82.5
Actuated g/C Ratio				0.14		0.14	0.79	0.79			0.79	0.79
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				240		214	1038	4006			5049	1247
v/s Ratio Prot								0.11			0.11	
v/s Ratio Perm				c0.09		0.01	0.07					c0.12
v/c Ratio				0.63		0.08	0.09	0.14			0.14	0.15
Uniform Delay, d1				42.8		39.5	2.5	2.6			2.6	2.7
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				5.4		0.2	0.2	0.1			0.1	0.3
Delay (s)				48.2		39.7	2.7	2.7			2.7	2.9
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			44.4			2.7			2.8	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	104.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

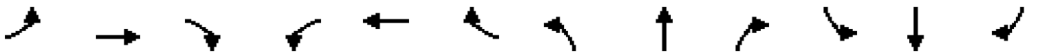
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	0	90	0	0	0	0	480	90	120	640	0
Future Volume (vph)	130	0	90	0	0	0	0	480	90	120	640	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.43	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1572	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	0	98	0	0	0	0	522	98	130	696	0
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	141	0	13	0	0	0	0	522	78	130	696	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	13.7		13.7					84.9	84.9	84.9	84.9	
Effective Green, g (s)	13.7		13.7					84.9	84.9	84.9	84.9	
Actuated g/C Ratio	0.13		0.13					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	227		358					5103	1260	1251	4049	
v/s Ratio Prot								0.08			c0.14	
v/s Ratio Perm	c0.08		0.00						0.05	0.08		
v/c Ratio	0.62		0.04					0.10	0.06	0.10	0.17	
Uniform Delay, d1	44.0		40.7					2.4	2.3	2.4	2.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.2		0.0					0.0	0.1	0.2	0.1	
Delay (s)	49.2		40.7					2.4	2.4	2.6	2.7	
Level of Service	D		D					A	A	A	A	
Approach Delay (s/veh)		45.7			0.0			2.4			2.6	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	106.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	3	446	1	86	0	958	568	150	968	10
Future Volume (vph)	1	1	3	446	1	86	0	958	568	150	968	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.92		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1668		1665	1669	1474		5036	1515	1752	5027	
Flt Permitted		1.00		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1685		1665	1669	1474		5036	1515	1752	5027	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1	3	496	1	96	0	1064	631	167	1076	11
RTOR Reduction (vph)	0	3	0	0	0	75	0	0	160	0	1	0
Lane Group Flow (vph)	0	2	0	248	249	21	0	1064	471	167	1086	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		1.3		28.7	28.7	28.7		66.3	95.0	17.2	87.5	
Effective Green, g (s)		1.3		28.7	28.7	28.7		66.3	95.0	17.2	87.5	
Actuated g/C Ratio		0.01		0.22	0.22	0.22		0.51	0.73	0.13	0.68	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		16		369	369	326		2578	1111	232	3396	
v/s Ratio Prot				0.15	c0.15			0.21	c0.09	c0.10	0.22	
v/s Ratio Perm		c0.00				0.01			0.22			
v/c Ratio		0.13		0.67	0.67	0.07		0.41	0.42	0.72	0.32	
Uniform Delay, d1		63.5		46.1	46.1	39.8		19.6	6.7	53.8	8.7	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.6		4.8	4.8	0.1		0.5	0.3	10.2	0.2	
Delay (s)		67.1		50.9	50.9	39.9		20.0	6.9	64.1	8.9	
Level of Service		E		D	D	D		C	A	E	A	
Approach Delay (s/veh)		67.1			49.1			15.2			16.3	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	129.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	299	17	113	23	57	20	182	788	3	11	345	293
Future Volume (veh/h)	299	17	113	23	57	20	182	788	3	11	345	293
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	356	20	135	27	68	24	217	938	4	13	411	349
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	23	538	0	644	539	288	1917	8	21	1623	713
Arrive On Green	0.35	0.35	0.35	0.00	0.35	0.35	0.08	0.53	0.53	0.01	0.46	0.46
Sat Flow, veh/h	1158	65	1556	0	1863	1558	3442	3614	15	1774	3539	1554
Grp Volume(v), veh/h	376	0	135	0	68	24	217	459	483	13	411	349
Grp Sat Flow(s),veh/h/ln	1223	0	1556	0	1863	1558	1721	1770	1859	1774	1770	1554
Q Serve(g_s), s	29.1	0.0	6.7	0.0	2.7	1.1	6.6	17.7	17.7	0.8	7.6	16.8
Cycle Q Clear(g_c), s	31.8	0.0	6.7	0.0	2.7	1.1	6.6	17.7	17.7	0.8	7.6	16.8
Prop In Lane	0.95		1.00	0.00		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	488	0	538	0	644	539	288	939	986	21	1623	713
V/C Ratio(X)	0.77	0.00	0.25	0.00	0.11	0.04	0.75	0.49	0.49	0.61	0.25	0.49
Avail Cap(c_a), veh/h	867	0	985	0	1318	1102	513	939	986	83	1623	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	25.2	0.0	23.9	23.3	48.1	16.0	16.0	52.8	17.8	20.3
Incr Delay (d2), s/veh	2.6	0.0	0.2	0.0	0.1	0.0	4.0	1.8	1.7	25.2	0.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	2.9	0.0	1.4	0.5	3.3	9.0	9.5	0.5	3.8	7.6
LnGrp Delay(d), s/veh	37.3	0.0	25.4	0.0	23.9	23.4	52.1	17.8	17.7	78.1	18.2	22.7
LnGrp LOS	D		C		C	C	D	B	B	E	B	C
Approach Vol, veh/h		511			92			1159			773	
Approach Delay, s/veh		34.1			23.8			24.2			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	61.0	0.0	41.2	13.0	53.3		41.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	57.0	4.0	68.0	16.0	46.0		76.0
Max Q Clear Time (g_c+I1), s	2.8	19.7	0.0	33.8	8.6	18.8		4.7
Green Ext Time (p_c), s	0.0	6.5	0.0	3.4	0.4	4.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	72	31	48	55	231	14	659	14	171	262	17
Future Volume (veh/h)	24	72	31	48	55	231	14	659	14	171	262	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.86	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	29	87	37	58	66	278	17	794	17	206	316	20
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	61	169	64	145	153	298	781	2602	1148	489	2602	1124
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	146	775	294	500	703	1369	1044	3574	1577	676	3574	1545
Grp Volume(v), veh/h	153	0	0	124	0	278	17	794	17	206	316	20
Grp Sat Flow(s),veh/h/ln	1215	0	0	1203	0	1369	1044	1787	1577	676	1787	1545
Q Serve(g_s), s	4.2	0.0	0.0	0.0	0.0	29.3	0.7	11.4	0.4	22.5	3.9	0.5
Cycle Q Clear(g_c), s	20.0	0.0	0.0	15.7	0.0	29.3	4.6	11.4	0.4	34.0	3.9	0.5
Prop In Lane	0.19		0.24	0.47		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	0	0	298	0	298	781	2602	1148	489	2602	1124
V/C Ratio(X)	0.52	0.00	0.00	0.42	0.00	0.93	0.02	0.31	0.01	0.42	0.12	0.02
Avail Cap(c_a), veh/h	324	0	0	329	0	326	781	2602	1148	489	2602	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	0.0	0.0	50.3	0.0	56.4	6.7	7.0	5.5	12.9	6.0	5.5
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.9	0.0	31.6	0.1	0.3	0.0	2.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	0.0	4.6	0.0	13.7	0.2	5.7	0.2	4.5	1.9	0.2
LnGrp Delay(d), s/veh	52.8	0.0	0.0	51.2	0.0	88.0	6.7	7.3	5.5	15.6	6.1	5.5
LnGrp LOS	D			D		F	A	A	A	B	A	A
Approach Vol, veh/h		153			402			828			542	
Approach Delay, s/veh		52.8			76.7			7.3			9.7	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		111.0		36.0		111.0		36.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		107.0		35.0		107.0		35.0
Max Q Clear Time (g_c+I1), s		13.4		22.0		36.0		31.3
Green Ext Time (p_c), s		6.4		0.7		4.4		0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.0
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	219	22	33	0	20	7	45	51	1	7	46	230
Future Vol, veh/h	219	22	33	0	20	7	45	51	1	7	46	230
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	304	31	46	0	28	10	63	71	1	10	64	319
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	16.4	9.5	11.5	14.4
HCM LOS	C	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	47%	0%	80%	0%	2%
Vol Thru, %	53%	0%	8%	74%	16%
Vol Right, %	0%	100%	12%	26%	81%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	1	274	27	283
LT Vol	45	0	219	0	7
Through Vol	51	0	22	20	46
RT Vol	0	1	33	7	230
Lane Flow Rate	133	1	381	38	393
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.244	0.002	0.59	0.063	0.557
Departure Headway (Hd)	6.599	5.648	5.582	6.01	5.097
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	543	631	647	593	707
Service Time	4.358	3.407	3.623	4.076	3.142
HCM Lane V/C Ratio	0.245	0.002	0.589	0.064	0.556
HCM Control Delay, s/veh	11.5	8.4	16.4	9.5	14.4
HCM Lane LOS	B	A	C	A	B
HCM 95th-tile Q	1	0	3.9	0.2	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	12	89	12	6	18	131	917	97	27	1071	12
Future Volume (veh/h)	5	12	89	12	6	18	131	917	97	27	1071	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	6	13	99	13	7	20	146	1019	108	30	1190	13
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	62	108	123	108	49	112	173	2812	1230	38	2543	1123
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.81	0.81	0.02	0.73	0.73
Sat Flow, veh/h	336	1373	1553	802	616	1413	1740	3471	1518	1740	3471	1533
Grp Volume(v), veh/h	19	0	99	20	0	20	146	1019	108	30	1190	13
Grp Sat Flow(s),veh/h/ln	1709	0	1553	1418	0	1413	1740	1736	1518	1740	1736	1533
Q Serve(g_s), s	0.0	0.0	8.4	0.4	0.0	1.8	11.1	10.6	2.0	2.3	18.8	0.3
Cycle Q Clear(g_c), s	1.3	0.0	8.4	1.7	0.0	1.8	11.1	10.6	2.0	2.3	18.8	0.3
Prop In Lane	0.32		1.00	0.65		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	0	123	156	0	112	173	2812	1230	38	2543	1123
V/C Ratio(X)	0.11	0.00	0.81	0.13	0.00	0.18	0.84	0.36	0.09	0.80	0.47	0.01
Avail Cap(c_a), veh/h	285	0	231	254	0	210	375	2812	1230	116	2543	1123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	60.9	57.7	0.0	57.9	59.6	3.4	2.6	65.5	7.3	4.9
Incr Delay (d2), s/veh	0.3	0.0	11.7	0.4	0.0	0.8	10.6	0.4	0.1	30.3	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	4.0	0.7	0.0	0.7	5.9	5.1	0.9	1.4	9.1	0.1
LnGrp Delay(d), s/veh	57.9	0.0	72.6	58.1	0.0	58.6	70.2	3.8	2.8	95.9	7.9	4.9
LnGrp LOS	E		E	E		E	E	A	A	F	A	A
Approach Vol, veh/h		118			40			1273			1233	
Approach Delay, s/veh		70.3			58.4			11.3			10.1	
Approach LOS		E			E			B			B	

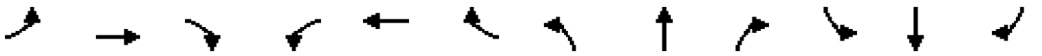
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	113.0		14.6	17.4	102.5		14.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	109.0		20.0	29.0	89.0		20.0
Max Q Clear Time (g_c+I1), s	4.3	12.6		10.4	13.1	20.8		3.8
Green Ext Time (p_c), s	0.0	10.6		0.2	0.3	12.1		0.1

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		14.1	
HCM 2010 LOS		B	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1092	29	325	1621	307	360
Future Volume (veh/h)	1092	29	325	1621	307	360
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1138	30	339	1689	320	375
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1373	1213	415	2758	692	617
Arrive On Green	0.39	0.39	0.12	0.54	0.39	0.39
Sat Flow, veh/h	3632	1535	3442	5253	1774	1583
Grp Volume(v), veh/h	1138	30	339	1689	320	375
Grp Sat Flow(s),veh/h/ln	1770	1535	1721	1695	1774	1583
Q Serve(g_s), s	34.2	0.5	11.3	26.9	15.8	22.3
Cycle Q Clear(g_c), s	34.2	0.5	11.3	26.9	15.8	22.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1373	1213	415	2758	692	617
V/C Ratio(X)	0.83	0.02	0.82	0.61	0.46	0.61
Avail Cap(c_a), veh/h	2040	1502	700	4137	692	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	3.0	50.6	18.5	26.8	28.8
Incr Delay (d2), s/veh	1.9	0.0	4.0	0.2	2.2	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	0.6	5.6	12.6	8.2	10.5
LnGrp Delay(d), s/veh	34.5	3.0	54.6	18.7	29.0	33.2
LnGrp LOS	C	A	D	B	C	C
Approach Vol, veh/h	1168			2028	695	
Approach Delay, s/veh	33.7			24.7	31.3	
Approach LOS	C			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		50.0	18.2	49.8				68.0
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		46.0	24.0	68.0				96.0
Max Q Clear Time (g_c+I1), s		24.3	13.3	36.2				28.9
Green Ext Time (p_c), s		2.4	0.9	9.5				22.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	663	472	19	1098	33	9	5	16	441	22	279
Future Volume (vph)	17	663	472	19	1098	33	9	5	16	441	22	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.97	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1547	1787	3574	1551		1705		1698	1603	1519
Flt Permitted	0.12	1.00	1.00	0.95	1.00	1.00		0.91		0.95	0.76	1.00
Satd. Flow (perm)	225	3574	1547	1787	3574	1551		1570		1698	1261	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	18	684	487	20	1132	34	9	5	16	455	23	288
RTOR Reduction (vph)	0	0	162	0	0	20	0	12	0	0	3	50
Lane Group Flow (vph)	18	684	325	20	1132	14	0	18	0	264	260	189
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	36.6	36.6	36.6	2.2	42.8	42.8		27.2		20.2	51.4	51.4
Effective Green, g (s)	36.6	36.6	36.6	2.2	42.8	42.8		27.2		20.2	51.4	51.4
Actuated g/C Ratio	0.36	0.36	0.36	0.02	0.42	0.42		0.27		0.20	0.50	0.50
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	80	1279	554	38	1496	649		417		335	701	763
v/s Ratio Prot		0.19		0.01	c0.32					c0.16	0.07	
v/s Ratio Perm	0.08		0.21			0.01		0.01			c0.11	0.12
v/c Ratio	0.23	0.53	0.59	0.53	0.76	0.02		0.04		0.79	0.37	0.25
Uniform Delay, d1	22.9	26.0	26.6	49.5	25.3	17.4		27.8		39.0	15.5	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	0.4	1.6	12.5	2.2	0.0		0.0		11.6	0.3	0.8
Delay (s)	24.3	26.5	28.2	62.0	27.5	17.4		27.9		50.6	15.8	15.2
Level of Service	C	C	C	E	C	B		C		D	B	B
Approach Delay (s/veh)		27.2			27.8			27.9			27.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	102.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	971	301	164	1270	122	319	706	167	151	498	254
Future Volume (veh/h)	164	971	301	164	1270	122	319	706	167	151	498	254
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	176	1044	324	176	1366	131	343	759	180	162	535	273
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	201	1185	515	201	1573	151	371	1198	517	187	831	358
Arrive On Green	0.11	0.33	0.33	0.11	0.33	0.33	0.21	0.34	0.34	0.10	0.23	0.23
Sat Flow, veh/h	1792	3574	1555	1792	4751	456	1792	3574	1542	1792	3574	1540
Grp Volume(v), veh/h	176	1044	324	176	984	513	343	759	180	162	535	273
Grp Sat Flow(s),veh/h/ln	1792	1787	1555	1792	1712	1783	1792	1787	1542	1792	1787	1540
Q Serve(g_s), s	13.3	37.9	24.2	13.3	37.0	37.0	25.8	24.6	12.1	12.2	18.5	22.7
Cycle Q Clear(g_c), s	13.3	37.9	24.2	13.3	37.0	37.0	25.8	24.6	12.1	12.2	18.5	22.7
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	1185	515	201	1134	590	371	1198	517	187	831	358
V/C Ratio(X)	0.87	0.88	0.63	0.88	0.87	0.87	0.92	0.63	0.35	0.86	0.64	0.76
Avail Cap(c_a), veh/h	261	1302	566	248	1223	636	470	1198	517	248	831	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.9	43.3	38.7	60.0	43.1	43.1	53.3	38.5	34.3	60.5	47.5	49.1
Incr Delay (d2), s/veh	21.8	6.9	1.9	24.0	6.5	11.7	21.1	2.6	1.8	20.9	3.8	14.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	19.8	10.6	7.9	18.5	20.1	14.9	12.5	5.4	7.2	9.6	11.1
LnGrp Delay(d), s/veh	81.8	50.2	40.7	83.9	49.6	54.7	74.4	41.1	36.2	81.4	51.3	63.3
LnGrp LOS	F	D	D	F	D	D	E	D	D	F	D	E
Approach Vol, veh/h		1544			1673			1282			970	
Approach Delay, s/veh		51.8			54.8			49.3			59.7	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	50.0	19.4	49.5	32.4	35.9	19.4	49.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	19.0	50.0	36.0	29.0	20.0	49.0
Max Q Clear Time (g_c+I1), s	14.2	26.6	15.3	39.9	27.8	24.7	15.3	39.0
Green Ext Time (p_c), s	0.2	5.5	0.1	5.6	0.7	1.7	0.2	6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.5
HCM 2010 LOS	D

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	20	228	589	74	31	695	60	33	94	458	365	5
Future Volume (vph)	20	228	589	74	31	695	60	33	94	458	365	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.97	1.00	1.00			1.00	0.98	0.92	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.98			1.00	0.97	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	3539	1536	1770	4976			1770	3231	1319	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	3539	1536	1770	4976			1770	3231	1319	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	21	243	627	79	33	739	64	35	100	487	388	5
RTOR Reduction (vph)	0	0	0	54	0	3	0	0	0	0	118	0
Lane Group Flow (vph)	0	264	627	25	33	835	0	0	100	611	151	0
Confl. Peds. (#/hr)		7		7	7		7		2		27	
Confl. Bikes (#/hr)							2				4	
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		21.3	43.5	43.5	5.1	27.3			10.6	31.5	31.5	
Effective Green, g (s)		21.3	43.5	43.5	5.1	27.3			10.6	31.5	31.5	
Actuated g/C Ratio		0.15	0.31	0.31	0.04	0.20			0.08	0.23	0.23	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		270	1103	478	64	973			134	729	297	
v/s Ratio Prot		c0.15	0.18		0.02	c0.17			c0.06	c0.19		
v/s Ratio Perm				0.02							0.11	
v/c Ratio		0.98	0.57	0.05	0.52	0.86			0.75	0.84	0.51	
Uniform Delay, d1		58.9	40.1	33.6	66.0	54.2			63.1	51.6	47.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		48.1	0.7	0.0	6.9	7.6			20.0	11.1	6.1	
Delay (s)		106.9	40.8	33.6	72.8	61.8			83.2	62.7	53.3	
Level of Service		F	D	C	E	E			F	E	D	
Approach Delay (s/veh)			58.2			62.2				62.2		
Approach LOS			E			E				E		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	60.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	139.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	74	72	45	196	60	263	629	36	25	507	81
Future Volume (veh/h)	50	74	72	45	196	60	263	629	36	25	507	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	57	84	82	51	223	68	299	715	41	28	576	92
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	126	336	283	222	336	283	585	2637	1154	533	2637	1153
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1063	1827	1540	1186	1827	1540	751	3471	1518	692	3471	1518
Grp Volume(v), veh/h	57	84	82	51	223	68	299	715	41	28	576	92
Grp Sat Flow(s),veh/h/ln	1063	1827	1540	1186	1827	1540	751	1736	1518	692	1736	1518
Q Serve(g_s), s	7.5	5.6	6.5	5.5	16.1	5.4	27.1	8.9	0.9	1.8	6.8	2.2
Cycle Q Clear(g_c), s	23.6	5.6	6.5	11.1	16.1	5.4	33.9	8.9	0.9	10.7	6.8	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	336	283	222	336	283	585	2637	1154	533	2637	1153
V/C Ratio(X)	0.45	0.25	0.29	0.23	0.66	0.24	0.51	0.27	0.04	0.05	0.22	0.08
Avail Cap(c_a), veh/h	184	437	368	288	437	368	585	2637	1154	533	2637	1153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	49.6	50.0	54.3	53.9	49.5	9.8	5.2	4.2	6.8	4.9	4.4
Incr Delay (d2), s/veh	2.5	0.4	0.6	0.5	2.4	0.4	3.2	0.3	0.1	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.9	2.8	1.8	8.3	2.3	6.1	4.3	0.4	0.4	3.3	1.0
LnGrp Delay(d), s/veh	67.4	50.0	50.6	54.9	56.3	49.9	13.0	5.4	4.3	7.0	5.1	4.5
LnGrp LOS	E	D	D	D	E	D	B	A	A	A	A	A
Approach Vol, veh/h		223			342			1055			696	
Approach Delay, s/veh		54.7			54.8			7.5			5.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		30.1		112.0		30.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		35.9		25.6		12.7		18.1
Green Ext Time (p_c), s		9.2		0.5		4.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	37	88	31	102	36	160	823	14	32	808	64
Future Volume (veh/h)	48	37	88	31	102	36	160	823	14	32	808	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	53	41	97	34	112	40	176	904	15	35	888	70
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	38	19	333	30	80	333	409	2523	1081	421	2523	1104
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	84	1468	0	354	1467	578	3505	1502	599	3505	1533
Grp Volume(v), veh/h	94	0	97	146	0	40	176	904	15	35	888	70
Grp Sat Flow(s),veh/h/ln	84	0	1468	354	0	1467	578	1752	1502	599	1752	1533
Q Serve(g_s), s	0.0	0.0	8.2	0.0	0.0	3.3	24.6	14.6	0.4	3.5	14.3	2.0
Cycle Q Clear(g_c), s	34.0	0.0	8.2	34.0	0.0	3.3	38.9	14.6	0.4	18.1	14.3	2.0
Prop In Lane	0.56		1.00	0.23		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	57	0	333	110	0	333	409	2523	1081	421	2523	1104
V/C Ratio(X)	1.66	0.00	0.29	1.33	0.00	0.12	0.43	0.36	0.01	0.08	0.35	0.06
Avail Cap(c_a), veh/h	57	0	333	110	0	333	409	2523	1081	421	2523	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	0.0	48.0	52.5	0.0	46.1	15.2	7.9	5.9	11.3	7.9	6.2
Incr Delay (d2), s/veh	363.4	0.0	0.5	198.3	0.0	0.2	3.3	0.4	0.0	0.4	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	3.4	10.6	0.0	1.3	4.3	7.2	0.2	0.6	6.9	0.9
LnGrp Delay(d), s/veh	427.2	0.0	48.5	250.9	0.0	46.3	18.4	8.3	6.0	11.7	8.3	6.3
LnGrp LOS	F		D	F		D	B	A	A	B	A	A
Approach Vol, veh/h		191			186			1095			993	
Approach Delay, s/veh		234.9			206.9			9.9			8.2	
Approach LOS		F			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		40.9		36.0		20.1		36.0
Green Ext Time (p_c), s		11.3		0.0		8.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.5
HCM 2010 LOS	D



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1000	50	0	1000	100	100
Future Volume (vph)	1000	50	0	1000	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	5049			5085	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	5049			5085	1770	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	4000	200	0	4000	400	400
RTOR Reduction (vph)	4	0	0	0	0	72
Lane Group Flow (vph)	4196	0	0	4000	400	328
Turn Type	NA			NA	Prot	Prot
Protected Phases	4			8 5	6	6
Permitted Phases						
Actuated Green, G (s)	87.0			113.0	29.0	29.0
Effective Green, g (s)	87.0			113.0	29.0	29.0
Actuated g/C Ratio	0.58			0.75	0.19	0.19
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	2928			3830	342	306
v/s Ratio Prot	c0.83			c0.79	c0.23	0.21
v/s Ratio Perm						
v/c Ratio	1.43			1.04	1.17	1.07
Uniform Delay, d1	31.5			18.5	60.5	60.5
Progression Factor	1.00			0.84	1.00	1.00
Incremental Delay, d2	196.9			27.7	103.2	72.1
Delay (s)	228.4			43.2	163.7	132.6
Level of Service	F			D	F	F
Approach Delay (s/veh)	228.4			43.2	148.1	
Approach LOS	F			D	F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	139.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

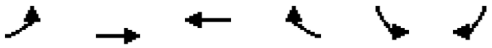
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	1084	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	1084	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s/veh)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	1	2	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h				0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	1774	3632	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1774	1770	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	1.00			0.00		
Lane Grp Cap(c), veh/h				0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h				0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Number	7	4	14	3	8	18				
Initial Q (Qb), veh	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	0	1863	1900	0	1863	1900				
Adj Flow Rate, veh/h	0	0	0	0	0	0				
Adj No. of Lanes	0	2	0	0	3	0				
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25				
Percent Heavy Veh, %	0	2	2	0	2	2				
Cap, veh/h	--21	47483648	0	--21	47483648	0				
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00				
Sat Flow, veh/h	0	-72647	0	0	-70952	0				
Grp Volume(v), veh/h	0	0	0	0	0	0				
Grp Sat Flow(s),veh/h/ln	0	1770	0	0	1695	0				
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				
Prop In Lane	0.00		0.00	0.00		0.00				
Lane Grp Cap(c), veh/h	405	35506944	0	582	43129344	0				
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00				
Avail Cap(c_a), veh/h	591818	39155200	0	850349	66974464	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00				
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp LOS										
Approach Vol, veh/h		0			0					
Approach Delay, s/veh		0.0			0.0					
Approach LOS										

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

NORWALK STATION - 2015 EXISTING PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1140	377	15	1377	379	365	531	0	367	704	2
Future Volume (vph)	0	1140	377	15	1377	379	365	531	0	367	704	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)		4921		1787	5136	1556	1537	4802		1537	4822	1569
Flt Permitted		1.00		0.10	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)		4921		192	5136	1556	1537	4802		1537	4822	1569
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1200	397	16	1449	399	384	559	0	386	741	2
RTOR Reduction (vph)	0	40	0	0	0	83	0	0	0	0	0	2
Lane Group Flow (vph)	0	1557	0	16	1449	316	230	713	0	274	853	0
Confl. Peds. (#/hr)	5		2	2		5	2		10	10		2
Confl. Bikes (#/hr)			3			3			1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Effective Green, g (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2854		111	2978	902	297	928		225	707	230
v/s Ratio Prot		c0.32			0.28		c0.15	0.15		c0.18	0.18	
v/s Ratio Perm				0.08		0.20						0.00
v/c Ratio		0.55		0.14	0.49	0.35	0.77	0.77		1.22	1.21	0.00
Uniform Delay, d1		19.4		14.4	18.4	16.6	57.4	57.3		64.0	64.0	54.6
Progression Factor		0.92		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		0.6	0.1	0.2	17.7	6.1		131.4	106.0	0.0
Delay (s)		17.7		15.0	18.6	16.8	75.1	63.4		195.4	170.0	54.6
Level of Service		B		B	B	B	E	E		F	F	D
Approach Delay (s/veh)		17.7			18.2			66.3			175.9	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	58.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	1216	223	146	1197	79	213	358	112	84	414	96
Future Volume (veh/h)	67	1216	223	146	1197	79	213	358	112	84	414	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	69	1254	230	151	1234	81	220	369	115	87	427	99
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	1532	676	195	1588	701	290	1173	520	377	1048	458
Arrive On Green	0.04	0.43	0.43	0.05	0.45	0.45	0.08	0.33	0.33	0.05	0.30	0.30
Sat Flow, veh/h	1774	3539	1563	1774	3539	1564	3442	3539	1569	1774	3539	1546
Grp Volume(v), veh/h	69	1254	230	151	1234	81	220	369	115	87	427	99
Grp Sat Flow(s),veh/h/ln	1774	1770	1563	1774	1770	1564	1721	1770	1569	1774	1770	1546
Q Serve(g_s), s	2.5	36.6	11.5	5.7	34.7	3.5	7.4	9.2	6.2	4.0	11.4	5.7
Cycle Q Clear(g_c), s	2.5	36.6	11.5	5.7	34.7	3.5	7.4	9.2	6.2	4.0	11.4	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	1532	676	195	1588	701	290	1173	520	377	1048	458
V/C Ratio(X)	0.37	0.82	0.34	0.78	0.78	0.12	0.76	0.31	0.22	0.23	0.41	0.22
Avail Cap(c_a), veh/h	366	2196	970	195	1895	837	644	1173	520	532	1048	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	29.3	22.2	26.1	27.5	18.9	52.7	29.4	28.4	26.7	33.2	31.1
Incr Delay (d2), s/veh	1.2	1.7	0.3	17.6	1.8	0.1	4.1	0.7	1.0	0.3	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	18.1	5.0	3.6	17.4	1.5	3.7	4.6	2.8	2.0	5.7	2.6
LnGrp Delay(d), s/veh	24.0	31.0	22.5	43.8	29.2	18.9	56.8	30.1	29.4	27.0	34.3	32.2
LnGrp LOS	C	C	C	D	C	B	E	C	C	C	C	C
Approach Vol, veh/h		1553			1466			704			613	
Approach Delay, s/veh		29.4			30.1			38.3			32.9	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	43.0	10.0	54.9	13.9	38.8	8.1	56.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	39.0	6.0	73.0	22.0	33.0	16.0	63.0
Max Q Clear Time (g_c+I1), s	6.0	11.2	7.7	38.6	9.4	13.4	4.5	36.7
Green Ext Time (p_c), s	0.1	2.7	0.0	12.3	0.6	2.8	0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	307	1010	97	162	1213	68	64	581	115	88	503	274
Future Volume (veh/h)	307	1010	97	162	1213	68	64	581	115	88	503	274
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	330	1086	104	174	1304	73	69	625	124	95	541	295
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	362	2029	620	202	1569	478	88	1134	497	143	1106	477
Arrive On Green	0.20	0.40	0.40	0.11	0.31	0.31	0.05	0.32	0.32	0.04	0.31	0.31
Sat Flow, veh/h	1774	5085	1553	1774	5085	1549	1774	3539	1551	3442	3539	1525
Grp Volume(v), veh/h	330	1086	104	174	1304	73	69	625	124	95	541	295
Grp Sat Flow(s),veh/h/ln	1774	1695	1553	1774	1695	1549	1774	1770	1551	1721	1770	1525
Q Serve(g_s), s	23.3	20.9	5.5	12.3	30.5	4.4	4.9	18.6	7.6	3.5	15.9	21.1
Cycle Q Clear(g_c), s	23.3	20.9	5.5	12.3	30.5	4.4	4.9	18.6	7.6	3.5	15.9	21.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	2029	620	202	1569	478	88	1134	497	143	1106	477
V/C Ratio(X)	0.91	0.54	0.17	0.86	0.83	0.15	0.78	0.55	0.25	0.66	0.49	0.62
Avail Cap(c_a), veh/h	569	2544	777	305	1789	545	125	1134	497	188	1106	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	29.4	24.8	55.7	41.1	32.1	60.1	35.9	32.1	60.4	35.7	37.5
Incr Delay (d2), s/veh	13.1	0.2	0.1	14.7	3.1	0.1	18.7	1.9	1.2	5.3	1.5	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	9.8	2.4	6.9	14.7	1.9	2.9	9.4	3.4	1.8	8.0	9.6
LnGrp Delay(d), s/veh	62.9	29.6	24.9	70.4	44.2	32.2	78.8	37.8	33.3	65.8	37.2	43.4
LnGrp LOS	E	C	C	E	D	C	E	D	C	E	D	D
Approach Vol, veh/h		1520			1551			818			931	
Approach Delay, s/veh		36.5			46.6			40.6			42.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	45.0	18.6	55.0	10.3	44.0	30.1	43.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	22.0	64.0	9.0	39.0	41.0	45.0
Max Q Clear Time (g_c+I1), s	5.5	20.6	14.3	22.9	6.9	23.1	25.3	32.5
Green Ext Time (p_c), s	0.0	4.3	0.3	9.6	0.0	4.1	0.9	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1235	171	98	1130	91	147	494	90	135	716	228
Future Volume (veh/h)	99	1235	171	98	1130	91	147	494	90	135	716	228
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	109	1357	188	108	1242	100	162	543	99	148	787	251
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	1806	553	134	1694	136	192	1201	526	174	1165	639
Arrive On Green	0.08	0.36	0.36	0.08	0.35	0.35	0.11	0.34	0.34	0.10	0.33	0.33
Sat Flow, veh/h	1774	5085	1558	1774	4792	386	1774	3539	1552	1774	3539	1573
Grp Volume(v), veh/h	109	1357	188	108	879	463	162	543	99	148	787	251
Grp Sat Flow(s),veh/h/ln	1774	1695	1558	1774	1695	1787	1774	1770	1552	1774	1770	1573
Q Serve(g_s), s	7.3	28.4	10.7	7.2	27.3	27.3	10.8	14.5	5.4	9.9	23.2	13.6
Cycle Q Clear(g_c), s	7.3	28.4	10.7	7.2	27.3	27.3	10.8	14.5	5.4	9.9	23.2	13.6
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	1806	553	134	1199	632	192	1201	526	174	1165	639
V/C Ratio(X)	0.80	0.75	0.34	0.81	0.73	0.73	0.84	0.45	0.19	0.85	0.68	0.39
Avail Cap(c_a), veh/h	411	2777	851	220	1487	784	352	1201	526	176	1165	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	34.3	28.6	55.0	34.1	34.1	52.9	31.2	28.2	53.6	35.0	25.4
Incr Delay (d2), s/veh	10.3	0.6	0.4	10.9	1.5	2.7	9.7	1.2	0.8	30.5	3.2	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	13.4	4.6	3.9	13.1	14.0	5.8	7.3	2.4	6.3	11.9	6.2
LnGrp Delay(d), s/veh	65.1	34.9	28.9	66.0	35.5	36.8	62.6	32.4	29.0	84.2	38.1	27.2
LnGrp LOS	E	C	C	E	D	D	E	C	C	F	D	C
Approach Vol, veh/h		1654			1450			804			1186	
Approach Delay, s/veh		36.2			38.2			38.1			41.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	45.0	13.1	46.9	17.1	43.8	13.3	46.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	41.0	15.0	66.0	24.0	29.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	11.9	16.5	9.2	30.4	12.8	25.2	9.3	29.3
Green Ext Time (p_c), s	0.0	3.7	0.1	12.5	0.3	2.0	0.2	9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1150	109	136	989	32	153	491	118	115	688	108
Future Volume (veh/h)	121	1150	109	136	989	32	153	491	118	115	688	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	126	1198	114	142	1030	33	159	511	123	120	717	112
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	246	1419	624	209	1437	633	293	1204	527	344	1146	501
Arrive On Green	0.06	0.40	0.40	0.06	0.41	0.41	0.08	0.34	0.34	0.06	0.33	0.33
Sat Flow, veh/h	1757	3505	1542	1757	3505	1544	1757	3505	1535	1757	3505	1533
Grp Volume(v), veh/h	126	1198	114	142	1030	33	159	511	123	120	717	112
Grp Sat Flow(s),veh/h/ln	1757	1752	1542	1757	1752	1544	1757	1752	1535	1757	1752	1533
Q Serve(g_s), s	5.2	38.7	5.9	5.9	30.7	1.6	7.4	14.0	7.2	5.6	21.7	6.6
Cycle Q Clear(g_c), s	5.2	38.7	5.9	5.9	30.7	1.6	7.4	14.0	7.2	5.6	21.7	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	1419	624	209	1437	633	293	1204	527	344	1146	501
V/C Ratio(X)	0.51	0.84	0.18	0.68	0.72	0.05	0.54	0.42	0.23	0.35	0.63	0.22
Avail Cap(c_a), veh/h	410	1876	825	308	1764	777	410	1204	527	365	1146	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	33.7	23.9	27.8	30.9	22.3	26.9	31.6	29.3	25.9	35.7	30.6
Incr Delay (d2), s/veh	1.6	2.9	0.1	3.8	1.1	0.0	1.6	1.1	1.0	0.6	2.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	19.2	2.5	3.1	15.1	0.7	3.7	7.0	3.2	2.8	10.9	3.0
LnGrp Delay(d), s/veh	25.8	36.6	24.1	31.7	31.9	22.3	28.5	32.7	30.4	26.5	38.2	31.6
LnGrp LOS	C	D	C	C	C	C	C	C	C	C	D	C
Approach Vol, veh/h		1438			1205			793			949	
Approach Delay, s/veh		34.6			31.6			31.5			36.0	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	47.0	12.0	54.7	13.6	44.9	11.3	55.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	15.0	67.0	18.0	34.0	19.0	63.0
Max Q Clear Time (g_c+I1), s	7.6	16.0	7.9	40.7	9.4	23.7	7.2	32.7
Green Ext Time (p_c), s	0.0	3.8	0.2	10.0	0.2	3.5	0.2	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	913	185	203	1357	70	184	672	94	96	919	144
Future Volume (veh/h)	158	913	185	203	1357	70	184	672	94	96	919	144
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	165	951	193	211	1414	73	192	700	98	100	957	150
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1419	425	236	1547	464	206	1423	823	123	1808	537
Arrive On Green	0.11	0.28	0.28	0.13	0.30	0.30	0.12	0.40	0.40	0.07	0.36	0.36
Sat Flow, veh/h	1774	5085	1523	1774	5085	1526	1774	3539	1523	1774	5085	1512
Grp Volume(v), veh/h	165	951	193	211	1414	73	192	700	98	100	957	150
Grp Sat Flow(s),veh/h/ln	1774	1695	1523	1774	1695	1526	1774	1770	1523	1774	1695	1512
Q Serve(g_s), s	12.6	22.9	14.4	16.1	36.9	4.8	14.8	20.3	4.4	7.7	20.6	9.8
Cycle Q Clear(g_c), s	12.6	22.9	14.4	16.1	36.9	4.8	14.8	20.3	4.4	7.7	20.6	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	1419	425	236	1547	464	206	1423	823	123	1808	537
V/C Ratio(X)	0.86	0.67	0.45	0.89	0.91	0.16	0.93	0.49	0.12	0.81	0.53	0.28
Avail Cap(c_a), veh/h	335	1697	508	296	1587	476	206	1423	823	245	1808	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.5	44.1	41.0	58.8	46.2	35.0	60.4	30.7	15.9	63.2	35.3	31.8
Incr Delay (d2), s/veh	10.7	0.8	0.8	23.4	8.4	0.2	44.0	1.2	0.3	11.9	1.1	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	10.8	6.2	9.5	18.5	2.0	9.8	10.2	1.9	4.2	9.8	4.3
LnGrp Delay(d), s/veh	71.2	44.9	41.8	82.2	54.6	35.2	104.4	31.9	16.2	75.1	36.4	33.1
LnGrp LOS	E	D	D	F	D	D	F	C	B	E	D	C
Approach Vol, veh/h		1309			1698			990			1207	
Approach Delay, s/veh		47.7			57.2			44.4			39.2	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	59.4	22.4	42.5	20.0	53.0	18.9	45.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	23.0	46.0	16.0	49.0	26.0	43.0
Max Q Clear Time (g_c+I1), s	9.7	22.3	18.1	24.9	16.8	22.6	14.6	38.9
Green Ext Time (p_c), s	0.1	5.2	0.2	7.2	0.0	7.6	0.3	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	1122	91	50	760	55	91	607	68	109	581	219
Future Volume (veh/h)	148	1122	91	50	760	55	91	607	68	109	581	219
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	156	1181	96	53	800	58	96	639	72	115	612	231
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1641	511	68	1292	397	345	1862	822	378	1862	822
Arrive On Green	0.11	0.32	0.32	0.04	0.25	0.25	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1774	5085	1583	1774	5085	1562	650	3539	1563	735	3539	1563
Grp Volume(v), veh/h	156	1181	96	53	800	58	96	639	72	115	612	231
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1562	650	1770	1563	735	1770	1563
Q Serve(g_s), s	9.2	21.8	4.7	3.2	14.8	3.1	10.6	11.1	2.4	11.4	10.5	8.7
Cycle Q Clear(g_c), s	9.2	21.8	4.7	3.2	14.8	3.1	21.1	11.1	2.4	22.5	10.5	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	1641	511	68	1292	397	345	1862	822	378	1862	822
V/C Ratio(X)	0.82	0.72	0.19	0.78	0.62	0.15	0.28	0.34	0.09	0.30	0.33	0.28
Avail Cap(c_a), veh/h	483	3583	1116	117	2532	778	345	1862	822	378	1862	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	31.8	26.0	50.7	35.1	30.8	20.5	14.6	12.5	21.1	14.4	14.0
Incr Delay (d2), s/veh	8.5	0.6	0.2	17.1	0.5	0.2	2.0	0.5	0.2	2.1	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	10.3	2.1	1.9	7.0	1.3	2.1	5.5	1.1	2.5	5.2	3.9
LnGrp Delay(d), s/veh	55.0	32.4	26.2	67.8	35.6	30.9	22.5	15.1	12.7	23.2	14.9	14.9
LnGrp LOS	E	C	C	E	D	C	C	B	B	C	B	B
Approach Vol, veh/h		1433			911			807			958	
Approach Delay, s/veh		34.4			37.2			15.8			15.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	8.1	38.3		60.0	15.4	31.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	7.0	75.0		56.0	29.0	53.0
Max Q Clear Time (g_c+I1), s		23.1	5.2	23.8		24.5	11.2	16.8
Green Ext Time (p_c), s		5.6	0.0	10.5		6.0	0.3	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1192	79	84	933	40	98	659	185	74	600	130
Future Volume (veh/h)	85	1192	79	84	933	40	98	659	185	74	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	91	1282	85	90	1003	43	105	709	199	80	645	140
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1478	661	115	1476	652	258	1484	663	227	1484	655
Arrive On Green	0.07	0.42	0.42	0.06	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1774	3539	1583	1774	3539	1563	686	3539	1582	612	3539	1562
Grp Volume(v), veh/h	91	1282	85	90	1003	43	105	709	199	80	645	140
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1563	686	1770	1582	612	1770	1562
Q Serve(g_s), s	6.2	40.2	4.0	6.1	28.0	2.0	15.6	17.7	10.2	13.3	15.7	7.0
Cycle Q Clear(g_c), s	6.2	40.2	4.0	6.1	28.0	2.0	31.3	17.7	10.2	31.0	15.7	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	1478	661	115	1476	652	258	1484	663	227	1484	655
V/C Ratio(X)	0.79	0.87	0.13	0.79	0.68	0.07	0.41	0.48	0.30	0.35	0.43	0.21
Avail Cap(c_a), veh/h	306	1746	781	394	1920	848	258	1484	663	227	1484	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	32.4	21.8	56.1	28.8	21.2	36.2	25.7	23.5	36.9	25.1	22.5
Incr Delay (d2), s/veh	11.3	4.3	0.1	11.1	0.6	0.0	4.7	1.1	1.2	4.3	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	20.5	1.8	3.3	13.8	0.9	3.3	8.9	4.7	2.5	7.9	3.1
LnGrp Delay(d), s/veh	67.3	36.7	21.9	67.2	29.5	21.3	40.9	26.8	24.6	41.2	26.0	23.3
LnGrp LOS	E	D	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1458			1136			1013			865	
Approach Delay, s/veh		37.7			32.2			27.8			27.0	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.0	11.9	54.8		55.0	11.9	54.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		51.0	27.0	60.0		51.0	21.0	66.0
Max Q Clear Time (g_c+I1), s		33.3	8.1	42.2		33.0	8.2	30.0
Green Ext Time (p_c), s		5.7	0.2	8.5		5.0	0.1	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	289	35	75	293	39	134	748	65	58	641	73
Future Volume (veh/h)	76	289	35	75	293	39	134	748	65	58	641	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	84	321	39	83	326	43	149	831	72	64	712	81
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	508	430	186	508	430	452	2329	1040	402	2329	1019
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1009	1863	1578	1017	1863	1578	681	3539	1581	615	3539	1548
Grp Volume(v), veh/h	84	321	39	83	326	43	149	831	72	64	712	81
Grp Sat Flow(s),veh/h/ln	1009	1863	1578	1017	1863	1578	681	1770	1581	615	1770	1548
Q Serve(g_s), s	9.2	17.5	2.1	9.0	17.8	2.4	13.8	12.1	1.9	6.0	9.9	2.2
Cycle Q Clear(g_c), s	27.1	17.5	2.1	26.5	17.8	2.4	23.8	12.1	1.9	18.1	9.9	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	508	430	186	508	430	452	2329	1040	402	2329	1019
V/C Ratio(X)	0.46	0.63	0.09	0.45	0.64	0.10	0.33	0.36	0.07	0.16	0.31	0.08
Avail Cap(c_a), veh/h	483	1064	902	490	1064	902	452	2329	1040	402	2329	1019
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	36.9	31.3	48.5	37.0	31.4	13.5	8.8	7.1	12.9	8.5	7.1
Incr Delay (d2), s/veh	1.8	1.3	0.1	1.7	1.4	0.1	1.9	0.4	0.1	0.8	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	9.2	0.9	2.6	9.3	1.0	2.9	6.0	0.9	1.1	5.0	1.0
LnGrp Delay(d), s/veh	50.8	38.2	31.4	50.2	38.4	31.5	15.5	9.3	7.2	13.7	8.8	7.3
LnGrp LOS	D	D	C	D	D	C	B	A	A	B	A	A
Approach Vol, veh/h		444			452			1052			857	
Approach Delay, s/veh		40.0			39.9			10.0			9.0	
Approach LOS		D			D			A			A	

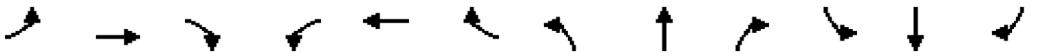
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		35.5		80.0		35.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		66.0		76.0		66.0
Max Q Clear Time (g_c+I1), s		25.8		29.1		20.1		28.5
Green Ext Time (p_c), s		8.4		2.4		6.3		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	975	84	213	1147	92	112	551	428	157	674	174
Future Volume (veh/h)	86	975	84	213	1147	92	112	551	428	157	674	174
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	88	995	86	217	1170	94	114	562	437	160	688	178
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	111	1263	371	247	1554	125	139	1385	604	153	1413	617
Arrive On Green	0.06	0.25	0.25	0.14	0.33	0.33	0.08	0.40	0.40	0.09	0.40	0.40
Sat Flow, veh/h	1757	5036	1478	1757	4733	380	1757	3505	1530	1757	3505	1530
Grp Volume(v), veh/h	88	995	86	217	830	434	114	562	437	160	688	178
Grp Sat Flow(s),veh/h/ln	1757	1679	1478	1757	1679	1756	1757	1752	1530	1757	1752	1530
Q Serve(g_s), s	6.3	23.3	5.9	15.3	27.9	27.9	8.1	14.6	30.6	11.0	18.4	9.9
Cycle Q Clear(g_c), s	6.3	23.3	5.9	15.3	27.9	27.9	8.1	14.6	30.6	11.0	18.4	9.9
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	1263	371	247	1102	576	139	1385	604	153	1413	617
V/C Ratio(X)	0.79	0.79	0.23	0.88	0.75	0.75	0.82	0.41	0.72	1.05	0.49	0.29
Avail Cap(c_a), veh/h	264	1672	491	430	1433	749	208	1385	604	153	1413	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	44.3	37.7	53.3	37.9	37.9	57.4	27.6	32.4	57.8	28.0	25.5
Incr Delay (d2), s/veh	11.9	1.9	0.3	9.9	1.7	3.2	14.6	0.9	7.3	86.0	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	11.0	2.4	8.1	13.2	14.0	4.5	7.3	14.2	9.0	9.1	4.4
LnGrp Delay(d), s/veh	70.4	46.1	38.0	63.2	39.6	41.1	72.0	28.4	39.7	143.9	29.2	26.7
LnGrp LOS	E	D	D	E	D	D	E	C	D	F	C	C
Approach Vol, veh/h		1169			1481			1113			1026	
Approach Delay, s/veh		47.4			43.5			37.3			46.7	
Approach LOS		D			D			D			D	

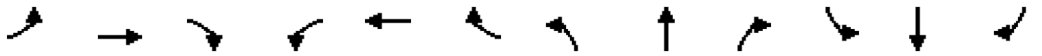
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	54.0	21.8	35.7	14.0	55.0	12.0	45.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	50.0	31.0	42.0	15.0	46.0	19.0	54.0
Max Q Clear Time (g_c+I1), s	13.0	32.6	17.3	25.3	10.1	20.4	8.3	29.9
Green Ext Time (p_c), s	0.0	4.9	0.5	6.4	0.1	5.2	0.1	9.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1537	13	5	1374	0	39	0	63	7	0	10
Future Volume (vph)	0	1537	13	5	1374	0	39	0	63	7	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	
Frt		1.00		1.00	1.00		1.00		0.85		0.92	
Flt Protected		1.00		0.95	1.00		0.95		1.00		0.98	
Satd. Flow (prot)		5027		1752	5036		1752		1537		1682	
Flt Permitted		1.00		0.11	1.00		0.75		1.00		0.98	
Satd. Flow (perm)		5027		198	5036		1374		1537		1682	
Peak-hour factor, PHF	0.92	0.95	0.95	0.95	0.95	0.92	0.95	0.92	0.95	0.92	0.92	0.92
Adj. Flow (vph)	0	1618	14	5	1446	0	41	0	66	8	0	11
RTOR Reduction (vph)	0	1	0	0	0	0	0	0	44	0	13	0
Lane Group Flow (vph)	0	1631	0	5	1446	0	41	0	22	0	6	0
Confl. Peds. (#/hr)			17	17					6			
Confl. Bikes (#/hr)			3									
Heavy Vehicles (%)	2%	3%	3%	3%	3%	2%	3%	2%	3%	2%	2%	2%
Turn Type		NA		pm+pt	NA		Perm		Perm	Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		33.3		38.2	38.2		22.6		22.6		22.6	
Effective Green, g (s)		33.3		38.2	38.2		22.6		22.6		22.6	
Actuated g/C Ratio		0.48		0.56	0.56		0.33		0.33		0.33	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)		2433		130	2796		451		504		552	
v/s Ratio Prot		c0.32		0.00	c0.29							
v/s Ratio Perm				0.02			c0.03		0.01		0.00	
v/c Ratio		0.67		0.04	0.52		0.09		0.04		0.01	
Uniform Delay, d1		13.6		9.1	9.5		16.0		15.7		15.6	
Progression Factor		1.00		1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2		0.7		0.1	0.2		0.4		0.2		0.0	
Delay (s)		14.3		9.2	9.7		16.4		15.9		15.6	
Level of Service		B		A	A		B		B		B	
Approach Delay (s/veh)		14.3			9.7			16.1			15.6	
Approach LOS		B			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	68.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1503	45	17	1404	1	53	0	38	0	0	1
Future Volume (vph)	0	1503	45	17	1404	1	53	0	38	0	0	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.91		0.95	0.91	0.95		1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00		0.98	
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Frt		1.00		1.00	1.00		1.00	0.95	0.85		0.87	
Flt Protected		1.00		0.95	1.00		0.95	0.97	1.00		1.00	
Satd. Flow (prot)		4959		1736	4987		1642	1528	1475		1552	
Flt Permitted		1.00		0.11	1.00		0.76	0.88	1.00		1.00	
Satd. Flow (perm)		4959		195	4987		1309	1398	1475		1552	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1534	46	17	1433	1	54	0	39	0	0	1
RTOR Reduction (vph)	0	4	0	0	0	0	0	21	19	0	1	0
Lane Group Flow (vph)	0	1576	0	17	1434	0	32	11	10	0	0	0
Confl. Peds. (#/hr)	1		11	11		1	3					3
Confl. Bikes (#/hr)			7									3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm		NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		33.5		38.5	38.5		24.6	24.6	24.6		24.6	
Effective Green, g (s)		33.5		38.5	38.5		24.6	24.6	24.6		24.6	
Actuated g/C Ratio		0.47		0.54	0.54		0.35	0.35	0.35		0.35	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2336		127	2700		452	483	510		536	
v/s Ratio Prot		c0.32		0.00	c0.29						0.00	
v/s Ratio Perm				0.07			c0.02	0.01	0.01			
v/c Ratio		0.67		0.13	0.53		0.07	0.02	0.02		0.00	
Uniform Delay, d1		14.6		9.9	10.5		15.6	15.3	15.3		15.2	
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.8		0.5	0.2		0.3	0.1	0.1		0.0	
Delay (s)		15.4		10.4	10.7		15.9	15.4	15.4		15.2	
Level of Service		B		B	B		B	B	B		B	
Approach Delay (s/veh)		15.4			10.7			15.6			15.2	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	71.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	1196	187	45	787	41	106	370	72	60	471	132
Future Volume (veh/h)	52	1196	187	45	787	41	106	370	72	60	471	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	57	1314	205	49	865	45	116	407	79	66	518	145
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	274	1793	802	136	1793	791	276	1471	649	370	1134	316
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	605	3505	1567	339	3505	1547	762	3505	1546	897	2700	752
Grp Volume(v), veh/h	57	1314	205	49	865	45	116	407	79	66	335	328
Grp Sat Flow(s),veh/h/ln	605	1752	1567	339	1752	1547	762	1752	1546	897	1752	1700
Q Serve(g_s), s	7.9	34.2	8.6	15.4	18.7	1.7	15.1	8.9	3.6	6.1	16.0	16.2
Cycle Q Clear(g_c), s	26.6	34.2	8.6	49.6	18.7	1.7	31.3	8.9	3.6	15.0	16.0	16.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	274	1793	802	136	1793	791	276	1471	649	370	736	714
V/C Ratio(X)	0.21	0.73	0.26	0.36	0.48	0.06	0.42	0.28	0.12	0.18	0.46	0.46
Avail Cap(c_a), veh/h	447	2793	1249	232	2793	1233	276	1471	649	370	736	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	22.3	16.0	41.6	18.5	14.3	35.6	22.2	20.7	27.1	24.3	24.3
Incr Delay (d2), s/veh	0.4	0.6	0.2	1.6	0.2	0.0	4.7	0.5	0.4	1.1	2.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	16.6	3.7	1.5	9.1	0.7	3.5	4.4	1.6	1.6	8.1	8.0
LnGrp Delay(d), s/veh	27.5	22.9	16.2	43.2	18.7	14.4	40.2	22.7	21.1	28.2	26.3	26.5
LnGrp LOS	C	C	B	D	B	B	D	C	C	C	C	C
Approach Vol, veh/h		1576			959			602			729	
Approach Delay, s/veh		22.2			19.7			25.9			26.6	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		63.7		53.0		63.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		33.3		36.2		18.2		51.6
Green Ext Time (p_c), s		3.2		15.2		4.6		8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	1365	41	22	1200	131	88	54	15	226	43	86
Future Volume (veh/h)	115	1365	41	22	1200	131	88	54	15	226	43	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	128	1517	46	24	1333	146	98	60	17	251	48	96
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	157	2285	69	33	1768	194	452	470	398	577	614	514
Arrive On Green	0.09	0.46	0.46	0.02	0.39	0.39	0.04	0.26	0.26	0.12	0.34	0.34
Sat Flow, veh/h	1740	4970	151	1740	4549	498	1740	1827	1549	1740	1827	1529
Grp Volume(v), veh/h	128	1015	548	24	974	505	98	60	17	251	48	96
Grp Sat Flow(s),veh/h/ln	1740	1663	1795	1740	1663	1723	1740	1827	1549	1740	1827	1529
Q Serve(g_s), s	8.2	26.9	26.9	1.6	28.7	28.7	4.7	2.9	0.9	11.5	2.0	5.0
Cycle Q Clear(g_c), s	8.2	26.9	26.9	1.6	28.7	28.7	4.7	2.9	0.9	11.5	2.0	5.0
Prop In Lane	1.00		0.08	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	1529	826	33	1292	669	452	470	398	577	614	514
V/C Ratio(X)	0.82	0.66	0.66	0.74	0.75	0.75	0.22	0.13	0.04	0.44	0.08	0.19
Avail Cap(c_a), veh/h	308	2527	1365	77	2086	1081	452	470	398	686	614	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	23.8	23.8	55.2	29.9	29.9	29.3	32.3	31.6	24.1	25.6	26.6
Incr Delay (d2), s/veh	9.9	0.5	0.9	27.2	0.9	1.8	0.2	0.6	0.2	0.5	0.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	12.4	13.5	1.0	13.3	13.9	2.3	1.5	0.4	5.5	1.1	2.2
LnGrp Delay(d), s/veh	60.5	24.3	24.7	82.4	30.8	31.7	29.5	32.8	31.8	24.6	25.9	27.4
LnGrp LOS	E	C	C	F	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1691			1503			175			395	
Approach Delay, s/veh		27.1			31.9			30.9			25.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	33.1	6.1	56.0	9.0	42.0	14.2	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	22.0	5.0	86.0	5.0	38.0	20.0	71.0
Max Q Clear Time (g_c+I1), s	13.5	4.9	3.6	28.9	6.7	7.0	10.2	30.7
Green Ext Time (p_c), s	0.4	0.2	0.0	15.5	0.0	0.5	0.2	13.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	496	1034	113	58	887	32	121	59	31	8	33	284
Future Volume (veh/h)	496	1034	113	58	887	32	121	59	31	8	33	284
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	551	1149	126	64	986	36	134	66	34	9	37	316
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	609	1824	200	83	1318	48	510	838	701	614	838	1249
Arrive On Green	0.18	0.40	0.40	0.05	0.26	0.26	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	3408	4604	505	1757	4984	182	1012	1845	1543	1274	1845	2750
Grp Volume(v), veh/h	551	838	437	64	664	358	134	66	34	9	37	316
Grp Sat Flow(s),veh/h/ln	1704	1679	1751	1757	1679	1808	1012	1845	1543	1274	1845	1375
Q Serve(g_s), s	18.5	23.4	23.5	4.2	21.2	21.2	9.9	2.4	1.4	0.5	1.3	8.3
Cycle Q Clear(g_c), s	18.5	23.4	23.5	4.2	21.2	21.2	11.2	2.4	1.4	2.8	1.3	8.3
Prop In Lane	1.00		0.29	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	609	1330	694	83	888	478	510	838	701	614	838	1249
V/C Ratio(X)	0.90	0.63	0.63	0.78	0.75	0.75	0.26	0.08	0.05	0.01	0.04	0.25
Avail Cap(c_a), veh/h	642	2014	1050	226	1812	976	510	838	701	614	838	1249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	28.4	28.4	55.0	39.4	39.4	20.9	18.0	17.8	18.8	17.7	19.6
Incr Delay (d2), s/veh	15.9	0.5	1.0	14.3	1.3	2.4	1.3	0.2	0.1	0.0	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.9	11.5	2.4	9.9	10.9	2.9	1.3	0.6	0.2	0.7	3.2
LnGrp Delay(d), s/veh	62.9	28.9	29.3	69.3	40.6	41.8	22.1	18.2	17.9	18.9	17.8	20.1
LnGrp LOS	E	C	C	E	D	D	C	B	B	B	B	C
Approach Vol, veh/h		1826			1086			234			362	
Approach Delay, s/veh		39.2			42.7			20.4			19.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	9.5	50.2		57.0	24.9	34.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	15.0	70.0		53.0	22.0	63.0
Max Q Clear Time (g_c+I1), s		13.2	6.2	25.5		10.3	20.5	23.2
Green Ext Time (p_c), s		1.2	0.1	10.8		1.5	0.4	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.0
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	188	727	115	209	562	87	178	969	126	180	820	232
Future Volume (veh/h)	188	727	115	209	562	87	178	969	126	180	820	232
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	192	742	117	213	573	89	182	989	129	184	837	237
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	224	1216	531	244	1257	547	178	1293	168	193	1152	324
Arrive On Green	0.12	0.34	0.34	0.14	0.35	0.35	0.10	0.28	0.28	0.11	0.29	0.29
Sat Flow, veh/h	1792	3574	1559	1792	3574	1556	1792	4576	595	1792	3960	1113
Grp Volume(v), veh/h	192	742	117	213	573	89	182	739	379	184	723	351
Grp Sat Flow(s),veh/h/ln	1792	1787	1559	1792	1787	1556	1792	1712	1747	1792	1712	1649
Q Serve(g_s), s	12.7	20.8	6.4	14.0	14.9	4.7	12.0	23.8	23.9	12.3	22.9	23.1
Cycle Q Clear(g_c), s	12.7	20.8	6.4	14.0	14.9	4.7	12.0	23.8	23.9	12.3	22.9	23.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.34	1.00		0.67
Lane Grp Cap(c), veh/h	224	1216	531	244	1257	547	178	968	494	193	996	480
V/C Ratio(X)	0.86	0.61	0.22	0.87	0.46	0.16	1.02	0.76	0.77	0.95	0.73	0.73
Avail Cap(c_a), veh/h	431	1216	531	387	1257	547	178	1535	783	193	1563	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	33.1	28.3	51.0	30.1	26.9	54.2	39.5	39.6	53.4	38.4	38.5
Incr Delay (d2), s/veh	9.2	2.3	1.0	12.2	1.2	0.6	72.7	1.3	2.5	50.8	1.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	10.7	2.9	7.8	7.5	2.1	9.5	11.5	11.9	8.8	11.0	10.8
LnGrp Delay(d), s/veh	60.8	35.4	29.3	63.2	31.3	27.5	127.1	40.8	42.1	104.2	39.4	40.7
LnGrp LOS	E	D	C	E	C	C	F	D	D	F	D	D
Approach Vol, veh/h		1051			875			1300			1258	
Approach Delay, s/veh		39.3			38.7			53.3			49.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	45.0	17.0	38.0	19.1	46.4	16.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	41.0	13.0	54.0	29.0	38.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	16.0	22.8	14.3	25.9	14.7	16.9	14.0	25.1
Green Ext Time (p_c), s	0.4	5.2	0.0	8.1	0.4	4.0	0.0	8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	1071	119	124	557	36	100	796	206	90	636	115
Future Volume (veh/h)	186	1071	119	124	557	36	100	796	206	90	636	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	192	1104	123	128	574	37	103	821	212	93	656	119
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	176	1293	573	153	1247	546	313	1434	636	231	1365	597
Arrive On Green	0.10	0.36	0.36	0.09	0.35	0.35	0.05	0.40	0.40	0.03	0.38	0.38
Sat Flow, veh/h	1792	3574	1584	1792	3574	1564	1792	3574	1585	1792	3574	1563
Grp Volume(v), veh/h	192	1104	123	128	574	37	103	821	212	93	656	119
Grp Sat Flow(s),veh/h/ln	1792	1787	1584	1792	1787	1564	1792	1787	1585	1792	1787	1563
Q Serve(g_s), s	13.0	37.7	7.1	9.3	16.5	2.1	4.5	23.6	12.2	4.0	18.4	6.7
Cycle Q Clear(g_c), s	13.0	37.7	7.1	9.3	16.5	2.1	4.5	23.6	12.2	4.0	18.4	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	176	1293	573	153	1247	546	313	1434	636	231	1365	597
V/C Ratio(X)	1.09	0.85	0.21	0.83	0.46	0.07	0.33	0.57	0.33	0.40	0.48	0.20
Avail Cap(c_a), veh/h	176	1623	720	231	1732	758	455	1434	636	231	1365	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	38.9	29.2	59.5	33.3	28.7	23.9	30.7	27.3	27.0	30.9	27.3
Incr Delay (d2), s/veh	93.5	3.8	0.2	14.9	0.3	0.1	0.6	1.7	1.4	1.1	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	19.2	3.1	5.3	8.2	0.9	2.3	12.0	5.6	2.1	9.3	3.0
LnGrp Delay(d), s/veh	153.1	42.8	29.4	74.3	33.6	28.7	24.5	32.4	28.8	28.1	32.1	28.1
LnGrp LOS	F	D	C	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1419			739			1136			868	
Approach Delay, s/veh		56.5			40.4			31.0			31.1	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	57.0	15.3	51.8	10.5	54.5	17.0	50.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	53.0	17.0	60.0	17.0	40.0	13.0	64.0
Max Q Clear Time (g_c+I1), s	6.0	25.6	11.3	39.7	6.5	20.4	15.0	18.5
Green Ext Time (p_c), s	0.0	7.0	0.1	8.1	0.2	4.7	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	451	21	203	289	89	32	1006	339	105	649	65
Future Volume (veh/h)	79	451	21	203	289	89	32	1006	339	105	649	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	87	496	23	223	318	98	35	1105	373	115	713	71
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	374	1376	606	311	1376	614	362	1970	867	183	1970	867
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	976	3574	1576	887	3574	1597	694	3574	1573	359	3574	1573
Grp Volume(v), veh/h	87	496	23	223	318	98	35	1105	373	115	713	71
Grp Sat Flow(s),veh/h/ln	976	1787	1576	887	1787	1597	694	1787	1573	359	1787	1573
Q Serve(g_s), s	8.3	12.4	1.1	30.0	7.5	5.0	3.7	25.1	17.5	38.2	14.0	2.7
Cycle Q Clear(g_c), s	15.8	12.4	1.1	42.4	7.5	5.0	17.7	25.1	17.5	63.4	14.0	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	374	1376	606	311	1376	614	362	1970	867	183	1970	867
V/C Ratio(X)	0.23	0.36	0.04	0.72	0.23	0.16	0.10	0.56	0.43	0.63	0.36	0.08
Avail Cap(c_a), veh/h	568	2084	919	487	2084	931	362	1970	867	183	1970	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	27.5	24.0	42.6	26.0	25.2	20.7	18.2	16.5	38.8	15.7	13.2
Incr Delay (d2), s/veh	0.3	0.2	0.0	3.1	0.1	0.1	0.5	1.2	1.6	15.1	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.2	0.5	7.6	3.7	2.2	0.8	12.6	7.9	4.6	7.0	1.2
LnGrp Delay(d), s/veh	31.6	27.7	24.1	45.7	26.1	25.4	21.2	19.4	18.1	53.9	16.3	13.4
LnGrp LOS	C	C	C	D	C	C	C	B	B	D	B	B
Approach Vol, veh/h		606			639			1513			899	
Approach Delay, s/veh		28.1			32.8			19.1			20.9	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		52.2		73.0		52.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		27.1		17.8		65.4		44.4
Green Ext Time (p_c), s		12.9		4.0		2.1		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	866	138	122	721	119	188	1150	106	106	729	61
Future Volume (veh/h)	96	866	138	122	721	119	188	1150	106	106	729	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	104	941	150	133	784	129	204	1250	115	115	792	66
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	1092	173	159	1167	190	389	1772	780	222	1665	742
Arrive On Green	0.07	0.25	0.25	0.09	0.27	0.27	0.07	0.50	0.50	0.04	0.47	0.47
Sat Flow, veh/h	1774	4408	700	1774	4391	716	1774	3539	1557	1774	3539	1577
Grp Volume(v), veh/h	104	723	368	133	604	309	204	1250	115	115	792	66
Grp Sat Flow(s),veh/h/ln	1774	1695	1718	1774	1695	1717	1774	1770	1557	1774	1770	1577
Q Serve(g_s), s	7.9	27.7	27.9	10.0	21.6	21.9	7.8	37.0	5.4	4.6	20.7	3.1
Cycle Q Clear(g_c), s	7.9	27.7	27.9	10.0	21.6	21.9	7.8	37.0	5.4	4.6	20.7	3.1
Prop In Lane	1.00		0.41	1.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	839	425	159	901	456	389	1772	780	222	1665	742
V/C Ratio(X)	0.82	0.86	0.87	0.84	0.67	0.68	0.52	0.71	0.15	0.52	0.48	0.09
Avail Cap(c_a), veh/h	157	924	468	301	1198	607	505	1772	780	222	1665	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	48.8	48.9	60.8	44.5	44.6	17.7	26.2	18.3	22.7	24.5	19.9
Incr Delay (d2), s/veh	23.7	7.8	14.6	10.9	0.9	1.9	1.1	2.4	0.4	2.1	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	13.9	14.9	5.4	10.3	10.6	3.9	18.6	2.4	2.4	10.3	1.4
LnGrp Delay(d), s/veh	85.9	56.6	63.5	71.8	45.4	46.5	18.8	28.5	18.7	24.8	25.5	20.1
LnGrp LOS	F	E	E	E	D	D	B	C	B	C	C	C
Approach Vol, veh/h		1195			1046			1569			973	
Approach Delay, s/veh		61.3			49.1			26.5			25.1	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	72.0	16.2	37.6	14.1	67.9	13.7	40.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	68.0	23.0	37.0	19.0	55.0	12.0	48.0
Max Q Clear Time (g_c+I1), s	6.6	39.0	12.0	29.9	9.8	22.7	9.9	23.9
Green Ext Time (p_c), s	0.0	10.5	0.2	3.8	0.4	6.3	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	68	1003	370	150	520	100	187	1136	39	227	985	110
Future Volume (veh/h)	68	1003	370	150	520	100	187	1136	39	227	985	110
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	70	1034	381	155	536	103	193	1171	0	234	1015	113
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	294	1220	544	195	1126	215	167	1710	0	263	1812	201
Arrive On Green	0.03	0.34	0.34	0.06	0.38	0.38	0.09	0.33	0.00	0.15	0.39	0.39
Sat Flow, veh/h	1792	3574	1595	1792	2986	571	1792	5305	0	1792	4687	521
Grp Volume(v), veh/h	70	1034	381	155	320	319	193	1171	0	234	741	387
Grp Sat Flow(s),veh/h/ln	1792	1787	1595	1792	1787	1770	1792	1712	0	1792	1712	1784
Q Serve(g_s), s	3.6	37.4	28.9	7.7	19.0	19.1	13.0	27.5	0.0	17.9	23.7	23.7
Cycle Q Clear(g_c), s	3.6	37.4	28.9	7.7	19.0	19.1	13.0	27.5	0.0	17.9	23.7	23.7
Prop In Lane	1.00		1.00	1.00		0.32	1.00		0.00	1.00		0.29
Lane Grp Cap(c), veh/h	294	1220	544	195	674	668	167	1710	0	263	1324	690
V/C Ratio(X)	0.24	0.85	0.70	0.80	0.47	0.48	1.16	0.68	0.00	0.89	0.56	0.56
Avail Cap(c_a), veh/h	294	1484	662	195	806	798	167	1710	0	539	1324	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	42.6	39.8	33.6	33.0	33.1	63.3	40.3	0.0	58.5	33.5	33.6
Incr Delay (d2), s/veh	0.4	4.1	2.5	20.0	0.5	0.5	118.3	2.3	0.0	9.9	1.7	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	19.2	13.1	4.9	9.4	9.4	11.9	13.4	0.0	9.6	11.5	12.4
LnGrp Delay(d), s/veh	30.0	46.7	42.3	53.6	33.5	33.6	181.7	42.5	0.0	68.4	35.2	36.8
LnGrp LOS	C	D	D	D	C	C	F	D		E	D	D
Approach Vol, veh/h		1485			794			1364			1362	
Approach Delay, s/veh		44.8			37.5			62.2			41.4	
Approach LOS		D			D			E			D	

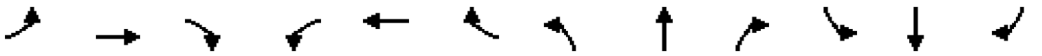
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	58.0	13.0	51.7	24.5	50.5	8.0	56.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	9.0	58.0	42.0	25.0	4.0	63.0
Max Q Clear Time (g_c+I1), s	15.0	25.7	9.7	39.4	19.9	29.5	5.6	21.1
Green Ext Time (p_c), s	0.0	7.9	0.0	8.2	0.6	0.0	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1460	60	20	1040	420	100	210	40	0	0	0
Future Volume (veh/h)	260	1460	60	20	1040	420	100	210	40	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	283	1587	65	22	1130	457	109	228	43			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	343	3642	149	32	3282	1022	149	336	215			
Arrive On Green	0.10	0.73	0.73	0.02	0.65	0.65	0.14	0.14	0.14			
Sat Flow, veh/h	3442	5012	205	1774	5085	1583	1100	2478	1583			
Grp Volume(v), veh/h	283	1073	579	22	1130	457	179	158	43			
Grp Sat Flow(s),veh/h/ln	1721	1695	1827	1774	1695	1583	1808	1770	1583			
Q Serve(g_s), s	8.1	12.7	12.7	1.2	10.2	14.5	9.6	8.5	2.4			
Cycle Q Clear(g_c), s	8.1	12.7	12.7	1.2	10.2	14.5	9.6	8.5	2.4			
Prop In Lane	1.00		0.11	1.00		1.00	0.61		1.00			
Lane Grp Cap(c), veh/h	343	2464	1327	32	3282	1022	245	240	215			
V/C Ratio(X)	0.83	0.44	0.44	0.68	0.34	0.45	0.73	0.66	0.20			
Avail Cap(c_a), veh/h	343	2464	1327	177	3695	1151	990	969	867			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	44.4	5.5	5.5	49.0	8.1	8.9	41.7	41.2	38.6			
Incr Delay (d2), s/veh	15.2	0.6	1.0	22.0	0.1	0.3	4.2	3.1	0.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.6	6.0	6.7	0.8	4.7	6.3	5.1	4.4	1.1			
LnGrp Delay(d), s/veh	59.6	6.1	6.5	71.0	8.2	9.2	45.8	44.3	39.0			
LnGrp LOS	E	A	A	E	A	A	D	D	D			
Approach Vol, veh/h		1935			1609			380				
Approach Delay, s/veh		14.0			9.3			44.4				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	5.8	77.0			14.0	68.8		17.6
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	73.0			10.0	73.0		55.0
Max Q Clear Time (g_c+I1), s	3.2	14.7			10.1	16.5		11.6
Green Ext Time (p_c), s	0.0	17.1			0.0	13.2		2.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.0
HCM 2010 LOS		B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1230	220	230	1130	0	0	0	0	330	10	50
Future Volume (vph)	0	1230	220	230	1130	0	0	0	0	330	10	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3238	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3238	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1337	239	250	1228	0	0	0	0	359	11	54
RTOR Reduction (vph)	0	0	63	0	0	0	0	0	0	0	0	46
Lane Group Flow (vph)	0	1337	176	250	1228	0	0	0	0	179	191	8
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		81.7	81.7	13.5	99.2					19.5	19.5	19.5
Effective Green, g (s)		81.7	81.7	13.5	99.2					19.5	19.5	19.5
Actuated g/C Ratio		0.64	0.64	0.11	0.78					0.15	0.15	0.15
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		3278	1020	365	3981					247	498	243
v/s Ratio Prot		c0.26		c0.07	0.24					c0.11	0.06	
v/s Ratio Perm			0.11									0.01
v/c Ratio		0.41	0.17	0.68	0.31					0.72	0.38	0.03
Uniform Delay, d1		10.8	9.0	54.6	3.9					51.0	48.2	45.6
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.3	0.2					10.1	0.5	0.1
Delay (s)		10.9	9.1	59.8	4.1					61.1	48.7	45.6
Level of Service		B	A	E	A					E	D	D
Approach Delay (s/veh)		10.6			13.6			0.0			53.5	
Approach LOS		B			B			A			D	

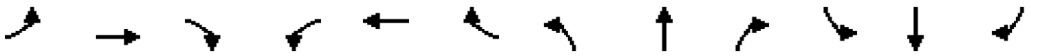
Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	126.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	10	20	100	290	270	420	0	0	1170	60
Future Volume (veh/h)	40	0	10	20	100	290	270	420	0	0	1170	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	11	22	109	315	293	457	0	0	1272	65
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	73	774	371	379	3437	0	0	2580	132
Arrive On Green	0.00	0.00	0.00	0.23	0.23	0.23	0.11	0.68	0.00	0.00	0.52	0.52
Sat Flow, veh/h		0		310	3307	1583	3442	5253	0	0	5123	253
Grp Volume(v), veh/h		0.0		131	0	315	293	457	0	0	870	467
Grp Sat Flow(s),veh/h/ln				1847	1770	1583	1721	1695	0	0	1695	1818
Q Serve(g_s), s				5.2	0.0	16.9	7.4	2.8	0.0	0.0	14.7	14.7
Cycle Q Clear(g_c), s				5.2	0.0	16.9	7.4	2.8	0.0	0.0	14.7	14.7
Prop In Lane				0.17		1.00	1.00		0.00	0.00		0.14
Lane Grp Cap(c), veh/h				432	414	371	379	3437	0	0	1765	947
V/C Ratio(X)				0.30	0.00	0.85	0.77	0.13	0.00	0.00	0.49	0.49
Avail Cap(c_a), veh/h				1436	1375	1231	543	3437	0	0	1765	947
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				28.0	0.0	32.5	38.4	5.1	0.0	0.0	13.7	13.7
Incr Delay (d2), s/veh				0.4	0.0	5.5	4.3	0.1	0.0	0.0	1.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.7	0.0	7.9	3.7	1.3	0.0	0.0	7.0	7.7
LnGrp Delay(d), s/veh				28.4	0.0	38.0	42.8	5.2	0.0	0.0	14.7	15.6
LnGrp LOS				C	A	D	D	A			B	B
Approach Vol, veh/h					446			750			1337	
Approach Delay, s/veh					35.2			19.9			15.0	
Approach LOS					D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		64.0			13.8	50.2		24.8
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		60.0			14.0	42.0		69.0
Max Q Clear Time (g_c+I1), s		4.8			9.4	16.7		18.9
Green Ext Time (p_c), s		3.4			0.4	10.1		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	230	0	0	0	0	690	100	380	810	0
Future Volume (vph)	20	10	230	0	0	0	0	690	100	380	810	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.86	0.85					0.98		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2923	1441					4989		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2923	1441					4989		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	11	250	0	0	0	0	750	109	413	880	0
RTOR Reduction (vph)	0	118	118	0	0	0	0	7	0	0	0	0
Lane Group Flow (vph)	22	18	7	0	0	0	0	852	0	413	880	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	8.1	8.1	8.1					99.5		22.5	126.0	
Effective Green, g (s)	8.1	8.1	8.1					99.5		22.5	126.0	
Actuated g/C Ratio	0.06	0.06	0.06					0.70		0.16	0.89	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	100	166	82					3493		543	4508	
v/s Ratio Prot	c0.01	0.01						c0.17		c0.12	0.17	
v/s Ratio Perm			0.00									
v/c Ratio	0.22	0.11	0.09					0.24		0.76	0.20	
Uniform Delay, d1	64.0	63.6	63.5					7.7		57.2	1.1	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.3	0.5					0.2		6.2	0.1	
Delay (s)	65.1	63.9	64.0					7.9		63.4	1.2	
Level of Service	E	E	E					A		E	A	
Approach Delay (s/veh)		64.0			0.0			7.9			21.1	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	142.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1120	131	34	856	32	159	326	55	45	349	62
Future Volume (veh/h)	93	1120	131	34	856	32	159	326	55	45	349	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	99	1191	139	36	911	34	169	347	59	48	371	66
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1978	231	166	2157	80	469	1485	250	486	1476	260
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	591	4610	538	410	5029	187	947	3025	509	975	3007	530
Grp Volume(v), veh/h	99	876	454	36	614	331	169	201	205	48	217	220
Grp Sat Flow(s),veh/h/ln	591	1695	1757	410	1695	1826	947	1770	1764	975	1770	1768
Q Serve(g_s), s	14.0	19.9	19.9	7.4	12.6	12.6	12.6	6.5	6.7	3.0	7.1	7.2
Cycle Q Clear(g_c), s	26.7	19.9	19.9	27.3	12.6	12.6	19.8	6.5	6.7	9.6	7.1	7.2
Prop In Lane	1.00		0.31	1.00		0.10	1.00		0.29	1.00		0.30
Lane Grp Cap(c), veh/h	251	1454	754	166	1454	783	469	869	866	486	869	868
V/C Ratio(X)	0.39	0.60	0.60	0.22	0.42	0.42	0.36	0.23	0.24	0.10	0.25	0.25
Avail Cap(c_a), veh/h	548	3158	1637	373	3158	1701	469	869	866	486	869	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	21.9	21.9	32.4	19.9	19.9	20.5	14.6	14.6	17.4	14.7	14.8
Incr Delay (d2), s/veh	1.0	0.4	0.8	0.6	0.2	0.4	2.2	0.6	0.6	0.4	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	9.3	9.8	0.9	5.9	6.4	3.6	3.3	3.4	0.9	3.6	3.7
LnGrp Delay(d), s/veh	30.2	22.3	22.7	33.1	20.1	20.2	22.7	15.2	15.3	17.8	15.4	15.5
LnGrp LOS	C	C	C	C	C	C	C	B	B	B	B	B
Approach Vol, veh/h		1429			981			575			485	
Approach Delay, s/veh		23.0			20.6			17.4			15.7	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		46.8		53.0		46.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		21.8		28.7		11.6		29.3
Green Ext Time (p_c), s		3.3		14.2		2.8		8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	40	33	210	65	219	18	248	81	136	491	66
Future Volume (veh/h)	74	40	33	210	65	219	18	248	81	136	491	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	84	45	38	239	74	249	20	282	92	155	558	75
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	270	144	109	297	80	269	414	1419	452	540	1917	831
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	559	352	269	633	196	659	806	2673	851	1022	3610	1566
Grp Volume(v), veh/h	167	0	0	562	0	0	20	188	186	155	558	75
Grp Sat Flow(s),veh/h/ln	1180	0	0	1488	0	0	806	1805	1718	1022	1805	1566
Q Serve(g_s), s	0.0	0.0	0.0	35.0	0.0	0.0	1.8	7.1	7.4	12.2	11.1	3.1
Cycle Q Clear(g_c), s	11.9	0.0	0.0	46.9	0.0	0.0	13.0	7.1	7.4	19.6	11.1	3.1
Prop In Lane	0.50		0.23	0.43		0.44	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	522	0	0	646	0	0	414	959	913	540	1917	831
V/C Ratio(X)	0.32	0.00	0.00	0.87	0.00	0.00	0.05	0.20	0.20	0.29	0.29	0.09
Avail Cap(c_a), veh/h	728	0	0	878	0	0	414	959	913	540	1917	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	0.0	37.0	0.0	0.0	20.5	15.9	16.0	21.2	16.9	15.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	7.3	0.0	0.0	0.2	0.5	0.5	1.3	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	20.5	0.0	0.0	0.4	3.6	3.6	3.6	5.6	1.4
LnGrp Delay(d), s/veh	26.4	0.0	0.0	44.2	0.0	0.0	20.7	16.4	16.5	22.5	17.3	15.2
LnGrp LOS	C			D			C	B	B	C	B	B
Approach Vol, veh/h		167			562			394			788	
Approach Delay, s/veh		26.4			44.2			16.7			18.1	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		56.9		73.0		56.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		15.0		13.9		21.6		48.9
Green Ext Time (p_c), s		2.4		1.3		5.1		4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	125	10	124	260	153	45	742	135	73	1117	78
Future Volume (veh/h)	35	125	10	124	260	153	45	742	135	73	1117	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	40	142	11	141	295	174	51	843	153	83	1269	89
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	70	233	16	232	484	404	259	2442	1061	386	2442	1062
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	148	906	64	1241	1881	1569	403	3574	1552	569	3574	1554
Grp Volume(v), veh/h	193	0	0	141	295	174	51	843	153	83	1269	89
Grp Sat Flow(s),veh/h/ln	1117	0	0	1241	1881	1569	403	1787	1552	569	1787	1554
Q Serve(g_s), s	6.6	0.0	0.0	4.9	18.6	12.5	9.6	13.2	4.7	9.5	23.5	2.6
Cycle Q Clear(g_c), s	25.2	0.0	0.0	30.1	18.6	12.5	33.1	13.2	4.7	22.7	23.5	2.6
Prop In Lane	0.21		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	0	0	232	484	404	259	2442	1061	386	2442	1062
V/C Ratio(X)	0.60	0.00	0.00	0.61	0.61	0.43	0.20	0.35	0.14	0.21	0.52	0.08
Avail Cap(c_a), veh/h	495	0	0	373	699	583	259	2442	1061	386	2442	1062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	0.0	0.0	50.8	44.0	41.8	18.6	8.8	7.5	13.6	10.5	7.2
Incr Delay (d2), s/veh	1.8	0.0	0.0	2.6	1.2	0.7	1.7	0.4	0.3	1.3	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	5.2	9.8	5.5	1.2	6.6	2.1	1.6	11.7	1.2
LnGrp Delay(d), s/veh	47.2	0.0	0.0	53.4	45.3	42.5	20.3	9.2	7.8	14.8	11.3	7.3
LnGrp LOS	D			D	D	D	C	A	A	B	B	A
Approach Vol, veh/h		193			610			1047			1441	
Approach Delay, s/veh		47.2			46.4			9.6			11.2	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		38.6		96.0		38.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		35.1		27.2		25.5		32.1
Green Ext Time (p_c), s		8.7		1.1		15.2		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	820	410	760	520	0	0	0	0	290	0	420
Future Volume (veh/h)	0	820	410	760	520	0	0	0	0	290	0	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	891	446	826	565	0	0	0	0	315	0	457
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	708	331	924	1796	0	0	806	0	1597	0	685
Arrive On Green	0.00	0.21	0.21	0.27	0.51	0.00	0.00	0.00	0.00	0.43	0.00	0.43
Sat Flow, veh/h	0	3558	1583	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	891	446	826	565	0	0	0	0	315	0	457
Grp Sat Flow(s),veh/h/ln	0	1695	1583	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	28.0	28.0	30.9	12.5	0.0	0.0	0.0	0.0	7.7	0.0	30.8
Cycle Q Clear(g_c), s	0.0	28.0	28.0	30.9	12.5	0.0	0.0	0.0	0.0	7.7	0.0	30.8
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	708	331	924	1796	0	0	806	0	1597	0	685
V/C Ratio(X)	0.00	1.26	1.35	0.89	0.31	0.00	0.00	0.00	0.00	0.20	0.00	0.67
Avail Cap(c_a), veh/h	0	708	331	1336	2219	0	0	806	0	1597	0	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	53.0	53.0	47.2	19.3	0.0	0.0	0.0	0.0	23.7	0.0	30.3
Incr Delay (d2), s/veh	0.0	127.2	175.4	5.9	0.1	0.0	0.0	0.0	0.0	0.3	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	25.6	28.3	15.4	6.1	0.0	0.0	0.0	0.0	3.7	0.0	14.4
LnGrp Delay(d), s/veh	0.0	180.2	228.4	53.0	19.4	0.0	0.0	0.0	0.0	24.0	0.0	35.4
LnGrp LOS		F	F	D	B					C		D
Approach Vol, veh/h		1337			1391			0			772	
Approach Delay, s/veh		196.3			39.4			0.0			30.7	
Approach LOS		F			D						C	

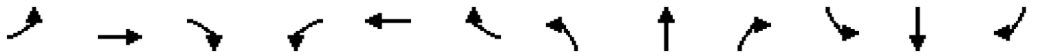
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		62.0	40.0	32.0		62.0		72.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0	52.0	28.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		0.0	32.9	30.0		32.8		14.5
Green Ext Time (p_c), s		0.0	3.0	0.0		4.2		4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	97.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	830	280	180	1080	10	190	10	980	10	10	10
Future Volume (vph)	10	830	280	180	1080	10	190	10	980	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3374	1441	3433	3534		1681	1694	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.77	1.00	0.68	1.00	
Satd. Flow (perm)	1770	3374	1441	3433	3534		1681	1354	2787	1274	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	902	304	196	1174	11	207	11	1065	11	11	11
RTOR Reduction (vph)	0	2	169	0	1	0	0	0	286	0	8	0
Lane Group Flow (vph)	11	930	105	196	1184	0	110	108	779	11	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	0.7	40.5	40.5	11.3	51.1		12.1	41.4	41.4	25.3	25.3	
Effective Green, g (s)	0.7	40.5	40.5	11.3	51.1		12.1	41.4	41.4	25.3	25.3	
Actuated g/C Ratio	0.01	0.38	0.38	0.11	0.49		0.12	0.39	0.39	0.24	0.24	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	11	1298	554	368	1716		193	571	1096	306	414	
v/s Ratio Prot	0.01	0.28		c0.06	c0.34		0.07	0.02			0.01	
v/s Ratio Perm			0.07					0.05	c0.28	0.01		
v/c Ratio	1.00	0.72	0.19	0.53	0.69		0.57	0.19	0.71	0.04	0.03	
Uniform Delay, d1	52.3	27.5	21.5	44.4	20.9		44.1	20.9	26.9	30.6	30.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	271.4	1.9	0.2	1.5	1.2		3.8	0.2	3.9	0.2	0.1	
Delay (s)	323.6	29.4	21.6	45.9	22.1		47.9	21.1	30.8	30.8	30.7	
Level of Service	F	C	C	D	C		D	C	C	C	C	
Approach Delay (s/veh)		30.3			25.5			31.4			30.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

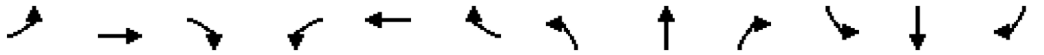
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	10	10	10	70	1170	10	10	220	240
Future Volume (vph)	10	10	10	10	10	10	70	1170	10	10	220	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.93			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			0.98		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1639			1750		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00			0.92		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1635			1631		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	11	11	11	11	11	76	1272	11	11	239	261
RTOR Reduction (vph)	0	9	0	0	10	0	0	0	3	0	0	77
Lane Group Flow (vph)	10	14	0	0	23	0	76	1272	8	11	239	184
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	1.5	19.0			13.5		9.6	105.4	105.4	1.5	97.3	97.3
Effective Green, g (s)	1.5	19.0			13.5		9.6	105.4	105.4	1.5	97.3	97.3
Actuated g/C Ratio	0.01	0.14			0.10		0.07	0.76	0.76	0.01	0.71	0.71
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	18	225			159		123	2704	1209	19	2497	1116
v/s Ratio Prot	c0.01	0.00					c0.04	c0.36		0.01	0.07	
v/s Ratio Perm		0.01			c0.01				0.01			0.12
v/c Ratio	0.56	0.06			0.15		0.62	0.47	0.01	0.58	0.10	0.17
Uniform Delay, d1	67.9	51.7			56.9		62.4	6.0	3.9	67.9	6.4	6.8
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	32.3	0.1			0.4		8.9	0.6	0.0	36.3	0.1	0.3
Delay (s)	100.2	51.8			57.3		71.3	6.6	3.9	104.2	6.5	7.1
Level of Service	F	D			E		E	A	A	F	A	A
Approach Delay (s/veh)		66.5			57.3			10.2			8.9	
Approach LOS		E			E			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	137.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1620	180	30	1190	140	70	30	220	0	0	0
Future Volume (veh/h)	270	1620	180	30	1190	140	70	30	220	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	293	1761	196	33	1293	152	76	33	239			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	252	2307	252	42	2362	1057	215	93	271			
Arrive On Green	0.07	0.72	0.72	0.02	0.67	0.67	0.17	0.17	0.17			
Sat Flow, veh/h	3442	3219	352	1774	3539	1583	1255	545	1583			
Grp Volume(v), veh/h	293	953	1004	33	1293	152	109	0	239			
Grp Sat Flow(s),veh/h/ln	1721	1770	1801	1774	1770	1583	1800	0	1583			
Q Serve(g_s), s	10.0	45.1	48.6	2.5	26.1	4.8	7.3	0.0	20.1			
Cycle Q Clear(g_c), s	10.0	45.1	48.6	2.5	26.1	4.8	7.3	0.0	20.1			
Prop In Lane	1.00		0.20	1.00		1.00	0.70		1.00			
Lane Grp Cap(c), veh/h	252	1268	1291	42	2362	1057	308	0	271			
V/C Ratio(X)	1.16	0.75	0.78	0.78	0.55	0.14	0.35	0.00	0.88			
Avail Cap(c_a), veh/h	252	1268	1291	247	2362	1057	488	0	430			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.2	11.9	12.4	66.2	11.9	8.3	49.8	0.0	55.1			
Incr Delay (d2), s/veh	107.2	4.1	4.7	25.9	0.9	0.3	0.7	0.0	12.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.5	23.2	25.6	1.5	12.9	2.2	3.7	0.0	9.7			
LnGrp Delay(d), s/veh	170.4	16.0	17.0	92.1	12.8	8.6	50.5	0.0	67.3			
LnGrp LOS	F	B	B	F	B	A	D		E			
Approach Vol, veh/h		2250			1478			348				
Approach Delay, s/veh		36.5			14.1			62.1				
Approach LOS		D			B			E				

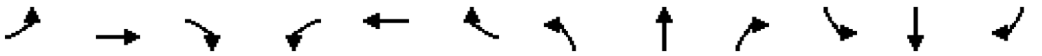
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	7.3	101.7			14.0	95.0		27.4
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	19.0	82.0			10.0	91.0		37.0
Max Q Clear Time (g_c+I1), s	4.5	50.6			12.0	28.1		22.1
Green Ext Time (p_c), s	0.0	19.7			0.0	14.0		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1840	0	0	1340	300	40	10	90	0	0	0
Future Volume (veh/h)	50	1840	0	0	1340	300	40	10	90	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	54	2000	0	0	1457	326	43	11	98			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	98	4319	0	0	3997	1245	144	152	129			
Arrive On Green	0.03	0.85	0.00	0.00	0.79	0.79	0.08	0.08	0.08			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	54	2000	0	0	1457	326	43	11	98			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	1.8	11.3	0.0	0.0	9.9	6.4	2.6	0.6	7.0			
Cycle Q Clear(g_c), s	1.8	11.3	0.0	0.0	9.9	6.4	2.6	0.6	7.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	98	4319	0	0	3997	1245	144	152	129			
V/C Ratio(X)	0.55	0.46	0.00	0.00	0.36	0.26	0.30	0.07	0.76			
Avail Cap(c_a), veh/h	119	4319	0	0	3997	1245	676	710	604			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	55.3	2.2	0.0	0.0	3.7	3.3	49.9	49.0	51.9			
Incr Delay (d2), s/veh	4.7	0.4	0.0	0.0	0.3	0.5	1.1	0.2	8.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.9	5.3	0.0	0.0	4.7	2.9	1.3	0.3	3.4			
LnGrp Delay(d), s/veh	60.1	2.5	0.0	0.0	4.0	3.8	51.0	49.2	60.7			
LnGrp LOS	E	A			A	A	D	D	E			
Approach Vol, veh/h		2054			1783			152				
Approach Delay, s/veh		4.0			3.9			57.1				
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		102.0			7.3	94.7		13.4
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		98.0			4.0	90.0		44.0
Max Q Clear Time (g_c+I1), s		13.3			3.8	11.9		9.0
Green Ext Time (p_c), s		29.6			0.0	18.4		0.5

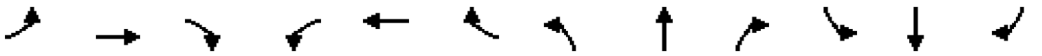
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1520	320	50	1380	90	100	10	150	120	10	260
Future Volume (vph)	90	1520	320	50	1380	90	100	10	150	120	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4953		1770	5039		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4953		1770	5039		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1652	348	54	1500	98	109	11	163	130	11	283
RTOR Reduction (vph)	0	17	0	0	3	0	0	0	100	0	0	230
Lane Group Flow (vph)	98	1983	0	54	1595	0	109	11	63	130	11	53
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	9.0	77.3		4.0	72.3		13.0	13.0	13.0	14.1	14.1	23.1
Effective Green, g (s)	9.0	77.3		4.0	72.3		13.0	13.0	13.0	14.1	14.1	23.1
Actuated g/C Ratio	0.07	0.62		0.03	0.58		0.10	0.10	0.10	0.11	0.11	0.19
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	3077		56	2928		184	194	165	200	211	517
v/s Ratio Prot	0.03	c0.40		c0.03	0.32		c0.06	0.01		c0.07	0.01	0.01
v/s Ratio Perm									0.04			0.01
v/c Ratio	0.40	0.64		0.96	0.54		0.59	0.06	0.38	0.65	0.05	0.10
Uniform Delay, d1	55.1	14.9		60.1	16.0		53.2	50.2	51.9	52.8	49.2	42.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	1.1		106.5	0.7		5.0	0.1	1.5	7.3	0.1	0.1
Delay (s)	56.1	15.9		166.6	16.7		58.2	50.3	53.4	60.1	49.3	42.1
Level of Service	E	B		F	B		E	D	D	E	D	D
Approach Delay (s/veh)		17.8			21.6			55.1			47.8	
Approach LOS		B			C			E			D	

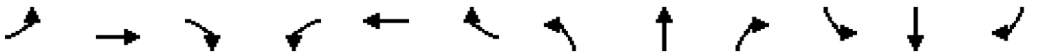
Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	124.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	236	1652	0	31	1044	810	14	10	22	89	6	130
Future Volume (vph)	236	1652	0	31	1044	810	14	10	22	89	6	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	0.99	0.97		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.96	0.85		0.94			0.97	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.96	1.00
Satd. Flow (prot)	1787	5136		1787	4615	1331		1732			1673	1519
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98			0.96	1.00
Satd. Flow (perm)	1787	5136		1787	4615	1331		1732			1673	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	246	1721	0	32	1088	844	15	10	23	93	6	135
RTOR Reduction (vph)	0	0	0	0	43	244	0	20	0	0	6	99
Lane Group Flow (vph)	246	1721	0	32	1450	195	0	28	0	0	116	13
Confl. Peds. (#/hr)	9		4	4		9						
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	22.2	72.0		3.0	52.8	52.8		13.5			14.1	14.1
Effective Green, g (s)	22.2	72.0		3.0	52.8	52.8		13.5			14.1	14.1
Actuated g/C Ratio	0.19	0.61		0.03	0.45	0.45		0.11			0.12	0.12
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	334	3117		45	2054	592		197			198	180
v/s Ratio Prot	c0.14	0.34		0.02	c0.31			c0.02			c0.07	
v/s Ratio Perm						0.15						0.01
v/c Ratio	0.74	0.55		0.71	0.71	0.33		0.14			0.59	0.07
Uniform Delay, d1	45.4	13.8		57.4	26.6	21.4		47.3			49.5	46.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	8.2	0.2		41.4	1.1	0.3		1.5			4.4	0.2
Delay (s)	53.6	14.0		98.7	27.7	21.7		48.8			53.8	46.6
Level of Service	D	B		F	C	C		D			D	D
Approach Delay (s/veh)		18.9			27.6			48.8			50.4	
Approach LOS		B			C			D			D	

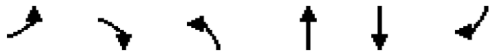
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	118.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	186	1305	280	188	1279	116	493	231	380	85	55	115
Future Volume (vph)	186	1305	280	188	1279	116	493	231	380	85	55	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99	0.92	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.98	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1770	4902		1770	4998		1681	1630	1383	1681	1750	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1770	4902		1770	4998		1681	1630	1383	1681	1750	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	198	1388	298	200	1361	123	524	246	404	90	59	122
RTOR Reduction (vph)	0	22	0	0	7	0	0	3	228	0	0	115
Lane Group Flow (vph)	198	1664	0	200	1477	0	403	408	132	73	76	7
Confl. Peds. (#/hr)	8		16	16		8			25	25		
Confl. Bikes (#/hr)			2			3			5			
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	17.0	52.1		21.1	56.2		45.1	45.1	45.1	8.0	8.0	8.0
Effective Green, g (s)	17.0	52.1		21.1	56.2		45.1	45.1	45.1	8.0	8.0	8.0
Actuated g/C Ratio	0.12	0.37		0.15	0.39		0.32	0.32	0.32	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	211	1794		262	1973		532	516	438	94	98	88
v/s Ratio Prot	c0.11	c0.34		c0.11	0.30		0.24	c0.25		0.04	c0.04	
v/s Ratio Perm									0.10			0.00
v/c Ratio	0.94	0.93		0.76	0.75		0.76	0.79	0.30	0.78	0.78	0.08
Uniform Delay, d1	62.1	43.3		58.2	37.0		43.7	44.3	36.7	66.3	66.3	63.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	44.4	8.8		12.4	1.6		9.7	11.8	1.8	45.7	44.2	1.7
Delay (s)	106.5	52.1		70.6	38.6		53.4	56.1	38.5	112.0	110.4	65.4
Level of Service	F	D		E	D		D	E	D	F	F	E
Approach Delay (s/veh)		57.8			42.4			49.7			90.6	
Approach LOS		E			D			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	142.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	592	70	265	521	230	316
Future Volume (veh/h)	592	70	265	521	230	316
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	637	0	285	560	247	340
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	743	342	319	2502	1746	763
Arrive On Green	0.22	0.00	0.18	0.71	0.50	0.50
Sat Flow, veh/h	3408	1568	1757	3597	3597	1533
Grp Volume(v), veh/h	637	0	285	560	247	340
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1533
Q Serve(g_s), s	21.1	0.0	18.6	6.4	4.5	16.8
Cycle Q Clear(g_c), s	21.1	0.0	18.6	6.4	4.5	16.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	743	342	319	2502	1746	763
V/C Ratio(X)	0.86	0.00	0.89	0.22	0.14	0.45
Avail Cap(c_a), veh/h	1680	773	567	2502	1746	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	0.0	47.0	5.7	15.9	19.0
Incr Delay (d2), s/veh	3.0	0.0	8.7	0.2	0.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.0	9.8	3.1	2.2	7.5
LnGrp Delay(d), s/veh	47.2	0.0	55.7	5.9	16.1	20.9
LnGrp LOS	D		E	A	B	C
Approach Vol, veh/h	637			845	587	
Approach Delay, s/veh	47.2			22.7	18.9	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		88.0		29.7	25.4	62.6		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		84.0		58.0	38.0	42.0		
Max Q Clear Time (g_c+I1), s		8.4		23.1	20.6	18.8		
Green Ext Time (p_c), s		4.2		2.5	0.8	2.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	764	623	222	632	615	175
Future Volume (veh/h)	764	623	222	632	615	175
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	788	0	229	652	634	180
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	914	420	264	2381	1726	744
Arrive On Green	0.26	0.00	0.15	0.67	0.48	0.48
Sat Flow, veh/h	3476	1599	1792	3668	3668	1540
Grp Volume(v), veh/h	788	0	229	652	634	180
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1540
Q Serve(g_s), s	24.3	0.0	14.1	8.4	12.6	7.7
Cycle Q Clear(g_c), s	24.3	0.0	14.1	8.4	12.6	7.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	914	420	264	2381	1726	744
V/C Ratio(X)	0.86	0.00	0.87	0.27	0.37	0.24
Avail Cap(c_a), veh/h	2068	952	541	2381	1726	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	0.0	46.9	7.7	18.3	17.0
Incr Delay (d2), s/veh	2.6	0.0	8.3	0.3	0.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	0.0	7.5	4.2	6.3	3.4
LnGrp Delay(d), s/veh	42.1	0.0	55.2	8.0	18.9	17.8
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	788			881	814	
Approach Delay, s/veh	42.1			20.3	18.7	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		79.0		33.6	20.6	58.4		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		75.0		67.0	34.0	37.0		
Max Q Clear Time (g_c+I1), s		10.4		26.3	16.1	14.6		
Green Ext Time (p_c), s		4.8		3.3	0.6	4.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	1285	204	195	1213	47	201	721	436	79	384	93
Future Volume (veh/h)	181	1285	204	195	1213	47	201	721	436	79	384	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	185	1311	208	199	1238	48	205	736	445	81	392	95
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	180	1500	442	226	1607	62	232	1490	642	90	1207	516
Arrive On Green	0.10	0.29	0.29	0.13	0.32	0.32	0.13	0.42	0.42	0.05	0.34	0.34
Sat Flow, veh/h	1792	5136	1514	1792	5063	196	1792	3574	1541	1792	3574	1529
Grp Volume(v), veh/h	185	1311	208	199	837	449	205	736	445	81	392	95
Grp Sat Flow(s),veh/h/ln	1792	1712	1514	1792	1712	1836	1792	1787	1541	1792	1787	1529
Q Serve(g_s), s	14.0	33.8	15.7	15.2	30.7	30.8	15.7	21.0	33.0	6.3	11.4	6.1
Cycle Q Clear(g_c), s	14.0	33.8	15.7	15.2	30.7	30.8	15.7	21.0	33.0	6.3	11.4	6.1
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	1500	442	226	1087	583	232	1490	642	90	1207	516
V/C Ratio(X)	1.03	0.87	0.47	0.88	0.77	0.77	0.89	0.49	0.69	0.90	0.32	0.18
Avail Cap(c_a), veh/h	180	1587	468	335	1353	726	335	1490	642	90	1207	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.6	46.8	40.4	59.8	42.9	42.9	59.6	29.8	33.3	65.7	34.3	32.5
Incr Delay (d2), s/veh	74.1	5.5	0.8	16.6	2.2	4.0	17.6	1.2	6.1	62.8	0.7	0.8
Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	16.8	6.7	8.6	14.9	16.2	8.9	10.6	15.1	4.7	5.7	2.7
LnGrp Delay(d), s/veh	137.0	52.4	41.2	76.4	45.1	46.9	77.1	31.0	39.3	128.5	35.0	33.3
LnGrp LOS	F	D	D	E	D	D	E	C	D	F	C	C
Approach Vol, veh/h		1704			1485			1386			568	
Approach Delay, s/veh		60.2			49.8			40.5			48.0	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	62.0	21.5	44.6	22.0	51.0	18.0	48.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	58.0	26.0	43.0	26.0	39.0	14.0	55.0
Max Q Clear Time (g_c+I1), s	8.3	35.0	17.2	35.8	17.7	13.4	16.0	32.8
Green Ext Time (p_c), s	0.0	6.9	0.3	4.9	0.3	2.8	0.0	8.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.6
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	50	80	670	0	0	840
Future Volume (veh/h)	50	80	670	0	0	840
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	54	87	728	0	0	913
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	175	110	2988	0	1	2988
Arrive On Green	0.10	0.10	0.84	0.00	0.00	0.84
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	54	87	728	0	0	913
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	4.0	11.6	5.6	0.0	0.0	7.6
Cycle Q Clear(g_c), s	4.0	11.6	5.6	0.0	0.0	7.6
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	175	110	2988	0	1	2988
V/C Ratio(X)	0.31	0.79	0.24	0.00	0.00	0.31
Avail Cap(c_a), veh/h	305	227	2988	0	51	2988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	132.7	2.1	0.0	0.0	2.3
Incr Delay (d2), s/veh	1.0	11.6	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	8.5	2.8	0.0	0.0	3.8
LnGrp Delay(d), s/veh	59.6	144.3	2.3	0.0	0.0	2.5
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	141		728			913
Approach Delay, s/veh	111.9		2.3			2.5
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	122.0				122.0		17.7
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	110.0				118.0		24.0
Max Q Clear Time (g_c+I1), s	0.0	7.6				9.6		13.6
Green Ext Time (p_c), s	0.0	5.5				7.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.1
HCM 2010 LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	340	450	590	610	240
Future Volume (veh/h)	80	340	450	590	610	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	370	489	641	663	261
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	308	274	464	2737	1920	756
Arrive On Green	0.17	0.17	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1774	1583	603	3632	2576	977
Grp Volume(v), veh/h	87	370	489	641	473	451
Grp Sat Flow(s),veh/h/ln	1774	1583	603	1770	1770	1690
Q Serve(g_s), s	6.4	26.0	103.6	7.5	12.4	12.4
Cycle Q Clear(g_c), s	6.4	26.0	116.0	7.5	12.4	12.4
Prop In Lane	1.00	1.00	1.00			0.58
Lane Grp Cap(c), veh/h	308	274	464	2737	1368	1307
V/C Ratio(X)	0.28	1.35	1.05	0.23	0.35	0.35
Avail Cap(c_a), veh/h	308	274	464	2737	1368	1307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	62.0	28.6	4.7	5.3	5.3
Incr Delay (d2), s/veh	0.5	178.9	56.5	0.2	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	25.0	26.5	3.7	6.3	6.0
LnGrp Delay(d), s/veh	54.4	240.9	85.1	4.9	5.9	6.0
LnGrp LOS	D	F	F	A	A	A
Approach Vol, veh/h	457			1130	924	
Approach Delay, s/veh	205.4			39.6	6.0	
Approach LOS	F			D	A	

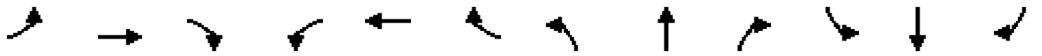
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		30.0		120.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		116.0		26.0		116.0		
Max Q Clear Time (g_c+I1), s		118.0		28.0		14.4		
Green Ext Time (p_c), s		0.0		0.0		6.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	770	110	250	640	260	320	540	440	440	370	140
Future Volume (veh/h)	80	770	110	250	640	260	320	540	440	440	370	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	87	837	120	272	696	283	348	587	478	478	402	152
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1569	702	336	1699	1774	346	676	457	540	542	242
Arrive On Green	0.06	0.44	0.44	0.10	0.48	0.48	0.19	0.19	0.19	0.16	0.15	0.15
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	87	837	120	272	696	283	348	587	478	478	402	152
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.0	24.8	6.6	11.1	18.3	5.9	28.0	23.1	27.5	19.6	15.6	12.9
Cycle Q Clear(g_c), s	7.0	24.8	6.6	11.1	18.3	5.9	28.0	23.1	27.5	19.6	15.6	12.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	1569	702	336	1699	1774	346	676	457	540	542	242
V/C Ratio(X)	0.80	0.53	0.17	0.81	0.41	0.16	1.01	0.87	1.05	0.89	0.74	0.63
Avail Cap(c_a), veh/h	185	1569	702	910	1699	1774	346	676	457	670	542	242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	29.2	24.1	63.6	24.2	10.6	57.9	56.4	51.1	59.4	58.2	57.0
Incr Delay (d2), s/veh	12.9	1.3	0.5	4.7	0.7	0.2	50.2	14.2	54.7	11.6	8.9	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	12.4	3.0	5.5	9.1	2.3	18.4	12.7	25.1	10.2	8.3	6.4
LnGrp Delay(d), s/veh	79.6	30.5	24.6	68.2	24.9	10.7	108.1	70.6	105.8	71.0	67.1	68.7
LnGrp LOS	E	C	C	E	C	B	F	E	F	E	E	E
Approach Vol, veh/h		1044			1251			1413			1032	
Approach Delay, s/veh		33.9			31.1			91.7			69.1	
Approach LOS		C			C			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	67.7	32.0	26.0	12.8	73.0	26.5	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	38.0	46.0	28.0	22.0	15.0	69.0	28.0	22.0
Max Q Clear Time (g_c+I1), s	13.1	26.8	30.0	17.6	9.0	20.3	21.6	29.5
Green Ext Time (p_c), s	0.9	5.8	0.0	1.2	0.1	6.6	1.0	0.0

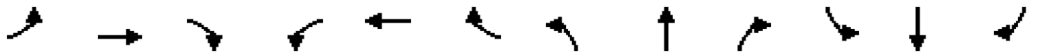
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.1
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1280	0	0	780	70	530	10	30	0	0	0
Future Volume (vph)	30	1280	0	0	780	70	530	10	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1688	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1688	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	1391	0	0	848	76	576	11	33	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	27	0	0	0
Lane Group Flow (vph)	33	1391	0	0	848	76	294	293	6	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	7.1	115.8			104.7	104.7	27.0	27.0	27.0			
Effective Green, g (s)	7.1	115.8			104.7	104.7	27.0	27.0	27.0			
Actuated g/C Ratio	0.05	0.77			0.69	0.69	0.18	0.18	0.18			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	83	2717			3530	1099	300	302	283			
v/s Ratio Prot	0.02	c0.39			0.17		c0.17	0.17				
v/s Ratio Perm						0.05			0.00			
v/c Ratio	0.40	0.51			0.24	0.07	0.98	0.97	0.02			
Uniform Delay, d1	69.8	6.7			8.5	7.4	61.6	61.5	51.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	3.1	0.7			0.2	0.1	46.3	43.5	0.0			
Delay (s)	72.9	7.4			8.6	7.5	107.9	105.0	51.0			
Level of Service	E	A			A	A	F	F	D			
Approach Delay (s/veh)		8.9			8.5			103.5			0.0	
Approach LOS		A			A			F			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1240	400	50	1270	0	0	0	0	70	10	80
Future Volume (vph)	0	1240	400	50	1270	0	0	0	0	70	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1706	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1706	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1348	435	54	1380	0	0	0	0	76	11	87
RTOR Reduction (vph)	0	0	198	0	0	0	0	0	0	0	0	64
Lane Group Flow (vph)	0	1348	237	54	1380	0	0	0	0	43	44	23
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		48.1	48.1	6.9	59.0					24.2	24.2	24.2
Effective Green, g (s)		48.1	48.1	6.9	59.0					24.2	24.2	24.2
Actuated g/C Ratio		0.53	0.53	0.08	0.65					0.27	0.27	0.27
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1866	834	133	3289					446	452	420
v/s Ratio Prot		c0.38		0.03	c0.27					0.03	c0.03	0.01
v/s Ratio Perm			0.15									
v/c Ratio		0.72	0.28	0.41	0.42					0.10	0.10	0.05
Uniform Delay, d1		16.5	12.0	40.2	7.8					25.3	25.3	25.0
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.4	0.2	2.0	0.1					0.4	0.4	0.2
Delay (s)		17.9	12.2	42.2	7.9					25.7	25.7	25.2
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		16.5			9.2			0.0			25.5	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	91.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	1095	139	230	1144	89	173	270	269	166	283	67
Future Volume (veh/h)	109	1095	139	230	1144	89	173	270	269	166	283	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	110	1106	140	232	1156	90	175	273	272	168	286	68
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	1251	533	261	2032	158	201	476	414	194	751	175
Arrive On Green	0.08	0.35	0.35	0.15	0.42	0.42	0.11	0.27	0.27	0.11	0.27	0.27
Sat Flow, veh/h	1774	3539	1508	1774	4795	373	1774	1770	1538	1774	2831	660
Grp Volume(v), veh/h	110	1106	140	232	817	429	175	273	272	168	177	177
Grp Sat Flow(s),veh/h/ln	1774	1770	1508	1774	1695	1778	1774	1770	1538	1774	1770	1722
Q Serve(g_s), s	8.1	38.8	8.7	16.9	24.1	24.2	12.8	17.6	20.7	12.3	10.7	11.1
Cycle Q Clear(g_c), s	8.1	38.8	8.7	16.9	24.1	24.2	12.8	17.6	20.7	12.3	10.7	11.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	136	1251	533	261	1437	753	201	476	414	194	470	457
V/C Ratio(X)	0.81	0.88	0.26	0.89	0.57	0.57	0.87	0.57	0.66	0.87	0.38	0.39
Avail Cap(c_a), veh/h	377	1395	595	390	1437	753	242	476	414	256	470	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	40.1	30.4	55.2	28.9	28.9	57.6	41.7	42.8	57.8	39.5	39.7
Incr Delay (d2), s/veh	10.9	6.6	0.3	15.6	0.5	1.0	24.4	5.0	7.9	20.6	2.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	20.0	3.7	9.4	11.3	12.0	7.6	9.2	9.8	7.1	5.6	5.6
LnGrp Delay(d), s/veh	70.8	46.7	30.7	70.8	29.4	29.9	82.0	46.6	50.8	78.4	41.8	42.2
LnGrp LOS	E	D	C	E	C	C	F	D	D	E	D	D
Approach Vol, veh/h		1356			1478			720			522	
Approach Delay, s/veh		47.0			36.0			56.8			53.7	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	39.5	23.4	50.6	18.9	39.0	14.1	59.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	34.0	29.0	52.0	18.0	35.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	14.3	22.7	18.9	40.8	14.8	13.1	10.1	26.2
Green Ext Time (p_c), s	0.2	2.6	0.4	5.9	0.1	2.1	0.2	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	18.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	190	360	80	60	60
Future Vol, veh/h	160	190	360	80	60	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	174	207	391	87	65	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	967	98	130	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	282	958	1455	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	206	958	1455	-	-	-
Mov Cap-2 Maneuver	206	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	410	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	40.1	6.9	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1455	-	206	958	-	-
HCM Lane V/C Ratio	0.269	-	0.844	0.216	-	-
HCM Control Delay (s/veh)	8.4	-	76.1	9.8	-	-
HCM Lane LOS	A	-	F	A	-	-
HCM 95th %tile Q(veh)	1.1	-	6.3	0.8	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	190	50	10	100	30	30
Future Vol, veh/h	190	50	10	100	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	207	54	11	109	33	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	110	11	0	0	120	0
Stage 1	11	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	887	1070	-	-	1468	-
Stage 1	1012	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	867	1070	-	-	1468	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	904	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10	0	3.8
HCM LOS	B		

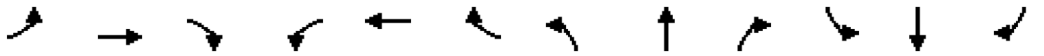
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	867	1070	1468	-	-	-
HCM Lane V/C Ratio	0.238	0.051	0.022	-	-	-
HCM Control Delay (s/veh)	10.4	8.5	7.5	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0.9	0.2	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	455	944	67	54	859	129	174	907	89	153	675	452
Future Volume (veh/h)	455	944	67	54	859	129	174	907	89	153	675	452
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	469	973	69	56	886	133	179	935	92	158	696	466
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	1167	83	72	1054	157	202	1394	613	183	1356	845
Arrive On Green	0.15	0.35	0.35	0.04	0.24	0.24	0.11	0.39	0.39	0.10	0.38	0.38
Sat Flow, veh/h	3442	3344	237	1774	4442	663	1774	3539	1558	1774	3539	1577
Grp Volume(v), veh/h	469	515	527	56	675	344	179	935	92	158	696	466
Grp Sat Flow(s),veh/h/ln	1721	1770	1812	1774	1695	1715	1774	1770	1558	1774	1770	1577
Q Serve(g_s), s	18.9	37.6	37.7	4.4	26.7	27.0	14.0	30.7	5.4	12.4	21.3	27.5
Cycle Q Clear(g_c), s	18.9	37.6	37.7	4.4	26.7	27.0	14.0	30.7	5.4	12.4	21.3	27.5
Prop In Lane	1.00		0.13	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	523	617	632	72	805	407	202	1394	613	183	1356	845
V/C Ratio(X)	0.90	0.83	0.83	0.78	0.84	0.84	0.89	0.67	0.15	0.86	0.51	0.55
Avail Cap(c_a), veh/h	586	666	681	126	938	475	214	1394	613	290	1356	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	42.1	42.1	67.0	51.2	51.3	61.5	35.2	27.5	62.2	33.4	21.6
Incr Delay (d2), s/veh	15.4	8.5	8.3	16.3	6.0	11.7	31.8	2.6	0.5	14.3	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	19.9	20.3	2.5	13.1	14.1	8.6	15.4	2.4	6.8	10.7	12.6
LnGrp Delay(d), s/veh	74.0	50.6	50.4	83.3	57.2	63.0	93.3	37.8	28.0	76.5	34.8	24.2
LnGrp LOS	E	D	D	F	E	E	F	D	C	E	C	C
Approach Vol, veh/h		1511			1075			1206			1320	
Approach Delay, s/veh		57.8			60.4			45.3			36.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	59.5	9.7	53.1	20.0	58.0	25.4	37.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	48.0	10.0	53.0	17.0	54.0	24.0	39.0
Max Q Clear Time (g_c+I1), s	14.4	32.7	6.4	39.7	16.0	29.5	20.9	29.0
Green Ext Time (p_c), s	0.2	5.6	0.0	5.3	0.0	6.5	0.6	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D

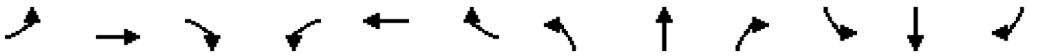
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	120	0	220	270	520	0	0	450	290
Future Volume (vph)	0	0	0	120	0	220	270	520	0	0	450	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.45	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1629	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	130	0	239	293	565	0	0	489	315
RTOR Reduction (vph)	0	0	0	0	0	209	0	0	0	0	0	64
Lane Group Flow (vph)	0	0	0	130	0	30	293	565	0	0	489	251
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				12.7		12.7	80.6	80.6			80.6	80.6
Effective Green, g (s)				12.7		12.7	80.6	80.6			80.6	80.6
Actuated g/C Ratio				0.13		0.13	0.80	0.80			0.80	0.80
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				221		198	1296	4045			5098	1259
v/s Ratio Prot								0.11			0.08	
v/s Ratio Perm				c0.07		0.02	c0.18					0.16
v/c Ratio				0.59		0.15	0.23	0.14			0.10	0.20
Uniform Delay, d1				41.8		39.5	2.6	2.4			2.3	2.5
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				4.0		0.4	0.4	0.1			0.0	0.4
Delay (s)				45.8		39.9	3.0	2.5			2.3	2.9
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			41.9			2.6			2.5	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	101.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

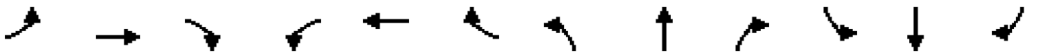
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	0	220	0	0	0	0	760	90	140	420	0
Future Volume (vph)	40	0	220	0	0	0	0	760	90	140	420	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1130	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	0	239	0	0	0	0	826	98	152	457	0
RTOR Reduction (vph)	0	0	220	0	0	0	0	0	16	0	0	0
Lane Group Flow (vph)	43	0	19	0	0	0	0	826	82	152	457	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	7.8		7.8					82.8	82.8	82.8	82.8	
Effective Green, g (s)	7.8		7.8					82.8	82.8	82.8	82.8	
Actuated g/C Ratio	0.08		0.08					0.84	0.84	0.84	0.84	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	140		220					5381	1329	948	4270	
v/s Ratio Prot								0.13			0.09	
v/s Ratio Perm	c0.02		0.01						0.05	c0.13		
v/c Ratio	0.31		0.09					0.15	0.06	0.16	0.11	
Uniform Delay, d1	42.8		42.1					1.5	1.3	1.5	1.4	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2		0.2					0.1	0.1	0.4	0.1	
Delay (s)	44.1		42.3					1.5	1.4	1.8	1.4	
Level of Service	D		D					A	A	A	A	
Approach Delay (s/veh)		42.5			0.0			1.5			1.5	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	3	1	488	0	201	0	784	481	176	1266	10
Future Volume (vph)	7	3	1	488	0	201	0	784	481	176	1266	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.96		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.97		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1782		1698	1698	1537		5136	1558	1787	5130	
Flt Permitted		0.88		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1615		1698	1698	1537		5136	1558	1787	5130	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	8	3	1	555	0	228	0	891	547	200	1439	11
RTOR Reduction (vph)	0	1	0	0	0	176	0	0	159	0	0	0
Lane Group Flow (vph)	0	11	0	277	278	52	0	891	388	200	1450	0
Confl. Peds. (#/hr)	10					10			10	10		
Confl. Bikes (#/hr)						2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		3.8		30.5	30.5	30.5		64.5	95.0	19.2	87.7	
Effective Green, g (s)		3.8		30.5	30.5	30.5		64.5	95.0	19.2	87.7	
Actuated g/C Ratio		0.03		0.23	0.23	0.23		0.48	0.71	0.14	0.65	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		45		386	386	349		2472	1104	256	3357	
v/s Ratio Prot				0.16	c0.16			0.17	0.08	c0.11	c0.28	
v/s Ratio Perm		c0.01				0.03			0.17			
v/c Ratio		0.25		0.72	0.72	0.15		0.36	0.35	0.78	0.43	
Uniform Delay, d1		63.7		47.8	47.8	41.4		21.8	7.6	55.4	11.2	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.8		6.3	6.5	0.2		0.4	0.2	14.3	0.4	
Delay (s)		66.5		54.0	54.3	41.6		22.2	7.8	69.7	11.6	
Level of Service		E		D	D	D		C	A	E	B	
Approach Delay (s/veh)		66.5			50.5			16.7			18.6	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	451	30	214	13	14	6	116	554	8	15	719	272
Future Volume (veh/h)	451	30	214	13	14	6	116	554	8	15	719	272
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	518	34	246	15	16	7	133	637	9	17	826	313
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	619	37	674	0	806	674	191	1659	23	26	1499	657
Arrive On Green	0.43	0.43	0.43	0.00	0.43	0.43	0.06	0.46	0.46	0.01	0.42	0.42
Sat Flow, veh/h	1311	86	1572	0	1881	1572	3476	3606	51	1792	3574	1566
Grp Volume(v), veh/h	552	0	246	0	16	7	133	316	330	17	826	313
Grp Sat Flow(s),veh/h/ln	1398	0	1572	0	1881	1572	1738	1787	1870	1792	1787	1566
Q Serve(g_s), s	45.7	0.0	13.1	0.0	0.6	0.3	4.7	14.3	14.4	1.2	21.6	18.0
Cycle Q Clear(g_c), s	46.3	0.0	13.1	0.0	0.6	0.3	4.7	14.3	14.4	1.2	21.6	18.0
Prop In Lane	0.94		1.00	0.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	655	0	674	0	806	674	191	822	861	26	1499	657
V/C Ratio(X)	0.84	0.00	0.36	0.00	0.02	0.01	0.69	0.38	0.38	0.66	0.55	0.48
Avail Cap(c_a), veh/h	825	0	863	0	1154	965	449	822	861	72	1499	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	24.0	0.0	20.4	20.3	57.5	21.9	21.9	60.8	27.2	26.1
Incr Delay (d2), s/veh	6.5	0.0	0.3	0.0	0.0	0.0	4.5	1.4	1.3	25.6	1.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.0	0.0	5.7	0.0	0.3	0.1	2.4	7.4	7.7	0.8	11.0	8.2
LnGrp Delay(d), s/veh	40.2	0.0	24.3	0.0	20.4	20.3	62.0	23.3	23.2	86.4	28.6	28.6
LnGrp LOS	D		C		C	C	E	C	C	F	C	C
Approach Vol, veh/h		798			23			779			1156	
Approach Delay, s/veh		35.3			20.4			29.9			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	61.0	0.0	57.1	10.8	55.9		57.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	57.0	4.0	68.0	16.0	46.0		76.0
Max Q Clear Time (g_c+I1), s	3.2	16.4	0.0	48.3	6.7	23.6		2.6
Green Ext Time (p_c), s	0.0	4.0	0.0	4.8	0.2	6.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	36	14	33	36	247	17	352	16	385	559	23
Future Volume (veh/h)	14	36	14	33	36	247	17	352	16	385	559	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.95		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	15	39	15	36	39	268	18	383	17	418	608	25
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	80	196	68	175	177	292	604	2666	1161	757	2666	1161
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	249	987	343	693	894	1473	798	3574	1556	988	3574	1557
Grp Volume(v), veh/h	69	0	0	75	0	268	18	383	17	418	608	25
Grp Sat Flow(s),veh/h/ln	1579	0	0	1587	0	1473	798	1787	1556	988	1787	1557
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	25.6	1.0	4.4	0.4	29.9	7.5	0.6
Cycle Q Clear(g_c), s	4.7	0.0	0.0	5.0	0.0	25.6	8.5	4.4	0.4	34.3	7.5	0.6
Prop In Lane	0.22		0.22	0.48		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	0	352	0	292	604	2666	1161	757	2666	1161
V/C Ratio(X)	0.20	0.00	0.00	0.21	0.00	0.92	0.03	0.14	0.01	0.55	0.23	0.02
Avail Cap(c_a), veh/h	413	0	0	422	0	359	604	2666	1161	757	2666	1161
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	0.0	0.0	48.0	0.0	56.3	6.9	5.2	4.7	10.1	5.6	4.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	24.7	0.1	0.1	0.0	2.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	2.5	0.0	12.4	0.2	2.2	0.2	8.7	3.7	0.3
LnGrp Delay(d), s/veh	48.3	0.0	0.0	48.3	0.0	81.0	7.0	5.3	4.7	13.0	5.8	4.7
LnGrp LOS	D			D		F	A	A	A	B	A	A
Approach Vol, veh/h		69			343			418			1051	
Approach Delay, s/veh		48.3			73.9			5.3			8.6	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		111.0		32.5		111.0		32.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		107.0		35.0		107.0		35.0
Max Q Clear Time (g_c+I1), s		10.5		6.7		36.3		27.6
Green Ext Time (p_c), s		2.8		0.4		7.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	13.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	286	21	34	0	13	24	36	30	0	12	16	203
Future Vol, veh/h	286	21	34	0	13	24	36	30	0	12	16	203
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	358	26	43	0	16	30	45	38	0	15	20	254
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	15.7	8.6	10.3	11.2
HCM LOS	C	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	55%	0%	84%	0%	5%
Vol Thru, %	45%	100%	6%	35%	7%
Vol Right, %	0%	0%	10%	65%	88%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	0	341	37	231
LT Vol	36	0	286	0	12
Through Vol	30	0	21	13	16
RT Vol	0	0	34	24	203
Lane Flow Rate	83	0	426	46	289
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.148	0	0.605	0.067	0.396
Departure Headway (Hd)	6.463	6.186	5.11	5.189	4.933
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	555	0	708	689	731
Service Time	4.203	3.926	3.127	3.229	2.956
HCM Lane V/C Ratio	0.15	0	0.602	0.067	0.395
HCM Control Delay, s/veh	10.3	8.9	15.7	8.6	11.2
HCM Lane LOS	B	N	C	A	B
HCM 95th-tile Q	0.5	0	4.1	0.2	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	19	185	65	28	58	62	1357	32	40	955	10
Future Volume (veh/h)	16	19	185	65	28	58	62	1357	32	40	955	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	17	20	197	69	30	62	66	1444	34	43	1016	11
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	96	101	215	136	67	150	85	2624	1145	55	2566	1131
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.05	0.75	0.75	0.03	0.73	0.73
Sat Flow, veh/h	439	733	1565	646	485	1090	1757	3505	1529	1757	3505	1546
Grp Volume(v), veh/h	37	0	197	77	0	84	66	1444	34	43	1016	11
Grp Sat Flow(s),veh/h/ln	1172	0	1565	737	0	1483	1757	1752	1529	1757	1752	1546
Q Serve(g_s), s	0.4	0.0	18.1	8.8	0.0	7.6	5.4	25.6	0.8	3.5	15.9	0.3
Cycle Q Clear(g_c), s	8.0	0.0	18.1	16.8	0.0	7.6	5.4	25.6	0.8	3.5	15.9	0.3
Prop In Lane	0.46		1.00	0.90		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	0	215	148	0	204	85	2624	1145	55	2566	1131
V/C Ratio(X)	0.19	0.00	0.92	0.52	0.00	0.41	0.78	0.55	0.03	0.78	0.40	0.01
Avail Cap(c_a), veh/h	197	0	215	148	0	204	350	2624	1145	109	2566	1131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	0.0	62.0	64.8	0.0	57.4	68.5	7.8	4.7	70.0	7.4	5.3
Incr Delay (d2), s/veh	0.5	0.0	39.1	3.1	0.0	1.3	14.2	0.8	0.0	20.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	10.1	3.2	0.0	3.2	3.0	12.5	0.4	2.0	7.8	0.1
LnGrp Delay(d), s/veh	56.2	0.0	101.1	67.9	0.0	58.8	82.7	8.7	4.7	90.5	7.8	5.3
LnGrp LOS	E		F	E		E	F	A	A	F	A	A
Approach Vol, veh/h		234			161			1544			1070	
Approach Delay, s/veh		94.0			63.1			11.7			11.1	
Approach LOS		F			E			B			B	

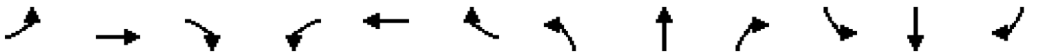
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	113.0		24.0	11.0	110.6		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	109.0		20.0	29.0	89.0		20.0
Max Q Clear Time (g_c+I1), s	5.5	27.6		20.1	7.4	17.9		18.8
Green Ext Time (p_c), s	0.0	18.8		0.0	0.1	9.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.7
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1168	35	303	1302	308	539
Future Volume (veh/h)	1168	35	303	1302	308	539
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	1192	36	309	1329	314	550
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1434	1242	385	2801	694	619
Arrive On Green	0.40	0.40	0.11	0.55	0.39	0.39
Sat Flow, veh/h	3668	1552	3476	5305	1792	1599
Grp Volume(v), veh/h	1192	36	309	1329	314	550
Grp Sat Flow(s),veh/h/ln	1787	1552	1738	1712	1792	1599
Q Serve(g_s), s	35.6	0.6	10.3	18.9	15.5	38.2
Cycle Q Clear(g_c), s	35.6	0.6	10.3	18.9	15.5	38.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1434	1242	385	2801	694	619
V/C Ratio(X)	0.83	0.03	0.80	0.47	0.45	0.89
Avail Cap(c_a), veh/h	2046	1508	702	4151	694	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	2.7	51.6	16.6	27.0	34.0
Incr Delay (d2), s/veh	2.1	0.0	4.0	0.1	2.1	17.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.0	0.7	5.1	8.9	8.1	19.7
LnGrp Delay(d), s/veh	34.0	2.7	55.5	16.7	29.2	51.2
LnGrp LOS	C	A	E	B	C	D
Approach Vol, veh/h	1228			1638	864	
Approach Delay, s/veh	33.1			24.0	43.2	
Approach LOS	C			C	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		50.0	17.1	51.6				68.8
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		46.0	24.0	68.0				96.0
Max Q Clear Time (g_c+I1), s		40.2	12.3	37.6				20.9
Green Ext Time (p_c), s		1.8	0.8	10.0				14.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	585	345	32	885	77	7	8	17	676	23	292
Future Volume (vph)	48	585	345	32	885	77	7	8	17	676	23	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.96		1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1781	3574	1552	1787	3574	1533		1730		1698	1620	1495
Flt Permitted	0.17	1.00	1.00	0.95	1.00	1.00		0.90		0.95	0.71	1.00
Satd. Flow (perm)	326	3574	1552	1787	3574	1533		1577		1698	1201	1495
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	52	629	371	34	952	83	8	9	18	727	25	314
RTOR Reduction (vph)	0	0	147	0	0	52	0	14	0	0	1	63
Lane Group Flow (vph)	52	629	224	34	952	31	0	21	0	393	389	220
Confl. Peds. (#/hr)	7		1	1		7	2					2
Confl. Bikes (#/hr)			5									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	29.2	29.2	29.2	3.4	36.6	36.6		20.5		29.0	53.5	53.5
Effective Green, g (s)	29.2	29.2	29.2	3.4	36.6	36.6		20.5		29.0	53.5	53.5
Actuated g/C Ratio	0.30	0.30	0.30	0.03	0.37	0.37		0.21		0.30	0.55	0.55
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	97	1063	461	61	1333	571		329		501	778	815
v/s Ratio Prot		0.18		0.02	c0.27					c0.23	0.15	
v/s Ratio Perm	0.16		0.14			0.02		0.01			c0.12	0.15
v/c Ratio	0.54	0.59	0.48	0.56	0.71	0.05		0.06		0.78	0.50	0.27
Uniform Delay, d1	28.8	29.4	28.3	46.6	26.3	19.7		31.1		31.7	13.9	11.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	5.6	0.9	0.8	10.6	1.8	0.0		0.1		7.9	0.5	0.8
Delay (s)	34.4	30.3	29.1	57.2	28.1	19.7		31.2		39.6	14.4	12.7
Level of Service	C	C	C	E	C	B		C		D	B	B
Approach Delay (s/veh)		30.0			28.4			31.2			23.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	98.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	1045	384	167	1191	103	296	615	148	223	615	179
Future Volume (veh/h)	194	1045	384	167	1191	103	296	615	148	223	615	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	198	1066	392	170	1215	105	302	628	151	228	628	183
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	221	1178	521	194	1509	130	329	1141	494	236	956	410
Arrive On Green	0.12	0.33	0.33	0.11	0.31	0.31	0.18	0.32	0.32	0.13	0.27	0.27
Sat Flow, veh/h	1792	3574	1582	1792	4803	415	1792	3574	1548	1792	3574	1533
Grp Volume(v), veh/h	198	1066	392	170	866	454	302	628	151	228	628	183
Grp Sat Flow(s),veh/h/ln	1792	1787	1582	1792	1712	1794	1792	1787	1548	1792	1787	1533
Q Serve(g_s), s	15.7	41.0	31.8	13.5	33.4	33.5	23.8	20.9	10.6	18.2	22.5	14.3
Cycle Q Clear(g_c), s	15.7	41.0	31.8	13.5	33.4	33.5	23.8	20.9	10.6	18.2	22.5	14.3
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	1178	521	194	1076	564	329	1141	494	236	956	410
V/C Ratio(X)	0.89	0.91	0.75	0.88	0.81	0.81	0.92	0.55	0.31	0.96	0.66	0.45
Avail Cap(c_a), veh/h	249	1241	549	236	1165	610	448	1141	494	236	956	410
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	46.1	43.1	63.3	45.4	45.4	57.7	40.5	37.0	62.2	46.9	43.9
Incr Delay (d2), s/veh	29.1	9.3	5.5	25.4	4.0	7.3	19.5	1.9	1.6	48.5	3.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	21.8	14.7	8.0	16.3	17.7	13.6	10.6	4.8	12.2	11.5	6.5
LnGrp Delay(d), s/veh	91.3	55.5	48.6	88.7	49.3	52.7	77.2	42.4	38.6	110.7	50.4	47.4
LnGrp LOS	F	E	D	F	D	D	E	D	D	F	D	D
Approach Vol, veh/h		1656			1490			1081			1039	
Approach Delay, s/veh		58.1			54.8			51.6			63.1	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	50.0	19.6	51.5	30.5	42.5	21.8	49.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	19.0	50.0	36.0	29.0	20.0	49.0
Max Q Clear Time (g_c+I1), s	20.2	22.9	15.5	43.0	25.8	24.5	17.7	35.5
Green Ext Time (p_c), s	0.0	4.6	0.1	4.4	0.6	1.9	0.1	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.8
HCM 2010 LOS	E

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	76	149	589	81	58	720	64	12	120	418	216	11
Future Volume (vph)	76	149	589	81	58	720	64	12	120	418	216	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.95	1.00	0.99			1.00	0.99	0.88	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.99			1.00	0.99	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1787	3574	1513	1787	5035			1787	3357	1279	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1787	3574	1513	1787	5035			1787	3357	1279	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	82	160	633	87	62	774	69	13	129	449	232	12
RTOR Reduction (vph)	0	0	0	64	0	1	0	0	0	0	121	0
Lane Group Flow (vph)	0	242	633	23	62	855	0	0	129	484	88	0
Confl. Peds. (#/hr)		15		15	15		15		22		39	
Confl. Bikes (#/hr)							2				1	
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		21.0	39.0	39.0	7.8	25.8			11.0	31.0	31.0	
Effective Green, g (s)		21.0	39.0	39.0	7.8	25.8			11.0	31.0	31.0	
Actuated g/C Ratio		0.14	0.26	0.26	0.05	0.17			0.07	0.21	0.21	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		249	926	392	92	863			130	691	263	
v/s Ratio Prot		c0.14	0.18		0.03	c0.17			c0.07	0.14		
v/s Ratio Perm				0.01							0.07	
v/c Ratio		0.97	0.68	0.06	0.67	0.99			0.99	0.70	0.33	
Uniform Delay, d1		64.5	50.2	41.9	70.1	62.2			69.7	55.4	50.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		48.9	2.1	0.1	17.7	28.3			76.3	5.8	3.4	
Delay (s)		113.4	52.3	42.0	87.8	90.5			146.0	61.3	54.3	
Level of Service		F	D	D	F	F			F	E	D	
Approach Delay (s/veh)			66.7			90.3				72.8		
Approach LOS			E			F				E		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	75.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	238	179	21	141	47	111	452	17	52	621	48
Future Volume (veh/h)	54	238	179	21	141	47	111	452	17	52	621	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	63	277	208	24	164	55	129	526	20	60	722	56
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	175	346	293	90	346	293	518	2619	1144	647	2619	1145
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1134	1827	1546	889	1827	1546	678	3471	1517	840	3471	1518
Grp Volume(v), veh/h	63	277	208	24	164	55	129	526	20	60	722	56
Grp Sat Flow(s),veh/h/ln	1134	1827	1546	889	1827	1546	678	1736	1517	840	1736	1518
Q Serve(g_s), s	7.5	20.7	18.0	3.8	11.4	4.3	10.4	6.3	0.5	3.2	9.2	1.3
Cycle Q Clear(g_c), s	18.9	20.7	18.0	24.5	11.4	4.3	19.7	6.3	0.5	9.5	9.2	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	346	293	90	346	293	518	2619	1144	647	2619	1145
V/C Ratio(X)	0.36	0.80	0.71	0.27	0.47	0.19	0.25	0.20	0.02	0.09	0.28	0.05
Avail Cap(c_a), veh/h	229	434	367	133	434	367	518	2619	1144	647	2619	1145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	55.4	54.3	67.1	51.6	48.7	8.5	5.1	4.4	6.5	5.4	4.5
Incr Delay (d2), s/veh	1.2	8.2	4.6	1.6	1.0	0.3	1.1	0.2	0.0	0.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	11.3	8.1	1.0	5.9	1.9	2.1	3.1	0.2	0.8	4.5	0.6
LnGrp Delay(d), s/veh	61.3	63.6	59.0	68.7	52.6	49.0	9.6	5.3	4.4	6.7	5.7	4.6
LnGrp LOS	E	E	E	E	D	D	A	A	A	A	A	A
Approach Vol, veh/h		548			243			675			838	
Approach Delay, s/veh		61.6			53.4			6.1			5.7	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		31.1		112.0		31.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		21.7		22.7		11.5		26.5
Green Ext Time (p_c), s		5.2		1.9		6.2		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	81	173	20	38	37	90	1037	22	50	822	47
Future Volume (veh/h)	105	81	173	20	38	37	90	1037	22	50	822	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	107	83	177	20	39	38	92	1058	22	51	839	48
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	38	7	356	32	49	356	447	2573	1145	364	2573	1121
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	32	1571	0	216	1571	630	3574	1590	525	3574	1557
Grp Volume(v), veh/h	190	0	177	59	0	38	92	1058	22	51	839	48
Grp Sat Flow(s),veh/h/ln	32	0	1571	216	0	1571	630	1787	1590	525	1787	1557
Q Serve(g_s), s	0.0	0.0	14.7	0.0	0.0	2.9	9.4	17.7	0.6	6.4	12.9	1.3
Cycle Q Clear(g_c), s	34.0	0.0	14.7	34.0	0.0	2.9	22.3	17.7	0.6	24.1	12.9	1.3
Prop In Lane	0.56		1.00	0.34		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	45	0	356	81	0	356	447	2573	1145	364	2573	1121
V/C Ratio(X)	4.23	0.00	0.50	0.73	0.00	0.11	0.21	0.41	0.02	0.14	0.33	0.04
Avail Cap(c_a), veh/h	45	0	356	81	0	356	447	2573	1145	364	2573	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.5	0.0	50.5	49.3	0.0	46.0	11.8	8.4	6.0	13.1	7.7	6.1
Incr Delay (d2), s/veh	1505.9	0.0	1.1	27.9	0.0	0.1	1.0	0.5	0.0	0.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.6	0.0	6.5	2.6	0.0	1.3	1.8	8.8	0.3	1.0	6.4	0.6
LnGrp Delay(d), s/veh	1575.4	0.0	51.6	77.2	0.0	46.1	12.8	8.8	6.0	13.9	8.0	6.1
LnGrp LOS	F		D	E		D	B	A	A	B	A	A
Approach Vol, veh/h		367			97			1172			938	
Approach Delay, s/veh		840.5			65.0			9.1			8.2	
Approach LOS		F			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		24.3		36.0		26.1		36.0
Green Ext Time (p_c), s		11.7		0.0		8.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	129.4
HCM 2010 LOS	F



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1000	50	0	1000	100	100
Future Volume (vph)	1000	50	0	1000	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	5049			5085	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	5049			5085	1770	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	4000	200	0	4000	400	400
RTOR Reduction (vph)	4	0	0	0	0	72
Lane Group Flow (vph)	4196	0	0	4000	400	328
Turn Type	NA			NA	Prot	Prot
Protected Phases	4			8 5	6	6
Permitted Phases						
Actuated Green, G (s)	87.0			113.0	29.0	29.0
Effective Green, g (s)	87.0			113.0	29.0	29.0
Actuated g/C Ratio	0.58			0.75	0.19	0.19
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	2928			3830	342	306
v/s Ratio Prot	c0.83			c0.79	c0.23	0.21
v/s Ratio Perm						
v/c Ratio	1.43			1.04	1.17	1.07
Uniform Delay, d1	31.5			18.5	60.5	60.5
Progression Factor	1.00			0.94	1.00	1.00
Incremental Delay, d2	196.9			27.7	103.2	72.1
Delay (s)	228.4			45.0	163.7	132.6
Level of Service	F			D	F	F
Approach Delay (s/veh)	228.4			45.0	148.1	
Approach LOS	F			D	F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	139.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

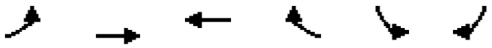
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	-	1	-	0	-	0
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	6.22	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	3.318	-	-	-	-
Pot Cap-1 Maneuver	0	1084	0	-	-	-
Stage 1	0	-	0	-	-	-
Stage 2	0	-	0	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	-	1084	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-
HCM Control Delay (s/veh)	-	0	-	-
HCM Lane LOS	-	A	-	-
HCM 95th %tile Q(veh)	-	-	-	-



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	1	2	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h				0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	1774	3632	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1774	1770	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	1.00			0.00		
Lane Grp Cap(c), veh/h				0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h				0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Number	7	4	14	3	8	18				
Initial Q (Qb), veh	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	0	1863	1900	0	1863	1900				
Adj Flow Rate, veh/h	0	0	0	0	0	0				
Adj No. of Lanes	0	2	0	0	3	0				
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25				
Percent Heavy Veh, %	0	2	2	0	2	2				
Cap, veh/h	--2104	7483648	0	--2104	7483648	0				
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00				
Sat Flow, veh/h	0	-72647	0	0	-70952	0				
Grp Volume(v), veh/h	0	0	0	0	0	0				
Grp Sat Flow(s),veh/h/ln	0	1770	0	0	1695	0				
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				
Prop In Lane	0.00		0.00	0.00		0.00				
Lane Grp Cap(c), veh/h	4053	35506944	0	5824	43129344	0				
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00				
Avail Cap(c_a), veh/h	591818	39155200	0	850349	66974464	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00				
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp LOS										
Approach Vol, veh/h		0			0					
Approach Delay, s/veh		0.0			0.0					
Approach LOS										

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

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Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	761	561	121	662	6	467	0	103	0	0
Future Volume (vph)	0	0	761	561	121	662	6	467	0	103	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.95	1.00	1.00		1.00		0.95		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.97	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3276	1372	1770	3533		3433		1504		
Flt Permitted			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3276	1372	1770	3533		3433		1504		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	810	597	129	704	6	497	0	110	0	0
RTOR Reduction (vph)	0	0	14	276	0	0	0	0	0	64	0	0
Lane Group Flow (vph)	0	0	963	154	129	710	0	497	0	46	0	0
Confl. Peds. (#/hr)		9		16	16		9			18	18	
Confl. Bikes (#/hr)				5			2			2		
Turn Type	Prot		NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases				4						2		
Actuated Green, G (s)			40.3	40.3	12.9	57.2		20.9		47.3		
Effective Green, g (s)			40.3	40.3	12.9	57.2		20.9		47.3		
Actuated g/C Ratio			0.36	0.36	0.11	0.51		0.19		0.42		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1173	491	202	1796		637		632		
v/s Ratio Prot			c0.29		c0.07	0.20		c0.14				
v/s Ratio Perm				0.11						c0.03		
v/c Ratio			0.82	0.31	0.64	0.40		0.78		0.07		
Uniform Delay, d1			32.8	26.1	47.6	17.0		43.6		19.5		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			4.7	0.4	6.5	0.1		6.2		0.2		
Delay (s)			37.5	26.5	54.1	17.2		49.8		19.7		
Level of Service			D	C	D	B		D		B		
Approach Delay (s/veh)			34.2			22.8			44.3			36.1
Approach LOS			C			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	112.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



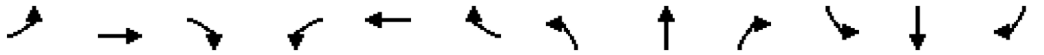
Movement	SBR
Lane Configurations	
Traffic Volume (vph)	1
Future Volume (vph)	1
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1611
Flt Permitted	1.00
Satd. Flow (perm)	1611
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	1
RTOR Reduction (vph)	1
Lane Group Flow (vph)	0
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	22.4
Effective Green, g (s)	22.4
Actuated g/C Ratio	0.20
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	320
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.00
Uniform Delay, d1	36.1
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	36.1
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	50	29	5	3	12	0	604	11	12	771
Future Volume (vph)	0	0	50	29	5	3	12	0	604	11	12	771
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.84	1.00	0.93		1.00		1.00	0.93	1.00	1.00
Flpb, ped/bikes			1.00	0.86	1.00		1.00		1.00	1.00	0.98	1.00
Frt			0.87	1.00	0.94		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1348	1514	1639		1770		3539	1471	1733	3539
Flt Permitted			1.00	0.95	1.00		0.34		1.00	1.00	0.41	1.00
Satd. Flow (perm)			1348	1514	1639		634		3539	1471	743	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	53	31	5	3	13	0	643	12	13	820
RTOR Reduction (vph)	0	0	49	0	3	0	0	0	0	2	0	0
Lane Group Flow (vph)	0	0	4	31	5	0	13	0	643	10	13	820
Confl. Peds. (#/hr)	93		85	85		93		2		18	18	
Confl. Bikes (#/hr)			4			6				2		
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			6.3	6.3	6.3		76.4		76.4	76.4	76.4	76.4
Effective Green, g (s)			6.3	6.3	6.3		76.4		76.4	76.4	76.4	76.4
Actuated g/C Ratio			0.07	0.07	0.07		0.84		0.84	0.84	0.84	0.84
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			93	105	113		534		2981	1239	625	2981
v/s Ratio Prot					0.00				0.18			c0.23
v/s Ratio Perm			0.00	c0.02			0.02			0.01	0.02	
v/c Ratio			0.04	0.30	0.05		0.02		0.22	0.01	0.02	0.28
Uniform Delay, d1			39.4	40.1	39.4		1.2		1.4	1.1	1.1	1.5
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.2	1.6	0.2		0.1		0.2	0.0	0.1	0.2
Delay (s)			39.6	41.7	39.6		1.2		1.5	1.1	1.2	1.7
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		39.6			41.2				1.5			1.7
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	90.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	47.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	789	121	316	952	219	61	361	133	180	516	110
Future Volume (veh/h)	94	789	121	316	952	219	61	361	133	180	516	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	99	831	127	333	1002	231	64	380	140	189	543	116
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	125	1052	160	363	1521	350	332	1210	527	423	1338	696
Arrive On Green	0.07	0.24	0.24	0.20	0.37	0.37	0.04	0.34	0.34	0.07	0.38	0.38
Sat Flow, veh/h	1774	4422	671	1774	4090	941	1774	3539	1543	1774	3539	1545
Grp Volume(v), veh/h	99	636	322	333	830	403	64	380	140	189	543	116
Grp Sat Flow(s),veh/h/ln	1774	1695	1703	1774	1695	1641	1774	1770	1543	1774	1770	1545
Q Serve(g_s), s	6.1	19.5	19.8	20.4	22.6	22.7	2.6	8.8	7.3	7.5	12.5	5.0
Cycle Q Clear(g_c), s	6.1	19.5	19.8	20.4	22.6	22.7	2.6	8.8	7.3	7.5	12.5	5.0
Prop In Lane	1.00		0.39	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	807	405	363	1261	610	332	1210	527	423	1338	696
V/C Ratio(X)	0.79	0.79	0.80	0.92	0.66	0.66	0.19	0.31	0.27	0.45	0.41	0.17
Avail Cap(c_a), veh/h	239	1006	505	399	1311	635	365	1210	527	423	1338	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	39.7	39.8	43.3	29.0	29.1	22.7	27.0	26.5	20.8	25.4	18.3
Incr Delay (d2), s/veh	10.7	3.4	7.0	24.8	1.2	2.4	0.3	0.7	1.2	0.7	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	9.6	10.1	12.5	10.8	10.7	1.3	4.4	3.3	3.7	6.3	2.2
LnGrp Delay(d), s/veh	61.6	43.1	46.8	68.1	30.2	31.5	23.0	27.7	27.7	21.5	26.3	18.8
LnGrp LOS	E	D	D	E	C	C	C	C	C	C	C	B
Approach Vol, veh/h		1057			1566			584			848	
Approach Delay, s/veh		46.0			38.6			27.2			24.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	42.0	26.7	30.5	8.0	46.0	11.8	45.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	38.0	25.0	33.0	6.0	40.0	15.0	43.0
Max Q Clear Time (g_c+I1), s	9.5	10.8	22.4	21.8	4.6	14.5	8.1	24.7
Green Ext Time (p_c), s	0.0	3.0	0.3	4.7	0.0	4.1	0.1	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	194	91	285	150	60	32	489	148	75	987	36
Future Volume (veh/h)	36	194	91	285	150	60	32	489	148	75	987	36
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	39	211	99	310	163	65	35	532	161	82	1073	39
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	347	413	194	280	437	174	257	2044	886	436	2010	73
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	1135	1180	554	1055	1248	498	500	3505	1519	740	3445	125
Grp Volume(v), veh/h	39	0	310	310	0	228	35	532	161	82	546	566
Grp Sat Flow(s),veh/h/ln	1135	0	1733	1055	0	1745	500	1752	1519	740	1752	1818
Q Serve(g_s), s	3.2	0.0	17.0	25.0	0.0	11.7	5.5	8.9	5.9	7.3	22.6	22.6
Cycle Q Clear(g_c), s	14.9	0.0	17.0	42.0	0.0	11.7	28.1	8.9	5.9	16.3	22.6	22.6
Prop In Lane	1.00		0.32	1.00		0.29	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	347	0	607	280	0	611	257	2044	886	436	1022	1060
V/C Ratio(X)	0.11	0.00	0.51	1.11	0.00	0.37	0.14	0.26	0.18	0.19	0.53	0.53
Avail Cap(c_a), veh/h	347	0	607	280	0	611	257	2044	886	436	1022	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	30.9	50.2	0.0	29.2	23.6	12.3	11.7	16.3	15.1	15.1
Incr Delay (d2), s/veh	0.1	0.0	0.7	85.9	0.0	0.4	1.1	0.3	0.5	1.0	2.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	8.2	15.9	0.0	5.7	0.8	4.4	2.6	1.6	11.5	11.9
LnGrp Delay(d), s/veh	34.9	0.0	31.6	136.0	0.0	29.5	24.7	12.6	12.1	17.2	17.1	17.1
LnGrp LOS	C		C	F		C	C	B	B	B	B	B
Approach Vol, veh/h		349			538			728			1194	
Approach Delay, s/veh		32.0			90.9			13.1			17.1	
Approach LOS		C			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		46.0		74.0		46.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		30.1		19.0		24.6		44.0
Green Ext Time (p_c), s		5.1		2.0		10.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	108	3	65	11	9	11	12	560	20	9	1256	128
Future Volume (veh/h)	108	3	65	11	9	11	12	560	20	9	1256	128
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	112	3	68	11	9	11	12	583	21	9	1308	133
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	238	8	189	190	96	117	313	2779	1210	680	2542	257
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1362	65	1472	1305	746	912	369	3539	1541	812	3237	328
Grp Volume(v), veh/h	112	0	71	11	0	20	12	583	21	9	712	729
Grp Sat Flow(s),veh/h/ln	1362	0	1537	1305	0	1659	369	1770	1541	812	1770	1795
Q Serve(g_s), s	7.3	0.0	3.9	0.7	0.0	1.0	1.1	3.9	0.3	0.3	13.4	13.6
Cycle Q Clear(g_c), s	8.3	0.0	3.9	4.6	0.0	1.0	14.8	3.9	0.3	4.2	13.4	13.6
Prop In Lane	1.00		0.96	1.00		0.55	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	238	0	198	190	0	213	313	2779	1210	680	1390	1410
V/C Ratio(X)	0.47	0.00	0.36	0.06	0.00	0.09	0.04	0.21	0.02	0.01	0.51	0.52
Avail Cap(c_a), veh/h	635	0	645	570	0	696	313	2779	1210	680	1390	1410
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	0.0	37.0	39.1	0.0	35.7	6.3	2.6	2.2	3.1	3.6	3.6
Incr Delay (d2), s/veh	1.4	0.0	1.1	0.1	0.0	0.2	0.2	0.2	0.0	0.0	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.0	1.7	0.3	0.0	0.5	0.1	1.9	0.1	0.1	6.9	7.0
LnGrp Delay(d), s/veh	40.8	0.0	38.1	39.2	0.0	35.9	6.5	2.7	2.2	3.1	4.9	5.0
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		183			31			616			1450	
Approach Delay, s/veh		39.8			37.1			2.8			4.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		16.0		77.0		16.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		16.8		10.3		15.6		6.6
Green Ext Time (p_c), s		4.8		0.7		15.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	204	106	133	111	38	25	497	112	57	1163	21
Future Volume (veh/h)	37	204	106	133	111	38	25	497	112	57	1163	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	40	222	115	145	121	41	27	540	122	62	1264	23
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	403	372	193	237	610	494	227	2119	918	471	2119	918
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1198	1137	589	1039	1863	1509	427	3539	1534	769	3539	1534
Grp Volume(v), veh/h	40	0	337	145	121	41	27	540	122	62	1264	23
Grp Sat Flow(s),veh/h/ln	1198	0	1725	1039	1863	1509	427	1770	1534	769	1770	1534
Q Serve(g_s), s	2.7	0.0	17.7	14.7	5.1	2.0	4.6	7.8	3.8	4.5	24.2	0.7
Cycle Q Clear(g_c), s	7.8	0.0	17.7	32.4	5.1	2.0	28.8	7.8	3.8	12.3	24.2	0.7
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	403	0	565	237	610	494	227	2119	918	471	2119	918
V/C Ratio(X)	0.10	0.00	0.60	0.61	0.20	0.08	0.12	0.25	0.13	0.13	0.60	0.03
Avail Cap(c_a), veh/h	529	0	747	347	807	654	227	2119	918	471	2119	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	30.5	44.1	26.3	25.2	22.6	10.3	9.5	13.2	13.6	8.9
Incr Delay (d2), s/veh	0.1	0.0	1.0	2.5	0.2	0.1	1.1	0.3	0.3	0.6	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	8.6	4.4	2.6	0.9	0.6	3.9	1.7	1.0	12.1	0.3
LnGrp Delay(d), s/veh	29.2	0.0	31.5	46.6	26.4	25.3	23.6	10.6	9.8	13.8	14.8	8.9
LnGrp LOS	C		C	D	C	C	C	B	A	B	B	A
Approach Vol, veh/h		377			307			689			1349	
Approach Delay, s/veh		31.3			35.8			11.0			14.7	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		39.5		69.0		39.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		30.8		19.7		26.2		34.4
Green Ext Time (p_c), s		4.8		2.3		13.0		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Future Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	152	1147	158	122	746	55	123	483	193	239	967	135
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1472	203	152	1571	468	185	1161	496	313	1858	553
Arrive On Green	0.11	0.33	0.33	0.09	0.31	0.31	0.05	0.33	0.33	0.09	0.37	0.37
Sat Flow, veh/h	1757	4451	613	1757	5036	1499	3408	3505	1497	3408	5036	1499
Grp Volume(v), veh/h	152	865	440	122	746	55	123	483	193	239	967	135
Grp Sat Flow(s),veh/h/ln	1757	1679	1707	1757	1679	1499	1704	1752	1497	1704	1679	1499
Q Serve(g_s), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Cycle Q Clear(g_c), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1110	564	152	1571	468	185	1161	496	313	1858	553
V/C Ratio(X)	0.82	0.78	0.78	0.80	0.47	0.12	0.67	0.42	0.39	0.76	0.52	0.24
Avail Cap(c_a), veh/h	350	1406	715	298	1958	583	272	1161	496	476	1858	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	30.3	30.3	45.0	27.9	24.7	46.5	26.0	25.7	44.5	24.7	22.0
Incr Delay (d2), s/veh	8.6	2.2	4.3	9.3	0.2	0.1	4.1	1.1	2.3	3.9	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	11.2	11.7	3.7	5.6	1.1	1.8	5.3	4.4	3.4	7.2	2.8
LnGrp Delay(d), s/veh	52.6	32.5	34.6	54.3	28.1	24.8	50.6	27.1	28.0	48.4	25.8	23.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1457			923			799			1341	
Approach Delay, s/veh		35.2			31.4			31.0			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	37.2	12.7	37.2	9.4	41.0	14.6	35.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	17.0	42.0	8.0	37.0	20.0	39.0
Max Q Clear Time (g_c+I1), s	8.9	12.7	8.8	25.3	5.6	17.0	10.5	14.0
Green Ext Time (p_c), s	0.4	3.5	0.2	7.8	0.1	7.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	621	89	165	549	107	83	629	129	75	526	148
Future Volume (veh/h)	158	621	89	165	549	107	83	629	129	75	526	148
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	163	640	92	170	566	110	86	648	133	77	542	153
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	200	837	359	207	707	137	111	1482	644	99	1117	314
Arrive On Green	0.11	0.24	0.24	0.12	0.24	0.24	0.06	0.42	0.42	0.06	0.41	0.41
Sat Flow, veh/h	1774	3539	1516	1774	2938	569	1774	3539	1538	1774	2707	761
Grp Volume(v), veh/h	163	640	92	170	340	336	86	648	133	77	353	342
Grp Sat Flow(s),veh/h/ln	1774	1770	1516	1774	1770	1737	1774	1770	1538	1774	1770	1698
Q Serve(g_s), s	8.4	15.7	4.6	8.7	16.8	17.0	4.4	12.1	5.1	4.0	13.7	13.8
Cycle Q Clear(g_c), s	8.4	15.7	4.6	8.7	16.8	17.0	4.4	12.1	5.1	4.0	13.7	13.8
Prop In Lane	1.00		1.00	1.00		0.33	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	200	837	359	207	426	418	111	1482	644	99	730	700
V/C Ratio(X)	0.82	0.76	0.26	0.82	0.80	0.80	0.78	0.44	0.21	0.77	0.48	0.49
Avail Cap(c_a), veh/h	381	1254	537	400	646	634	229	1482	644	210	730	700
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	33.1	28.9	40.2	33.2	33.3	43.0	19.3	17.2	43.4	20.1	20.1
Incr Delay (d2), s/veh	7.9	1.6	0.4	7.8	4.1	4.4	11.0	0.9	0.7	12.0	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	7.8	2.0	4.7	8.7	8.6	2.5	6.1	2.3	2.3	7.1	6.9
LnGrp Delay(d), s/veh	48.3	34.7	29.3	48.0	37.3	37.7	54.0	20.2	17.9	55.4	22.4	22.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	E	C	C
Approach Vol, veh/h		895			846			867			772	
Approach Delay, s/veh		36.6			39.6			23.2			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	43.0	14.9	26.0	9.8	42.4	14.5	26.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	21.0	33.0	12.0	38.0	20.0	34.0
Max Q Clear Time (g_c+I1), s	6.0	14.1	10.7	17.7	6.4	15.8	10.4	19.0
Green Ext Time (p_c), s	0.1	5.0	0.3	4.0	0.1	4.2	0.3	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	8	3	292	4	66	13	635	264	45	677	9
Future Volume (veh/h)	12	8	3	292	4	66	13	635	264	45	677	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.93		0.88	0.90		0.89	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	13	9	3	314	4	71	14	683	284	48	728	10
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	373	365	122	426	21	381	462	1522	633	358	2261	31
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1224	1290	430	1261	76	1347	716	2406	1000	578	3574	49
Grp Volume(v), veh/h	13	0	12	314	0	75	14	502	465	48	360	378
Grp Sat Flow(s),veh/h/ln	1224	0	1719	1261	0	1423	716	1770	1637	578	1770	1853
Q Serve(g_s), s	0.8	0.0	0.5	22.7	0.0	3.8	0.9	13.8	13.8	4.4	8.9	8.9
Cycle Q Clear(g_c), s	4.6	0.0	0.5	23.2	0.0	3.8	9.8	13.8	13.8	18.2	8.9	8.9
Prop In Lane	1.00		0.25	1.00		0.95	1.00		0.61	1.00		0.03
Lane Grp Cap(c), veh/h	373	0	486	426	0	403	462	1120	1035	358	1120	1173
V/C Ratio(X)	0.03	0.00	0.02	0.74	0.00	0.19	0.03	0.45	0.45	0.13	0.32	0.32
Avail Cap(c_a), veh/h	698	0	943	761	0	780	462	1120	1035	358	1120	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	24.6	32.9	0.0	25.7	10.3	8.9	8.9	13.6	8.0	8.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.5	0.0	0.2	0.1	1.3	1.4	0.8	0.8	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.2	8.1	0.0	1.5	0.2	7.1	6.6	0.8	4.5	4.7
LnGrp Delay(d), s/veh	27.5	0.0	24.6	35.4	0.0	26.0	10.4	10.2	10.3	14.4	8.8	8.8
LnGrp LOS	C		C	D		C	B	B	B	B	A	A
Approach Vol, veh/h		25			389			981			786	
Approach Delay, s/veh		26.1			33.6			10.3			9.1	
Approach LOS		C			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		30.8		64.0		30.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		15.8		6.6		20.2		25.2
Green Ext Time (p_c), s		7.9		0.1		5.7		1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	415	749	132	186	941	138	128	450	111	137	503	395
Future Volume (veh/h)	415	749	132	186	941	138	128	450	111	137	503	395
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.92	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	428	772	136	192	970	142	132	464	114	141	519	407
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	327	1166	492	223	1198	175	301	937	228	353	1244	531
Arrive On Green	0.18	0.33	0.33	0.13	0.27	0.27	0.05	0.34	0.34	0.07	0.35	0.35
Sat Flow, veh/h	1774	3539	1492	1774	4426	645	1774	2794	681	1774	3539	1509
Grp Volume(v), veh/h	428	772	136	192	742	370	132	292	286	141	519	407
Grp Sat Flow(s),veh/h/ln	1774	1770	1492	1774	1695	1681	1774	1770	1705	1774	1770	1509
Q Serve(g_s), s	21.0	21.3	7.7	12.1	23.3	23.4	5.6	15.0	15.2	5.9	12.7	27.2
Cycle Q Clear(g_c), s	21.0	21.3	7.7	12.1	23.3	23.4	5.6	15.0	15.2	5.9	12.7	27.2
Prop In Lane	1.00		1.00	1.00		0.38	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	327	1166	492	223	918	455	301	593	572	353	1244	531
V/C Ratio(X)	1.31	0.66	0.28	0.86	0.81	0.81	0.44	0.49	0.50	0.40	0.42	0.77
Avail Cap(c_a), veh/h	327	1166	492	327	1102	547	301	593	572	402	1244	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	32.7	28.2	48.8	38.7	38.8	23.7	30.1	30.2	23.2	28.0	32.8
Incr Delay (d2), s/veh	158.7	1.4	0.3	14.3	3.9	7.8	1.0	2.9	3.1	0.7	1.0	10.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.6	10.6	3.2	6.8	11.3	11.9	2.8	7.8	7.6	2.9	6.4	12.8
LnGrp Delay(d), s/veh	205.1	34.1	28.5	63.0	42.6	46.6	24.7	33.0	33.3	23.9	29.1	42.9
LnGrp LOS	F	C	C	E	D	D	C	C	C	C	C	D
Approach Vol, veh/h		1336			1304			710			1067	
Approach Delay, s/veh		88.3			46.7			31.6			33.7	
Approach LOS		F			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	42.1	18.3	41.5	10.0	44.0	25.0	34.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	35.0	21.0	37.0	6.0	40.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	7.9	17.2	14.1	23.3	7.6	29.2	23.0	25.4
Green Ext Time (p_c), s	0.1	3.2	0.3	4.8	0.0	3.7	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	133	184	275	64	135	68	180	274	26	52	583	79
Future Volume (veh/h)	133	184	275	64	135	68	180	274	26	52	583	79
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	140	194	289	67	142	72	189	288	27	55	614	83
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	384	241	360	158	421	213	399	1812	168	607	1733	234
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	1147	659	982	900	1150	583	737	3233	300	1046	3092	417
Grp Volume(v), veh/h	140	0	483	67	0	214	189	155	160	55	347	350
Grp Sat Flow(s),veh/h/ln	1147	0	1641	900	0	1733	737	1752	1781	1046	1752	1756
Q Serve(g_s), s	10.9	0.0	28.8	7.9	0.0	9.7	20.6	4.6	4.7	2.9	11.8	11.9
Cycle Q Clear(g_c), s	20.7	0.0	28.8	36.6	0.0	9.7	32.5	4.6	4.7	7.6	11.8	11.9
Prop In Lane	1.00		0.60	1.00		0.34	1.00		0.17	1.00		0.24
Lane Grp Cap(c), veh/h	384	0	601	158	0	634	399	982	998	607	982	984
V/C Ratio(X)	0.36	0.00	0.80	0.42	0.00	0.34	0.47	0.16	0.16	0.09	0.35	0.36
Avail Cap(c_a), veh/h	501	0	769	250	0	812	399	982	998	607	982	984
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.4	0.0	31.0	47.4	0.0	25.0	22.0	11.5	11.6	13.4	13.1	13.1
Incr Delay (d2), s/veh	0.6	0.0	4.9	1.8	0.0	0.3	4.0	0.3	0.3	0.3	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	13.8	2.0	0.0	4.7	4.6	2.3	2.4	0.9	6.0	6.0
LnGrp Delay(d), s/veh	33.0	0.0	35.8	49.3	0.0	25.3	26.0	11.9	11.9	13.7	14.1	14.1
LnGrp LOS	C		D	D		C	C	B	B	B	B	B
Approach Vol, veh/h		623			281			504			752	
Approach Delay, s/veh		35.2			31.0			17.2			14.1	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		43.8		65.0		43.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		61.0		51.0		61.0		51.0
Max Q Clear Time (g_c+I1), s		34.5		30.8		13.9		38.6
Green Ext Time (p_c), s		3.4		3.7		5.1		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	22	7	88	13	165	10	301	34	186	710	7
Future Volume (veh/h)	2	22	7	88	13	165	10	301	34	186	710	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.93	0.95		0.93	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	2	23	7	94	14	176	11	320	36	198	755	7
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	111	210	64	257	17	217	487	1407	1154	789	1407	1180
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1150	1332	405	1299	109	1376	695	1845	1513	1006	1845	1547
Grp Volume(v), veh/h	2	0	30	94	0	190	11	320	36	198	755	7
Grp Sat Flow(s),veh/h/ln	1150	0	1737	1299	0	1486	695	1845	1513	1006	1845	1547
Q Serve(g_s), s	0.2	0.0	1.5	6.7	0.0	12.5	0.7	5.0	0.6	7.1	16.6	0.1
Cycle Q Clear(g_c), s	12.6	0.0	1.5	8.2	0.0	12.5	17.2	5.0	0.6	12.1	16.6	0.1
Prop In Lane	1.00		0.23	1.00		0.93	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	0	274	257	0	235	487	1407	1154	789	1407	1180
V/C Ratio(X)	0.02	0.00	0.11	0.37	0.00	0.81	0.02	0.23	0.03	0.25	0.54	0.01
Avail Cap(c_a), veh/h	328	0	602	503	0	515	487	1407	1154	789	1407	1180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	0.0	36.4	39.9	0.0	41.0	8.3	3.4	2.9	5.2	4.8	2.9
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.9	0.0	6.6	0.1	0.4	0.1	0.8	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.7	2.5	0.0	5.5	0.1	2.6	0.3	2.1	8.8	0.0
LnGrp Delay(d), s/veh	47.2	0.0	36.6	40.8	0.0	47.6	8.4	3.8	3.0	5.9	6.3	2.9
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		32			284			367			960	
Approach Delay, s/veh		37.3			45.3			3.9			6.2	
Approach LOS		D			D			A			A	

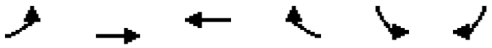
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		81.0		19.9		81.0		19.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		77.0		35.0		77.0		35.0
Max Q Clear Time (g_c+I1), s		19.2		14.6		18.6		14.5
Green Ext Time (p_c), s		2.3		0.1		7.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	59	240	80	65	196	63	44	207	49	76	668	81
Future Volume (veh/h)	59	240	80	65	196	63	44	207	49	76	668	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.92	0.98		0.87	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	60	245	82	66	200	64	45	211	50	78	682	83
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	436	342	199	304	97	484	1250	1030	776	2130	259
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	1078	1845	1444	1021	1287	412	692	1845	1521	1099	3144	382
Grp Volume(v), veh/h	60	245	82	66	0	264	45	211	50	78	380	385
Grp Sat Flow(s),veh/h/ln	1078	1845	1444	1021	0	1699	692	1845	1521	1099	1752	1774
Q Serve(g_s), s	5.0	10.9	4.3	5.7	0.0	13.1	2.7	3.9	1.0	2.6	8.3	8.3
Cycle Q Clear(g_c), s	18.0	10.9	4.3	16.5	0.0	13.1	11.0	3.9	1.0	6.5	8.3	8.3
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	181	436	342	199	0	402	484	1250	1030	776	1187	1201
V/C Ratio(X)	0.33	0.56	0.24	0.33	0.00	0.66	0.09	0.17	0.05	0.10	0.32	0.32
Avail Cap(c_a), veh/h	494	972	761	496	0	895	484	1250	1030	776	1187	1201
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	31.3	28.7	38.5	0.0	32.1	8.4	5.5	5.0	6.6	6.2	6.2
Incr Delay (d2), s/veh	1.1	1.1	0.4	1.0	0.0	1.8	0.4	0.3	0.1	0.3	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.7	1.7	1.6	0.0	6.3	0.6	2.0	0.4	0.8	4.2	4.3
LnGrp Delay(d), s/veh	41.3	32.4	29.1	39.5	0.0	33.9	8.8	5.8	5.1	6.9	6.9	6.9
LnGrp LOS	D	C	C	D		C	A	A	A	A	A	A
Approach Vol, veh/h		387			330			306			843	
Approach Delay, s/veh		33.1			35.0			6.1			6.9	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		67.0		26.0		67.0		26.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		63.0		49.0		63.0		49.0
Max Q Clear Time (g_c+I1), s		13.0		20.0		10.3		18.5
Green Ext Time (p_c), s		1.8		2.0		5.8		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.2
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	166	1074	1057	171	381	383
Future Volume (veh/h)	166	1074	1057	171	381	383
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	173	1119	1101	178	397	399
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	210	2504	1461	236	1428	657
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4518	703	3408	1568
Grp Volume(v), veh/h	173	1119	849	430	397	399
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1698	1704	1568
Q Serve(g_s), s	9.2	13.7	21.5	21.5	7.3	18.9
Cycle Q Clear(g_c), s	9.2	13.7	21.5	21.5	7.3	18.9
Prop In Lane	1.00			0.41	1.00	1.00
Lane Grp Cap(c), veh/h	210	2504	1127	570	1428	657
V/C Ratio(X)	0.82	0.45	0.75	0.75	0.28	0.61
Avail Cap(c_a), veh/h	442	3798	1548	783	1428	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	15.5	28.2	28.2	18.2	21.6
Incr Delay (d2), s/veh	7.9	0.1	1.4	2.8	0.5	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	6.3	10.1	10.5	3.5	17.4
LnGrp Delay(d), s/veh	48.9	15.6	29.6	31.0	18.7	25.7
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		1292	1279		796	
Approach Delay, s/veh		20.1	30.1		22.2	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.5		44.0	15.4	36.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				72.0		40.0	24.0	44.0
Max Q Clear Time (g_c+I1), s				15.7		20.9	11.2	23.5
Green Ext Time (p_c), s				9.8		2.8	0.3	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	414	109	93	351	66	92	470	55	78	858	55
Future Volume (veh/h)	132	414	109	93	351	66	92	470	55	78	858	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.99		0.97	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	140	440	116	99	373	70	98	500	59	83	913	59
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	256	578	254	217	501	217	390	2132	251	567	2001	129
Arrive On Green	0.08	0.16	0.16	0.06	0.14	0.14	0.04	0.66	0.66	0.59	0.59	0.59
Sat Flow, veh/h	1792	3574	1569	1792	3574	1544	1792	3213	378	850	3402	220
Grp Volume(v), veh/h	140	440	116	99	373	70	98	277	282	83	480	492
Grp Sat Flow(s),veh/h/ln	1792	1787	1569	1792	1787	1544	1792	1787	1804	850	1787	1835
Q Serve(g_s), s	7.0	12.6	7.2	5.0	10.7	4.4	2.2	6.6	6.7	4.8	16.2	16.2
Cycle Q Clear(g_c), s	7.0	12.6	7.2	5.0	10.7	4.4	2.2	6.6	6.7	4.8	16.2	16.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.21	1.00		0.12
Lane Grp Cap(c), veh/h	256	578	254	217	501	217	390	1186	1197	567	1051	1079
V/C Ratio(X)	0.55	0.76	0.46	0.46	0.74	0.32	0.25	0.23	0.24	0.15	0.46	0.46
Avail Cap(c_a), veh/h	323	869	381	289	802	346	506	1186	1197	567	1051	1079
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	42.9	40.6	36.6	44.1	41.4	9.0	7.2	7.2	10.1	12.4	12.4
Incr Delay (d2), s/veh	1.8	2.2	1.3	1.5	2.2	0.9	0.3	0.5	0.5	0.5	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	6.4	3.2	2.5	5.4	1.9	1.1	3.4	3.4	1.2	8.3	8.5
LnGrp Delay(d), s/veh	37.2	45.1	41.9	38.0	46.4	42.3	9.3	7.6	7.6	10.6	13.8	13.8
LnGrp LOS	D	D	D	D	D	D	A	A	A	B	B	B
Approach Vol, veh/h		696			542			657			1055	
Approach Delay, s/veh		42.9			44.3			7.9			13.6	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		75.0	10.7	21.3	8.1	66.9	13.0	19.0
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		71.0	11.0	26.0	11.0	56.0	13.0	24.0
Max Q Clear Time (g_c+I1), s		8.7	7.0	14.6	4.2	18.2	9.0	12.7
Green Ext Time (p_c), s		3.7	0.1	2.5	0.1	8.0	0.1	1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	162	97	30	173	146	58	373	39	93	591	168
Future Volume (veh/h)	187	162	97	30	173	146	58	373	39	93	591	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.96		0.93	1.00		0.96	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	203	176	105	33	188	159	63	405	42	101	642	183
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	432	355	254	257	200	359	2050	211	610	1184	1164
Arrive On Green	0.11	0.23	0.23	0.02	0.14	0.14	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1774	1863	1528	1774	1829	1419	661	3225	332	934	1863	1545
Grp Volume(v), veh/h	203	176	105	33	181	166	63	221	226	101	642	183
Grp Sat Flow(s),veh/h/ln	1774	1863	1528	1774	1770	1479	661	1770	1788	934	1863	1545
Q Serve(g_s), s	10.3	8.8	6.2	1.7	10.8	11.9	6.4	5.7	5.8	5.6	21.1	3.7
Cycle Q Clear(g_c), s	10.3	8.8	6.2	1.7	10.8	11.9	27.5	5.7	5.8	11.4	21.1	3.7
Prop In Lane	1.00		1.00	1.00		0.96	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	301	432	355	254	249	208	359	1125	1137	610	1184	1164
V/C Ratio(X)	0.67	0.41	0.30	0.13	0.73	0.80	0.18	0.20	0.20	0.17	0.54	0.16
Avail Cap(c_a), veh/h	404	575	472	278	305	255	359	1125	1137	610	1184	1164
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	35.8	34.9	39.2	45.3	45.8	18.8	8.3	8.4	10.7	11.1	3.9
Incr Delay (d2), s/veh	2.7	0.6	0.5	0.2	6.7	13.3	1.1	0.4	0.4	0.6	1.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	4.6	2.7	0.9	5.8	5.6	1.3	2.9	2.9	1.5	11.3	1.6
LnGrp Delay(d), s/veh	36.6	36.5	35.3	39.4	52.0	59.1	19.9	8.7	8.8	11.3	12.9	4.2
LnGrp LOS	D	D	D	D	D	E	B	A	A	B	B	A
Approach Vol, veh/h		484			380			510			926	
Approach Delay, s/veh		36.3			54.0			10.1			11.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.0	6.5	29.6		74.0	16.6	19.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		70.0	4.0	34.0		70.0	19.0	19.0
Max Q Clear Time (g_c+I1), s		29.5	3.7	10.8		23.1	12.3	13.9
Green Ext Time (p_c), s		3.4	0.0	1.3		6.4	0.3	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Future Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	284	827	180	195	630	59	60	802	81	132	1114	212
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	355	987	407	279	786	73	198	1329	134	309	1561	646
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.03	0.41	0.41	0.06	0.44	0.44
Sat Flow, veh/h	1774	3539	1460	1774	3244	303	1774	3217	325	1774	3539	1463
Grp Volume(v), veh/h	284	827	180	195	343	346	60	441	442	132	1114	212
Grp Sat Flow(s),veh/h/ln	1774	1770	1460	1774	1770	1777	1774	1770	1772	1774	1770	1463
Q Serve(g_s), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Cycle Q Clear(g_c), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	355	987	407	279	429	431	198	731	732	309	1561	646
V/C Ratio(X)	0.80	0.84	0.44	0.70	0.80	0.80	0.30	0.60	0.60	0.43	0.71	0.33
Avail Cap(c_a), veh/h	469	1171	483	360	488	490	207	731	732	350	1561	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	36.9	32.3	29.0	38.7	38.8	20.7	24.9	24.9	18.6	24.8	19.9
Incr Delay (d2), s/veh	7.2	4.8	0.8	4.1	8.2	8.4	0.8	3.7	3.7	0.9	2.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	12.4	4.5	4.6	10.7	10.8	1.1	11.0	11.1	2.2	14.2	4.4
LnGrp Delay(d), s/veh	33.8	41.7	33.0	33.1	46.9	47.1	21.5	28.6	28.6	19.6	27.6	21.2
LnGrp LOS	C	D	C	C	D	D	C	C	C	B	C	C
Approach Vol, veh/h		1291			884			943			1458	
Approach Delay, s/veh		38.7			44.0			28.2			25.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	15.0	34.3	7.4	52.0	19.0	30.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	16.0	36.0	4.0	48.0	22.0	30.0
Max Q Clear Time (g_c+I1), s	6.5	23.2	10.8	25.9	4.1	29.9	14.5	21.9
Green Ext Time (p_c), s	0.1	5.5	0.2	4.4	0.0	8.4	0.5	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Future Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	179	927	108	153	933	89	127	613	111	209	1062	144
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	213	1096	128	185	1176	466	262	1288	228	379	1694	495
Arrive On Green	0.12	0.34	0.34	0.10	0.33	0.33	0.07	0.30	0.30	0.10	0.33	0.33
Sat Flow, veh/h	1792	3181	371	1792	3574	1417	1792	4338	769	1792	5136	1500
Grp Volume(v), veh/h	179	521	514	153	933	89	127	481	243	209	1062	144
Grp Sat Flow(s),veh/h/ln	1792	1787	1764	1792	1787	1417	1792	1712	1684	1792	1712	1500
Q Serve(g_s), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Cycle Q Clear(g_c), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	213	616	608	185	1176	466	262	1017	500	379	1694	495
V/C Ratio(X)	0.84	0.85	0.85	0.83	0.79	0.19	0.48	0.47	0.49	0.55	0.63	0.29
Avail Cap(c_a), veh/h	330	763	753	278	1422	564	316	1017	500	479	1694	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	31.2	31.2	45.3	31.4	24.8	23.9	29.6	29.8	21.5	29.2	25.6
Incr Delay (d2), s/veh	10.9	7.3	7.4	11.8	2.6	0.2	1.4	1.6	3.4	1.3	1.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	14.8	14.7	4.9	12.5	1.8	2.6	5.8	6.1	4.0	8.7	3.2
LnGrp Delay(d), s/veh	55.3	38.5	38.6	57.1	34.0	24.9	25.3	31.2	33.1	22.8	30.9	27.1
LnGrp LOS	E	D	D	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1214			1175			851			1415	
Approach Delay, s/veh		41.0			36.3			30.9			29.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	34.6	14.7	39.5	10.9	38.0	16.3	37.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	28.0	16.0	44.0	10.0	34.0	19.0	41.0
Max Q Clear Time (g_c+I1), s	10.0	14.2	10.6	29.8	7.0	20.0	12.1	26.4
Green Ext Time (p_c), s	0.3	3.9	0.2	5.7	0.1	6.6	0.3	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Future Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.89	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	118	556	223	172	503	242	166	516	144	234	799	52
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	773	300	212	897	355	206	1246	333	279	1747	113
Arrive On Green	0.08	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.16	0.36	0.36
Sat Flow, veh/h	1774	3539	1373	1774	3539	1402	1774	3906	1044	1774	4853	314
Grp Volume(v), veh/h	118	556	223	172	503	242	166	445	215	234	557	294
Grp Sat Flow(s),veh/h/ln	1774	1770	1373	1774	1770	1402	1774	1695	1560	1774	1695	1776
Q Serve(g_s), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Cycle Q Clear(g_c), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.18
Lane Grp Cap(c), veh/h	150	773	300	212	897	355	206	1081	497	279	1221	640
V/C Ratio(X)	0.78	0.72	0.74	0.81	0.56	0.68	0.81	0.41	0.43	0.84	0.46	0.46
Avail Cap(c_a), veh/h	309	1192	462	453	1480	586	453	1081	497	577	1221	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	31.2	31.4	36.9	28.0	29.0	37.1	23.0	23.2	35.2	21.1	21.1
Incr Delay (d2), s/veh	8.7	1.3	3.6	7.2	0.6	2.3	7.3	1.2	2.7	6.7	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.2	5.2	4.4	5.2	5.4	4.2	4.3	4.4	5.9	5.2	5.7
LnGrp Delay(d), s/veh	47.3	32.5	35.0	44.2	28.5	31.3	44.4	24.1	25.9	41.9	22.3	23.5
LnGrp LOS	D	C	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		897			917			826			1085	
Approach Delay, s/veh		35.0			32.2			28.7			26.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	31.5	14.3	22.8	14.0	35.0	11.3	25.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	25.0	22.0	29.0	22.0	31.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	13.0	11.4	10.1	15.0	9.9	12.9	7.6	15.4
Green Ext Time (p_c), s	0.5	3.4	0.3	3.8	0.3	5.0	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Future Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	195	911	121	423	953	137	131	498	92	275	904	72
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1196	158	518	1194	517	196	1622	483	356	1750	139
Arrive On Green	0.08	0.26	0.26	0.15	0.34	0.34	0.06	0.32	0.32	0.10	0.37	0.37
Sat Flow, veh/h	3442	4523	598	3442	3539	1534	3442	5085	1514	3442	4788	380
Grp Volume(v), veh/h	195	682	350	423	953	137	131	498	92	275	639	337
Grp Sat Flow(s),veh/h/ln	1721	1695	1731	1721	1770	1534	1721	1695	1514	1721	1695	1778
Q Serve(g_s), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Cycle Q Clear(g_c), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	268	896	458	518	1194	517	196	1622	483	356	1239	650
V/C Ratio(X)	0.73	0.76	0.77	0.82	0.80	0.26	0.67	0.31	0.19	0.77	0.52	0.52
Avail Cap(c_a), veh/h	419	1205	615	839	1689	732	315	1622	483	594	1239	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	33.4	33.4	40.5	29.6	23.7	45.5	25.3	24.3	43.0	24.4	24.5
Incr Delay (d2), s/veh	3.8	2.0	4.0	3.3	1.9	0.3	3.9	0.5	0.9	3.6	1.5	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.8	9.3	5.8	12.0	2.8	1.9	3.5	1.9	3.8	7.0	7.6
LnGrp Delay(d), s/veh	48.2	35.4	37.4	43.8	31.5	24.0	49.4	25.8	25.2	46.6	26.0	27.4
LnGrp LOS	D	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1227			1513			721			1251	
Approach Delay, s/veh		38.0			34.2			30.0			30.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	35.4	18.8	30.0	9.6	40.0	11.7	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	28.0	24.0	35.0	9.0	36.0	12.0	47.0
Max Q Clear Time (g_c+I1), s	9.7	9.3	13.7	20.4	5.7	16.6	7.5	26.1
Green Ext Time (p_c), s	0.5	3.3	1.1	5.7	0.1	6.0	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Future Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	157	95	285	23	86	66	161	818	11	43	1382	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	3	495	37	119	495	191	2864	38	55	2235	218
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.11	0.55	0.55	0.03	0.47	0.47
Sat Flow, veh/h	0	9	1561	0	375	1559	1792	5217	70	1792	4727	462
Grp Volume(v), veh/h	252	0	285	109	0	66	161	536	293	43	1001	516
Grp Sat Flow(s),veh/h/ln	9	0	1561	375	0	1559	1792	1712	1864	1792	1712	1765
Q Serve(g_s), s	0.0	0.0	17.8	0.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Cycle Q Clear(g_c), s	37.0	0.0	17.8	37.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Prop In Lane	0.62		1.00	0.21		1.00	1.00		0.04	1.00		0.26
Lane Grp Cap(c), veh/h	53	0	495	157	0	495	191	1879	1023	55	1619	834
V/C Ratio(X)	4.75	0.00	0.58	0.70	0.00	0.13	0.84	0.29	0.29	0.78	0.62	0.62
Avail Cap(c_a), veh/h	53	0	495	157	0	495	323	1879	1023	108	1619	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	33.2	32.6	0.0	28.4	51.1	14.1	14.1	56.1	22.9	22.9
Incr Delay (d2), s/veh	1729.6	0.0	1.6	12.6	0.0	0.1	9.5	0.4	0.7	20.4	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.2	0.0	7.9	3.1	0.0	1.5	5.6	4.7	5.2	1.7	12.4	13.1
LnGrp Delay(d), s/veh	1785.8	0.0	34.9	45.2	0.0	28.5	60.6	14.5	14.8	76.5	24.7	26.3
LnGrp LOS	F		C	D		C	E	B	B	E	C	C
Approach Vol, veh/h		537			175			990			1560	
Approach Delay, s/veh		856.5			38.9			22.0			26.6	
Approach LOS		F			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	68.0		41.0	16.5	59.1		41.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	64.0		37.0	21.0	50.0		37.0
Max Q Clear Time (g_c+I1), s	4.8	11.8		39.0	12.3	27.4		39.0
Green Ext Time (p_c), s	0.0	5.9		0.0	0.2	10.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		162.5
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Future Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.74		0.63	0.75		0.63	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	81	65	98	79	38	38	593	95	66	1393	12
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	314	168	189	314	168	303	2424	1022	590	2486	21
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.03	0.68	0.68	0.03	0.69	0.69
Sat Flow, veh/h	935	1863	996	925	1863	996	1774	3539	1492	1774	3594	31
Grp Volume(v), veh/h	9	81	65	98	79	38	38	593	95	66	686	719
Grp Sat Flow(s),veh/h/ln	935	1863	996	925	1863	996	1774	1770	1492	1774	1770	1855
Q Serve(g_s), s	0.9	4.0	6.1	10.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Cycle Q Clear(g_c), s	4.8	4.0	6.1	14.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	192	314	168	189	314	168	303	2424	1022	590	1224	1283
V/C Ratio(X)	0.05	0.26	0.39	0.52	0.25	0.23	0.13	0.24	0.09	0.11	0.56	0.56
Avail Cap(c_a), veh/h	319	567	303	315	567	303	326	2424	1022	599	1224	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	38.0	38.9	44.4	38.0	37.8	6.6	6.3	5.6	4.6	8.2	8.2
Incr Delay (d2), s/veh	0.1	0.4	1.5	2.2	0.4	0.7	0.2	0.2	0.2	0.1	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.1	1.8	2.9	2.0	1.0	0.3	3.3	1.0	0.5	10.5	11.0
LnGrp Delay(d), s/veh	40.1	38.4	40.3	46.6	38.4	38.5	6.8	6.5	5.8	4.7	10.0	9.9
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	A
Approach Vol, veh/h		155			215			726			1471	
Approach Delay, s/veh		39.3			42.1			6.4			9.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	76.0		21.7	6.7	76.7		21.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	72.0		32.0	4.0	72.0		32.0
Max Q Clear Time (g_c+I1), s	3.1	8.7		8.1	2.7	22.5		16.8
Green Ext Time (p_c), s	0.0	4.9		0.8	0.0	14.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	368	151	58	1086	59	151	1128	27	60	930	212
Future Volume (veh/h)	124	368	151	58	1086	59	151	1128	27	60	930	212
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	129	383	157	60	1131	61	157	1175	28	62	969	221
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	157	1514	763	357	1181	64	206	1461	35	175	1078	245
Arrive On Green	0.05	0.44	0.44	0.36	0.36	0.36	0.07	0.43	0.43	0.03	0.39	0.39
Sat Flow, veh/h	1723	3438	1491	831	3311	178	1723	3430	82	1723	2763	629
Grp Volume(v), veh/h	129	383	157	60	587	605	157	589	614	62	602	588
Grp Sat Flow(s),veh/h/ln	1723	1719	1491	831	1719	1770	1723	1719	1792	1723	1719	1672
Q Serve(g_s), s	5.6	8.4	6.9	6.0	39.9	40.0	6.3	35.8	35.8	2.6	39.3	39.6
Cycle Q Clear(g_c), s	5.6	8.4	6.9	6.0	39.9	40.0	6.3	35.8	35.8	2.6	39.3	39.6
Prop In Lane	1.00		1.00	1.00		0.10	1.00		0.05	1.00		0.38
Lane Grp Cap(c), veh/h	157	1514	763	357	613	632	206	732	764	175	671	653
V/C Ratio(X)	0.82	0.25	0.21	0.17	0.96	0.96	0.76	0.80	0.80	0.35	0.90	0.90
Avail Cap(c_a), veh/h	157	1522	766	359	618	636	217	732	764	175	671	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	21.1	16.1	26.7	37.6	37.6	27.4	30.0	30.0	25.4	34.2	34.3
Incr Delay (d2), s/veh	28.3	0.1	0.1	0.2	25.8	25.5	13.9	9.1	8.8	1.2	17.1	17.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	4.0	2.9	1.4	23.3	24.0	3.8	18.9	19.6	1.3	21.8	21.5
LnGrp Delay(d), s/veh	58.0	21.2	16.2	26.9	63.4	63.1	41.3	39.1	38.8	26.7	51.4	52.2
LnGrp LOS	E	C	B	C	E	E	D	D	D	C	D	D
Approach Vol, veh/h		669			1252			1360			1252	
Approach Delay, s/veh		27.1			61.5			39.2			50.5	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	55.0		56.7	12.3	50.7	10.0	46.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	51.0		53.0	9.0	46.0	6.0	43.0
Max Q Clear Time (g_c+I1), s	4.6	37.8		10.4	8.3	41.6	7.6	42.0
Green Ext Time (p_c), s	0.0	6.4		3.1	0.0	2.8	0.0	0.7

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		46.7
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	150	139	39	675	108	292	987	25	46	812	190
Future Volume (veh/h)	141	150	139	39	675	108	292	987	25	46	812	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	147	156	145	41	703	112	304	1028	0	48	846	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	175	1045	467	52	799	357	335	1669	747	61	1122	502
Arrive On Green	0.10	0.30	0.30	0.03	0.23	0.23	0.19	0.49	0.00	0.04	0.33	0.00
Sat Flow, veh/h	1723	3438	1537	1723	3438	1536	1723	3438	1538	1723	3438	1538
Grp Volume(v), veh/h	147	156	145	41	703	112	304	1028	0	48	846	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1537	1723	1719	1536	1723	1719	1538	1723	1719	1538
Q Serve(g_s), s	9.2	3.6	8.0	2.6	21.8	6.7	19.0	24.2	0.0	3.0	24.2	0.0
Cycle Q Clear(g_c), s	9.2	3.6	8.0	2.6	21.8	6.7	19.0	24.2	0.0	3.0	24.2	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	1045	467	52	799	357	335	1669	747	61	1122	502
V/C Ratio(X)	0.84	0.15	0.31	0.79	0.88	0.31	0.91	0.62	0.00	0.79	0.75	0.00
Avail Cap(c_a), veh/h	219	1091	488	109	873	390	406	1669	747	141	1122	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	48.7	28.0	29.5	53.1	40.8	35.0	43.4	20.8	0.0	52.8	33.2	0.0
Incr Delay (d2), s/veh	20.4	0.1	0.4	23.3	9.7	0.5	21.1	1.7	0.0	19.6	4.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	1.7	3.4	1.6	11.4	2.9	11.0	11.8	0.0	1.8	12.2	0.0
LnGrp Delay(d), s/veh	69.0	28.0	29.9	76.4	50.5	35.5	64.6	22.5	0.0	72.3	37.9	0.0
LnGrp LOS	E	C	C	E	D	D	E	C		E	D	
Approach Vol, veh/h		448			856			1332			894	
Approach Delay, s/veh		42.1			49.8			32.1			39.7	
Approach LOS		D			D			C			D	

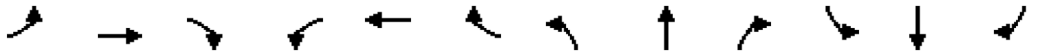
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.9	57.5	7.3	37.5	25.4	40.0	15.2	29.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	53.0	7.0	35.0	26.0	36.0	14.0	28.0
Max Q Clear Time (g_c+I1), s	5.0	26.2	4.6	10.0	21.0	26.2	11.2	23.8
Green Ext Time (p_c), s	0.0	7.8	0.0	1.3	0.4	3.8	0.1	1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	141	457	150	169	602	14	191	556	99	20	453	58
Future Volume (veh/h)	141	457	150	169	602	14	191	556	99	20	453	58
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	148	481	0	178	634	15	201	585	104	21	477	61
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9	9	9	9	9	9	9
Cap, veh/h	183	760	340	214	821	364	236	1777	310	30	1038	451
Arrive On Green	0.11	0.23	0.00	0.13	0.25	0.25	0.14	0.44	0.44	0.02	0.31	0.31
Sat Flow, veh/h	1660	3312	1482	1660	3312	1467	1660	4061	709	1660	3312	1439
Grp Volume(v), veh/h	148	481	0	178	634	15	201	455	234	21	477	61
Grp Sat Flow(s),veh/h/ln	1660	1656	1482	1660	1656	1467	1660	1586	1597	1660	1656	1439
Q Serve(g_s), s	7.5	11.3	0.0	9.0	15.3	0.7	10.2	8.1	8.3	1.1	9.9	2.6
Cycle Q Clear(g_c), s	7.5	11.3	0.0	9.0	15.3	0.7	10.2	8.1	8.3	1.1	9.9	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.44	1.00		1.00
Lane Grp Cap(c), veh/h	183	760	340	214	821	364	236	1388	699	30	1038	451
V/C Ratio(X)	0.81	0.63	0.00	0.83	0.77	0.04	0.85	0.33	0.34	0.69	0.46	0.14
Avail Cap(c_a), veh/h	463	1654	740	347	1423	630	308	1388	699	116	1038	451
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	29.9	0.0	36.6	30.1	24.6	36.0	15.9	16.0	42.0	23.7	21.2
Incr Delay (d2), s/veh	8.1	0.9	0.0	8.8	1.6	0.0	15.9	0.6	1.3	24.2	1.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	5.2	0.0	4.6	7.1	0.3	5.7	3.7	3.9	0.7	4.7	1.1
LnGrp Delay(d), s/veh	45.5	30.8	0.0	45.4	31.7	24.7	51.9	16.5	17.3	66.2	25.2	21.8
LnGrp LOS	D	C		D	C	C	D	B	B	E	C	C
Approach Vol, veh/h		629			827			890			559	
Approach Delay, s/veh		34.3			34.5			24.7			26.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.6	41.7	15.1	23.8	16.3	31.0	13.5	25.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	37.0	18.0	43.0	16.0	27.0	24.0	37.0
Max Q Clear Time (g_c+I1), s	3.1	10.3	11.0	13.3	12.2	11.9	9.5	17.3
Green Ext Time (p_c), s	0.0	4.5	0.3	3.2	0.2	2.8	0.3	4.0

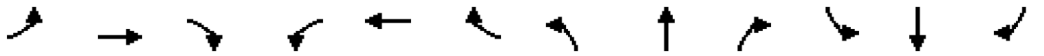
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	318	124	81	677	20	105	451	23	37	494	13
Future Volume (veh/h)	60	318	124	81	677	20	105	451	23	37	494	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1900
Adj Flow Rate, veh/h	63	335	131	85	713	21	111	475	24	39	520	14
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	80	871	383	109	928	414	141	2145	108	47	1935	52
Arrive On Green	0.05	0.26	0.26	0.06	0.28	0.28	0.08	0.46	0.46	0.03	0.40	0.40
Sat Flow, veh/h	1675	3343	1469	1675	3343	1489	1675	4680	235	1675	4806	129
Grp Volume(v), veh/h	63	335	131	85	713	21	111	324	175	39	346	188
Grp Sat Flow(s),veh/h/ln	1675	1671	1469	1675	1671	1489	1675	1601	1713	1675	1601	1733
Q Serve(g_s), s	3.2	7.0	6.2	4.3	16.7	0.9	5.5	5.2	5.3	2.0	6.2	6.2
Cycle Q Clear(g_c), s	3.2	7.0	6.2	4.3	16.7	0.9	5.5	5.2	5.3	2.0	6.2	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.07
Lane Grp Cap(c), veh/h	80	871	383	109	928	414	141	1468	785	47	1289	698
V/C Ratio(X)	0.79	0.38	0.34	0.78	0.77	0.05	0.79	0.22	0.22	0.82	0.27	0.27
Avail Cap(c_a), veh/h	236	1532	674	335	1729	770	394	1468	785	177	1289	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.1	25.9	25.5	39.2	28.2	22.5	38.2	13.9	13.9	41.1	17.0	17.0
Incr Delay (d2), s/veh	15.9	0.3	0.5	11.5	1.4	0.1	9.3	0.3	0.7	28.1	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	3.2	2.6	2.3	7.8	0.4	2.9	2.4	2.6	1.3	2.8	3.1
LnGrp Delay(d), s/veh	56.0	26.1	26.1	50.7	29.6	22.6	47.5	14.2	14.6	69.2	17.5	18.0
LnGrp LOS	E	C	C	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		529			819			610			573	
Approach Delay, s/veh		29.7			31.6			20.4			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.4	43.0	9.5	26.2	11.2	38.3	8.0	27.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.0	17.0	39.0	20.0	28.0	12.0	44.0
Max Q Clear Time (g_c+I1), s	4.0	7.3	6.3	9.0	7.5	8.2	5.2	18.7
Green Ext Time (p_c), s	0.0	3.1	0.1	2.6	0.2	3.0	0.1	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Future Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3574		1783	5136					3467		1599
Flt Permitted		1.00		0.41	1.00					0.95		1.00
Satd. Flow (perm)		3574		778	5136					3467		1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	119
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	101
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		32.2		32.2	32.2					51.2		51.2
Effective Green, g (s)		32.2		32.2	32.2					51.2		51.2
Actuated g/C Ratio		0.35		0.35	0.35					0.56		0.56
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1259		274	1809					1942		895
v/s Ratio Prot		0.13			c0.24							
v/s Ratio Perm				0.16						c0.18		0.06
v/c Ratio		0.36		0.45	0.68					0.32		0.11
Uniform Delay, d1		21.9		22.7	25.3					10.8		9.4
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		1.2	1.1					0.4		0.3
Delay (s)		22.1		23.9	26.3					11.2		9.7
Level of Service		C		C	C					B		A
Approach Delay (s/veh)		22.1			26.1			0.0			11.0	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	91.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Future Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	139	748	147	16	871	554	159	158	0	241	683	42
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	198	1132	222	25	1213	629	231	1082	484	276	1395	612
Arrive On Green	0.06	0.38	0.38	0.01	0.34	0.34	0.07	0.30	0.00	0.15	0.39	0.39
Sat Flow, veh/h	3476	2960	582	1792	3574	1540	3476	3574	1599	1792	3574	1567
Grp Volume(v), veh/h	139	452	443	16	871	554	159	158	0	241	683	42
Grp Sat Flow(s),veh/h/ln	1738	1787	1755	1792	1787	1540	1738	1787	1599	1792	1787	1567
Q Serve(g_s), s	4.3	22.8	22.8	1.0	23.2	36.4	4.9	3.5	0.0	14.3	15.7	1.8
Cycle Q Clear(g_c), s	4.3	22.8	22.8	1.0	23.2	36.4	4.9	3.5	0.0	14.3	15.7	1.8
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	683	671	25	1213	629	231	1082	484	276	1395	612
V/C Ratio(X)	0.70	0.66	0.66	0.63	0.72	0.88	0.69	0.15	0.00	0.87	0.49	0.07
Avail Cap(c_a), veh/h	223	683	671	66	1213	629	861	1082	484	444	1395	612
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	27.8	27.8	53.5	31.4	30.0	49.8	27.7	0.0	45.1	25.1	20.8
Incr Delay (d2), s/veh	8.2	2.4	2.4	23.4	2.1	13.6	3.6	0.3	0.0	10.7	1.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	11.6	11.4	0.6	11.8	17.7	2.5	1.8	0.0	7.9	7.9	0.8
LnGrp Delay(d), s/veh	58.7	30.2	30.2	76.8	33.5	43.7	53.4	28.0	0.0	55.8	26.3	21.0
LnGrp LOS	E	C	C	E	C	D	D	C		E	C	C
Approach Vol, veh/h		1034			1441			317			966	
Approach Delay, s/veh		34.0			37.9			40.7			33.4	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	46.5	5.5	45.7	20.8	37.0	10.2	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	33.0	4.0	40.0	27.0	33.0	7.0	37.0
Max Q Clear Time (g_c+I1), s	6.9	17.7	3.0	24.8	16.3	5.5	6.3	38.4
Green Ext Time (p_c), s	0.4	3.9	0.0	4.8	0.5	0.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	728	31	50	1015	134	188	1218	17	203	1284	277
Future Volume (veh/h)	142	728	31	50	1015	134	188	1218	17	203	1284	277
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	148	758	32	52	1057	140	196	1269	18	211	1338	289
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	164	1494	63	67	1107	146	209	1459	648	224	1489	800
Arrive On Green	0.09	0.30	0.30	0.04	0.24	0.24	0.12	0.41	0.41	0.13	0.42	0.42
Sat Flow, veh/h	1792	5050	213	1792	4579	606	1792	3574	1587	1792	3574	1568
Grp Volume(v), veh/h	148	513	277	52	790	407	196	1269	18	211	1338	289
Grp Sat Flow(s),veh/h/ln	1792	1712	1839	1792	1712	1761	1792	1787	1587	1792	1787	1568
Q Serve(g_s), s	9.8	14.9	15.0	3.5	27.3	27.4	13.0	39.1	0.8	14.0	41.9	13.3
Cycle Q Clear(g_c), s	9.8	14.9	15.0	3.5	27.3	27.4	13.0	39.1	0.8	14.0	41.9	13.3
Prop In Lane	1.00		0.12	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	1013	544	67	827	425	209	1459	648	224	1489	800
V/C Ratio(X)	0.90	0.51	0.51	0.77	0.95	0.96	0.94	0.87	0.03	0.94	0.90	0.36
Avail Cap(c_a), veh/h	164	1013	544	134	827	425	209	1459	648	224	1489	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	35.0	35.0	57.2	44.9	44.9	52.6	32.6	21.2	52.1	32.6	17.8
Incr Delay (d2), s/veh	43.0	0.4	0.8	16.9	21.0	32.6	44.9	7.3	0.1	44.2	8.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.1	7.7	2.0	15.2	17.2	9.0	20.7	0.4	9.7	22.5	6.1
LnGrp Delay(d), s/veh	96.9	35.4	35.8	74.1	65.8	77.5	97.5	39.9	21.3	96.2	41.6	19.1
LnGrp LOS	F	D	D	E	E	E	F	D	C	F	D	B
Approach Vol, veh/h		938			1249			1483			1838	
Approach Delay, s/veh		45.2			70.0			47.3			44.3	
Approach LOS		D			E			D			D	

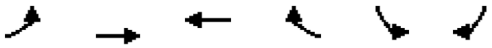
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	53.0	8.5	39.5	18.0	54.0	15.0	33.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	49.0	9.0	31.0	14.0	50.0	11.0	29.0
Max Q Clear Time (g_c+I1), s	16.0	41.1	5.5	17.0	15.0	43.9	11.8	29.4
Green Ext Time (p_c), s	0.0	4.9	0.0	4.1	0.0	4.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Future Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	90	883	149	145	1386	122	83	434	58	99	546	157
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1462	245	177	1758	155	304	1629	662	408	1220	349
Arrive On Green	0.06	0.33	0.33	0.10	0.37	0.37	0.46	0.46	0.46	0.46	0.46	0.46
Sat Flow, veh/h	1792	4408	740	1792	4800	422	747	3574	1452	893	2677	765
Grp Volume(v), veh/h	90	685	347	145	989	519	83	434	58	99	363	340
Grp Sat Flow(s),veh/h/ln	1792	1712	1724	1792	1712	1799	747	1787	1452	893	1787	1655
Q Serve(g_s), s	5.2	17.6	17.8	8.4	27.1	27.1	9.0	7.9	2.4	8.1	14.6	14.8
Cycle Q Clear(g_c), s	5.2	17.6	17.8	8.4	27.1	27.1	23.8	7.9	2.4	16.1	14.6	14.8
Prop In Lane	1.00		0.43	1.00		0.23	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	115	1136	572	177	1254	659	304	1629	662	408	814	754
V/C Ratio(X)	0.78	0.60	0.61	0.82	0.79	0.79	0.27	0.27	0.09	0.24	0.45	0.45
Avail Cap(c_a), veh/h	221	1365	687	306	1528	803	304	1629	662	408	814	754
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	29.4	29.5	46.5	29.7	29.7	27.8	17.8	16.3	22.7	19.6	19.6
Incr Delay (d2), s/veh	10.9	0.5	1.1	9.0	2.3	4.4	2.2	0.4	0.3	1.4	1.8	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.4	8.7	4.6	13.2	14.2	2.1	4.0	1.0	2.2	7.6	7.1
LnGrp Delay(d), s/veh	59.5	29.9	30.5	55.5	32.1	34.1	30.0	18.2	16.5	24.1	21.4	21.6
LnGrp LOS	E	C	C	E	C	C	C	B	B	C	C	C
Approach Vol, veh/h		1122			1653			575			802	
Approach Delay, s/veh		32.5			34.8			19.7			21.8	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	14.4	38.9		52.0	10.8	42.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	18.0	42.0		48.0	13.0	47.0
Max Q Clear Time (g_c+I1), s		25.8	10.4	19.8		18.1	7.2	29.1
Green Ext Time (p_c), s		3.9	0.2	6.8		5.7	0.1	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.6
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	25	311	1047	32	29	178
Future Volume (veh/h)	25	311	1047	32	29	178
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	28	346	1163	36	32	198
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	165	1523	1523	666	726	648
Arrive On Green	0.46	0.46	0.46	0.46	0.44	0.44
Sat Flow, veh/h	435	3399	3399	1448	1660	1482
Grp Volume(v), veh/h	28	346	1163	36	32	198
Grp Sat Flow(s),veh/h/ln	435	1656	1656	1448	1660	1482
Q Serve(g_s), s	4.5	4.9	22.7	1.1	0.9	6.7
Cycle Q Clear(g_c), s	27.2	4.9	22.7	1.1	0.9	6.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	165	1523	1523	666	726	648
V/C Ratio(X)	0.17	0.23	0.76	0.05	0.04	0.31
Avail Cap(c_a), veh/h	402	3323	3323	1453	726	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	12.7	17.5	11.6	12.6	14.2
Incr Delay (d2), s/veh	0.5	0.1	0.8	0.0	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	2.2	10.5	0.4	0.4	3.0
LnGrp Delay(d), s/veh	29.3	12.7	18.3	11.7	12.7	15.4
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h		374	1199		230	
Approach Delay, s/veh		14.0	18.1		15.0	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				39.8		38.0		39.8
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				78.0		34.0		78.0
Max Q Clear Time (g_c+I1), s				29.2		8.7		24.7
Green Ext Time (p_c), s				2.8		0.8		11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	81	236	47	189	721	246	81	982	131	67	622	206
Future Volume (veh/h)	81	236	47	189	721	246	81	982	131	67	622	206
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	87	254	51	203	775	265	87	1056	0	72	669	222
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	109	1111	490	263	852	291	109	1367	612	91	1331	571
Arrive On Green	0.06	0.33	0.33	0.08	0.34	0.34	0.06	0.40	0.00	0.05	0.39	0.39
Sat Flow, veh/h	1707	3406	1503	3312	2492	852	1707	3406	1524	1707	3406	1461
Grp Volume(v), veh/h	87	254	51	203	530	510	87	1056	0	72	669	222
Grp Sat Flow(s),veh/h/ln	1707	1703	1503	1656	1703	1641	1707	1703	1524	1707	1703	1461
Q Serve(g_s), s	5.8	6.2	2.7	6.9	34.0	34.0	5.8	30.8	0.0	4.8	17.1	12.5
Cycle Q Clear(g_c), s	5.8	6.2	2.7	6.9	34.0	34.0	5.8	30.8	0.0	4.8	17.1	12.5
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	1111	490	263	582	561	109	1367	612	91	1331	571
V/C Ratio(X)	0.80	0.23	0.10	0.77	0.91	0.91	0.80	0.77	0.00	0.79	0.50	0.39
Avail Cap(c_a), veh/h	134	1130	499	376	624	601	194	1367	612	104	1331	571
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	28.1	26.9	51.7	36.0	36.0	52.9	29.7	0.0	53.6	26.5	25.1
Incr Delay (d2), s/veh	23.7	0.1	0.1	6.1	16.8	17.3	12.2	4.3	0.0	29.6	1.4	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	2.9	1.1	3.4	18.6	18.2	3.1	15.2	0.0	3.0	8.2	5.4
LnGrp Delay(d), s/veh	76.6	28.2	27.0	57.8	52.7	53.3	65.1	34.0	0.0	83.2	27.8	27.1
LnGrp LOS	E	C	C	E	D	D	E	C		F	C	C
Approach Vol, veh/h		392			1243			1143			963	
Approach Delay, s/veh		38.8			53.8			36.4			31.8	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	50.0	13.1	41.4	11.3	48.8	11.3	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	46.0	13.0	38.0	13.0	40.0	9.0	42.0
Max Q Clear Time (g_c+I1), s	6.8	32.8	8.9	8.2	7.8	19.1	7.8	36.0
Green Ext Time (p_c), s	0.0	5.8	0.2	1.7	0.1	5.1	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.2
HCM 2010 LOS	D

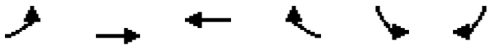
Intersection	
Int Delay, s/veh	0.7

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	426	1278	46	12	15
Future Vol, veh/h	30	426	1278	46	12	15
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	31	444	1331	48	13	16

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1380	0	-	0	1616	667
Stage 1	-	-	-	-	1332	-
Stage 2	-	-	-	-	284	-
Critical Hdwy	4.28	-	-	-	6.98	7.08
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.29	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	458	-	-	-	88	385
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	718	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	458	-	-	-	82	385
Mov Cap-2 Maneuver	-	-	-	-	82	-
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	717	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	33.3
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	458	-	-	-	82	385
HCM Lane V/C Ratio	0.068	-	-	-	0.152	0.041
HCM Control Delay (s/veh)	13.4	-	-	-	56.6	14.7
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.5	0.1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	37	401	1332	387	189	20
Future Volume (veh/h)	37	401	1332	387	189	20
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712
Adj Flow Rate, veh/h	39	418	1388	403	197	21
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	47	2111	1853	811	409	365
Arrive On Green	0.03	0.65	0.57	0.57	0.25	0.25
Sat Flow, veh/h	1630	3338	3338	1424	1630	1455
Grp Volume(v), veh/h	39	418	1388	403	197	21
Grp Sat Flow(s),veh/h/ln	1630	1626	1626	1424	1630	1455
Q Serve(g_s), s	1.9	4.1	25.5	13.5	8.2	0.9
Cycle Q Clear(g_c), s	1.9	4.1	25.5	13.5	8.2	0.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	47	2111	1853	811	409	365
V/C Ratio(X)	0.82	0.20	0.75	0.50	0.48	0.06
Avail Cap(c_a), veh/h	184	3751	3221	1410	409	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	5.6	12.9	10.3	25.5	22.7
Incr Delay (d2), s/veh	28.4	0.0	0.6	0.5	4.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	11.5	5.4	4.1	0.8
LnGrp Delay(d), s/veh	66.9	5.7	13.5	10.8	29.5	23.0
LnGrp LOS	E	A	B	B	C	C
Approach Vol, veh/h		457	1791		218	
Approach Delay, s/veh		10.9	12.9		28.9	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				55.8		24.0	6.3	49.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				92.0		20.0	9.0	79.0
Max Q Clear Time (g_c+I1), s				6.1		10.2	3.9	27.5
Green Ext Time (p_c), s				2.9		0.4	0.0	17.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	539	10	0	1393	355	0	0	42	0	0	13
Future Vol, veh/h	0	539	10	0	1393	355	0	0	42	0	0	13
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	0	550	10	0	1421	362	0	0	43	0	0	13

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	283	-	-	711
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.36	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.03	-	-	3.43
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	584	0	0	351
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	583	-	-	351
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	11.7	15.7
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	583	-	-	-	-	351
HCM Lane V/C Ratio	0.074	-	-	-	-	0.038
HCM Control Delay (s/veh)	11.7	-	-	-	-	15.7
HCM Lane LOS	B	-	-	-	-	C
HCM 95th %tile Q(veh)	0.2	-	-	-	-	0.1

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	137	78	724	118	82	884	59	93	179	986	71	845
Future Volume (vph)	137	78	724	118	82	884	59	93	179	986	71	845
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.96	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.99	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1424		4500	1423	1656	1743	1463	1583	1304	1482	1656	3213
Flt Permitted	0.95		0.65	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1424		2922	1423	1656	1743	1463	1583	1304	1482	1656	3213
Peak-hour factor, PHF	0.91	0.92	0.91	0.91	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.91
Adj. Flow (vph)	151	85	796	130	90	971	65	101	197	1084	78	929
RTOR Reduction (vph)	0	0	0	74	0	0	0	65	84	120	0	0
Lane Group Flow (vph)	136	0	896	56	90	971	65	36	557	520	78	929
Confl. Peds. (#/hr)				12	12							
Confl. Bikes (#/hr)				2			1					
Heavy Vehicles (%)	9%	2%	9%	9%	9%	9%	9%	2%	9%	9%	9%	9%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	pm+ov	Prot	Prot
Protected Phases	7	7	4		3	8				7!	5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	7.0		52.0	45.0	5.0	43.0	43.0	43.0	34.8	41.8	20.0	20.0
Effective Green, g (s)	7.0		52.0	45.0	5.0	43.0	43.0	43.0	34.8	41.8	20.0	20.0
Actuated g/C Ratio	0.06		0.43	0.37	0.04	0.36	0.36	0.36	0.29	0.35	0.17	0.17
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	82		1349	530	68	620	520	563	375	561	274	531
v/s Ratio Prot	c0.10		c0.04		0.05	c0.56				0.05	0.05	c0.29
v/s Ratio Perm			0.25	0.04			0.04	0.02	c0.43	0.30		
v/c Ratio	1.66		0.66	0.11	1.32	1.57	0.13	0.06	1.49	0.93	0.28	1.75
Uniform Delay, d1	56.9		27.4	24.8	57.9	38.9	26.2	25.6	43.0	38.0	44.1	50.4
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	344.0		1.2	0.1	217.9	262.6	0.1	0.0	232.2	21.6	0.6	345.0
Delay (s)	400.9		28.7	24.8	275.8	301.5	26.3	25.7	275.2	59.6	44.7	395.4
Level of Service	F		C	C	F	F	C	C	F	E	D	F
Approach Delay (s/veh)			71.8			262.3						
Approach LOS			E			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	158.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.57		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	135.9%	ICU Level of Service	H
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	743	322	63	731
Future Volume (vph)	743	322	63	731
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.95		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4718		1770	5085
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4718		1770	5085
Peak-hour factor, PHF	0.92	0.91	0.92	0.92
Adj. Flow (vph)	808	354	68	795
RTOR Reduction (vph)	63	0	0	0
Lane Group Flow (vph)	1099	0	68	795
Confl. Peds. (#/hr)		5		
Confl. Bikes (#/hr)		3		
Heavy Vehicles (%)	2%	9%	2%	2%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	47.1		7.7	34.8
Effective Green, g (s)	47.1		7.7	34.8
Actuated g/C Ratio	0.39		0.06	0.29
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	1839		112	1464
v/s Ratio Prot	0.23		0.04	0.16
v/s Ratio Perm				
v/c Ratio	0.60		0.61	0.54
Uniform Delay, d1	29.3		55.1	36.3
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	1.4		9.0	1.5
Delay (s)	30.7		64.1	37.7
Level of Service	C		E	D
Approach Delay (s/veh)	187.4			39.8
Approach LOS	F			D

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	410	745	109	77	696	69	64	334	341	85	641	98
Future Volume (veh/h)	410	745	109	77	696	69	64	334	341	85	641	98
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1759	1759	1759	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	461	837	122	87	782	0	72	375	383	96	720	110
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	540	1475	215	109	1351	604	91	1015	554	120	1097	422
Arrive On Green	0.17	0.51	0.51	0.07	0.40	0.00	0.05	0.21	0.21	0.07	0.23	0.23
Sat Flow, veh/h	3250	2920	426	1675	3343	1495	1675	4803	1445	1675	4803	1420
Grp Volume(v), veh/h	461	479	480	87	782	0	72	375	383	96	720	110
Grp Sat Flow(s),veh/h/ln	1625	1671	1674	1675	1671	1495	1675	1601	1445	1675	1601	1420
Q Serve(g_s), s	15.0	21.6	21.6	5.6	19.8	0.0	4.6	7.3	23.0	6.1	14.8	6.5
Cycle Q Clear(g_c), s	15.0	21.6	21.6	5.6	19.8	0.0	4.6	7.3	23.0	6.1	14.8	6.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	540	844	846	109	1351	604	91	1015	554	120	1097	422
V/C Ratio(X)	0.85	0.57	0.57	0.80	0.58	0.00	0.79	0.37	0.69	0.80	0.66	0.26
Avail Cap(c_a), veh/h	746	844	846	200	1351	604	169	1015	554	200	1103	424
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	18.7	18.7	50.2	25.2	0.0	50.9	36.7	28.7	49.8	38.1	29.5
Incr Delay (d2), s/veh	7.0	2.8	2.8	12.3	1.8	0.0	14.1	0.2	3.7	11.7	1.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	10.6	10.6	3.0	9.5	0.0	2.5	3.3	10.3	3.2	6.7	2.6
LnGrp Delay(d), s/veh	51.1	21.4	21.4	62.5	27.0	0.0	65.0	37.0	32.4	61.5	39.5	29.8
LnGrp LOS	D	C	C	E	C		E	D	C	E	D	C
Approach Vol, veh/h		1420			869			830			926	
Approach Delay, s/veh		31.1			30.6			37.3			40.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	59.0	11.8	27.0	22.1	48.0	9.9	28.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	55.0	13.0	23.0	25.0	43.0	11.0	25.0
Max Q Clear Time (g_c+I1), s	7.6	23.6	8.1	25.0	17.0	21.8	6.6	16.8
Green Ext Time (p_c), s	0.1	6.7	0.1	0.0	1.1	5.2	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	128	179	47	133	184	230	94	1080	75	217	1146	571
Future Volume (veh/h)	128	179	47	133	184	230	94	1080	75	217	1146	571
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	128	179	47	133	184	0	94	1080	75	217	1146	571
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	157	288	125	163	299	134	119	1744	755	252	2010	882
Arrive On Green	0.09	0.08	0.08	0.10	0.09	0.00	0.07	0.51	0.51	0.15	0.59	0.59
Sat Flow, veh/h	1707	3406	1482	1707	3406	1524	1707	3406	1475	1707	3406	1493
Grp Volume(v), veh/h	128	179	47	133	184	0	94	1080	75	217	1146	571
Grp Sat Flow(s),veh/h/ln	1707	1703	1482	1707	1703	1524	1707	1703	1475	1707	1703	1493
Q Serve(g_s), s	7.4	5.1	3.0	7.6	5.2	0.0	5.4	22.6	2.6	12.4	20.8	25.3
Cycle Q Clear(g_c), s	7.4	5.1	3.0	7.6	5.2	0.0	5.4	22.6	2.6	12.4	20.8	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	288	125	163	299	134	119	1744	755	252	2010	882
V/C Ratio(X)	0.81	0.62	0.38	0.82	0.61	0.00	0.79	0.62	0.10	0.86	0.57	0.65
Avail Cap(c_a), veh/h	256	545	237	273	579	259	222	1744	755	410	2010	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	44.2	43.3	44.3	44.0	0.0	45.8	17.4	12.5	41.6	12.6	13.6
Incr Delay (d2), s/veh	9.7	2.2	1.9	9.5	2.0	0.0	11.1	1.7	0.3	9.9	1.2	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	2.5	1.3	4.0	2.5	0.0	2.9	10.9	1.1	6.5	10.0	11.2
LnGrp Delay(d), s/veh	54.2	46.4	45.1	53.8	46.0	0.0	56.9	19.1	12.8	51.5	13.8	17.3
LnGrp LOS	D	D	D	D	D		E	B	B	D	B	B
Approach Vol, veh/h		354			317			1249			1934	
Approach Delay, s/veh		49.0			49.3			21.6			19.1	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	55.2	13.5	12.5	10.9	63.0	13.2	12.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	48.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.4	24.6	9.6	7.1	7.4	27.3	9.4	7.2
Green Ext Time (p_c), s	0.4	8.2	0.2	0.7	0.1	13.0	0.1	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	42.3

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	442	60	256	0	114	399
Future Vol, veh/h	442	60	256	0	114	399
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	497	67	288	0	128	448

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	288	0	-	0	1349	-
Stage 1	-	-	-	-	288	-
Stage 2	-	-	-	-	1061	-
Critical Hdwy	4.19	-	-	-	6.49	-
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.281	-	-	-	3.581	-
Pot Cap-1 Maneuver	1235	-	-	-	160	0
Stage 1	-	-	-	-	745	0
Stage 2	-	-	-	-	323	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1235	-	-	-	~ 96	-
Mov Cap-2 Maneuver	-	-	-	-	~ 96	-
Stage 1	-	-	-	-	446	-
Stage 2	-	-	-	-	323	-

Approach	EB	WB	SW
HCM Control Delay, s/v	8.7	0	285.6
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1235	-	-	-	96	-
HCM Lane V/C Ratio	0.402	-	-	-	1.334	-
HCM Control Delay (s/veh)	9.9	-	-	-	285.6	0
HCM Lane LOS	A	-	-	-	F	A
HCM 95th %tile Q(veh)	2	-	-	-	9.2	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	31	95	41	28	267	119	216	1094	34	105	947	88
Future Volume (veh/h)	31	95	41	28	267	119	216	1094	34	105	947	88
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	32	99	43	29	278	124	225	1140	0	109	986	92
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	145	315	137	345	312	139	345	1726	772	277	1601	692
Arrive On Green	0.02	0.27	0.27	0.02	0.27	0.27	0.09	0.51	0.00	0.05	0.47	0.47
Sat Flow, veh/h	1707	1177	511	1707	1172	523	1707	3406	1524	1707	3406	1472
Grp Volume(v), veh/h	32	0	142	29	0	402	225	1140	0	109	986	92
Grp Sat Flow(s),veh/h/ln	1707	0	1688	1707	0	1695	1707	1703	1524	1707	1703	1472
Q Serve(g_s), s	1.4	0.0	7.0	1.3	0.0	23.8	6.7	25.9	0.0	3.4	22.6	3.7
Cycle Q Clear(g_c), s	1.4	0.0	7.0	1.3	0.0	23.8	6.7	25.9	0.0	3.4	22.6	3.7
Prop In Lane	1.00		0.30	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	452	345	0	452	345	1726	772	277	1601	692
V/C Ratio(X)	0.22	0.00	0.31	0.08	0.00	0.89	0.65	0.66	0.00	0.39	0.62	0.13
Avail Cap(c_a), veh/h	170	0	614	373	0	616	474	1726	772	338	1601	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	0.0	30.6	27.2	0.0	36.9	16.1	19.1	0.0	15.9	20.7	15.7
Incr Delay (d2), s/veh	0.8	0.0	0.4	0.1	0.0	11.8	2.1	2.0	0.0	0.9	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.3	0.6	0.0	12.7	3.3	12.7	0.0	1.6	10.9	1.6
LnGrp Delay(d), s/veh	30.5	0.0	31.0	27.3	0.0	48.7	18.1	21.1	0.0	16.8	22.5	16.1
LnGrp LOS	C		C	C		D	B	C		B	C	B
Approach Vol, veh/h		174			431			1365			1187	
Approach Delay, s/veh		30.9			47.3			20.6			21.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	57.0	6.3	32.0	13.1	53.1	6.4	31.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	53.0	4.0	38.0	17.0	45.0	4.0	38.0
Max Q Clear Time (g_c+I1), s	5.4	27.9	3.3	9.0	8.7	24.6	3.4	25.8
Green Ext Time (p_c), s	0.1	9.1	0.0	0.8	0.4	7.3	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	153	50	148	480	23	26
Future Vol, veh/h	153	50	148	480	23	26
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	14	14	14	14	14	14
Mvmt Flow	168	55	163	527	25	29

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	223	0	1021	168
Stage 1	-	-	-	-	168	-
Stage 2	-	-	-	-	853	-
Critical Hdwy	-	-	4.24	-	6.54	6.34
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.326	-	3.626	3.426
Pot Cap-1 Maneuver	-	-	1278	-	249	846
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	398	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1278	-	204	846
Mov Cap-2 Maneuver	-	-	-	-	204	-
Stage 1	-	-	-	-	833	-
Stage 2	-	-	-	-	326	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.9	16.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	204	846	-	-	1278	-
HCM Lane V/C Ratio	0.124	0.034	-	-	0.127	-
HCM Control Delay (s/veh)	25.1	9.4	-	-	8.2	0
HCM Lane LOS	D	A	-	-	A	A
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.4	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.26	-	6.56	6.36
Critical Hdwy Stg 1	-	-	-	-	5.56	-
Critical Hdwy Stg 2	-	-	-	-	5.56	-
Follow-up Hdwy	-	-	2.344	-	3.644	3.444
Pot Cap-1 Maneuver	-	-	1535	-	985	1044
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1535	-	985	1044
Mov Cap-2 Maneuver	-	-	-	-	985	-
Stage 1	-	-	-	-	987	-
Stage 2	-	-	-	-	987	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1535	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1624	1624	1624	1624	1624	1624
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	17	17	17	17	17	17
Cap, veh/h	--	2147483648	2147483648	2147483648	2147483648	2147483648
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	-64957	1380	1547	1624	1547	1380
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1624	1380	1547	1624	1547	1380
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2324911	1946	1743872		1946	1743872
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2138918	1790	1604382		1790	1604382
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0			0	0	
Approach Delay, s/veh	0.0			0.0	0.0	
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		0.0		0.0				0.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		20.0		92.0				92.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	3	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.28	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	-	-	2.362	-	3.662	3.462
Pot Cap-1 Maneuver	-	-	1522	-	979	1037
Stage 1	-	-	-	-	981	-
Stage 2	-	-	-	-	982	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1521	-	978	1036
Mov Cap-2 Maneuver	-	-	-	-	978	-
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	982	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1521	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	151	292	43	188	810	208	36	1068	62	47	844	130
Future Volume (veh/h)	151	292	43	188	810	208	36	1068	62	47	844	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		1.00	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1900	1792	1792	1900
Adj Flow Rate, veh/h	157	304	45	196	844	217	38	1112	65	49	879	135
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	239	1032	148	420	996	254	47	1549	91	62	1420	218
Arrive On Green	0.09	0.24	0.24	0.10	0.26	0.26	0.03	0.47	0.47	0.04	0.48	0.48
Sat Flow, veh/h	1707	4303	616	1707	3882	992	1707	3267	191	1707	2942	452
Grp Volume(v), veh/h	157	228	121	196	708	353	38	579	598	49	509	505
Grp Sat Flow(s),veh/h/ln	1707	1631	1657	1707	1631	1612	1707	1703	1755	1707	1703	1692
Q Serve(g_s), s	7.5	6.3	6.6	9.3	22.6	22.8	2.4	29.7	29.8	3.1	24.2	24.2
Cycle Q Clear(g_c), s	7.5	6.3	6.6	9.3	22.6	22.8	2.4	29.7	29.8	3.1	24.2	24.2
Prop In Lane	1.00		0.37	1.00		0.62	1.00		0.11	1.00		0.27
Lane Grp Cap(c), veh/h	239	782	397	420	837	414	47	807	832	62	822	817
V/C Ratio(X)	0.66	0.29	0.30	0.47	0.85	0.85	0.80	0.72	0.72	0.79	0.62	0.62
Avail Cap(c_a), veh/h	308	952	483	445	922	456	109	807	832	109	822	817
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	34.1	34.2	26.9	38.7	38.8	53.0	23.0	23.0	52.4	20.9	20.9
Incr Delay (d2), s/veh	3.3	0.2	0.4	0.8	6.9	13.5	25.8	5.4	5.3	19.6	3.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	2.8	3.0	4.4	10.9	11.7	1.5	15.1	15.5	1.8	12.1	12.0
LnGrp Delay(d), s/veh	33.4	34.3	34.6	27.7	45.6	52.3	78.8	28.4	28.3	72.1	24.4	24.4
LnGrp LOS	C	C	C	C	D	D	E	C	C	E	C	C
Approach Vol, veh/h		506			1257			1215			1063	
Approach Delay, s/veh		34.1			44.7			29.9			26.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	56.0	15.4	30.3	7.0	56.9	13.5	32.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	52.0	13.0	32.0	7.0	52.0	14.0	31.0
Max Q Clear Time (g_c+I1), s	5.1	31.8	11.3	8.6	4.4	26.2	9.5	24.8
Green Ext Time (p_c), s	0.0	7.9	0.1	2.0	0.0	7.3	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	168	7	754	223	0	735
Future Volume (veh/h)	168	7	754	223	0	735
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	0	1810
Adj Flow Rate, veh/h	189	8	847	0	0	826
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	5	0	5
Cap, veh/h	272	125	2878	1412	0	2878
Arrive On Green	0.08	0.08	0.84	0.00	0.00	0.84
Sat Flow, veh/h	3343	1538	3529	1538	0	3619
Grp Volume(v), veh/h	189	8	847	0	0	826
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	1538	0	1719
Q Serve(g_s), s	5.4	0.5	5.2	0.0	0.0	5.1
Cycle Q Clear(g_c), s	5.4	0.5	5.2	0.0	0.0	5.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	272	125	2878	1412	0	2878
V/C Ratio(X)	0.69	0.06	0.29	0.00	0.00	0.29
Avail Cap(c_a), veh/h	1024	471	2878	1412	0	2878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	43.8	41.6	1.7	0.0	0.0	1.7
Incr Delay (d2), s/veh	3.2	0.2	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.2	2.5	0.0	0.0	2.4
LnGrp Delay(d), s/veh	47.0	41.8	2.0	0.0	0.0	2.0
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	197		847			826
Approach Delay, s/veh	46.8		2.0			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		86.0				86.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		82.0				82.0		30.0
Max Q Clear Time (g_c+I1), s		7.2				7.1		7.4
Green Ext Time (p_c), s		6.8				6.6		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.7
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Future Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	8	251	29	458	618	13	205	8	330	15	13	12
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	14	1590	492	502	3011	63	388	15	359	54	27	25
Arrive On Green	0.01	0.31	0.31	0.28	0.58	0.58	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1792	5136	1589	1792	5174	109	1727	67	1595	1792	895	826
Grp Volume(v), veh/h	8	251	29	458	408	223	213	0	330	15	0	25
Grp Sat Flow(s),veh/h/ln	1792	1712	1589	1792	1712	1859	1795	0	1595	1792	0	1720
Q Serve(g_s), s	0.5	3.7	1.3	25.5	5.8	5.9	10.8	0.0	20.9	0.8	0.0	1.5
Cycle Q Clear(g_c), s	0.5	3.7	1.3	25.5	5.8	5.9	10.8	0.0	20.9	0.8	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.06	0.96		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	14	1590	492	502	1992	1082	404	0	359	54	0	52
V/C Ratio(X)	0.56	0.16	0.06	0.91	0.21	0.21	0.53	0.00	0.92	0.28	0.00	0.48
Avail Cap(c_a), veh/h	70	1590	492	799	1992	1082	418	0	371	278	0	267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.0	25.8	25.0	35.9	10.2	10.2	35.2	0.0	39.1	48.9	0.0	49.2
Incr Delay (d2), s/veh	30.4	0.2	0.2	9.9	0.2	0.4	1.1	0.0	27.2	2.7	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.6	14.0	2.8	3.1	5.5	0.0	11.9	0.5	0.0	0.8
LnGrp Delay(d), s/veh	81.4	26.0	25.3	45.8	10.5	10.7	36.3	0.0	66.3	51.6	0.0	56.0
LnGrp LOS	F	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		288			1089			543			40	
Approach Delay, s/veh		27.5			25.4			54.5			54.4	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	64.0		27.2	32.9	35.9		7.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	60.0		24.0	46.0	18.0		16.0
Max Q Clear Time (g_c+I1), s	2.5	7.9		22.9	27.5	5.7		3.5
Green Ext Time (p_c), s	0.0	4.7		0.3	1.4	1.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.3
HCM 2010 LOS	C

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	167	115	541	666	281	4	1122	285	91	1304	68
Future Volume (veh/h)	20	167	115	541	666	281	4	1122	285	91	1304	68
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	21	178	122	576	709	299	4	1194	303	97	1387	72
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	30	615	266	651	1225	648	35	1396	624	121	1799	790
Arrive On Green	0.02	0.18	0.18	0.19	0.35	0.35	0.41	0.41	0.41	0.07	0.52	0.52
Sat Flow, veh/h	1740	3471	1501	3375	3471	1528	2	3394	1517	1740	3471	1523
Grp Volume(v), veh/h	21	178	122	576	709	299	641	557	303	97	1387	72
Grp Sat Flow(s),veh/h/ln	1740	1736	1501	1688	1736	1528	1817	1579	1517	1740	1736	1523
Q Serve(g_s), s	1.3	4.8	7.8	17.9	17.9	15.1	0.0	34.5	15.8	5.9	34.5	2.6
Cycle Q Clear(g_c), s	1.3	4.8	7.8	17.9	17.9	15.1	34.3	34.5	15.8	5.9	34.5	2.6
Prop In Lane	1.00		1.00	1.00		1.00	0.01		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	30	615	266	651	1225	648	781	650	624	121	1799	790
V/C Ratio(X)	0.70	0.29	0.46	0.88	0.58	0.46	0.82	0.86	0.49	0.80	0.77	0.09
Avail Cap(c_a), veh/h	65	615	266	752	1225	648	908	763	733	162	2127	934
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	38.4	39.7	42.3	28.3	22.3	28.7	28.8	23.3	49.3	20.8	13.1
Incr Delay (d2), s/veh	25.0	1.2	5.6	11.0	2.0	2.4	5.3	8.4	0.6	18.3	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	2.4	3.7	9.3	8.9	6.8	18.4	16.5	6.7	3.5	16.8	1.1
LnGrp Delay(d), s/veh	77.7	39.6	45.3	53.3	30.3	24.7	34.1	37.2	23.9	67.7	22.3	13.2
LnGrp LOS	E	D	D	D	C	C	C	D	C	E	C	B
Approach Vol, veh/h		321			1584			1501			1556	
Approach Delay, s/veh		44.2			37.6			33.2			24.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	42.0	11.5	48.3	24.8	23.1		59.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	38.0	10.0	52.0	24.0	18.0		66.0
Max Q Clear Time (g_c+I1), s	3.3	19.9	7.9	36.5	19.9	9.8		36.5
Green Ext Time (p_c), s	0.0	5.3	0.0	7.8	0.9	0.8		12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	332	211	396	827	661	16
Future Volume (vph)	332	211	396	827	661	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3471	1553	1736	3471	3367	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3471	1553	1736	3471	3367	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	339	215	404	844	674	16
RTOR Reduction (vph)	0	83	0	0	1	0
Lane Group Flow (vph)	339	132	404	844	689	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	40.5	69.1	31.7	76.2	28.6	
Effective Green, g (s)	40.5	69.1	31.7	76.2	28.6	
Actuated g/C Ratio	0.36	0.61	0.28	0.68	0.25	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1246	1006	487	2344	853	
v/s Ratio Prot	0.10	0.03	c0.23	c0.24	c0.20	
v/s Ratio Perm		0.05				
v/c Ratio	0.27	0.13	0.83	0.36	0.81	
Uniform Delay, d1	25.7	9.2	38.0	7.8	39.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.1	11.2	0.4	5.6	
Delay (s)	26.2	9.3	49.2	8.3	45.2	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	19.6			21.5	45.2	
Approach LOS	B			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	60.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	424	290	69	407	1072	266
Future Volume (veh/h)	424	290	69	407	1072	266
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	433	0	70	415	1094	271
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	825	380	280	2314	2314	1033
Arrive On Green	0.24	0.00	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3375	1553	389	3563	3563	1549
Grp Volume(v), veh/h	433	0	70	415	1094	271
Grp Sat Flow(s),veh/h/ln	1688	1553	389	1736	1736	1549
Q Serve(g_s), s	10.0	0.0	9.6	4.1	13.8	6.4
Cycle Q Clear(g_c), s	10.0	0.0	23.4	4.1	13.8	6.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	825	380	280	2314	2314	1033
V/C Ratio(X)	0.52	0.00	0.25	0.18	0.47	0.26
Avail Cap(c_a), veh/h	825	380	280	2314	2314	1033
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	13.0	5.7	7.3	6.1
Incr Delay (d2), s/veh	2.4	0.0	0.5	0.0	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	1.1	1.9	6.8	2.9
LnGrp Delay(d), s/veh	31.9	0.0	13.5	5.7	8.0	6.7
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	433			485	1365	
Approach Delay, s/veh	31.9			6.8	7.7	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		64.0				64.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		60.0				60.0
Max Q Clear Time (g_c+I1), s		12.0		25.4				15.8
Green Ext Time (p_c), s		1.1		4.1				10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	35

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	158	0	0	874	0	0	1062	3	0	2
Future Vol, veh/h	158	0	0	874	0	0	1062	3	0	2
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	163	0	0	901	0	0	1095	3	0	2

Major/Minor	Minor1			Major1			Major2			Minor2	
Conflicting Flow All	1449	451	1098	0	-	-	-	0	1548	549
Stage 1	901	-	-	-	-	-	-	-	1097	-
Stage 2	548	-	-	-	-	-	-	-	451	-
Critical Hdwy	7.6	7	4.2	-	-	-	-	-	7.6	7
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-	-	6.6	-
Critical Hdwy Stg 2	6.6	-	-	-	-	-	-	-	6.6	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-	-	-	3.55	3.35
Pot Cap-1 Maneuver	~ 89	547	614	-	0	0	-	-	75	472
Stage 1	293	-	-	-	0	0	-	-	222	-
Stage 2	481	-	-	-	0	0	-	-	550	-
Platoon blocked, %				-			-	-		
Mov Cap-1 Maneuver	~ 89	547	614	-	-	-	-	-	31	472
Mov Cap-2 Maneuver	~ 89	-	-	-	-	-	-	-	31	-
Stage 1	293	-	-	-	-	-	-	-	222	-
Stage 2	479	-	-	-	-	-	-	-	228	-

Approach	NB	SE	NW	SW
HCM Control Delay, s/v	179.8	0	0	12.7
HCM LOS	F			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	89	547	-	-	614	-	472
HCM Lane V/C Ratio	1.83	0.586	-	-	-	-	0.004
HCM Control Delay (s/veh)	$ 493.4	20.5	-	-	0	-	12.7
HCM Lane LOS	F	C	-	-	A	-	B
HCM 95th %tile Q(veh)	13.7	3.8	-	-	0	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	0.6

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	12	11	17	1071	1160	52
Future Vol, veh/h	12	11	17	1071	1160	52
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	12	11	17	1093	1184	53

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1813	640	1258	0	-	0
Stage 1	1232	-	-	-	-	-
Stage 2	581	-	-	-	-	-
Critical Hdwy	6.9	7	4.2	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-
Pot Cap-1 Maneuver	67	411	533	-	-	-
Stage 1	233	-	-	-	-	-
Stage 2	514	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	63	404	524	-	-	-
Mov Cap-2 Maneuver	63	-	-	-	-	-
Stage 1	222	-	-	-	-	-
Stage 2	505	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	46.1	0.2	0
HCM LOS	E		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	524	-	63	404
HCM Lane V/C Ratio	-	-	0.033	-	0.194	0.028
HCM Control Delay (s/veh)	-	-	12.1	-	75.4	14.2
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	-	0.7	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	210	986	280	10	1075	454	58	540	456	334	554	12
Future Volume (veh/h)	210	986	280	10	1075	454	58	540	456	334	554	12
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1690	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	226	1060	301	11	1156	488	62	581	0	359	596	13
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	250	1589	864	18	1215	594	80	844	378	396	1093	24
Arrive On Green	0.16	0.49	0.49	0.01	0.35	0.35	0.05	0.24	0.00	0.12	0.31	0.31
Sat Flow, veh/h	1609	3211	1405	1740	3471	1494	1740	3471	1553	3375	3470	76
Grp Volume(v), veh/h	226	1060	301	11	1156	488	62	581	0	359	298	311
Grp Sat Flow(s),veh/h/ln	1609	1605	1405	1740	1736	1494	1740	1736	1553	1688	1736	1810
Q Serve(g_s), s	16.5	29.7	12.6	0.8	38.7	34.9	4.2	18.1	0.0	12.5	16.9	17.0
Cycle Q Clear(g_c), s	16.5	29.7	12.6	0.8	38.7	34.9	4.2	18.1	0.0	12.5	16.9	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	250	1589	864	18	1215	594	80	844	378	396	546	570
V/C Ratio(X)	0.91	0.67	0.35	0.62	0.95	0.82	0.78	0.69	0.00	0.91	0.55	0.55
Avail Cap(c_a), veh/h	256	1589	864	58	1223	597	204	844	378	396	546	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	22.7	11.4	58.8	37.7	32.3	56.3	41.0	0.0	52.0	33.8	33.8
Incr Delay (d2), s/veh	32.1	1.1	0.2	30.0	15.5	8.9	14.9	4.6	0.0	23.8	3.9	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	13.3	4.9	0.5	21.1	15.8	2.3	9.2	0.0	7.1	8.7	9.1
LnGrp Delay(d), s/veh	81.6	23.8	11.6	88.7	53.2	41.2	71.2	45.6	0.0	75.8	37.7	37.5
LnGrp LOS	F	C	B	F	D	D	E	D		E	D	D
Approach Vol, veh/h		1587			1655			643			968	
Approach Delay, s/veh		29.7			49.9			48.0			51.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	41.5	5.2	63.0	18.0	33.0	22.5	45.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	4.0	57.0	14.0	29.0	19.0	42.0
Max Q Clear Time (g_c+I1), s	6.2	19.0	2.8	31.7	14.5	20.1	18.5	40.7
Green Ext Time (p_c), s	0.1	2.7	0.0	9.4	0.0	2.6	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.4
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	17	9	460	21	57	773
Future Vol, veh/h	17	9	460	21	57	773
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	18	9	479	22	59	805

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1002	242	0	0	503	0
Stage 1	481	-	-	-	-	-
Stage 2	521	-	-	-	-	-
Critical Hdwy	6.94	7.04	-	-	4.24	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-
Follow-up Hdwy	3.57	3.37	-	-	2.27	-
Pot Cap-1 Maneuver	231	744	-	-	1023	-
Stage 1	573	-	-	-	-	-
Stage 2	547	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	217	743	-	-	1021	-
Mov Cap-2 Maneuver	217	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	515	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	18.5	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	217	743	1021	-
HCM Lane V/C Ratio	-	-	0.082	0.013	0.058	-
HCM Control Delay (s/veh)	-	-	23.1	9.9	8.7	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0.2	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	37	88	393	38	77	708
Future Volume (veh/h)	37	88	393	38	77	708
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	39	92	409	40	80	738
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	139	124	2841	1271	808	2841
Arrive On Green	0.08	0.08	0.83	0.83	0.83	0.83
Sat Flow, veh/h	1707	1524	3495	1524	902	3495
Grp Volume(v), veh/h	39	92	409	40	80	738
Grp Sat Flow(s),veh/h/ln	1707	1524	1703	1524	902	1703
Q Serve(g_s), s	2.0	5.6	2.1	0.4	1.7	4.3
Cycle Q Clear(g_c), s	2.0	5.6	2.1	0.4	3.9	4.3
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	139	124	2841	1271	808	2841
V/C Ratio(X)	0.28	0.74	0.14	0.03	0.10	0.26
Avail Cap(c_a), veh/h	595	531	2841	1271	808	2841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	42.5	1.5	1.3	1.8	1.7
Incr Delay (d2), s/veh	1.1	8.4	0.1	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	2.6	1.0	0.2	0.5	2.0
LnGrp Delay(d), s/veh	42.0	50.9	1.6	1.4	2.1	1.9
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	131		449			818
Approach Delay, s/veh	48.2		1.6			1.9
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		11.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		4.1				6.3		7.6
Green Ext Time (p_c), s		2.9				6.3		0.4

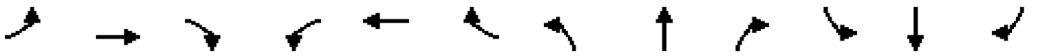
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.1
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	23	75	162	43	38	25
Future Vol, veh/h	23	75	162	43	38	25
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	19	19	19	19	19	19
Mvmt Flow	25	82	176	47	41	27
Number of Lanes	1	1	0	1	1	1

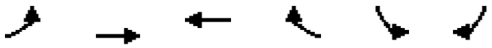
Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	8.4	10.5	8
HCM LOS	A	B	A

Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	79%	100%	0%	0%	0%
Vol Thru, %	21%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	205	23	75	38	25
LT Vol	162	23	0	0	0
Through Vol	43	0	0	38	0
RT Vol	0	0	75	0	25
Lane Flow Rate	223	25	82	41	27
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.318	0.042	0.11	0.061	0.035
Departure Headway (Hd)	5.138	6.084	4.878	5.3	4.597
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	702	590	736	677	780
Service Time	3.156	3.806	2.6	3.022	2.319
HCM Lane V/C Ratio	0.318	0.042	0.111	0.061	0.035
HCM Control Delay, s/veh	10.5	9.1	8.2	8.4	7.5
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	1.4	0.1	0.4	0.2	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	179	624	16	424	1250	152	15	242	510	335	36	26
Future Volume (vph)	179	624	16	424	1250	152	15	242	510	335	36	26
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.98			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1703	4873		1703	4799			3394	1524	1550	3133	1492
Flt Permitted	0.95	1.00		0.95	1.00			0.93	1.00	0.95	0.59	1.00
Satd. Flow (perm)	1703	4873		1703	4799			3169	1524	1550	1914	1492
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	188	657	17	446	1316	160	16	255	537	353	38	27
RTOR Reduction (vph)	0	2	0	0	13	0	0	0	388	0	0	15
Lane Group Flow (vph)	188	672	0	446	1463	0	0	271	149	176	215	12
Confl. Peds. (#/hr)	6					6	4					4
Confl. Bikes (#/hr)			2			4						
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	15.9	20.7		34.1	38.9			31.5	31.5	16.5	52.0	52.0
Effective Green, g (s)	15.9	20.7		34.1	38.9			31.5	31.5	16.5	52.0	52.0
Actuated g/C Ratio	0.13	0.17		0.29	0.33			0.27	0.27	0.14	0.44	0.44
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	227	849		488	1571			840	404	215	1007	653
v/s Ratio Prot	0.11	0.14		c0.26	c0.30					c0.11	0.03	
v/s Ratio Perm								0.09	c0.10		0.06	0.01
v/c Ratio	0.83	0.79		0.91	0.93			0.32	0.37	0.82	0.21	0.02
Uniform Delay, d1	50.1	47.0		40.9	38.7			35.1	35.6	49.7	20.7	18.9
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.3	5.1		21.5	10.3			1.0	2.6	20.9	0.1	0.1
Delay (s)	71.5	52.0		62.5	49.0			36.1	38.1	70.6	20.8	19.0
Level of Service	E	D		E	D			D	D	E	C	B
Approach Delay (s/veh)		56.3			52.1			37.4			41.7	
Approach LOS		E			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	118.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	77	979	1513	73	51	27
Future Volume (veh/h)	77	979	1513	73	51	27
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1658	1658	1792	1792	1792	1792
Adj Flow Rate, veh/h	89	1125	1739	84	59	31
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	186	2370	2562	1122	282	251
Arrive On Green	0.75	0.75	0.75	0.75	0.17	0.17
Sat Flow, veh/h	227	3233	3495	1491	1707	1524
Grp Volume(v), veh/h	89	1125	1739	84	59	31
Grp Sat Flow(s),veh/h/ln	227	1575	1703	1491	1707	1524
Q Serve(g_s), s	31.7	13.3	25.0	1.4	2.9	1.7
Cycle Q Clear(g_c), s	56.7	13.3	25.0	1.4	2.9	1.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	186	2370	2562	1122	282	251
V/C Ratio(X)	0.48	0.47	0.68	0.07	0.21	0.12
Avail Cap(c_a), veh/h	240	3120	3373	1477	282	251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.4	4.6	6.1	3.1	35.0	34.5
Incr Delay (d2), s/veh	1.9	0.1	0.4	0.0	1.7	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	5.7	11.5	0.6	1.5	0.8
LnGrp Delay(d), s/veh	22.3	4.8	6.4	3.2	36.7	35.5
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		1214	1823		90	
Approach Delay, s/veh		6.1	6.3		36.3	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				76.9		20.0		76.9
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				96.0		16.0		96.0
Max Q Clear Time (g_c+I1), s				58.7		4.9		27.0
Green Ext Time (p_c), s				14.2		0.1		24.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	617	43	200	1385	117	45	539	101	66	665	198
Future Volume (veh/h)	211	617	43	200	1385	117	45	539	101	66	665	198
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	224	656	46	213	1473	124	48	573	107	70	707	211
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	256	1799	125	246	1747	147	61	973	429	89	1030	449
Arrive On Green	0.15	0.38	0.38	0.14	0.37	0.37	0.04	0.28	0.28	0.05	0.30	0.30
Sat Flow, veh/h	1740	4755	331	1740	4686	394	1740	3471	1531	1740	3471	1512
Grp Volume(v), veh/h	224	457	245	213	1045	552	48	573	107	70	707	211
Grp Sat Flow(s),veh/h/ln	1740	1663	1761	1740	1663	1755	1740	1736	1531	1740	1736	1512
Q Serve(g_s), s	13.6	10.7	10.8	12.9	31.0	31.0	3.0	15.3	5.8	4.3	19.4	12.3
Cycle Q Clear(g_c), s	13.6	10.7	10.8	12.9	31.0	31.0	3.0	15.3	5.8	4.3	19.4	12.3
Prop In Lane	1.00		0.19	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1258	666	246	1240	654	61	973	429	89	1030	449
V/C Ratio(X)	0.88	0.36	0.37	0.86	0.84	0.84	0.79	0.59	0.25	0.78	0.69	0.47
Avail Cap(c_a), veh/h	339	1264	670	387	1356	716	113	973	429	145	1030	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	24.2	24.2	45.3	30.9	30.9	51.6	33.4	30.0	50.6	33.5	31.0
Incr Delay (d2), s/veh	17.6	0.2	0.3	11.6	4.7	8.5	19.5	2.6	1.4	13.8	3.7	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	4.9	5.3	7.0	15.0	16.6	1.7	7.7	2.6	2.4	9.9	5.6
LnGrp Delay(d), s/veh	62.7	24.3	24.5	56.9	35.6	39.4	71.1	36.1	31.4	64.3	37.2	34.5
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		926			1810			728			988	
Approach Delay, s/veh		33.7			39.3			37.7			38.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	34.2	19.3	44.8	7.8	36.0	19.9	44.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	30.0	24.0	41.0	7.0	32.0	21.0	44.0
Max Q Clear Time (g_c+I1), s	6.3	17.3	14.9	12.8	5.0	21.4	15.6	33.0
Green Ext Time (p_c), s	0.0	3.1	0.4	4.6	0.0	3.8	0.3	7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	145	630	105	233	1455	104	104	1039	154	78	927	101
Future Volume (veh/h)	145	630	105	233	1455	104	104	1039	154	78	927	101
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	154	670	112	248	1548	111	111	1105	164	83	986	107
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	161	1121	185	278	1555	111	136	1222	181	88	1307	718
Arrive On Green	0.09	0.26	0.26	0.16	0.32	0.32	0.08	0.40	0.40	0.05	0.37	0.37
Sat Flow, veh/h	1757	4337	715	1757	4784	343	1757	3055	452	1757	3505	1540
Grp Volume(v), veh/h	154	517	265	248	1086	573	111	633	636	83	986	107
Grp Sat Flow(s),veh/h/ln	1757	1679	1695	1757	1679	1769	1757	1752	1755	1757	1752	1540
Q Serve(g_s), s	10.5	16.2	16.5	16.6	38.7	38.8	7.5	40.7	41.0	5.7	29.5	4.8
Cycle Q Clear(g_c), s	10.5	16.2	16.5	16.6	38.7	38.8	7.5	40.7	41.0	5.7	29.5	4.8
Prop In Lane	1.00		0.42	1.00		0.19	1.00		0.26	1.00		1.00
Lane Grp Cap(c), veh/h	161	868	438	278	1091	575	136	701	702	88	1307	718
V/C Ratio(X)	0.96	0.60	0.61	0.89	1.00	1.00	0.82	0.90	0.91	0.94	0.75	0.15
Avail Cap(c_a), veh/h	161	868	438	366	1091	575	161	701	702	88	1307	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	39.0	39.1	49.5	40.4	40.4	54.5	33.8	33.9	56.8	32.8	18.5
Incr Delay (d2), s/veh	57.8	1.1	2.4	19.1	26.1	36.5	23.7	17.1	17.5	77.7	4.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	7.7	8.0	9.5	21.9	24.8	4.5	23.0	23.2	4.6	15.0	2.1
LnGrp Delay(d), s/veh	112.1	40.1	41.5	68.7	66.5	76.9	78.3	50.9	51.4	134.5	36.9	18.9
LnGrp LOS	F	D	D	E	E	E	E	D	D	F	D	B
Approach Vol, veh/h		936			1907			1380			1176	
Approach Delay, s/veh		52.3			69.9			53.3			42.2	
Approach LOS		D			E			D			D	

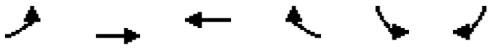
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	52.0	23.0	35.0	13.3	48.7	15.0	43.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	48.0	25.0	25.0	11.0	43.0	11.0	39.0
Max Q Clear Time (g_c+I1), s	7.7	43.0	18.6	18.5	9.5	31.5	12.5	40.8
Green Ext Time (p_c), s	0.0	3.2	0.4	2.6	0.0	5.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	789	44	133	1545	67	150	257	216	176	282	156
Future Volume (veh/h)	70	789	44	133	1545	67	150	257	216	176	282	156
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	73	822	46	139	1609	70	156	268	225	183	294	162
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	1803	101	170	2043	89	383	1009	440	434	654	350
Arrive On Green	0.05	0.37	0.37	0.10	0.41	0.41	0.08	0.29	0.29	0.09	0.30	0.30
Sat Flow, veh/h	1757	4876	272	1757	4944	215	1757	3505	1528	1757	2188	1171
Grp Volume(v), veh/h	73	565	303	139	1092	587	156	268	225	183	234	222
Grp Sat Flow(s),veh/h/ln	1757	1679	1790	1757	1679	1802	1757	1752	1528	1757	1752	1606
Q Serve(g_s), s	4.3	13.3	13.4	8.1	29.5	29.5	6.4	6.1	12.8	7.5	11.2	11.7
Cycle Q Clear(g_c), s	4.3	13.3	13.4	8.1	29.5	29.5	6.4	6.1	12.8	7.5	11.2	11.7
Prop In Lane	1.00		0.15	1.00		0.12	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	94	1241	662	170	1387	744	383	1009	440	434	524	480
V/C Ratio(X)	0.78	0.46	0.46	0.82	0.79	0.79	0.41	0.27	0.51	0.42	0.45	0.46
Avail Cap(c_a), veh/h	169	1450	773	287	1676	899	443	1009	440	475	524	480
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	24.9	24.9	46.1	26.6	26.6	23.4	28.6	31.0	22.6	29.5	29.7
Incr Delay (d2), s/veh	13.0	0.3	0.5	9.3	2.1	3.9	0.7	0.6	4.2	0.7	2.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.2	6.7	4.4	14.1	15.5	3.2	3.1	5.9	3.6	5.9	5.6
LnGrp Delay(d), s/veh	61.7	25.1	25.4	55.4	28.7	30.5	24.1	29.2	35.2	23.2	32.3	32.9
LnGrp LOS	E	C	C	E	C	C	C	C	D	C	C	C
Approach Vol, veh/h		941			1818			649			639	
Approach Delay, s/veh		28.1			31.3			30.1			29.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	34.0	14.1	42.5	12.4	35.1	9.5	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	30.0	17.0	45.0	12.0	30.0	10.0	52.0
Max Q Clear Time (g_c+I1), s	9.5	14.8	10.1	15.4	8.4	13.7	6.3	31.5
Green Ext Time (p_c), s	0.1	2.3	0.2	5.9	0.1	2.7	0.0	11.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	811	1713	0	434	376
Future Volume (veh/h)	0	811	1713	0	434	376
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	0	1706	1706
Adj Flow Rate, veh/h	0	836	1766	0	447	388
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	1955	1955	0	606	541
Arrive On Green	0.00	0.56	0.56	0.00	0.37	0.37
Sat Flow, veh/h	0	3689	3689	0	1625	1450
Grp Volume(v), veh/h	0	836	1766	0	447	388
Grp Sat Flow(s),veh/h/ln	0	1752	1752	0	1625	1450
Q Serve(g_s), s	0.0	16.0	51.8	0.0	27.4	26.4
Cycle Q Clear(g_c), s	0.0	16.0	51.8	0.0	27.4	26.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1955	1955	0	606	541
V/C Ratio(X)	0.00	0.43	0.90	0.00	0.74	0.72
Avail Cap(c_a), veh/h	0	2097	2097	0	606	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	14.8	22.7	0.0	31.3	31.0
Incr Delay (d2), s/veh	0.0	0.1	5.7	0.0	7.8	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	26.3	0.0	13.6	11.8
LnGrp Delay(d), s/veh	0.0	15.0	28.5	0.0	39.1	38.9
LnGrp LOS		B	C		D	D
Approach Vol, veh/h		836	1766		835	
Approach Delay, s/veh		15.0	28.5		39.0	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				68.3		47.0		68.3
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				69.0		43.0		69.0
Max Q Clear Time (g_c+I1), s				18.0		29.4		53.8
Green Ext Time (p_c), s				6.3		2.6		10.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	211	812	339	136	1213	369	191	355	134	226	507	252
Future Volume (veh/h)	211	812	339	136	1213	369	191	355	134	226	507	252
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	222	855	357	143	1277	388	201	374	141	238	534	265
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	248	1495	622	171	1355	602	227	626	272	265	702	306
Arrive On Green	0.14	0.43	0.43	0.10	0.39	0.39	0.13	0.18	0.18	0.15	0.20	0.20
Sat Flow, veh/h	1740	3440	1430	1740	3471	1543	1740	3471	1510	1740	3471	1513
Grp Volume(v), veh/h	222	826	386	143	1277	388	201	374	141	238	534	265
Grp Sat Flow(s),veh/h/ln	1740	1663	1546	1740	1736	1543	1740	1736	1510	1740	1736	1513
Q Serve(g_s), s	14.9	22.2	22.3	9.6	42.1	24.3	13.5	11.8	10.0	16.0	17.2	20.1
Cycle Q Clear(g_c), s	14.9	22.2	22.3	9.6	42.1	24.3	13.5	11.8	10.0	16.0	17.2	20.1
Prop In Lane	1.00		0.93	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1445	672	171	1355	602	227	626	272	265	702	306
V/C Ratio(X)	0.90	0.57	0.57	0.84	0.94	0.64	0.89	0.60	0.52	0.90	0.76	0.87
Avail Cap(c_a), veh/h	249	1445	672	264	1374	611	234	626	272	293	702	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	25.3	25.3	52.6	34.9	29.5	50.8	44.7	44.0	49.4	44.7	45.8
Incr Delay (d2), s/veh	31.3	0.5	1.2	13.0	12.9	2.3	30.0	4.2	6.9	26.7	7.6	26.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	10.3	9.8	5.2	22.5	10.7	8.4	6.0	4.7	9.6	9.0	10.6
LnGrp Delay(d), s/veh	81.4	25.8	26.5	65.6	47.8	31.8	80.8	48.9	50.9	76.1	52.3	72.4
LnGrp LOS	F	C	C	E	D	C	F	D	D	E	D	E
Approach Vol, veh/h		1434			1808			716			1037	
Approach Delay, s/veh		34.6			45.8			58.2			62.9	
Approach LOS		C			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.1	25.4	15.7	55.6	19.5	28.0	20.9	50.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	20.0	18.0	46.0	16.0	24.0	17.0	47.0
Max Q Clear Time (g_c+I1), s	18.0	13.8	11.6	24.3	15.5	22.1	16.9	44.1
Green Ext Time (p_c), s	0.1	1.6	0.2	8.1	0.0	0.9	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	818	129	86	1053	236	103	487	78	253	865	114
Future Volume (veh/h)	139	818	129	86	1053	236	103	487	78	253	865	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.94	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	153	899	142	95	1157	259	113	535	86	278	951	125
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	1582	249	120	1339	300	238	1056	443	425	1286	545
Arrive On Green	0.10	0.36	0.36	0.07	0.33	0.33	0.06	0.30	0.30	0.13	0.37	0.37
Sat Flow, veh/h	1757	4376	688	1757	4110	920	1757	3505	1470	1757	3505	1484
Grp Volume(v), veh/h	153	689	352	95	945	471	113	535	86	278	951	125
Grp Sat Flow(s),veh/h/ln	1757	1679	1706	1757	1679	1672	1757	1752	1470	1757	1752	1484
Q Serve(g_s), s	9.6	18.4	18.6	6.0	29.5	29.5	4.9	14.1	4.9	11.7	26.3	6.5
Cycle Q Clear(g_c), s	9.6	18.4	18.6	6.0	29.5	29.5	4.9	14.1	4.9	11.7	26.3	6.5
Prop In Lane	1.00		0.40	1.00		0.55	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	1214	617	120	1094	545	238	1056	443	425	1286	545
V/C Ratio(X)	0.84	0.57	0.57	0.79	0.86	0.86	0.47	0.51	0.19	0.65	0.74	0.23
Avail Cap(c_a), veh/h	252	1262	641	204	1172	584	258	1056	443	518	1286	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	28.7	28.7	51.3	35.3	35.3	26.4	32.2	29.0	22.2	30.7	24.4
Incr Delay (d2), s/veh	16.2	0.6	1.1	11.2	6.6	12.2	1.5	1.7	1.0	2.2	3.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	8.6	8.9	3.2	14.7	15.4	2.5	7.0	2.1	5.9	13.4	2.8
LnGrp Delay(d), s/veh	65.4	29.2	29.8	62.5	41.9	47.5	27.9	33.9	29.9	24.4	34.5	25.4
LnGrp LOS	E	C	C	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1194			1511			734			1354	
Approach Delay, s/veh		34.0			45.0			32.5			31.6	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	37.6	11.6	44.4	10.7	45.0	15.6	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	29.0	13.0	42.0	8.0	41.0	16.0	39.0
Max Q Clear Time (g_c+I1), s	13.7	16.1	8.0	20.6	6.9	28.3	11.6	31.5
Green Ext Time (p_c), s	0.4	3.0	0.1	6.8	0.0	5.4	0.1	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	846	139	25	1196	256	61	161	8	302	340	118
Future Volume (veh/h)	160	846	139	25	1196	256	61	161	8	302	340	118
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	168	891	146	26	1259	269	64	169	8	318	358	124
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	199	1945	317	35	1466	313	397	1479	70	546	1523	671
Arrive On Green	0.11	0.44	0.44	0.02	0.35	0.35	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1774	4397	717	1774	4186	894	909	3439	162	1201	3539	1560
Grp Volume(v), veh/h	168	686	351	26	1020	508	64	86	91	318	358	124
Grp Sat Flow(s),veh/h/ln	1774	1695	1724	1774	1695	1690	909	1770	1831	1201	1770	1560
Q Serve(g_s), s	10.4	15.8	15.9	1.6	31.2	31.2	5.4	3.3	3.3	24.1	7.2	5.5
Cycle Q Clear(g_c), s	10.4	15.8	15.9	1.6	31.2	31.2	12.5	3.3	3.3	27.4	7.2	5.5
Prop In Lane	1.00		0.42	1.00		0.53	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	199	1500	763	35	1188	592	397	761	788	546	1523	671
V/C Ratio(X)	0.85	0.46	0.46	0.74	0.86	0.86	0.16	0.11	0.11	0.58	0.24	0.18
Avail Cap(c_a), veh/h	286	1641	834	95	1276	636	397	761	788	546	1523	671
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	21.7	21.8	54.4	33.7	33.7	24.1	19.0	19.1	27.3	20.1	19.7
Incr Delay (d2), s/veh	14.5	0.2	0.4	25.7	5.8	10.8	0.9	0.3	0.3	4.5	0.4	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	7.4	7.6	1.0	15.5	16.3	1.4	1.6	1.7	8.6	3.6	2.5
LnGrp Delay(d), s/veh	63.1	22.0	22.2	80.1	39.5	44.5	25.0	19.3	19.3	31.8	20.5	20.3
LnGrp LOS	E	C	C	F	D	D	C	B	B	C	C	C
Approach Vol, veh/h		1205			1554			241			800	
Approach Delay, s/veh		27.8			41.8			20.8			24.9	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	6.2	53.4		52.0	16.5	43.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	6.0	54.0		48.0	18.0	42.0
Max Q Clear Time (g_c+I1), s		14.5	3.6	17.9		29.4	12.4	33.2
Green Ext Time (p_c), s		1.3	0.0	7.8		3.7	0.2	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	76	908	127	120	1166	106	96	312	33	99	602	214
Future Volume (vph)	76	908	127	120	1166	106	96	312	33	99	602	214
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5029		1787	5060		1785	3574	1568	1781	3574	1573
Flt Permitted	0.95	1.00		0.95	1.00		0.31	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)	1787	5029		1787	5060		580	3574	1568	962	3574	1573
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	81	966	135	128	1240	113	102	332	35	105	640	228
RTOR Reduction (vph)	0	15	0	0	9	0	0	0	21	0	0	134
Lane Group Flow (vph)	81	1086	0	128	1344	0	102	332	14	105	640	94
Confl. Peds. (#/hr)	6		3	3		6	2		3	3		2
Confl. Bikes (#/hr)			3			2			2			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7			7				2			2	
Permitted Phases		8			8		2		2	2		2
Actuated Green, G (s)	13.3	42.3		13.3	42.3		47.1	47.1	47.1	47.1	47.1	47.1
Effective Green, g (s)	13.3	42.3		13.3	42.3		47.1	47.1	47.1	47.1	47.1	47.1
Actuated g/C Ratio	0.12	0.37		0.12	0.37		0.41	0.41	0.41	0.41	0.41	0.41
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	207	1854		207	1866		238	1467	643	395	1467	645
v/s Ratio Prot	0.05			c0.07				0.09			c0.18	
v/s Ratio Perm		0.22			c0.27		0.18		0.01	0.11		0.06
v/c Ratio	0.39	0.59		0.62	0.72		0.43	0.23	0.02	0.27	0.44	0.15
Uniform Delay, d1	47.0	29.1		48.3	31.1		24.2	22.0	20.1	22.4	24.3	21.2
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.5		5.4	1.4		5.6	0.4	0.1	1.6	0.9	0.5
Delay (s)	48.2	29.6		53.7	32.5		29.7	22.3	20.2	24.0	25.2	21.7
Level of Service	D	C		D	C		C	C	C	C	C	C
Approach Delay (s/veh)		30.9			34.3			23.8			24.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	27.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	207	375	0	936	608	0
Future Vol, veh/h	207	375	0	936	608	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	233	421	0	1052	683	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1209	342	-	0	-	0
Stage 1	683	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	-	-
Pot Cap-1 Maneuver	~ 171	645	0	-	-	0
Stage 1	455	-	0	-	-	0
Stage 2	549	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 171	645	-	-	-	-
Mov Cap-2 Maneuver	~ 171	-	-	-	-	-
Stage 1	455	-	-	-	-	-
Stage 2	549	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	100.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	171	645	-
HCM Lane V/C Ratio	-	1.36	0.653	-
HCM Control Delay (s/veh)	-	246.6	20.5	-
HCM Lane LOS	-	F	C	-
HCM 95th %tile Q(veh)	-	14	4.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	4	14	284	1	222	9	462	121	223	816	5
Future Volume (veh/h)	10	4	14	284	1	222	9	462	121	223	816	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	12	5	17	351	1	274	11	570	149	275	1007	6
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	78	197	457	520	440	342	2253	991	482	2253	1002
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	422	279	701	1362	1845	1561	549	3505	1543	723	3505	1559
Grp Volume(v), veh/h	34	0	0	351	1	274	11	570	149	275	1007	6
Grp Sat Flow(s),veh/h/ln	1402	0	0	1362	1845	1561	549	1752	1543	723	1752	1559
Q Serve(g_s), s	0.0	0.0	0.0	24.2	0.0	16.2	1.1	7.3	4.0	27.7	15.2	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.0	25.8	0.0	16.2	16.3	7.3	4.0	35.1	15.2	0.1
Prop In Lane	0.35		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	441	0	0	457	520	440	342	2253	991	482	2253	1002
V/C Ratio(X)	0.08	0.00	0.00	0.77	0.00	0.62	0.03	0.25	0.15	0.57	0.45	0.01
Avail Cap(c_a), veh/h	624	0	0	640	767	649	342	2253	991	482	2253	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	0.0	0.0	36.4	27.3	33.1	13.6	8.1	7.5	15.5	9.5	6.8
Incr Delay (d2), s/veh	0.1	0.0	0.0	3.7	0.0	1.4	0.2	0.3	0.3	4.8	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	10.3	0.0	7.1	0.2	3.6	1.8	6.1	7.5	0.1
LnGrp Delay(d), s/veh	27.9	0.0	0.0	40.0	27.3	34.6	13.7	8.3	7.8	20.4	10.1	6.8
LnGrp LOS	C			D	C	C	B	A	A	C	B	A
Approach Vol, veh/h		34			626			730			1288	
Approach Delay, s/veh		27.9			37.6			8.3			12.3	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		33.8		72.0		33.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		44.0		68.0		44.0
Max Q Clear Time (g_c+I1), s		18.3		3.6		37.1		27.8
Green Ext Time (p_c), s		5.0		0.2		11.5		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.1

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	370	29	250	814	57	144
Future Vol, veh/h	370	29	250	814	57	144
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	425	33	287	936	66	166

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	458	0	1484	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	1042	-
Critical Hdwy	-	-	4.12	-	6.82	-
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	-
Pot Cap-1 Maneuver	-	-	1106	-	117	0
Stage 1	-	-	-	-	618	0
Stage 2	-	-	-	-	303	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1106	-	87	-
Mov Cap-2 Maneuver	-	-	-	-	87	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	225	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	2.2	121.6
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	87	-	1106	-
HCM Lane V/C Ratio	-	-	0.753	-	0.26	-
HCM Control Delay (s/veh)	-	-	121.6	0	9.4	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	3.8	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	1242	171	121	1370	141	150	204	118	167	241	28
Future Volume (veh/h)	79	1242	171	121	1370	141	150	204	118	167	241	28
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	86	1350	186	132	1489	153	163	222	128	182	262	30
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	110	1761	243	164	1972	202	198	770	338	219	811	361
Arrive On Green	0.06	0.39	0.39	0.09	0.42	0.42	0.11	0.22	0.22	0.12	0.23	0.23
Sat Flow, veh/h	1757	4466	615	1757	4640	477	1757	3505	1540	1757	3505	1562
Grp Volume(v), veh/h	86	1015	521	132	1077	565	163	222	128	182	262	30
Grp Sat Flow(s),veh/h/ln	1757	1679	1725	1757	1679	1760	1757	1752	1540	1757	1752	1562
Q Serve(g_s), s	4.6	25.0	25.0	7.0	25.8	25.9	8.6	5.0	6.7	9.6	5.9	1.4
Cycle Q Clear(g_c), s	4.6	25.0	25.0	7.0	25.8	25.9	8.6	5.0	6.7	9.6	5.9	1.4
Prop In Lane	1.00		0.36	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	110	1323	680	164	1426	748	198	770	338	219	811	361
V/C Ratio(X)	0.78	0.77	0.77	0.80	0.76	0.76	0.82	0.29	0.38	0.83	0.32	0.08
Avail Cap(c_a), veh/h	222	1659	852	296	1800	944	351	770	338	388	811	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	25.0	25.0	42.3	23.2	23.2	41.3	30.9	31.6	40.7	30.4	28.6
Incr Delay (d2), s/veh	11.2	1.7	3.3	8.8	1.4	2.7	8.2	0.9	3.2	8.0	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	11.9	12.5	3.8	12.2	13.1	4.6	2.5	3.2	5.1	3.0	0.7
LnGrp Delay(d), s/veh	55.1	26.7	28.3	51.1	24.6	25.9	49.5	31.9	34.8	48.7	31.4	29.1
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1622			1774			513			474	
Approach Delay, s/veh		28.7			27.0			38.2			37.9	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	24.9	12.9	41.5	14.7	26.0	10.0	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	20.0	16.0	47.0	19.0	22.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	11.6	8.7	9.0	27.0	10.6	7.9	6.6	27.9
Green Ext Time (p_c), s	0.3	1.3	0.2	10.4	0.2	1.3	0.1	12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	228	151	52	330	116	53	361	59	138	739	82
Future Volume (veh/h)	56	228	151	52	330	116	53	361	59	138	739	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	57	233	154	53	337	118	54	368	60	141	754	84
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	73	363	230	68	446	154	449	1915	836	643	2620	290
Arrive On Green	0.04	0.18	0.18	0.04	0.18	0.18	0.03	0.55	0.55	0.06	0.58	0.58
Sat Flow, veh/h	1740	2027	1282	1740	2534	873	1740	3471	1515	1740	4551	503
Grp Volume(v), veh/h	57	198	189	53	229	226	54	368	60	141	549	289
Grp Sat Flow(s),veh/h/ln	1740	1736	1574	1740	1736	1671	1740	1736	1515	1740	1663	1729
Q Serve(g_s), s	3.0	9.7	10.3	2.8	11.5	11.9	1.2	4.9	1.7	3.2	7.7	7.8
Cycle Q Clear(g_c), s	3.0	9.7	10.3	2.8	11.5	11.9	1.2	4.9	1.7	3.2	7.7	7.8
Prop In Lane	1.00		0.81	1.00		0.52	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	73	311	282	68	305	294	449	1915	836	643	1914	996
V/C Ratio(X)	0.78	0.64	0.67	0.78	0.75	0.77	0.12	0.19	0.07	0.22	0.29	0.29
Avail Cap(c_a), veh/h	246	584	530	246	584	563	525	1915	836	791	1914	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	35.0	35.3	43.9	36.0	36.1	8.4	10.3	9.6	7.8	9.9	9.9
Incr Delay (d2), s/veh	16.2	2.2	2.8	17.6	3.7	4.2	0.1	0.2	0.2	0.2	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.9	4.7	1.7	5.8	5.8	0.6	2.4	0.7	1.5	3.6	3.9
LnGrp Delay(d), s/veh	59.9	37.2	38.0	61.4	39.7	40.4	8.5	10.6	9.8	7.9	10.3	10.7
LnGrp LOS	E	D	D	E	D	D	A	B	A	A	B	B
Approach Vol, veh/h		444			508			482			979	
Approach Delay, s/veh		40.5			42.3			10.2			10.1	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	54.8	7.6	20.5	7.0	57.0	7.9	20.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	47.0	13.0	31.0	7.0	53.0	13.0	31.0
Max Q Clear Time (g_c+I1), s	5.2	6.9	4.8	12.3	3.2	9.8	5.0	13.9
Green Ext Time (p_c), s	0.2	2.9	0.0	2.0	0.0	6.7	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	29	305	85	154	490	157	80	509	57	212	770	105
Future Volume (veh/h)	29	305	85	154	490	157	80	509	57	212	770	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	33	343	96	173	551	176	90	572	64	238	865	118
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	134	679	568	273	679	562	299	1969	858	435	1969	860
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	718	1845	1543	937	1845	1528	565	3505	1528	781	3505	1530
Grp Volume(v), veh/h	33	343	96	173	551	176	90	572	64	238	865	118
Grp Sat Flow(s),veh/h/ln	718	1845	1543	937	1845	1528	565	1752	1528	781	1752	1530
Q Serve(g_s), s	4.9	16.4	4.8	20.0	30.7	9.4	12.6	9.7	2.2	26.2	16.4	4.2
Cycle Q Clear(g_c), s	35.6	16.4	4.8	36.5	30.7	9.4	28.9	9.7	2.2	35.9	16.4	4.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	134	679	568	273	679	562	299	1969	858	435	1969	860
V/C Ratio(X)	0.25	0.51	0.17	0.63	0.81	0.31	0.30	0.29	0.07	0.55	0.44	0.14
Avail Cap(c_a), veh/h	172	777	650	323	777	644	299	1969	858	435	1969	860
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	28.0	24.3	42.1	32.4	25.7	22.9	13.1	11.4	22.5	14.5	11.9
Incr Delay (d2), s/veh	0.9	0.6	0.1	3.1	5.8	0.3	2.6	0.4	0.2	4.9	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.5	2.0	5.4	16.7	4.0	2.2	4.8	1.0	6.2	8.1	1.8
LnGrp Delay(d), s/veh	49.4	28.5	24.4	45.2	38.3	26.0	25.5	13.4	11.6	27.4	15.2	12.2
LnGrp LOS	D	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		472			900			726			1221	
Approach Delay, s/veh		29.2			37.2			14.8			17.3	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		68.0		45.9		68.0		45.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		64.0		48.0		64.0		48.0
Max Q Clear Time (g_c+I1), s		30.9		37.6		37.9		38.5
Green Ext Time (p_c), s		5.2		1.8		8.6		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	6.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	7	345	264	424	761	27
Future Vol, veh/h	7	345	264	424	761	27
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	8	388	297	476	855	30

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1687	428	885	0	-	0
Stage 1	855	-	-	-	-	-
Stage 2	832	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	85	575	760	-	-	-
Stage 1	377	-	-	-	-	-
Stage 2	388	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	52	575	760	-	-	-
Mov Cap-2 Maneuver	52	-	-	-	-	-
Stage 1	230	-	-	-	-	-
Stage 2	388	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	24.5	4.9	0
HCM LOS	C		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	760	-	52	575	-	-
HCM Lane V/C Ratio	0.39	-	0.151	0.674	-	-
HCM Control Delay (s/veh)	12.7	-	86.2	23.2	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	1.9	-	0.5	5.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	36	537	215	233	999	41	248	636	171	66	948	63
Future Volume (veh/h)	36	537	215	233	999	41	248	636	171	66	948	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	37	554	222	240	1030	42	256	656	176	68	977	65
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	628	244	270	1507	61	286	1675	736	87	1277	560
Arrive On Green	0.03	0.18	0.18	0.15	0.30	0.30	0.16	0.48	0.48	0.05	0.36	0.36
Sat Flow, veh/h	1757	3554	1382	1757	4959	202	1757	3505	1540	1757	3505	1537
Grp Volume(v), veh/h	37	522	254	240	697	375	256	656	176	68	977	65
Grp Sat Flow(s),veh/h/ln	1757	1679	1578	1757	1679	1804	1757	1752	1540	1757	1752	1537
Q Serve(g_s), s	2.4	17.1	17.7	15.1	20.5	20.6	16.1	13.5	7.6	4.3	27.6	3.2
Cycle Q Clear(g_c), s	2.4	17.1	17.7	15.1	20.5	20.6	16.1	13.5	7.6	4.3	27.6	3.2
Prop In Lane	1.00		0.88	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	47	593	279	270	1020	548	286	1675	736	87	1277	560
V/C Ratio(X)	0.79	0.88	0.91	0.89	0.68	0.68	0.89	0.39	0.24	0.78	0.76	0.12
Avail Cap(c_a), veh/h	94	597	281	328	1045	561	344	1675	736	156	1277	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	45.2	45.4	46.7	34.4	34.4	46.1	18.9	17.3	52.8	31.5	23.7
Incr Delay (d2), s/veh	25.1	14.3	31.2	21.5	1.8	3.3	21.9	0.7	0.8	13.9	4.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	9.1	10.2	8.9	9.7	10.7	9.6	6.7	3.4	2.4	14.1	1.4
LnGrp Delay(d), s/veh	79.5	59.4	76.7	68.2	36.2	37.8	68.0	19.6	18.1	66.7	35.9	24.1
LnGrp LOS	E	E	E	E	D	D	E	B	B	E	D	C
Approach Vol, veh/h		813			1312			1088			1110	
Approach Delay, s/veh		65.7			42.5			30.7			37.1	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	57.7	21.3	23.9	22.3	45.0	7.0	38.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	53.0	21.0	20.0	22.0	41.0	6.0	35.0
Max Q Clear Time (g_c+I1), s	6.3	15.5	17.1	19.7	18.1	29.6	4.4	22.6
Green Ext Time (p_c), s	0.0	5.4	0.2	0.1	0.3	4.9	0.0	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	82	71	178	83	109	61	144	932	40	27	1222	82
Future Volume (veh/h)	82	71	178	83	109	61	144	932	40	27	1222	82
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	89	77	193	90	118	66	157	1013	43	29	1328	89
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	27	417	44	42	417	186	2137	932	37	1840	799
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.11	0.61	0.61	0.02	0.52	0.52
Sat Flow, veh/h	0	103	1564	0	156	1564	1757	3505	1529	1757	3505	1522
Grp Volume(v), veh/h	166	0	193	208	0	66	157	1013	43	29	1328	89
Grp Sat Flow(s),veh/h/ln	103	0	1564	156	0	1564	1757	1752	1529	1757	1752	1522
Q Serve(g_s), s	0.0	0.0	12.0	0.0	0.0	3.8	10.2	18.5	1.3	1.9	33.7	3.4
Cycle Q Clear(g_c), s	31.0	0.0	12.0	31.0	0.0	3.8	10.2	18.5	1.3	1.9	33.7	3.4
Prop In Lane	0.54		1.00	0.43		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	417	86	0	417	186	2137	932	37	1840	799
V/C Ratio(X)	2.22	0.00	0.46	2.42	0.00	0.16	0.84	0.47	0.05	0.79	0.72	0.11
Avail Cap(c_a), veh/h	75	0	417	86	0	417	272	2137	932	91	1840	799
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	0.0	35.8	43.8	0.0	32.7	51.1	12.5	9.1	56.7	21.2	14.0
Incr Delay (d2), s/veh	588.0	0.0	0.8	674.4	0.0	0.2	14.7	0.8	0.1	30.1	2.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.6	0.0	5.3	18.8	0.0	1.6	5.7	9.1	0.6	1.2	16.9	1.5
LnGrp Delay(d), s/veh	635.2	0.0	36.6	718.2	0.0	32.9	65.9	13.2	9.2	86.9	23.6	14.2
LnGrp LOS	F		D	F		C	E	B	A	F	C	B
Approach Vol, veh/h		359			274			1213			1446	
Approach Delay, s/veh		313.3			553.1			19.9			24.3	
Approach LOS		F			F			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	75.0		35.0	16.3	65.1		35.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	71.0		31.0	18.0	59.0		31.0
Max Q Clear Time (g_c+I1), s	3.9	20.5		33.0	12.2	35.7		33.0
Green Ext Time (p_c), s	0.0	8.4		0.0	0.2	10.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	98.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	741	72	195	904	171	168	856	47	97	1299	84
Future Volume (veh/h)	91	741	72	195	904	171	168	856	47	97	1299	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	96	780	76	205	952	180	177	901	49	102	1367	88
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	102	789	343	220	1022	446	190	1559	683	126	1431	624
Arrive On Green	0.06	0.22	0.22	0.13	0.29	0.29	0.11	0.44	0.44	0.07	0.41	0.41
Sat Flow, veh/h	1757	3505	1526	1757	3505	1530	1757	3505	1535	1757	3505	1529
Grp Volume(v), veh/h	96	780	76	205	952	180	177	901	49	102	1367	88
Grp Sat Flow(s),veh/h/ln	1757	1752	1526	1757	1752	1530	1757	1752	1535	1757	1752	1529
Q Serve(g_s), s	6.5	26.6	4.9	13.9	31.7	11.3	12.0	23.1	2.2	6.9	45.4	4.3
Cycle Q Clear(g_c), s	6.5	26.6	4.9	13.9	31.7	11.3	12.0	23.1	2.2	6.9	45.4	4.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	102	789	343	220	1022	446	190	1559	683	126	1431	624
V/C Ratio(X)	0.94	0.99	0.22	0.93	0.93	0.40	0.93	0.58	0.07	0.81	0.96	0.14
Avail Cap(c_a), veh/h	102	789	343	220	1022	446	190	1559	683	190	1431	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	46.4	37.9	52.0	41.3	34.1	53.0	24.9	19.1	54.9	34.4	22.3
Incr Delay (d2), s/veh	68.7	29.2	0.3	42.6	14.5	0.6	45.7	1.6	0.2	13.9	15.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	16.1	2.1	9.3	17.4	4.9	8.2	11.5	1.0	3.8	24.9	1.9
LnGrp Delay(d), s/veh	124.9	75.6	38.2	94.6	55.8	34.7	98.7	26.5	19.3	68.8	49.7	22.8
LnGrp LOS	F	E	D	F	E	C	F	C	B	E	D	C
Approach Vol, veh/h		952			1337			1127			1557	
Approach Delay, s/veh		77.6			58.9			37.5			49.4	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	57.4	19.0	31.0	17.0	53.0	11.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	49.0	15.0	27.0	13.0	49.0	7.0	35.0
Max Q Clear Time (g_c+I1), s	8.9	25.1	15.9	28.6	14.0	47.4	8.5	33.7
Green Ext Time (p_c), s	0.1	6.3	0.0	0.0	0.0	1.2	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	63	96	134	127	151	85	889	44	97	1463	16
Future Volume (veh/h)	4	63	96	134	127	151	85	889	44	97	1463	16
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	4	64	97	135	128	153	86	898	0	98	1478	16
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	7	150	135	168	311	278	110	1997	893	125	2968	32
Arrive On Green	0.00	0.09	0.09	0.10	0.18	0.18	0.06	0.58	0.00	0.07	0.58	0.58
Sat Flow, veh/h	1740	1736	1553	1740	1736	1553	1740	3471	1553	1740	5086	55
Grp Volume(v), veh/h	4	64	97	135	128	153	86	898	0	98	966	528
Grp Sat Flow(s),veh/h/ln	1740	1736	1553	1740	1736	1553	1740	1736	1553	1740	1663	1816
Q Serve(g_s), s	0.2	3.3	5.7	7.2	6.2	8.5	4.6	14.0	0.0	5.2	16.1	16.1
Cycle Q Clear(g_c), s	0.2	3.3	5.7	7.2	6.2	8.5	4.6	14.0	0.0	5.2	16.1	16.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	7	150	135	168	311	278	110	1997	893	125	1941	1060
V/C Ratio(X)	0.54	0.43	0.72	0.80	0.41	0.55	0.78	0.45	0.00	0.78	0.50	0.50
Avail Cap(c_a), veh/h	74	295	264	351	571	511	258	1997	893	277	1941	1060
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	40.8	41.9	41.7	34.3	35.2	43.5	11.5	0.0	43.0	11.5	11.5
Incr Delay (d2), s/veh	50.8	1.9	7.1	8.6	0.9	1.7	11.2	0.7	0.0	10.2	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	1.7	2.7	3.9	3.0	3.7	2.5	6.8	0.0	2.9	7.5	8.4
LnGrp Delay(d), s/veh	97.6	42.7	49.0	50.3	35.2	36.9	54.7	12.2	0.0	53.3	12.4	13.2
LnGrp LOS	F	D	D	D	D	D	D	B		D	B	B
Approach Vol, veh/h		165			416			984			1592	
Approach Delay, s/veh		47.7			40.7			15.9			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	58.2	13.1	12.2	10.0	59.0	4.4	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	54.0	19.0	16.0	14.0	55.0	4.0	31.0
Max Q Clear Time (g_c+I1), s	7.2	16.0	9.2	7.7	6.6	18.1	2.2	10.5
Green Ext Time (p_c), s	0.1	6.8	0.2	0.4	0.1	12.4	0.0	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	1	72	13	2	4	98	925	30	15	1516	44
Future Volume (veh/h)	7	1	72	13	2	4	98	925	30	15	1516	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	8	1	78	14	2	4	107	1005	33	16	1648	48
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	77	6	166	79	7	166	133	2629	1150	24	3457	101
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.08	0.76	0.76	0.01	0.70	0.70
Sat Flow, veh/h	121	55	1534	140	65	1534	1723	3438	1504	1723	4930	144
Grp Volume(v), veh/h	9	0	78	16	0	4	107	1005	33	16	1101	595
Grp Sat Flow(s),veh/h/ln	176	0	1534	205	0	1534	1723	1719	1504	1723	1647	1780
Q Serve(g_s), s	0.4	0.0	5.1	0.9	0.0	0.2	6.5	10.3	0.6	1.0	15.9	15.9
Cycle Q Clear(g_c), s	10.7	0.0	5.1	11.0	0.0	0.2	6.5	10.3	0.6	1.0	15.9	15.9
Prop In Lane	0.89		1.00	0.87		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	83	0	166	86	0	166	133	2629	1150	24	2309	1248
V/C Ratio(X)	0.11	0.00	0.47	0.19	0.00	0.02	0.80	0.38	0.03	0.66	0.48	0.48
Avail Cap(c_a), veh/h	196	0	290	193	0	290	325	2629	1150	114	2309	1248
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	0.0	44.4	48.9	0.0	42.2	48.1	4.1	3.0	52.0	7.1	7.1
Incr Delay (d2), s/veh	0.6	0.0	2.1	1.0	0.0	0.1	10.6	0.4	0.0	26.5	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	2.3	0.5	0.0	0.1	3.5	4.9	0.2	0.6	7.4	8.2
LnGrp Delay(d), s/veh	47.7	0.0	46.5	49.9	0.0	42.3	58.7	4.6	3.0	78.5	7.8	8.4
LnGrp LOS	D		D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		87			20			1145			1712	
Approach Delay, s/veh		46.6			48.4			9.6			8.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	85.0		16.0	12.2	78.3		16.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	81.0		20.0	20.0	68.0		20.0
Max Q Clear Time (g_c+I1), s	3.0	12.3		12.7	8.5	17.9		13.0
Green Ext Time (p_c), s	0.0	8.4		0.1	0.2	16.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	724	105	149	1097	113	87
Future Volume (veh/h)	724	105	149	1097	113	87
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1900	1827	1827	1827	1827
Adj Flow Rate, veh/h	778	113	160	1180	122	94
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1224	176	207	2285	733	655
Arrive On Green	0.28	0.28	0.12	0.46	0.42	0.42
Sat Flow, veh/h	4552	632	1740	5152	1740	1553
Grp Volume(v), veh/h	588	303	160	1180	122	94
Grp Sat Flow(s),veh/h/ln	1663	1695	1740	1663	1740	1553
Q Serve(g_s), s	10.3	10.4	5.9	11.2	2.9	2.5
Cycle Q Clear(g_c), s	10.3	10.4	5.9	11.2	2.9	2.5
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	928	473	207	2285	733	655
V/C Ratio(X)	0.63	0.64	0.77	0.52	0.17	0.14
Avail Cap(c_a), veh/h	2352	1199	864	6307	733	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	21.0	28.4	12.8	12.0	11.8
Incr Delay (d2), s/veh	0.7	1.5	6.1	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	5.1	3.2	5.1	1.5	1.1
LnGrp Delay(d), s/veh	21.7	22.5	34.5	13.0	12.4	12.3
LnGrp LOS	C	C	C	B	B	B
Approach Vol, veh/h	891			1340	216	
Approach Delay, s/veh	22.0			15.5	12.4	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		32.0	11.9	22.5				34.4
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		28.0	33.0	47.0				84.0
Max Q Clear Time (g_c+I1), s		4.9	7.9	12.4				13.2
Green Ext Time (p_c), s		0.6	0.4	6.1				10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	15.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	165	25	18	159	80	24	108	74	87	126	21
Future Vol, veh/h	11	165	25	18	159	80	24	108	74	87	126	21
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	13	194	29	21	187	94	28	127	87	102	148	25
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	15.6	19	12.1	13
HCM LOS	C	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	7%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	87%	62%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	13%	31%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	24	108	74	11	190	257	87	126	21
LT Vol	24	0	0	11	0	18	87	0	0
Through Vol	0	108	0	0	165	159	0	126	0
RT Vol	0	0	74	0	25	80	0	0	21
Lane Flow Rate	28	127	87	13	224	302	102	148	25
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.063	0.267	0.165	0.028	0.451	0.583	0.226	0.306	0.046
Departure Headway (Hd)	8.076	7.561	6.84	7.866	7.267	6.945	7.958	7.443	6.723
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	443	475	523	455	496	520	451	483	532
Service Time	5.829	5.313	4.592	5.616	5.016	4.688	5.707	5.193	4.472
HCM Lane V/C Ratio	0.063	0.267	0.166	0.029	0.452	0.581	0.226	0.306	0.047
HCM Control Delay, s/veh	11.4	13.1	10.9	10.8	15.9	19	13	13.5	9.8
HCM Lane LOS	B	B	B	B	C	C	B	B	A
HCM 95th-tile Q	0.2	1.1	0.6	0.1	2.3	3.7	0.9	1.3	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	841	98	33	1083	79	29	24	11	64	39	66
Future Volume (veh/h)	85	841	98	33	1083	79	29	24	11	64	39	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	90	895	104	35	1152	84	31	26	12	68	41	70
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	117	1666	729	48	1528	670	73	40	533	77	29	526
Arrive On Green	0.07	0.48	0.48	0.03	0.44	0.44	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	1757	3505	1534	1757	3505	1535	0	119	1565	0	86	1545
Grp Volume(v), veh/h	90	895	104	35	1152	84	57	0	12	109	0	70
Grp Sat Flow(s),veh/h/ln	1757	1752	1534	1757	1752	1535	119	0	1565	86	0	1545
Q Serve(g_s), s	3.9	13.8	2.9	1.5	21.1	2.5	0.0	0.0	0.4	0.0	0.0	2.4
Cycle Q Clear(g_c), s	3.9	13.8	2.9	1.5	21.1	2.5	26.0	0.0	0.4	26.0	0.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	0.54		1.00	0.62		1.00
Lane Grp Cap(c), veh/h	117	1666	729	48	1528	670	113	0	533	106	0	526
V/C Ratio(X)	0.77	0.54	0.14	0.73	0.75	0.13	0.50	0.00	0.02	1.03	0.00	0.13
Avail Cap(c_a), veh/h	368	3395	1486	184	3028	1326	113	0	533	106	0	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	35.1	14.1	11.3	36.9	18.1	12.9	21.0	0.0	16.8	31.2	0.0	17.4
Incr Delay (d2), s/veh	10.1	0.3	0.1	18.6	0.8	0.1	15.1	0.0	0.1	96.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.5	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	6.7	1.2	1.0	10.2	1.1	1.7	0.0	0.2	5.0	0.0	1.1
LnGrp Delay(d), s/veh	45.2	14.4	11.4	55.4	18.9	12.9	36.1	0.0	16.8	128.1	0.0	17.9
LnGrp LOS	D	B	B	E	B	B	D		B	F		B
Approach Vol, veh/h		1089			1271			69			179	
Approach Delay, s/veh		16.7			19.5			32.8			85.0	
Approach LOS		B			B			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.1	40.3		30.0	9.1	37.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	8.0	74.0		26.0	16.0	66.0
Max Q Clear Time (g_c+I1), s		28.0	3.5	15.8		28.0	5.9	23.1
Green Ext Time (p_c), s		0.0	0.0	7.4		0.0	0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	2	3	182	0	134	12	1014	126	88	1115	8
Future Volume (veh/h)	5	2	3	182	0	134	12	1014	126	88	1115	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	6	2	3	202	0	149	13	1127	140	98	1239	9
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	129	46	46	308	0	291	21	2175	952	124	2381	1041
Arrive On Green	0.19	0.19	0.19	0.19	0.00	0.19	0.01	0.63	0.63	0.07	0.69	0.69
Sat Flow, veh/h	406	242	243	1377	0	1550	1740	3471	1518	1740	3471	1518
Grp Volume(v), veh/h	11	0	0	202	0	149	13	1127	140	98	1239	9
Grp Sat Flow(s),veh/h/ln	891	0	0	1377	0	1550	1740	1736	1518	1740	1736	1518
Q Serve(g_s), s	0.1	0.0	0.0	7.3	0.0	9.1	0.8	18.8	4.0	5.8	18.3	0.2
Cycle Q Clear(g_c), s	9.1	0.0	0.0	16.4	0.0	9.1	0.8	18.8	4.0	5.8	18.3	0.2
Prop In Lane	0.55		0.27	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	0	0	308	0	291	21	2175	952	124	2381	1041
V/C Ratio(X)	0.05	0.00	0.00	0.66	0.00	0.51	0.62	0.52	0.15	0.79	0.52	0.01
Avail Cap(c_a), veh/h	381	0	0	469	0	473	66	2175	952	249	2381	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	0.0	0.0	41.6	0.0	38.3	51.6	10.8	8.1	48.0	8.1	5.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.4	0.0	1.4	26.4	0.9	0.3	10.7	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	5.9	0.0	4.0	0.5	9.2	1.8	3.2	8.9	0.1
LnGrp Delay(d), s/veh	35.2	0.0	0.0	44.0	0.0	39.7	78.1	11.7	8.4	58.7	8.9	5.2
LnGrp LOS	D			D		D	E	B	A	E	A	A
Approach Vol, veh/h		11			351			1280			1346	
Approach Delay, s/veh		35.2			42.2			12.0			12.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.5	69.8		23.7	5.3	76.0		23.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	15.0	61.0		32.0	4.0	72.0		32.0
Max Q Clear Time (g_c+I1), s	7.8	20.8		11.1	2.8	20.3		18.4
Green Ext Time (p_c), s	0.1	10.1		0.0	0.0	11.3		1.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.9
HCM 2010 LOS		B

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	56	37	493	51	6	1217	73	0	0	5	32	119
Future Volume (vph)	56	37	493	51	6	1217	73	0	0	5	32	119
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%		15%				0%
Total Lost time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Lane Util. Factor		1.00	0.91		1.00	0.91					1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Frt		1.00	0.99		1.00	0.99					1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00					0.95	1.00
Satd. Flow (prot)		1787	5057		1787	5092					1787	1881
Flt Permitted		0.95	1.00		0.42	1.00					0.53	1.00
Satd. Flow (perm)		1787	5057		791	5092					993	1881
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	60	40	530	55	6	1309	78	0	0	5	34	128
RTOR Reduction (vph)	0	0	7	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	100	578	0	6	1387	0	0	0	0	39	128
Confl. Peds. (#/hr)								2	3			
Confl. Bikes (#/hr)				1								
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Perm	Perm	Perm	NA
Protected Phases	7	7	4		3	8		9				6
Permitted Phases					8				10	6	6	
Actuated Green, G (s)		7.0	39.8		34.4	33.6					23.0	23.0
Effective Green, g (s)		7.0	39.8		34.4	33.6					23.0	23.0
Actuated g/C Ratio		0.09	0.53		0.46	0.44					0.30	0.30
Clearance Time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0					3.0	3.0
Lane Grp Cap (vph)		165	2662		370	2263					302	572
v/s Ratio Prot		c0.06	0.11		0.00	c0.27						0.07
v/s Ratio Perm					0.01						0.04	
v/c Ratio		0.61	0.22		0.02	0.61					0.13	0.22
Uniform Delay, d1		33.0	9.6		11.3	16.0					19.0	19.6
Progression Factor		1.00	1.00		1.00	1.00					1.00	1.00
Incremental Delay, d2		6.2	0.0		0.0	0.5					0.2	0.2
Delay (s)		39.1	9.6		11.3	16.5					19.2	19.8
Level of Service		D	A		B	B					B	B
Approach Delay (s/veh)			13.9			16.5		0.0				19.3
Approach LOS			B			B		A				B

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	75.6	Sum of lost time (s)	20.0
Intersection Capacity Utilization	65.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	144	148	206	19	7
Future Volume (vph)	144	148	206	19	7
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Grade (%)			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	1.00	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1599	1787	1881	1599	
Flt Permitted	1.00	0.67	1.00	1.00	
Satd. Flow (perm)	1599	1268	1881	1599	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	155	159	222	20	8
RTOR Reduction (vph)	108	0	0	19	0
Lane Group Flow (vph)	47	159	222	9	0
Confl. Peds. (#/hr)					
Confl. Bikes (#/hr)					
Heavy Vehicles (%)	1%	1%	1%	1%	1%
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			2		
Permitted Phases	6	2		2	
Actuated Green, G (s)	23.0	23.0	23.0	23.0	
Effective Green, g (s)	23.0	23.0	23.0	23.0	
Actuated g/C Ratio	0.30	0.30	0.30	0.30	
Clearance Time (s)	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	486	385	572	486	
v/s Ratio Prot			0.12		
v/s Ratio Perm	0.03	c0.13		0.01	
v/c Ratio	0.10	0.41	0.39	0.02	
Uniform Delay, d1	18.9	20.9	20.7	18.4	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	3.2	2.0	0.1	
Delay (s)	18.9	24.2	22.7	18.5	
Level of Service	B	C	C	B	
Approach Delay (s/veh)			23.0		
Approach LOS			C		

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	255	1563	43	9	2427	185	128	11	271	80	41	12
Future Volume (vph)	255	1563	43	9	2427	185	128	11	271	80	41	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.86	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5059		1766	5085	1583	1766	1506	1484	1770	1863	1556
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.73	1.00	1.00	0.42	1.00	1.00
Satd. Flow (perm)	3433	5059		1766	5085	1583	1353	1506	1484	777	1863	1556
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	277	1699	47	10	2638	201	139	12	295	87	45	13
RTOR Reduction (vph)	0	2	0	0	0	61	0	94	94	0	0	11
Lane Group Flow (vph)	277	1744	0	10	2638	140	139	60	59	87	45	2
Confl. Peds. (#/hr)			6	6			1					1
Confl. Bikes (#/hr)			1						1			2
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	11.7	88.4		0.8	77.5	77.5	16.6	16.6	16.6	16.6	16.6	16.6
Effective Green, g (s)	11.7	88.4		0.8	77.5	77.5	16.6	16.6	16.6	16.6	16.6	16.6
Actuated g/C Ratio	0.10	0.75		0.01	0.66	0.66	0.14	0.14	0.14	0.14	0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	340	3796		11	3345	1041	190	212	209	109	262	219
v/s Ratio Prot	c0.08	0.34		0.01	c0.52			0.04			0.02	
v/s Ratio Perm						0.09	0.10		0.04	c0.11		0.00
v/c Ratio	0.81	0.46		0.91	0.79	0.13	0.73	0.28	0.28	0.80	0.17	0.01
Uniform Delay, d1	52.0	5.6		58.5	14.3	7.6	48.5	45.3	45.3	49.0	44.5	43.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.9	0.4		217.6	2.0	0.3	13.5	0.7	0.7	32.1	0.3	0.0
Delay (s)	65.9	6.0		276.0	16.3	7.8	62.0	46.0	46.0	81.1	44.9	43.5
Level of Service	E	A		F	B	A	E	D	D	F	D	D
Approach Delay (s/veh)		14.2			16.6			51.0			66.5	
Approach LOS		B			B			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	117.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	217	58	216	79	182	11	634	621	0	4	1005	477
Future Volume (veh/h)	217	58	216	79	182	11	634	621	0	4	1005	477
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	226	60	225	82	190	11	660	647	0	4	1047	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	288	295	250	105	233	14	751	2276	1018	7	1519	680
Arrive On Green	0.08	0.16	0.16	0.06	0.13	0.13	0.22	0.64	0.00	0.00	0.43	0.00
Sat Flow, veh/h	3476	1881	1596	1792	1761	102	3476	3574	1599	1792	3574	1599
Grp Volume(v), veh/h	226	60	225	82	0	201	660	647	0	4	1047	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1596	1792	0	1863	1738	1787	1599	1792	1787	1599
Q Serve(g_s), s	7.1	3.1	15.4	5.0	0.0	11.7	20.5	8.9	0.0	0.2	26.6	0.0
Cycle Q Clear(g_c), s	7.1	3.1	15.4	5.0	0.0	11.7	20.5	8.9	0.0	0.2	26.6	0.0
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	295	250	105	0	247	751	2276	1018	7	1519	680
V/C Ratio(X)	0.78	0.20	0.90	0.78	0.00	0.81	0.88	0.28	0.00	0.53	0.69	0.00
Avail Cap(c_a), veh/h	343	304	258	177	0	301	935	2276	1018	64	1519	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	40.9	46.1	51.8	0.0	47.0	42.3	9.0	0.0	55.4	26.1	0.0
Incr Delay (d2), s/veh	9.6	0.3	30.5	11.9	0.0	13.2	8.2	0.3	0.0	48.4	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	1.6	8.9	2.8	0.0	6.9	10.7	4.5	0.0	0.2	13.6	0.0
LnGrp Delay(d), s/veh	59.7	41.3	76.7	63.6	0.0	60.2	50.5	9.3	0.0	103.8	28.6	0.0
LnGrp LOS	E	D	E	E		E	D	A		F	C	
Approach Vol, veh/h		511			283			1307			1051	
Approach Delay, s/veh		65.0			61.2			30.1			28.9	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.5	75.0	10.5	21.5	28.1	51.4	13.2	18.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	71.0	11.0	18.0	30.0	45.0	11.0	18.0
Max Q Clear Time (g_c+I1), s	2.2	10.9	7.0	17.4	22.5	28.6	9.1	13.7
Green Ext Time (p_c), s	0.0	4.7	0.1	0.1	1.6	6.5	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.2
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	311	1289	222	176	1808	293	112	725	451	372	665	67
Future Volume (veh/h)	311	1289	222	176	1808	293	112	725	451	372	665	67
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	331	1371	236	187	1923	312	119	771	480	396	707	71
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	377	2080	635	215	2140	733	176	804	526	406	1380	137
Arrive On Green	0.11	0.40	0.40	0.12	0.42	0.42	0.05	0.22	0.22	0.12	0.29	0.29
Sat Flow, veh/h	3476	5136	1567	1792	5136	1564	3476	3574	1566	3476	4739	472
Grp Volume(v), veh/h	331	1371	236	187	1923	312	119	771	480	396	509	269
Grp Sat Flow(s),veh/h/ln	1738	1712	1567	1792	1712	1564	1738	1787	1566	1738	1712	1787
Q Serve(g_s), s	11.3	26.0	12.7	12.3	41.9	15.9	4.0	25.6	27.0	13.6	14.9	15.1
Cycle Q Clear(g_c), s	11.3	26.0	12.7	12.3	41.9	15.9	4.0	25.6	27.0	13.6	14.9	15.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	377	2080	635	215	2140	733	176	804	526	406	997	520
V/C Ratio(X)	0.88	0.66	0.37	0.87	0.90	0.43	0.68	0.96	0.91	0.98	0.51	0.52
Avail Cap(c_a), veh/h	377	2080	635	254	2140	733	348	804	526	406	997	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	29.0	25.0	51.9	32.6	21.3	56.0	45.9	38.4	52.8	35.4	35.5
Incr Delay (d2), s/veh	20.5	1.7	1.7	23.4	6.5	1.8	4.5	22.2	20.4	38.4	0.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	12.6	5.8	7.5	21.1	7.2	2.1	15.1	18.2	8.7	7.1	7.5
LnGrp Delay(d), s/veh	73.2	30.6	26.7	75.3	39.2	23.1	60.5	68.1	58.9	91.2	35.9	36.4
LnGrp LOS	E	C	C	E	D	C	E	E	E	F	D	D
Approach Vol, veh/h		1938			2422			1370			1174	
Approach Delay, s/veh		37.4			39.9			64.2			54.7	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	52.6	18.0	31.0	17.0	54.0	10.1	38.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	46.0	14.0	27.0	13.0	50.0	12.0	29.0
Max Q Clear Time (g_c+I1), s	14.3	28.0	15.6	29.0	13.3	43.9	6.0	17.1
Green Ext Time (p_c), s	0.1	9.3	0.0	0.0	0.0	5.3	0.1	3.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		46.5
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	103	10	16	1	2	44	13	1669	4	29	2525	203
Future Volume (veh/h)	103	10	16	1	2	44	13	1669	4	29	2525	203
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	107	10	17	1	2	46	14	1739	4	30	2630	211
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	59	3	250	41	62	253	22	3745	9	38	3474	272
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.01	0.71	0.71	0.02	0.72	0.72
Sat Flow, veh/h	0	18	1545	0	384	1566	1774	5238	12	1774	4802	375
Grp Volume(v), veh/h	117	0	17	3	0	46	14	1125	618	30	1836	1005
Grp Sat Flow(s),veh/h/ln	18	0	1545	384	0	1566	1774	1695	1860	1774	1695	1787
Q Serve(g_s), s	0.0	0.0	1.1	0.0	0.0	3.0	0.9	16.6	16.6	2.0	38.4	41.7
Cycle Q Clear(g_c), s	19.0	0.0	1.1	19.0	0.0	3.0	0.9	16.6	16.6	2.0	38.4	41.7
Prop In Lane	0.91		1.00	0.33		1.00	1.00		0.01	1.00		0.21
Lane Grp Cap(c), veh/h	62	0	250	103	0	253	22	2423	1330	38	2453	1293
V/C Ratio(X)	1.90	0.00	0.07	0.03	0.00	0.18	0.63	0.46	0.46	0.80	0.75	0.78
Avail Cap(c_a), veh/h	62	0	250	103	0	253	60	2423	1330	91	2453	1293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.8	0.0	41.7	42.3	0.0	42.5	57.7	7.1	7.1	57.2	9.8	10.3
Incr Delay (d2), s/veh	458.6	0.0	0.1	0.1	0.0	0.3	26.1	0.6	1.2	30.2	2.1	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	0.0	0.5	0.1	0.0	1.3	0.6	7.9	8.8	1.3	18.3	21.8
LnGrp Delay(d), s/veh	516.4	0.0	41.8	42.4	0.0	42.9	83.8	7.8	8.3	87.4	11.9	14.9
LnGrp LOS	F		D	D		D	F	A	A	F	B	B
Approach Vol, veh/h		134			49			1757			2871	
Approach Delay, s/veh		456.2			42.8			8.6			13.8	
Approach LOS		F			D			A			B	

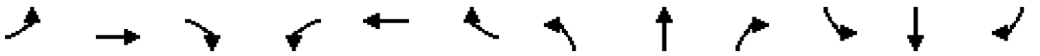
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	88.0		23.0	5.5	89.0		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	83.0		19.0	4.0	85.0		19.0
Max Q Clear Time (g_c+I1), s	4.0	18.6		21.0	2.9	43.7		21.0
Green Ext Time (p_c), s	0.0	19.2		0.0	0.0	34.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		24.5
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	329	516	55	59	573	113	77	1272	58	95	1905	379
Future Volume (veh/h)	329	516	55	59	573	113	77	1272	58	95	1905	379
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	336	527	56	60	585	115	79	1298	59	97	1944	387
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	391	965	428	101	666	290	117	2585	118	149	2249	436
Arrive On Green	0.11	0.27	0.27	0.03	0.19	0.19	0.03	0.52	0.52	0.04	0.53	0.53
Sat Flow, veh/h	3442	3539	1569	3442	3539	1543	3442	4985	227	3442	4261	827
Grp Volume(v), veh/h	336	527	56	60	585	115	79	883	474	97	1536	795
Grp Sat Flow(s),veh/h/ln	1721	1770	1569	1721	1770	1543	1721	1695	1821	1721	1695	1698
Q Serve(g_s), s	11.3	15.0	3.2	2.0	18.9	7.7	2.7	19.9	19.9	3.3	46.0	48.8
Cycle Q Clear(g_c), s	11.3	15.0	3.2	2.0	18.9	7.7	2.7	19.9	19.9	3.3	46.0	48.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.49
Lane Grp Cap(c), veh/h	391	965	428	101	666	290	117	1758	945	149	1789	896
V/C Ratio(X)	0.86	0.55	0.13	0.59	0.88	0.40	0.67	0.50	0.50	0.65	0.86	0.89
Avail Cap(c_a), veh/h	410	994	441	146	723	315	117	1758	945	205	1789	896
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	36.5	32.2	56.3	46.4	41.8	56.1	18.4	18.4	55.3	24.0	24.6
Incr Delay (d2), s/veh	16.0	0.6	0.1	5.4	11.3	0.9	14.2	1.0	1.9	4.8	5.6	12.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	7.4	1.4	1.0	10.3	3.3	1.5	9.6	10.5	1.6	22.7	25.9
LnGrp Delay(d), s/veh	67.1	37.1	32.4	61.7	57.7	42.7	70.3	19.4	20.3	60.1	29.6	37.2
LnGrp LOS	E	D	C	E	E	D	E	B	C	E	C	D
Approach Vol, veh/h		919			760			1436			2428	
Approach Delay, s/veh		47.8			55.7			22.5			33.3	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	64.9	7.5	36.0	8.0	66.0	17.4	26.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	59.0	5.0	33.0	4.0	62.0	14.0	24.0
Max Q Clear Time (g_c+I1), s	5.3	21.9	4.0	17.0	4.7	50.8	13.3	20.9
Green Ext Time (p_c), s	0.0	11.3	0.0	3.1	0.0	9.7	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	833	399	427	692	17	171	150	360	37	158	16
Future Volume (vph)	12	833	399	427	692	17	171	150	360	37	158	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.99	1.00		0.99	
Satd. Flow (prot)	1787	3574	1571	3467	3561		1698	1773	1579		1844	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.55	0.93	1.00		0.92	
Satd. Flow (perm)	1787	3574	1571	3467	3561		985	1668	1579		1716	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	877	420	449	728	18	180	158	379	39	166	17
RTOR Reduction (vph)	0	0	266	0	1	0	0	0	237	0	3	0
Lane Group Flow (vph)	13	877	154	449	745	0	151	187	142	0	219	0
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			2						1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	1.5	37.9	37.9	19.3	55.7		41.4	41.4	41.4		41.4	
Effective Green, g (s)	1.5	37.9	37.9	19.3	55.7		41.4	41.4	41.4		41.4	
Actuated g/C Ratio	0.01	0.34	0.34	0.17	0.50		0.37	0.37	0.37		0.37	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	24	1224	538	605	1793		368	624	591		642	
v/s Ratio Prot	0.01	c0.25		c0.13	0.21							
v/s Ratio Perm			0.10				c0.15	0.11	0.09		0.13	
v/c Ratio	0.54	0.72	0.29	0.74	0.42		0.41	0.30	0.24		0.34	
Uniform Delay, d1	54.2	31.7	26.5	43.3	17.2		25.6	24.4	23.8		24.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	22.7	2.0	0.3	4.9	0.2		3.4	1.2	1.0		1.4	
Delay (s)	76.9	33.7	26.8	48.2	17.4		28.9	25.6	24.7		26.3	
Level of Service	E	C	C	D	B		C	C	C		C	
Approach Delay (s/veh)		31.9			29.0			25.9			26.3	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	110.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	0	22	88	2	25	1	646	17	5	982	9
Future Volume (veh/h)	19	0	22	88	2	25	1	646	17	5	982	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	21	0	24	96	2	27	1	702	18	5	1067	10
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	0	194	186	10	36	2	2645	1157	9	2660	1163
Arrive On Green	0.12	0.00	0.12	0.12	0.12	0.12	0.00	0.75	0.75	0.01	0.75	0.75
Sat Flow, veh/h	1432	0	1560	967	81	289	1774	3539	1549	1774	3539	1548
Grp Volume(v), veh/h	21	0	24	125	0	0	1	702	18	5	1067	10
Grp Sat Flow(s),veh/h/ln	1432	0	1560	1337	0	0	1774	1770	1549	1774	1770	1548
Q Serve(g_s), s	0.0	0.0	1.3	7.7	0.0	0.0	0.1	6.1	0.3	0.3	10.5	0.2
Cycle Q Clear(g_c), s	1.3	0.0	1.3	9.0	0.0	0.0	0.1	6.1	0.3	0.3	10.5	0.2
Prop In Lane	1.00		1.00	0.77		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	252	0	194	232	0	0	2	2645	1157	9	2660	1163
V/C Ratio(X)	0.08	0.00	0.12	0.54	0.00	0.00	0.51	0.27	0.02	0.54	0.40	0.01
Avail Cap(c_a), veh/h	487	0	463	474	0	0	182	2645	1157	109	2660	1163
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	0.0	38.0	41.6	0.0	0.0	48.8	3.9	3.2	48.5	4.3	3.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	1.9	0.0	0.0	132.0	0.2	0.0	41.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.6	3.4	0.0	0.0	0.1	3.0	0.1	0.2	5.2	0.1
LnGrp Delay(d), s/veh	38.1	0.0	38.3	43.5	0.0	0.0	180.7	4.1	3.2	90.1	4.8	3.1
LnGrp LOS	D		D	D			F	A	A	F	A	A
Approach Vol, veh/h		45			125			721			1082	
Approach Delay, s/veh		38.2			43.5			4.4			5.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.5	77.0		16.2	4.1	77.4		16.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	73.0		29.0	10.0	69.0		29.0
Max Q Clear Time (g_c+I1), s	2.3	8.1		3.3	2.1	12.5		11.0
Green Ext Time (p_c), s	0.0	5.3		0.1	0.0	9.4		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	326	329	125	29	229	8	65	276	71	22	539	474
Future Volume (veh/h)	326	329	125	29	229	8	65	276	71	22	539	474
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	358	362	137	32	252	9	71	303	78	24	592	521
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	473	709	264	212	363	13	323	2037	889	610	2037	898
Arrive On Green	0.20	0.28	0.28	0.02	0.10	0.10	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	1792	2538	945	1792	3520	125	509	3574	1560	1006	3574	1575
Grp Volume(v), veh/h	358	253	246	32	128	133	71	303	78	24	592	521
Grp Sat Flow(s),veh/h/ln	1792	1787	1696	1792	1787	1858	509	1787	1560	1006	1787	1575
Q Serve(g_s), s	16.0	11.3	11.6	1.5	6.5	6.6	7.9	3.8	2.1	1.1	8.1	20.1
Cycle Q Clear(g_c), s	16.0	11.3	11.6	1.5	6.5	6.6	16.0	3.8	2.1	4.9	8.1	20.1
Prop In Lane	1.00		0.56	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	473	499	474	212	184	192	323	2037	889	610	2037	898
V/C Ratio(X)	0.76	0.51	0.52	0.15	0.69	0.70	0.22	0.15	0.09	0.04	0.29	0.58
Avail Cap(c_a), veh/h	795	943	895	245	340	353	323	2037	889	610	2037	898
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	28.7	28.8	36.7	41.0	41.0	14.6	9.6	9.2	10.7	10.5	13.1
Incr Delay (d2), s/veh	2.5	0.8	0.9	0.3	4.6	4.5	1.6	0.2	0.2	0.1	0.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	5.7	5.5	0.8	3.5	3.6	1.2	1.9	1.0	0.3	4.0	9.3
LnGrp Delay(d), s/veh	30.1	29.5	29.7	37.1	45.6	45.5	16.2	9.7	9.4	10.8	10.9	15.8
LnGrp LOS	C	C	C	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h		857			293			452			1137	
Approach Delay, s/veh		29.8			44.6			10.7			13.1	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	6.3	30.5		58.0	23.0	13.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	4.0	50.0		54.0	36.0	18.0
Max Q Clear Time (g_c+I1), s		18.0	3.5	13.6		22.1	18.0	8.6
Green Ext Time (p_c), s		3.2	0.0	3.1		6.7	1.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	549	103	186	596	4	161	26	123	28	53	13
Future Volume (veh/h)	6	549	103	186	596	4	161	26	123	28	53	13
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	7	617	116	209	670	4	181	29	138	31	60	15
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	282	816	153	346	1361	8	666	737	615	534	930	224
Arrive On Green	0.01	0.27	0.27	0.11	0.37	0.37	0.09	0.39	0.39	0.02	0.33	0.33
Sat Flow, veh/h	1792	2996	562	1792	3642	22	1792	1881	1571	1792	2847	684
Grp Volume(v), veh/h	7	368	365	209	329	345	181	29	138	31	37	38
Grp Sat Flow(s),veh/h/ln	1792	1787	1770	1792	1787	1877	1792	1881	1571	1792	1787	1744
Q Serve(g_s), s	0.2	14.9	15.0	6.2	11.2	11.2	5.0	0.8	4.6	0.9	1.1	1.2
Cycle Q Clear(g_c), s	0.2	14.9	15.0	6.2	11.2	11.2	5.0	0.8	4.6	0.9	1.1	1.2
Prop In Lane	1.00		0.32	1.00		0.01	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	282	487	482	346	668	701	666	737	615	534	584	570
V/C Ratio(X)	0.02	0.76	0.76	0.60	0.49	0.49	0.27	0.04	0.22	0.06	0.06	0.07
Avail Cap(c_a), veh/h	360	994	985	672	1423	1495	867	737	615	625	584	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.7	26.4	26.4	18.3	19.0	19.0	13.8	14.9	16.0	16.9	18.3	18.3
Incr Delay (d2), s/veh	0.0	2.4	2.5	1.7	0.6	0.5	0.2	0.1	0.8	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.7	7.6	3.2	5.6	5.9	2.5	0.4	2.1	0.5	0.6	0.6
LnGrp Delay(d), s/veh	20.7	28.8	28.9	20.0	19.6	19.6	14.0	15.0	16.9	17.0	18.5	18.6
LnGrp LOS	C	C	C	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		740			883			348			106	
Approach Delay, s/veh		28.7			19.7			15.2			18.1	
Approach LOS		C			B			B			B	

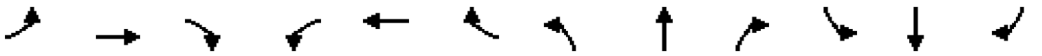
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	35.0	12.6	25.5	11.1	29.9	4.6	33.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	31.0	23.0	44.0	16.0	21.0	4.0	63.0
Max Q Clear Time (g_c+I1), s	2.9	6.6	8.2	17.0	7.0	3.2	2.2	13.2
Green Ext Time (p_c), s	0.0	0.5	0.5	4.6	0.3	0.2	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	111	339	80	40	386	133	49	144	23	219	332	125
Future Volume (veh/h)	111	339	80	40	386	133	49	144	23	219	332	125
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	126	385	91	45	439	151	56	164	26	249	377	142
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	160	980	428	57	564	192	72	1059	165	294	1184	439
Arrive On Green	0.09	0.28	0.28	0.03	0.22	0.22	0.04	0.35	0.35	0.17	0.47	0.47
Sat Flow, veh/h	1774	3539	1545	1774	2575	876	1774	3062	476	1774	2515	933
Grp Volume(v), veh/h	126	385	91	45	300	290	56	93	97	249	264	255
Grp Sat Flow(s),veh/h/ln	1774	1770	1545	1774	1770	1682	1774	1770	1769	1774	1770	1678
Q Serve(g_s), s	6.2	7.9	4.0	2.2	14.2	14.5	2.8	3.3	3.4	12.2	8.3	8.5
Cycle Q Clear(g_c), s	6.2	7.9	4.0	2.2	14.2	14.5	2.8	3.3	3.4	12.2	8.3	8.5
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.27	1.00		0.56
Lane Grp Cap(c), veh/h	160	980	428	57	388	368	72	612	612	294	833	790
V/C Ratio(X)	0.79	0.39	0.21	0.79	0.77	0.79	0.78	0.15	0.16	0.85	0.32	0.32
Avail Cap(c_a), veh/h	378	1627	710	199	635	603	219	612	612	656	833	790
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.7	26.2	24.8	42.9	32.8	32.9	42.4	20.1	20.2	36.1	14.7	14.7
Incr Delay (d2), s/veh	8.3	0.3	0.2	20.8	3.3	3.7	16.2	0.5	0.6	6.7	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.9	1.7	1.4	7.3	7.1	1.7	1.7	1.7	6.5	4.3	4.1
LnGrp Delay(d), s/veh	48.1	26.4	25.0	63.6	36.1	36.6	58.6	20.7	20.7	42.9	15.7	15.8
LnGrp LOS	D	C	C	E	D	D	E	C	C	D	B	B
Approach Vol, veh/h		602			635			246			768	
Approach Delay, s/veh		30.7			38.3			29.3			24.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	34.9	6.9	28.7	7.6	46.0	12.0	23.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	33.0	20.0	10.0	41.0	11.0	42.0	19.0	32.0
Max Q Clear Time (g_c+I1), s	14.2	5.4	4.2	9.9	4.8	10.5	8.2	16.5
Green Ext Time (p_c), s	0.6	0.8	0.0	2.8	0.0	3.2	0.2	3.0

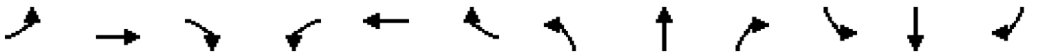
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	442	412	20	55	240	206	27	422	72	437	252	670
Future Volume (vph)	442	412	20	55	240	206	27	422	72	437	252	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		0.99		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1610	3324		1770	3539	1571		3435		1681	1745	2739
Flt Permitted	0.95	0.67		0.95	1.00	1.00		0.91		0.95	0.42	1.00
Satd. Flow (perm)	1610	2258		1770	3539	1571		3147		1681	743	2739
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	480	448	22	60	261	224	29	459	78	475	274	728
RTOR Reduction (vph)	0	2	0	0	0	47	0	10	0	0	0	76
Lane Group Flow (vph)	312	636	0	60	261	177	0	556	0	366	383	652
Confl. Peds. (#/hr)	2		2	2		2	1		12	12		1
Confl. Bikes (#/hr)			3			2			9			2
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	26.2	53.0		5.0	22.8	51.4		26.4		28.6	59.0	85.2
Effective Green, g (s)	26.2	53.0		5.0	22.8	51.4		26.4		28.6	59.0	85.2
Actuated g/C Ratio	0.22	0.44		0.04	0.19	0.43		0.22		0.24	0.49	0.71
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	351	1230		73	672	725		692		400	604	2035
v/s Ratio Prot	c0.19	0.11		0.03	0.07	0.06				c0.22	0.15	0.07
v/s Ratio Perm		c0.12				0.05		c0.18			0.16	0.17
v/c Ratio	0.89	0.52		0.82	0.39	0.24		0.80		0.92	0.63	0.32
Uniform Delay, d1	45.5	24.2		57.1	42.5	21.9		44.3		44.5	22.5	6.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	22.8	0.4		49.9	0.4	0.2		9.6		25.1	2.2	0.1
Delay (s)	68.3	24.6		107.0	42.9	22.1		53.9		69.6	24.7	6.6
Level of Service	E	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		38.9			41.4			53.9			26.9	
Approach LOS		D			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	516	489	521	351	7	297	4	484	2	7	1
Future Volume (vph)	1	516	489	521	351	7	297	4	484	2	7	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1753	3539	1566	1770	3526		1681	1687	1553	1739	1828	
Flt Permitted	0.53	1.00	1.00	0.19	1.00		0.95	0.64	1.00	0.95	1.00	
Satd. Flow (perm)	978	3539	1566	348	3526		1681	1126	1553	1739	1828	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	1	538	509	543	366	7	309	4	504	2	7	1
RTOR Reduction (vph)	0	0	294	0	1	0	0	0	62	0	1	0
Lane Group Flow (vph)	1	538	215	543	372	0	158	155	442	2	7	0
Confl. Peds. (#/hr)	9		2	2		9			11	11		
Confl. Bikes (#/hr)			3			4			4			
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	24.2	23.5	38.5	59.6	54.9		15.0	42.2	69.6	0.7	23.2	
Effective Green, g (s)	24.2	23.5	38.5	59.6	54.9		15.0	42.2	69.6	0.7	23.2	
Actuated g/C Ratio	0.22	0.21	0.35	0.54	0.50		0.14	0.38	0.63	0.01	0.21	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	220	757	606	604	1763		229	509	1040	11	386	
v/s Ratio Prot	0.00	0.15	c0.05	c0.26	0.11		c0.09	0.04	c0.12	0.00	0.00	
v/s Ratio Perm	0.00		0.09	c0.22				0.08	0.16			
v/c Ratio	0.00	0.71	0.35	0.90	0.21		0.69	0.30	0.43	0.18	0.02	
Uniform Delay, d1	33.4	40.0	26.4	25.8	15.3		45.2	23.6	10.1	54.3	34.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	3.2	0.4	16.1	0.1		8.4	0.3	0.3	7.8	0.1	
Delay (s)	33.4	43.2	26.8	41.9	15.4		53.6	23.9	10.4	62.1	34.4	
Level of Service	C	D	C	D	B		D	C	B	E	C	
Approach Delay (s/veh)		35.2			31.1			21.3			39.9	
Approach LOS		D			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	109.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	127	305	126	174	171	106	66	555	130	134	814	50
Future Volume (veh/h)	127	305	126	174	171	106	66	555	130	134	814	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.94	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	137	328	135	187	184	114	71	597	140	144	875	54
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	338	422	169	298	417	241	349	1429	334	442	1782	110
Arrive On Green	0.08	0.17	0.17	0.11	0.20	0.20	0.03	0.50	0.50	0.06	0.53	0.53
Sat Flow, veh/h	1774	2434	978	1774	2107	1218	1774	2846	666	1774	3382	209
Grp Volume(v), veh/h	137	236	227	187	152	146	71	371	366	144	458	471
Grp Sat Flow(s),veh/h/ln	1774	1770	1642	1774	1770	1555	1774	1770	1742	1774	1770	1822
Q Serve(g_s), s	6.3	12.8	13.3	8.5	7.6	8.3	1.9	13.3	13.3	3.9	16.6	16.6
Cycle Q Clear(g_c), s	6.3	12.8	13.3	8.5	7.6	8.3	1.9	13.3	13.3	3.9	16.6	16.6
Prop In Lane	1.00		0.60	1.00		0.78	1.00		0.38	1.00		0.11
Lane Grp Cap(c), veh/h	338	307	285	298	351	308	349	888	875	442	933	960
V/C Ratio(X)	0.41	0.77	0.80	0.63	0.43	0.47	0.20	0.42	0.42	0.33	0.49	0.49
Avail Cap(c_a), veh/h	405	475	441	427	581	510	394	888	875	584	933	960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	39.7	39.9	30.0	35.4	35.7	12.4	15.8	15.8	11.5	15.2	15.2
Incr Delay (d2), s/veh	0.8	4.1	5.6	2.2	0.9	1.1	0.3	1.4	1.5	0.4	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.6	6.5	4.3	3.8	3.7	1.0	6.8	6.8	1.9	8.5	8.7
LnGrp Delay(d), s/veh	31.2	43.8	45.4	32.1	36.2	36.8	12.7	17.2	17.3	11.9	17.0	17.0
LnGrp LOS	C	D	D	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		600			485			808			1073	
Approach Delay, s/veh		41.5			34.8			16.8			16.3	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	54.5	14.7	21.4	7.4	57.0	12.2	23.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	45.0	18.0	27.0	6.0	53.0	12.0	33.0
Max Q Clear Time (g_c+I1), s	5.9	15.3	10.5	15.3	3.9	18.6	8.3	10.3
Green Ext Time (p_c), s	0.2	4.9	0.3	2.1	0.0	6.7	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	1031	118	162	431	129	78	945	176	219	1134	136
Future Volume (veh/h)	225	1031	118	162	431	129	78	945	176	219	1134	136
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	242	1109	127	174	463	139	84	1016	189	235	1219	146
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	305	1227	140	230	951	275	106	1383	703	264	1699	881
Arrive On Green	0.09	0.26	0.26	0.07	0.24	0.24	0.06	0.39	0.39	0.15	0.48	0.48
Sat Flow, veh/h	3476	4659	533	3476	3932	1136	1792	3574	1544	1792	3574	1558
Grp Volume(v), veh/h	242	815	421	174	401	201	84	1016	189	235	1219	146
Grp Sat Flow(s),veh/h/ln	1738	1712	1768	1738	1712	1643	1792	1787	1544	1792	1787	1558
Q Serve(g_s), s	8.0	27.1	27.1	5.8	11.8	12.5	5.5	28.7	9.0	15.2	32.0	5.3
Cycle Q Clear(g_c), s	8.0	27.1	27.1	5.8	11.8	12.5	5.5	28.7	9.0	15.2	32.0	5.3
Prop In Lane	1.00		0.30	1.00		0.69	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	902	466	230	828	398	106	1383	703	264	1699	881
V/C Ratio(X)	0.79	0.90	0.90	0.76	0.48	0.51	0.79	0.73	0.27	0.89	0.72	0.17
Avail Cap(c_a), veh/h	413	930	480	236	828	398	122	1383	703	319	1699	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.7	41.9	42.0	54.1	38.3	38.6	54.7	30.9	20.1	49.3	24.6	12.4
Incr Delay (d2), s/veh	7.4	11.8	20.1	12.9	0.4	1.0	25.9	3.5	0.9	22.1	2.6	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	14.3	15.8	3.2	5.7	5.8	3.5	14.8	4.0	9.1	16.4	2.4
LnGrp Delay(d), s/veh	60.1	53.7	62.1	67.0	38.8	39.6	80.6	34.4	21.0	71.3	27.2	12.8
LnGrp LOS	E	D	E	E	D	D	F	C	C	E	C	B
Approach Vol, veh/h		1478			776			1289			1600	
Approach Delay, s/veh		57.2			45.3			35.5			32.4	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.4	49.6	11.8	35.0	11.0	60.0	14.3	32.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	43.0	8.0	32.0	8.0	56.0	14.0	26.0
Max Q Clear Time (g_c+I1), s	17.2	30.7	7.8	29.1	7.5	34.0	10.0	14.5
Green Ext Time (p_c), s	0.2	6.0	0.0	1.9	0.0	9.9	0.3	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	237	930	227	525	760	69	86	742	414	98	813	244
Future Volume (veh/h)	237	930	227	525	760	69	86	742	414	98	813	244
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	255	1000	244	565	817	74	92	798	445	105	874	262
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	758	2472	602	531	3081	957	60	1191	524	124	723	216
Arrive On Green	0.60	0.60	0.60	0.60	0.60	0.60	0.03	0.33	0.33	0.27	0.27	0.27
Sat Flow, veh/h	1217	4121	1004	872	5136	1594	1792	3574	1572	450	2711	811
Grp Volume(v), veh/h	255	831	413	565	817	74	92	798	445	105	576	560
Grp Sat Flow(s),veh/h/ln	609	1712	1701	436	1712	1594	1792	1787	1572	450	1787	1735
Q Serve(g_s), s	15.1	15.4	15.4	56.6	9.1	2.3	4.0	23.0	31.6	17.0	32.0	32.0
Cycle Q Clear(g_c), s	24.2	15.4	15.4	72.0	9.1	2.3	4.0	23.0	31.6	32.0	32.0	32.0
Prop In Lane	1.00		0.59	1.00		1.00	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	758	2054	1020	531	3081	957	60	1191	524	124	477	463
V/C Ratio(X)	0.34	0.40	0.41	1.06	0.27	0.08	1.54	0.67	0.85	0.85	1.21	1.21
Avail Cap(c_a), veh/h	758	2054	1020	531	3081	957	60	1191	524	124	477	463
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	12.7	12.7	38.1	11.4	10.1	58.0	34.3	37.2	54.8	44.0	44.0
Incr Delay (d2), s/veh	0.3	0.1	0.3	57.0	0.0	0.0	310.5	3.0	15.7	47.8	112.0	113.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	7.3	7.3	13.0	4.2	1.0	7.1	11.8	16.0	5.1	30.6	29.9
LnGrp Delay(d), s/veh	17.4	12.8	12.9	95.1	11.5	10.1	368.5	37.3	52.9	102.7	156.0	157.6
LnGrp LOS	B	B	B	F	B	B	F	D	D	F	F	F
Approach Vol, veh/h		1499			1456			1335			1241	
Approach Delay, s/veh		13.6			43.8			65.3			152.2	
Approach LOS		B			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		44.0		76.0	8.0	36.0		76.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0	4.0	32.0		72.0
Max Q Clear Time (g_c+I1), s		33.6		26.2	6.0	34.0		74.0
Green Ext Time (p_c), s		3.5		14.5	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	65.2
HCM 2010 LOS	E



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	279	65	52	1015	1357	214
Future Volume (veh/h)	279	65	52	1015	1357	214
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	291	68	54	1057	1414	223
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	294	70	2623	2036	317
Arrive On Green	0.19	0.19	0.04	0.74	0.67	0.67
Sat Flow, veh/h	1774	1583	1774	3632	3153	476
Grp Volume(v), veh/h	291	68	54	1057	809	828
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1767
Q Serve(g_s), s	17.5	4.0	3.3	12.1	30.8	32.3
Cycle Q Clear(g_c), s	17.5	4.0	3.3	12.1	30.8	32.3
Prop In Lane	1.00	1.00	1.00			0.27
Lane Grp Cap(c), veh/h	329	294	70	2623	1177	1175
V/C Ratio(X)	0.88	0.23	0.78	0.40	0.69	0.70
Avail Cap(c_a), veh/h	503	449	146	2623	1177	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.9	52.0	5.2	11.3	11.5
Incr Delay (d2), s/veh	11.5	0.4	16.6	0.5	3.3	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	0.0	1.9	6.0	15.9	16.6
LnGrp Delay(d), s/veh	54.8	38.3	68.6	5.7	14.6	15.1
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	359			1111	1637	
Approach Delay, s/veh	51.7			8.7	14.8	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		85.0		24.3	8.3	76.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		81.0		31.0	9.0	68.0		
Max Q Clear Time (g_c+I1), s		14.1		19.5	5.3	34.3		
Green Ext Time (p_c), s		9.3		0.8	0.0	15.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	717	0	0	619	10	6	135	13	541	0	273
Future Volume (veh/h)	192	717	0	0	619	10	6	135	13	541	0	273
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	209	779	0	0	673	0	7	147	14	588	0	297
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	412	1642	0	0	995	445	30	636	61	0	0	0
Arrive On Green	0.11	0.46	0.00	0.00	0.28	0.00	0.40	0.40	0.40	0.00	0.00	0.00
Sat Flow, veh/h	1774	3632	0	0	3632	1583	76	1598	152		0	
Grp Volume(v), veh/h	209	779	0	0	673	0	168	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1827	0	0			
Q Serve(g_s), s	4.4	8.7	0.0	0.0	9.8	0.0	3.5	0.0	0.0			
Cycle Q Clear(g_c), s	4.4	8.7	0.0	0.0	9.8	0.0	3.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.04		0.08			
Lane Grp Cap(c), veh/h	412	1642	0	0	995	445	726	0	0			
V/C Ratio(X)	0.51	0.47	0.00	0.00	0.68	0.00	0.23	0.00	0.00			
Avail Cap(c_a), veh/h	732	3304	0	0	2019	903	726	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	12.3	10.7	0.0	0.0	18.5	0.0	11.6	0.0	0.0			
Incr Delay (d2), s/veh	1.0	0.2	0.0	0.0	0.8	0.0	0.7	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.2	4.3	0.0	0.0	4.9	0.0	1.9	0.0	0.0			
LnGrp Delay(d), s/veh	13.3	10.9	0.0	0.0	19.3	0.0	12.3	0.0	0.0			
LnGrp LOS	B	B			B		B					
Approach Vol, veh/h		988			673			168				
Approach Delay, s/veh		11.4			19.3			12.3				
Approach LOS		B			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		27.0		30.8			10.6	20.3
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		23.0		54.0			17.0	33.0
Max Q Clear Time (g_c+I1), s		5.5		10.7			6.4	11.8
Green Ext Time (p_c), s		0.8		6.2			0.4	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	144	714	186	114	1334	49	427	487	84	87	650	343
Future Volume (veh/h)	144	714	186	114	1334	49	427	487	84	87	650	343
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	148	736	192	118	1375	51	440	502	87	90	670	354
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	173	1213	313	144	1439	53	479	1507	672	139	728	384
Arrive On Green	0.10	0.31	0.31	0.08	0.29	0.29	0.14	0.43	0.43	0.04	0.33	0.33
Sat Flow, veh/h	1740	3932	1013	1740	4935	183	3375	3471	1546	3375	2182	1152
Grp Volume(v), veh/h	148	621	307	118	926	500	440	502	87	90	533	491
Grp Sat Flow(s),veh/h/ln	1740	1663	1620	1740	1663	1793	1688	1736	1546	1688	1736	1599
Q Serve(g_s), s	10.0	19.0	19.4	8.0	32.8	32.8	15.4	11.5	4.0	3.1	35.4	35.4
Cycle Q Clear(g_c), s	10.0	19.0	19.4	8.0	32.8	32.8	15.4	11.5	4.0	3.1	35.4	35.4
Prop In Lane	1.00		0.63	1.00		0.10	1.00		1.00	1.00		0.72
Lane Grp Cap(c), veh/h	173	1026	500	144	969	523	479	1507	672	139	579	533
V/C Ratio(X)	0.85	0.61	0.61	0.82	0.96	0.96	0.92	0.33	0.13	0.65	0.92	0.92
Avail Cap(c_a), veh/h	174	1026	500	218	971	523	479	1507	672	197	579	533
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	35.2	35.4	54.1	41.7	41.7	50.8	22.4	20.3	56.6	38.4	38.4
Incr Delay (d2), s/veh	31.4	1.0	2.2	13.8	19.0	28.4	23.0	0.6	0.4	5.0	22.2	23.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	8.9	9.0	4.4	17.6	20.4	8.7	5.6	1.8	1.6	20.6	19.2
LnGrp Delay(d), s/veh	84.5	36.3	37.6	67.9	60.7	70.1	73.7	23.0	20.7	61.7	60.6	62.0
LnGrp LOS	F	D	D	E	E	E	E	C	C	E	E	E
Approach Vol, veh/h		1076			1544			1029			1114	
Approach Delay, s/veh		43.3			64.3			44.5			61.3	
Approach LOS		D			E			D			E	

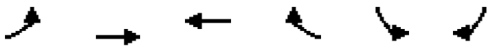
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	56.1	13.9	41.0	21.0	44.0	16.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	50.0	15.0	32.0	17.0	40.0	12.0	35.0
Max Q Clear Time (g_c+I1), s	5.1	13.5	10.0	21.4	17.4	37.4	12.0	34.8
Green Ext Time (p_c), s	0.0	3.6	0.1	4.3	0.0	1.5	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	658	164	225	1297	85	232	753	270	208	832	121
Future Volume (veh/h)	67	658	164	225	1297	85	232	753	270	208	832	121
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	71	693	173	237	1365	89	244	793	284	219	876	127
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	90	1100	566	266	1535	100	273	1224	770	248	1174	598
Arrive On Green	0.05	0.22	0.22	0.15	0.32	0.32	0.16	0.35	0.35	0.14	0.33	0.33
Sat Flow, veh/h	1757	5036	1473	1757	4821	314	1757	3505	1525	1757	3505	1545
Grp Volume(v), veh/h	71	693	173	237	951	503	244	793	284	219	876	127
Grp Sat Flow(s),veh/h/ln	1757	1679	1473	1757	1679	1778	1757	1752	1525	1757	1752	1545
Q Serve(g_s), s	4.6	14.3	9.5	15.2	30.8	30.8	15.6	21.8	13.1	14.0	25.4	6.3
Cycle Q Clear(g_c), s	4.6	14.3	9.5	15.2	30.8	30.8	15.6	21.8	13.1	14.0	25.4	6.3
Prop In Lane	1.00		1.00	1.00		0.18	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	90	1100	566	266	1069	566	273	1224	770	248	1174	598
V/C Ratio(X)	0.79	0.63	0.31	0.89	0.89	0.89	0.89	0.65	0.37	0.88	0.75	0.21
Avail Cap(c_a), veh/h	107	1100	566	307	1114	590	322	1224	770	291	1174	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	40.5	25.4	47.7	37.1	37.1	47.4	31.3	17.5	48.2	33.8	23.5
Incr Delay (d2), s/veh	26.8	1.2	0.3	24.0	8.8	15.1	23.0	2.7	1.4	23.2	4.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	6.7	3.9	9.1	15.6	17.5	9.3	11.0	5.7	8.4	13.0	2.8
LnGrp Delay(d), s/veh	80.4	41.7	25.7	71.6	46.0	52.2	70.4	34.0	18.9	71.5	38.1	24.3
LnGrp LOS	F	D	C	E	D	D	E	C	B	E	D	C
Approach Vol, veh/h		937			1691			1321			1222	
Approach Delay, s/veh		41.7			51.4			37.5			42.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.2	44.0	21.3	29.0	21.8	42.3	9.9	40.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	40.0	20.0	25.0	21.0	38.0	7.0	38.0
Max Q Clear Time (g_c+I1), s	16.0	23.8	17.2	16.3	17.6	27.4	6.6	32.8
Green Ext Time (p_c), s	0.2	5.7	0.2	3.3	0.2	4.5	0.0	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	46	845	614	500	99	51
Future Volume (vph)	46	845	614	500	99	51
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.96	1.00	1.00
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	0.99	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1587	3195	3195	1376	3092	1301
Flt Permitted	0.34	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	575	3195	3195	1376	3092	1301
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	49	899	653	532	105	54
RTOR Reduction (vph)	0	0	0	313	2	28
Lane Group Flow (vph)	49	899	653	219	108	21
Confl. Peds. (#/hr)	11			11	1	
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	21.2	21.2	21.2	21.2	22.2	22.2
Effective Green, g (s)	21.2	21.2	21.2	21.2	22.2	22.2
Actuated g/C Ratio	0.41	0.41	0.41	0.41	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	237	1317	1317	567	1335	561
v/s Ratio Prot		c0.28	0.20		c0.03	
v/s Ratio Perm	0.09			0.16		0.02
v/c Ratio	0.21	0.68	0.50	0.39	0.08	0.04
Uniform Delay, d1	9.7	12.3	11.2	10.6	8.6	8.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.4	1.5	0.3	0.4	0.1	0.1
Delay (s)	10.1	13.8	11.4	11.0	8.7	8.6
Level of Service	B	B	B	B	A	A
Approach Delay (s/veh)		13.6	11.2		8.7	
Approach LOS		B	B		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	51.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	1

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	5	17	40	1400	1916	26
Future Vol, veh/h	5	17	40	1400	1916	26
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	100	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	5	18	41	1443	1975	27

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2783	992	2006	0	-	0
Stage 1	1979	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Critical Hdwy	6.88	6.98	4.18	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.34	2.24	-	-	-
Pot Cap-1 Maneuver	15	241	274	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	13	240	273	-	-	-
Mov Cap-2 Maneuver	13	-	-	-	-	-
Stage 1	77	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	108.8	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	273	-	13	240	-	-
HCM Lane V/C Ratio	0.151	-	0.397	0.073	-	-
HCM Control Delay (s/veh)	20.5	-	$ 406.6	21.2	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.5	-	1	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	17	780	47	66	1677	81	98	85	75	59	30	11
Future Volume (veh/h)	17	780	47	66	1677	81	98	85	75	59	30	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	18	830	50	70	1784	86	104	90	80	63	32	12
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	2728	164	381	2766	133	528	628	525	454	628	525
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	241	4850	291	622	4916	237	1339	1845	1543	1196	1845	1543
Grp Volume(v), veh/h	18	574	306	70	1217	653	104	90	80	63	32	12
Grp Sat Flow(s),veh/h/ln	241	1679	1784	622	1679	1796	1339	1845	1543	1196	1845	1543
Q Serve(g_s), s	4.6	7.4	7.5	5.5	20.5	20.5	4.7	2.8	3.0	3.2	1.0	0.4
Cycle Q Clear(g_c), s	25.1	7.4	7.5	13.0	20.5	20.5	5.6	2.8	3.0	6.0	1.0	0.4
Prop In Lane	1.00		0.16	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	1889	1004	381	1889	1010	528	628	525	454	628	525
V/C Ratio(X)	0.11	0.30	0.31	0.18	0.64	0.65	0.20	0.14	0.15	0.14	0.05	0.02
Avail Cap(c_a), veh/h	273	3427	1821	666	3427	1833	528	628	525	454	628	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	9.5	9.5	12.9	12.4	12.4	20.1	18.8	18.9	20.9	18.2	18.0
Incr Delay (d2), s/veh	0.3	0.1	0.2	0.2	0.4	0.7	0.8	0.5	0.6	0.6	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	3.4	3.7	1.0	9.4	10.2	1.8	1.5	1.4	1.1	0.5	0.2
LnGrp Delay(d), s/veh	21.3	9.6	9.7	13.2	12.7	13.1	20.9	19.3	19.5	21.5	18.4	18.1
LnGrp LOS	C	A	A	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		898			1940			274			107	
Approach Delay, s/veh		9.9			12.9			20.0			20.2	
Approach LOS		A			B			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		50.3		32.0		50.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		7.6		27.1		8.0		22.5
Green Ext Time (p_c), s		1.0		7.3		0.3		23.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	0	105	6	0	6	89	514	0	60	873	53
Future Volume (veh/h)	94	0	105	6	0	6	89	514	0	60	873	53
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1845	1845	1863	1845	1845	1845	1845	1863
Adj Flow Rate, veh/h	109	0	122	7	0	7	103	598	0	70	1015	62
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	2
Cap, veh/h	64	0	354	64	0	351	130	2164	968	90	2087	943
Arrive On Green	0.22	0.00	0.22	0.22	0.00	0.22	0.07	0.62	0.00	0.05	0.60	0.60
Sat Flow, veh/h	0	0	1583	0	0	1568	1774	3505	1568	1757	3505	1583
Grp Volume(v), veh/h	109	0	122	7	0	7	103	598	0	70	1015	62
Grp Sat Flow(s),veh/h/ln	0	0	1583	0	0	1568	1774	1752	1568	1757	1752	1583
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	0.4	6.4	8.8	0.0	4.4	18.4	1.8
Cycle Q Clear(g_c), s	25.0	0.0	7.2	25.0	0.0	0.4	6.4	8.8	0.0	4.4	18.4	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	64	0	354	64	0	351	130	2164	968	90	2087	943
V/C Ratio(X)	1.69	0.00	0.34	0.11	0.00	0.02	0.79	0.28	0.00	0.78	0.49	0.07
Avail Cap(c_a), veh/h	64	0	354	64	0	351	302	2164	968	220	2087	943
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	0.0	36.5	55.9	0.0	33.8	50.9	9.9	0.0	52.4	12.9	9.5
Incr Delay (d2), s/veh	368.8	0.0	0.6	0.7	0.0	0.0	10.3	0.3	0.0	13.3	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	0.0	3.2	0.2	0.0	0.2	3.5	4.3	0.0	2.5	9.1	0.8
LnGrp Delay(d), s/veh	424.7	0.0	37.0	56.6	0.0	33.8	61.2	10.2	0.0	65.6	13.7	9.6
LnGrp LOS	F		D	E		C	E	B		E	B	A
Approach Vol, veh/h		231			14			701			1147	
Approach Delay, s/veh		220.0			45.2			17.7			16.6	
Approach LOS		F			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	73.0		29.0	12.2	70.5		29.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	69.0		25.0	19.0	64.0		25.0
Max Q Clear Time (g_c+I1), s	6.4	10.8		27.0	8.4	20.4		27.0
Green Ext Time (p_c), s	0.1	4.5		0.0	0.2	9.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	3	92	48	7	4	37	322	30	2	475	8
Future Volume (veh/h)	1	3	92	48	7	4	37	322	30	2	475	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.97	0.98		0.93	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	1	3	105	55	8	5	42	366	34	2	540	9
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	156	157	177	22	149	150	1286	1264	35	1531	1267
Arrive On Green	0.10	0.10	0.10	0.10	0.10	0.10	0.82	0.82	0.82	0.82	0.82	0.82
Sat Flow, veh/h	239	1533	1541	1109	212	1467	137	1564	1536	1	1861	1541
Grp Volume(v), veh/h	4	0	105	63	0	5	408	0	34	542	0	9
Grp Sat Flow(s),veh/h/ln	1772	0	1541	1321	0	1467	1701	0	1536	1862	0	1541
Q Serve(g_s), s	0.0	0.0	6.9	4.4	0.0	0.3	0.0	0.0	0.4	0.0	0.0	0.1
Cycle Q Clear(g_c), s	0.2	0.0	6.9	4.7	0.0	0.3	5.3	0.0	0.4	7.7	0.0	0.1
Prop In Lane	0.25		1.00	0.87		1.00	0.10		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	223	0	157	198	0	149	1436	0	1264	1566	0	1267
V/C Ratio(X)	0.02	0.00	0.67	0.32	0.00	0.03	0.28	0.00	0.03	0.35	0.00	0.01
Avail Cap(c_a), veh/h	452	0	364	374	0	347	1436	0	1264	1566	0	1267
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.8	0.0	45.8	44.7	0.0	42.8	2.1	0.0	1.7	2.4	0.0	1.7
Incr Delay (d2), s/veh	0.0	0.0	4.8	0.9	0.0	0.1	0.5	0.0	0.0	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	3.2	1.8	0.0	0.1	2.8	0.0	0.2	4.2	0.0	0.0
LnGrp Delay(d), s/veh	42.8	0.0	50.6	45.6	0.0	42.9	2.6	0.0	1.7	3.0	0.0	1.7
LnGrp LOS	D		D	D		D	A		A	A		A
Approach Vol, veh/h		109			68			442			551	
Approach Delay, s/veh		50.3			45.4			2.6			2.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.0		14.8		91.0		14.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		87.0		25.0		87.0		25.0
Max Q Clear Time (g_c+I1), s		7.3		8.9		9.7		6.7
Green Ext Time (p_c), s		3.4		0.3		4.5		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.7
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	34	31	41	107	181	55	169	1154	22	27	978	96
Future Volume (veh/h)	34	31	41	107	181	55	169	1154	22	27	978	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	37	34	45	118	199	60	186	1268	24	30	1075	105
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	46	213	292	147	233	70	253	2193	41	39	2004	884
Arrive On Green	0.03	0.12	0.12	0.08	0.17	0.17	0.07	0.62	0.62	0.02	0.57	0.57
Sat Flow, veh/h	1757	1845	1523	1757	1350	407	3408	3517	67	1757	3505	1546
Grp Volume(v), veh/h	37	34	45	118	0	259	186	632	660	30	1075	105
Grp Sat Flow(s),veh/h/ln	1757	1845	1523	1757	0	1757	1704	1752	1831	1757	1752	1546
Q Serve(g_s), s	2.2	1.7	2.5	6.8	0.0	14.8	5.5	21.9	21.9	1.8	19.6	3.2
Cycle Q Clear(g_c), s	2.2	1.7	2.5	6.8	0.0	14.8	5.5	21.9	21.9	1.8	19.6	3.2
Prop In Lane	1.00		1.00	1.00		0.23	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	46	213	292	147	0	303	253	1093	1142	39	2004	884
V/C Ratio(X)	0.80	0.16	0.15	0.80	0.00	0.85	0.74	0.58	0.58	0.76	0.54	0.12
Avail Cap(c_a), veh/h	102	340	397	255	0	477	363	1093	1142	102	2004	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	41.1	34.9	46.4	0.0	41.4	46.8	11.4	11.4	50.2	13.7	10.2
Incr Delay (d2), s/veh	25.8	0.3	0.2	9.7	0.0	8.7	4.5	2.2	2.1	25.8	1.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.9	1.1	3.7	0.0	7.9	2.8	11.2	11.7	1.1	9.7	1.4
LnGrp Delay(d), s/veh	75.7	41.5	35.2	56.2	0.0	50.1	51.3	13.7	13.6	75.9	14.7	10.4
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	B
Approach Vol, veh/h		116			377			1478			1210	
Approach Delay, s/veh		49.9			52.0			18.4			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	68.3	12.6	15.9	11.7	63.0	6.7	21.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	64.0	15.0	19.0	11.0	59.0	6.0	28.0
Max Q Clear Time (g_c+I1), s	3.8	23.9	8.8	4.5	7.5	21.6	4.2	16.8
Green Ext Time (p_c), s	0.0	10.8	0.1	0.2	0.2	9.5	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	20.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	28	40	86	97	120	8	86	239	35	5	301	57
Future Vol, veh/h	28	40	86	97	120	8	86	239	35	5	301	57
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	32	45	98	110	136	9	98	272	40	6	342	65
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	12.1	18.8	24.9	21.1
HCM LOS	B	C	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	26%	0%	41%	0%	45%	0%	2%	0%
Vol Thru, %	74%	0%	59%	0%	55%	0%	98%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	325	35	68	86	217	8	306	57
LT Vol	86	0	28	0	97	0	5	0
Through Vol	239	0	40	0	120	0	301	0
RT Vol	0	35	0	86	0	8	0	57
Lane Flow Rate	369	40	77	98	247	9	348	65
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.727	0.069	0.174	0.194	0.533	0.017	0.675	0.113
Departure Headway (Hd)	7.086	6.235	8.094	7.159	7.779	6.829	6.987	6.262
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	510	573	442	499	464	522	515	571
Service Time	4.846	3.994	5.869	4.934	5.543	4.593	4.747	4.022
HCM Lane V/C Ratio	0.724	0.07	0.174	0.196	0.532	0.017	0.676	0.114
HCM Control Delay, s/veh	26.6	9.5	12.6	11.7	19.1	9.7	23.2	9.8
HCM Lane LOS	D	A	B	B	C	A	C	A
HCM 95th-tile Q	5.9	0.2	0.6	0.7	3.1	0.1	5	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	634	116	61	858	217	155	524	68	174	725	281
Future Volume (veh/h)	201	634	116	61	858	217	155	524	68	174	725	281
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	218	689	126	66	933	236	168	570	74	189	788	305
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	232	1876	817	337	1876	837	185	1300	168	280	1459	653
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	483	3574	1557	674	3574	1594	519	3183	412	791	3574	1599
Grp Volume(v), veh/h	218	689	126	66	933	236	168	319	325	189	788	305
Grp Sat Flow(s),veh/h/ln	483	1787	1557	674	1787	1594	519	1787	1808	791	1787	1599
Q Serve(g_s), s	42.9	13.6	5.0	7.7	20.1	9.9	28.9	15.4	15.5	27.2	20.1	16.7
Cycle Q Clear(g_c), s	63.0	13.6	5.0	21.3	20.1	9.9	49.0	15.4	15.5	42.7	20.1	16.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	232	1876	817	337	1876	837	185	730	738	280	1459	653
V/C Ratio(X)	0.94	0.37	0.15	0.20	0.50	0.28	0.91	0.44	0.44	0.67	0.54	0.47
Avail Cap(c_a), veh/h	232	1876	817	337	1876	837	185	730	738	280	1459	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	16.8	14.7	23.0	18.3	15.9	49.2	25.6	25.6	41.0	26.9	26.0
Incr Delay (d2), s/veh	42.0	0.1	0.1	0.3	0.2	0.2	45.6	1.9	1.9	12.2	1.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	6.7	2.2	1.5	9.9	4.4	7.9	8.0	8.1	6.9	10.1	7.8
LnGrp Delay(d), s/veh	85.1	16.9	14.8	23.3	18.5	16.1	94.8	27.5	27.5	53.2	28.4	28.3
LnGrp LOS	F	B	B	C	B	B	F	C	C	D	C	C
Approach Vol, veh/h		1033			1235			812			1282	
Approach Delay, s/veh		31.0			18.3			41.4			32.0	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		67.0		53.0		67.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		63.0		49.0		63.0
Max Q Clear Time (g_c+I1), s		51.0		65.0		44.7		23.3
Green Ext Time (p_c), s		0.0		0.0		2.7		9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	195	639	94	269	1089	82	177	839	204	72	1050	364
Future Volume (veh/h)	195	639	94	269	1089	82	177	839	204	72	1050	364
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1810
Adj Flow Rate, veh/h	205	673	99	283	1146	86	186	883	215	76	1105	383
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	233	993	144	311	1281	96	241	1085	264	96	1309	574
Arrive On Green	0.14	0.23	0.23	0.18	0.27	0.27	0.07	0.40	0.40	0.06	0.38	0.38
Sat Flow, veh/h	1723	4350	633	1723	4680	351	3343	2732	665	1723	3438	1507
Grp Volume(v), veh/h	205	508	264	283	806	426	186	555	543	76	1105	383
Grp Sat Flow(s),veh/h/ln	1723	1647	1690	1723	1647	1738	1672	1719	1677	1723	1719	1507
Q Serve(g_s), s	13.5	16.3	16.5	18.6	27.2	27.2	6.3	33.3	33.3	5.0	33.9	24.4
Cycle Q Clear(g_c), s	13.5	16.3	16.5	18.6	27.2	27.2	6.3	33.3	33.3	5.0	33.9	24.4
Prop In Lane	1.00		0.37	1.00		0.20	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	233	751	386	311	902	476	241	683	666	96	1309	574
V/C Ratio(X)	0.88	0.68	0.69	0.91	0.89	0.90	0.77	0.81	0.81	0.79	0.84	0.67
Avail Cap(c_a), veh/h	268	769	395	358	940	496	260	683	666	119	1309	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	40.7	40.8	46.4	40.4	40.4	52.7	31.0	31.1	53.9	32.7	29.7
Incr Delay (d2), s/veh	24.7	2.3	4.7	24.4	10.7	18.1	12.4	10.3	10.5	24.5	6.8	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	7.6	8.2	11.0	13.7	15.4	3.3	17.7	17.3	3.1	17.4	11.1
LnGrp Delay(d), s/veh	73.8	43.0	45.6	70.8	51.1	58.5	65.1	41.3	41.6	78.4	39.5	35.8
LnGrp LOS	E	D	D	E	D	E	E	D	D	E	D	D
Approach Vol, veh/h		977			1515			1284			1564	
Approach Delay, s/veh		50.1			56.8			44.9			40.5	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	49.9	24.9	30.4	12.3	48.0	19.6	35.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	24.0	27.0	9.0	44.0	18.0	33.0
Max Q Clear Time (g_c+I1), s	7.0	35.3	20.6	18.5	8.3	35.9	15.5	29.2
Green Ext Time (p_c), s	0.0	4.6	0.3	2.9	0.0	5.3	0.1	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	228	36	159	244	106	23	1276	193	56	1883	75
Future Volume (veh/h)	70	228	36	159	244	106	23	1276	193	56	1883	75
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	243	38	169	260	113	24	1357	205	60	2003	80
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	448	224	235	339	142	34	2721	411	77	3184	127
Arrive On Green	0.05	0.13	0.13	0.07	0.14	0.14	0.02	0.61	0.61	0.04	0.63	0.63
Sat Flow, veh/h	1774	3539	1530	3442	2404	1010	1774	4459	673	1774	5017	200
Grp Volume(v), veh/h	74	243	38	169	189	184	24	1032	530	60	1352	731
Grp Sat Flow(s),veh/h/ln	1774	1770	1530	1721	1770	1644	1774	1695	1742	1774	1695	1827
Q Serve(g_s), s	4.3	6.8	2.3	5.1	10.8	11.4	1.4	18.0	18.0	3.5	25.6	25.7
Cycle Q Clear(g_c), s	4.3	6.8	2.3	5.1	10.8	11.4	1.4	18.0	18.0	3.5	25.6	25.7
Prop In Lane	1.00		1.00	1.00		0.61	1.00		0.39	1.00		0.11
Lane Grp Cap(c), veh/h	95	448	224	235	250	232	34	2069	1063	77	2152	1160
V/C Ratio(X)	0.78	0.54	0.17	0.72	0.76	0.79	0.71	0.50	0.50	0.78	0.63	0.63
Avail Cap(c_a), veh/h	168	670	320	359	352	327	101	2069	1063	151	2152	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	43.2	39.5	48.2	43.6	43.8	51.5	11.5	11.5	50.0	11.7	11.7
Incr Delay (d2), s/veh	12.7	1.0	0.4	4.1	5.9	8.5	23.4	0.9	1.7	15.1	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.4	1.0	2.6	5.7	5.7	0.9	8.6	9.0	2.1	12.2	13.6
LnGrp Delay(d), s/veh	62.1	44.3	39.9	52.3	49.5	52.4	74.9	12.4	13.2	65.1	13.1	14.4
LnGrp LOS	E	D	D	D	D	D	E	B	B	E	B	B
Approach Vol, veh/h		355			542			1586			2143	
Approach Delay, s/veh		47.5			51.4			13.6			15.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	68.4	11.2	17.3	6.0	71.0	9.7	18.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	64.0	11.0	20.0	6.0	67.0	10.0	21.0
Max Q Clear Time (g_c+I1), s	5.5	20.0	7.1	8.8	3.4	27.7	6.3	13.4
Green Ext Time (p_c), s	0.0	15.6	0.2	1.1	0.0	22.8	0.0	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	4.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	21	1	1	178	132	10
Future Vol, veh/h	21	1	1	178	132	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	23	1	1	193	143	11

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	194	0	-	0	48	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	47	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1379	-	-	-	962	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	975	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1379	-	-	-	946	1084
Mov Cap-2 Maneuver	-	-	-	-	946	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	975	-

Approach	EB	WB	SB
HCM Control Delay, s/v	7.3	0	9.4
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1379	-	-	-	946	1084
HCM Lane V/C Ratio	0.017	-	-	-	0.152	0.01
HCM Control Delay (s/veh)	7.7	0	-	-	9.5	8.4
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	-	-	-	0.5	0

Intersection	
Int Delay, s/veh	1.9

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	13	0	44	18	0	0	12	311	13	73	419	0
Future Vol, veh/h	13	0	44	18	0	0	12	311	13	73	419	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	14	0	48	20	0	0	13	338	14	79	455	0

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	757	984	176	808	991	228	455	0	0	352	0	0
Stage 1	371	371	-	613	613	-	-	-	-	-	-	-
Stage 2	386	613	-	195	378	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	297	247	837	272	245	775	1102	-	-	1203	-	-
Stage 1	622	618	-	446	481	-	-	-	-	-	-	-
Stage 2	609	481	-	788	614	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	279	228	837	242	226	775	1102	-	-	1203	-	-
Mov Cap-2 Maneuver	279	228	-	242	226	-	-	-	-	-	-	-
Stage 1	615	611	-	441	449	-	-	-	-	-	-	-
Stage 2	569	449	-	734	607	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	11.5	21.2	0.3	1.2
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	279	575	837	1203	-	-	1102	-	-	242
HCM Lane V/C Ratio	0.034	0.036	0.038	0.066	-	-	0.012	-	-	0.081
HCM Control Delay (s/veh)	18.4	11.5	9.5	8.2	-	-	8.3	-	-	21.2
HCM Lane LOS	C	B	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.1	0.1	0.1	0.2	-	-	0	-	-	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	162	0	0	546	44	0	0	0	51	0	3
Future Volume (veh/h)	6	162	0	0	546	44	0	0	0	51	0	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	7	176	0	0	593	48	0	0	0	55	0	3
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	56	807	0	0	795	64	0	1253	1065	985	2	49
Arrive On Green	0.24	0.24	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.67	0.00	0.67
Sat Flow, veh/h	38	3488	0	0	3444	271	0	1881	1599	1351	4	74
Grp Volume(v), veh/h	98	85	0	0	316	325	0	0	0	58	0	0
Grp Sat Flow(s),veh/h/ln	1814	1626	0	0	1787	1833	0	1881	1599	1429	0	0
Q Serve(g_s), s	0.0	3.5	0.0	0.0	13.5	13.6	0.0	0.0	0.0	1.0	0.0	0.0
Cycle Q Clear(g_c), s	13.6	3.5	0.0	0.0	13.5	13.6	0.0	0.0	0.0	1.1	0.0	0.0
Prop In Lane	0.07		0.00	0.00		0.15	0.00		1.00	0.95		0.05
Lane Grp Cap(c), veh/h	477	386	0	0	424	435	0	1253	1065	1036	0	0
V/C Ratio(X)	0.20	0.22	0.00	0.00	0.74	0.75	0.00	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1253	1122	0	0	1233	1265	0	1253	1065	1036	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.3	25.4	0.0	0.0	29.2	29.2	0.0	0.0	0.0	4.8	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.3	0.0	0.0	2.6	2.6	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	1.6	0.0	0.0	7.0	7.2	0.0	0.0	0.0	0.5	0.0	0.0
LnGrp Delay(d), s/veh	25.6	25.6	0.0	0.0	31.8	31.8	0.0	0.0	0.0	4.9	0.0	0.0
LnGrp LOS	C	C			C	C				A		
Approach Vol, veh/h		183			641			0			58	
Approach Delay, s/veh		25.6			31.8			0.0			4.9	
Approach LOS		C			C						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		23.6		59.0		23.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		0.0		15.6		3.1		15.6
Green Ext Time (p_c), s		0.0		1.0		0.3		4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	209	0	0	577	27	0	0	0	13	0	6
Future Volume (veh/h)	4	209	0	0	577	27	0	0	0	13	0	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	4	227	0	0	627	29	0	0	0	14	0	7
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	48	836	0	0	838	39	0	1247	0	712	14	327
Arrive On Green	0.24	0.24	0.00	0.00	0.24	0.24	0.00	0.00	0.00	0.66	0.00	0.66
Sat Flow, veh/h	14	3558	0	0	3573	161	0	1881	0	965	22	493
Grp Volume(v), veh/h	124	107	0	0	322	334	0	0	0	21	0	0
Grp Sat Flow(s),veh/h/ln	1861	1626	0	0	1787	1853	0	1881	0	1480	0	0
Q Serve(g_s), s	0.0	4.4	0.0	0.0	13.8	13.9	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	4.4	4.4	0.0	0.0	13.8	13.9	0.0	0.0	0.0	0.3	0.0	0.0
Prop In Lane	0.03		0.00	0.00		0.09	0.00		0.00	0.67		0.33
Lane Grp Cap(c), veh/h	493	392	0	0	430	446	0	1247	0	1053	0	0
V/C Ratio(X)	0.25	0.27	0.00	0.00	0.75	0.75	0.00	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	1296	1117	0	0	1228	1273	0	1247	0	1053	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.6	25.6	0.0	0.0	29.2	29.2	0.0	0.0	0.0	4.8	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.4	0.0	0.0	2.6	2.5	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.0	0.0	0.0	7.1	7.4	0.0	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	25.9	26.0	0.0	0.0	31.8	31.7	0.0	0.0	0.0	4.8	0.0	0.0
LnGrp LOS	C	C			C	C				A		
Approach Vol, veh/h		231			656			0			21	
Approach Delay, s/veh		25.9			31.8			0.0			4.8	
Approach LOS		C			C						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		24.0		59.0		24.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		0.0		6.4		2.3		15.9
Green Ext Time (p_c), s		0.0		1.3		0.1		4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	220	0	0	636	16	0	0	0	1	0	1
Future Volume (veh/h)	2	220	0	0	636	16	0	0	0	1	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	2	239	0	0	691	17	0	0	0	1	0	1
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	103	1185	0	0	1210	30	0	828	0	439	47	337
Arrive On Green	0.34	0.34	0.00	0.00	0.34	0.34	0.00	0.00	0.00	0.44	0.00	0.44
Sat Flow, veh/h	6	3578	0	0	3659	88	0	1881	0	658	108	766
Grp Volume(v), veh/h	129	112	0	0	346	362	0	0	0	2	0	0
Grp Sat Flow(s),veh/h/ln	1872	1626	0	0	1787	1866	0	1881	0	1532	0	0
Q Serve(g_s), s	0.0	1.8	0.0	0.0	5.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	1.8	0.0	0.0	5.8	5.8	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	0.02		0.00	0.00		0.05	0.00		0.00	0.50		0.50
Lane Grp Cap(c), veh/h	736	552	0	0	607	633	0	828	0	823	0	0
V/C Ratio(X)	0.18	0.20	0.00	0.00	0.57	0.57	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2996	2552	0	0	2804	2927	0	2848	0	823	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	8.5	8.5	0.0	0.0	9.8	9.8	0.0	0.0	0.0	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.2	0.0	0.0	0.8	0.8	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.8	0.0	0.0	2.9	3.1	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	8.6	8.7	0.0	0.0	10.7	10.6	0.0	0.0	0.0	5.7	0.0	0.0
LnGrp LOS	A	A			B	B				A		
Approach Vol, veh/h		241			708			0			2	
Approach Delay, s/veh		8.7			10.7			0.0			5.7	
Approach LOS		A			B						A	

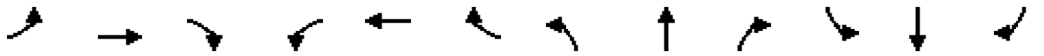
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		20.0		16.3		20.0		16.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		16.0		57.0
Max Q Clear Time (g_c+I1), s		0.0		3.8		2.0		7.8
Green Ext Time (p_c), s		0.0		1.4		0.0		4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	213	0	0	675	10	0	0	0	27	0	3
Future Volume (veh/h)	8	213	0	0	675	10	0	0	0	27	0	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	9	232	0	0	734	11	0	0	0	29	0	3
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	884	0	0	961	14	0	1204	0	909	4	86
Arrive On Green	0.27	0.27	0.00	0.00	0.27	0.27	0.00	0.00	0.00	0.64	0.00	0.64
Sat Flow, veh/h	36	3402	0	0	3699	54	0	1881	0	1295	6	135
Grp Volume(v), veh/h	127	114	0	0	364	381	0	0	0	32	0	0
Grp Sat Flow(s),veh/h/ln	1726	1626	0	0	1787	1872	0	1881	0	1436	0	0
Q Serve(g_s), s	0.1	4.8	0.0	0.0	16.1	16.1	0.0	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	16.2	4.8	0.0	0.0	16.1	16.1	0.0	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.07		0.00	0.00		0.03	0.00		0.00	0.91		0.09
Lane Grp Cap(c), veh/h	505	434	0	0	476	499	0	1204	0	1000	0	0
V/C Ratio(X)	0.25	0.26	0.00	0.00	0.76	0.76	0.00	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	1175	1079	0	0	1186	1242	0	1204	0	1000	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	24.8	24.8	0.0	0.0	29.0	29.0	0.0	0.0	0.0	5.7	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.3	0.0	0.0	2.6	2.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	2.2	0.0	0.0	8.2	8.6	0.0	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	25.0	25.2	0.0	0.0	31.6	31.5	0.0	0.0	0.0	5.7	0.0	0.0
LnGrp LOS	C	C			C	C				A		
Approach Vol, veh/h		241			745			0			32	
Approach Delay, s/veh		25.1			31.5			0.0			5.7	
Approach LOS		C			C						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		26.9		59.0		26.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		0.0		18.2		2.6		18.1
Green Ext Time (p_c), s		0.0		1.4		0.2		4.8

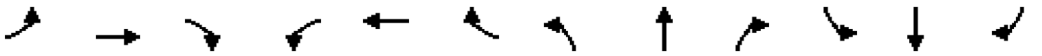
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	226	0	0	620	224	0	0	0	280	0	74
Future Volume (vph)	14	226	0	0	620	224	0	0	0	280	0	74
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0					4.0	4.0	4.0
Lane Util. Factor		0.95			0.95					0.95	0.91	0.95
Frt		1.00			0.96					1.00	0.99	0.85
Flt Protected		1.00			1.00					0.95	0.95	1.00
Satd. Flow (prot)		3564			3432					1698	1622	1519
Flt Permitted		0.84			1.00					0.95	0.75	1.00
Satd. Flow (perm)		3012			3432					1698	1268	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	246	0	0	674	243	0	0	0	304	0	80
RTOR Reduction (vph)	0	0	0	0	39	0	0	0	0	0	33	29
Lane Group Flow (vph)	0	261	0	0	878	0	0	0	0	155	124	43
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		30.8			30.8					13.8	56.3	56.3
Effective Green, g (s)		30.8			30.8					13.8	56.3	56.3
Actuated g/C Ratio		0.32			0.32					0.15	0.59	0.59
Clearance Time (s)		4.0			4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		975			1111					246	802	899
v/s Ratio Prot					c0.26					c0.09	0.02	0.03
v/s Ratio Perm		0.09									c0.07	
v/c Ratio		0.27			0.79					0.63	0.15	0.05
Uniform Delay, d1		23.8			29.2					38.2	8.7	8.1
Progression Factor		1.00			1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1			3.9					5.2	0.1	0.1
Delay (s)		23.9			33.1					43.4	8.8	8.2
Level of Service		C			C					D	A	A
Approach Delay (s/veh)		23.9			33.1			0.0			22.7	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	95.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	14	482	10	8	670	224	3	2	11	205	3	162
Future Volume (vph)	14	482	10	8	670	224	3	2	11	205	3	162
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.90		1.00	0.95	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.97	1.00
Satd. Flow (prot)	1787	3574	1599	1787	3574	1599		1687		1698	1570	1519
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.75	0.84	1.00
Satd. Flow (perm)	1787	3574	1599	1787	3574	1599		1662		1334	1361	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	15	524	11	9	728	243	3	2	12	223	3	176
RTOR Reduction (vph)	0	0	8	0	0	101	0	6	0	0	12	59
Lane Group Flow (vph)	15	524	3	9	728	142	0	11	0	140	123	68
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	1.2	22.3	22.3	1.1	22.2	22.2		40.7		40.7	40.7	40.7
Effective Green, g (s)	1.2	22.3	22.3	1.1	22.2	22.2		40.7		40.7	40.7	40.7
Actuated g/C Ratio	0.02	0.29	0.29	0.01	0.29	0.29		0.53		0.53	0.53	0.53
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	28	1047	468	25	1042	466		888		713	727	812
v/s Ratio Prot	c0.01	0.15		0.01	c0.20							
v/s Ratio Perm			0.00			0.09		0.01		c0.10	0.09	0.04
v/c Ratio	0.54	0.50	0.01	0.36	0.70	0.30		0.01		0.20	0.17	0.08
Uniform Delay, d1	37.2	22.3	19.1	37.2	24.0	20.9		8.3		9.2	9.1	8.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	18.3	0.4	0.0	8.7	2.1	0.4		0.0		0.6	0.5	0.2
Delay (s)	55.5	22.7	19.1	45.8	26.0	21.3		8.3		9.8	9.6	8.8
Level of Service	E	C	B	D	C	C		A		A	A	A
Approach Delay (s/veh)		23.5			25.1			8.3			9.4	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	76.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	39.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	15	27	10	90	70	56	90	723	101	21	694	109
Future Volume (veh/h)	15	27	10	90	70	56	90	723	101	21	694	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	16	29	11	98	76	61	98	786	110	23	754	118
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	49	71	717	59	33	717	268	1720	770	276	1491	233
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	14	158	1599	23	75	1599	639	3574	1599	625	3098	485
Grp Volume(v), veh/h	45	0	11	174	0	61	98	786	110	23	435	437
Grp Sat Flow(s),veh/h/ln	172	0	1599	97	0	1599	639	1787	1599	625	1787	1796
Q Serve(g_s), s	1.3	0.0	0.4	1.3	0.0	2.5	14.0	16.7	4.4	2.9	19.1	19.1
Cycle Q Clear(g_c), s	51.3	0.0	0.4	51.3	0.0	2.5	32.3	16.7	4.4	18.9	19.1	19.1
Prop In Lane	0.36		1.00	0.56		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	120	0	717	93	0	717	268	1720	770	276	860	864
V/C Ratio(X)	0.37	0.00	0.02	1.87	0.00	0.09	0.37	0.46	0.14	0.08	0.51	0.51
Avail Cap(c_a), veh/h	200	0	798	171	0	798	268	1720	770	276	860	864
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	17.5	43.1	0.0	18.1	31.1	19.7	16.5	25.7	20.3	20.3
Incr Delay (d2), s/veh	1.9	0.0	0.0	430.2	0.0	0.1	3.8	0.9	0.4	0.6	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.2	14.0	0.0	1.1	2.8	8.4	2.0	0.5	9.9	10.0
LnGrp Delay(d), s/veh	29.4	0.0	17.5	473.3	0.0	18.1	34.9	20.6	16.9	26.3	22.4	22.4
LnGrp LOS	C		B	F		B	C	C	B	C	C	C
Approach Vol, veh/h		56			235			994			895	
Approach Delay, s/veh		27.1			355.2			21.6			22.5	
Approach LOS		C			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		59.0		56.4		59.0		56.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		55.0		57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s		34.3		53.3		21.1		53.3
Green Ext Time (p_c), s		6.5		0.0		6.9		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.1
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	6	3	1249	2	26	821
Future Vol, veh/h	6	3	1249	2	26	821
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	6	3	1301	2	27	855

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1785	653	0	0	1304	0
Stage 1	1303	-	-	-	-	-
Stage 2	482	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	74	412	-	-	532	-
Stage 1	220	-	-	-	-	-
Stage 2	590	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	70	412	-	-	532	-
Mov Cap-2 Maneuver	70	-	-	-	-	-
Stage 1	220	-	-	-	-	-
Stage 2	560	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	45.5	0	0.4
HCM LOS	E		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	70	412	532	-
HCM Lane V/C Ratio	-	-	0.089	0.008	0.051	-
HCM Control Delay (s/veh)	-	-	61.4	13.8	12.1	-
HCM Lane LOS	-	-	F	B	B	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0.2	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	157	187	1153	224	107	640
Future Volume (vph)	157	187	1153	224	107	640
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	1599	3467		1787	3574
Flt Permitted	0.95	1.00	1.00		0.12	1.00
Satd. Flow (perm)	1787	1599	3467		227	3574
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	165	197	1214	236	113	674
RTOR Reduction (vph)	0	55	12	0	0	0
Lane Group Flow (vph)	165	142	1438	0	113	674
Confl. Peds. (#/hr)	11			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)	15.4	26.5	72.2		83.3	87.3
Effective Green, g (s)	15.4	26.5	72.2		83.3	87.3
Actuated g/C Ratio	0.14	0.24	0.65		0.75	0.79
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	248	440	2261		327	2818
v/s Ratio Prot	c0.09	c0.03	c0.41		0.03	0.19
v/s Ratio Perm		0.06			0.22	
v/c Ratio	0.67	0.32	0.64		0.35	0.24
Uniform Delay, d1	45.2	34.7	11.4		18.0	3.0
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	6.6	0.4	1.4		0.6	0.0
Delay (s)	51.8	35.1	12.8		18.7	3.1
Level of Service	D	D	B		B	A
Approach Delay (s/veh)	42.7		12.8			5.3
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	110.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	0	3	0	0	4	3	1189	4	4	557	30
Future Vol, veh/h	4	0	3	0	0	4	3	1189	4	4	557	30
Conflicting Peds, #/hr	0	0	5	5	0	0	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	4	0	3	0	0	4	3	1278	4	4	599	32

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1150	1927	331	1545	1941	647	641	0	0	1288	0	0
Stage 1	633	633	-	1292	1292	-	-	-	-	-	-	-
Stage 2	517	1294	-	253	649	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	209	66	567	121	64	355	581	-	-	283	-	-
Stage 1	356	472	-	124	232	-	-	-	-	-	-	-
Stage 2	465	231	-	669	464	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	202	64	560	117	62	353	576	-	-	282	-	-
Mov Cap-2 Maneuver	202	64	-	117	62	-	-	-	-	-	-	-
Stage 1	351	462	-	123	230	-	-	-	-	-	-	-
Stage 2	457	229	-	653	454	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.3	15.3	0	0.1
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	576	-	-	278	353	282	-	-
HCM Lane V/C Ratio	0.006	-	-	0.027	0.012	0.015	-	-
HCM Control Delay (s/veh)	11.3	-	-	18.3	15.3	18	-	-
HCM Lane LOS	B	-	-	C	C	C	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	201	267	32	122	268	149	31	860	99	61	308	154
Future Volume (veh/h)	201	267	32	122	268	149	31	860	99	61	308	154
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	209	278	33	127	279	155	32	896	103	64	321	160
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	321	524	62	406	319	177	420	1750	200	280	1328	596
Arrive On Green	0.11	0.32	0.32	0.07	0.29	0.29	0.03	0.38	0.38	0.04	0.39	0.39
Sat Flow, veh/h	1774	1632	194	1774	1114	619	1774	4608	527	1774	3390	1523
Grp Volume(v), veh/h	209	0	311	127	0	434	32	658	341	64	321	160
Grp Sat Flow(s),veh/h/ln	1774	0	1826	1774	0	1733	1774	1695	1745	1774	1695	1523
Q Serve(g_s), s	6.7	0.0	11.7	4.2	0.0	20.1	0.9	12.6	12.7	1.8	5.4	6.0
Cycle Q Clear(g_c), s	6.7	0.0	11.7	4.2	0.0	20.1	0.9	12.6	12.7	1.8	5.4	6.0
Prop In Lane	1.00		0.11	1.00		0.36	1.00		0.30	1.00		1.00
Lane Grp Cap(c), veh/h	321	0	586	406	0	495	420	1288	663	280	1328	596
V/C Ratio(X)	0.65	0.00	0.53	0.31	0.00	0.88	0.08	0.51	0.51	0.23	0.24	0.27
Avail Cap(c_a), veh/h	552	0	693	699	0	658	797	1288	663	635	1328	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.2	0.0	23.4	19.2	0.0	28.7	15.4	20.1	20.1	15.9	17.2	17.4
Incr Delay (d2), s/veh	2.2	0.0	0.7	0.4	0.0	10.1	0.1	1.5	2.8	0.4	0.4	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	6.0	2.1	0.0	10.9	0.5	6.1	6.6	0.9	2.6	2.7
LnGrp Delay(d), s/veh	22.4	0.0	24.1	19.6	0.0	38.8	15.4	21.6	23.0	16.4	17.7	18.5
LnGrp LOS	C		C	B		D	B	C	C	B	B	B
Approach Vol, veh/h		520			561			1031			545	
Approach Delay, s/veh		23.5			34.4			21.8			17.8	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.1	36.0	10.1	31.1	6.1	37.0	13.1	28.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	20.0	32.0	20.0	32.0	20.0	32.0
Max Q Clear Time (g_c+I1), s	3.8	14.7	6.2	13.7	2.9	8.0	8.7	22.1
Green Ext Time (p_c), s	0.1	5.9	0.2	1.7	0.0	3.0	0.4	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	144	22	259	745	17	14
Future Vol, veh/h	144	22	259	745	17	14
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	150	23	270	776	18	15

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	173	0	1478	162
Stage 1	-	-	-	-	162	-
Stage 2	-	-	-	-	1316	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1416	-	140	888
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	253	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1416	-	93	888
Mov Cap-2 Maneuver	-	-	-	-	93	-
Stage 1	-	-	-	-	872	-
Stage 2	-	-	-	-	168	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.1	33
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	93	888	-	-	1416	-
HCM Lane V/C Ratio	0.19	0.016	-	-	0.191	-
HCM Control Delay (s/veh)	52.6	9.1	-	-	8.1	0
HCM Lane LOS	F	A	-	-	A	A
HCM 95th %tile Q(veh)	0.7	0.1	-	-	0.7	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	11	49	36	312	1337	37
Future Volume (veh/h)	11	49	36	312	1337	37
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	12	52	38	332	1422	39
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	328	293	273	2681	2663	73
Arrive On Green	0.18	0.18	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1792	1599	365	3668	3645	97
Grp Volume(v), veh/h	12	52	38	332	715	746
Grp Sat Flow(s),veh/h/ln	1792	1599	365	1787	1787	1861
Q Serve(g_s), s	0.7	3.3	5.8	3.1	20.0	20.1
Cycle Q Clear(g_c), s	0.7	3.3	25.9	3.1	20.0	20.1
Prop In Lane	1.00	1.00	1.00			0.05
Lane Grp Cap(c), veh/h	328	293	273	2681	1340	1396
V/C Ratio(X)	0.04	0.18	0.14	0.12	0.53	0.53
Avail Cap(c_a), veh/h	328	293	273	2681	1340	1396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.3	41.4	11.7	4.1	6.2	6.3
Incr Delay (d2), s/veh	0.2	1.3	1.1	0.1	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.6	0.7	1.5	10.3	10.7
LnGrp Delay(d), s/veh	40.5	42.7	12.7	4.2	7.8	7.7
LnGrp LOS	D	D	B	A	A	A
Approach Vol, veh/h	64			370	1461	
Approach Delay, s/veh	42.3			5.1	7.8	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				94.0		26.0		94.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				90.0		22.0		90.0
Max Q Clear Time (g_c+I1), s				27.9		5.3		22.1
Green Ext Time (p_c), s				3.0		0.1		13.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.4
HCM 2010 LOS	A

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Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	13	651	462	134	948	16	659	0	138	0	0
Future Volume (vph)	0	13	651	462	134	948	16	659	0	138	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.94	1.00	1.00		1.00		0.96		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.98	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3327	1373	1787	3564		3467		1533		
Flt Permitted			0.93	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3089	1373	1787	3564		3467		1533		
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	14	715	508	147	1042	18	724	0	152	0	0
RTOR Reduction (vph)	0	0	10	266	0	1	0	0	0	84	0	0
Lane Group Flow (vph)	0	0	831	130	147	1059	0	724	0	68	0	0
Confl. Peds. (#/hr)		2		18	18		2			13	13	
Confl. Bikes (#/hr)				11						5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases		4		4						2		
Actuated Green, G (s)			37.4	37.4	13.2	54.6		27.5		51.3		
Effective Green, g (s)			37.4	37.4	13.2	54.6		27.5		51.3		
Actuated g/C Ratio			0.33	0.33	0.12	0.48		0.24		0.45		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1014	450	207	1708		837		690		
v/s Ratio Prot					c0.08	0.30		c0.21				
v/s Ratio Perm			c0.27	0.09						c0.04		
v/c Ratio			0.82	0.29	0.71	0.62		0.86		0.10		
Uniform Delay, d1			35.1	28.4	48.5	22.0		41.4		18.0		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			5.3	0.4	10.9	0.7		9.3		0.3		
Delay (s)			40.4	28.7	59.4	22.6		50.7		18.3		
Level of Service			D	C	E	C		D		B		
Approach Delay (s/veh)			36.7			27.1			45.1			38.9
Approach LOS			D			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	113.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	6
Future Volume (vph)	6
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1627
Flt Permitted	1.00
Satd. Flow (perm)	1627
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	7
RTOR Reduction (vph)	6
Lane Group Flow (vph)	1
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	19.8
Effective Green, g (s)	19.8
Actuated g/C Ratio	0.17
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	282
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.00
Uniform Delay, d1	38.9
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	38.9
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	52	16	2	14	15	0	993	13	13	590
Future Volume (vph)	0	0	52	16	2	14	15	0	993	13	13	590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.92	1.00	0.94		1.00		1.00	0.94	1.00	1.00
Flpb, ped/bikes			1.00	0.96	1.00		1.00		1.00	1.00	0.99	1.00
Frt			0.87	1.00	0.87		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1497	1710	1533		1787		3574	1507	1773	3574
Flt Permitted			1.00	0.95	1.00		0.41		1.00	1.00	0.27	1.00
Satd. Flow (perm)			1497	1710	1533		778		3574	1507	496	3574
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	55	17	2	15	16	0	1056	14	14	628
RTOR Reduction (vph)	0	0	52	0	14	0	0	0	0	2	0	0
Lane Group Flow (vph)	0	0	3	17	3	0	16	0	1056	12	14	628
Confl. Peds. (#/hr)	25		20	20		25		8		10	10	
Confl. Bikes (#/hr)			6			1				5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			5.6	5.6	5.6		101.5		101.5	101.5	101.5	101.5
Effective Green, g (s)			5.6	5.6	5.6		101.5		101.5	101.5	101.5	101.5
Actuated g/C Ratio			0.05	0.05	0.05		0.88		0.88	0.88	0.88	0.88
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			72	83	74		686		3151	1328	437	3151
v/s Ratio Prot					0.00				c0.30			0.18
v/s Ratio Perm			0.00	c0.01			0.02			0.01	0.03	
v/c Ratio			0.04	0.20	0.04		0.02		0.34	0.01	0.03	0.20
Uniform Delay, d1			52.2	52.6	52.2		0.8		1.1	0.8	0.8	1.0
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.2	1.2	0.2		0.1		0.3	0.0	0.1	0.1
Delay (s)			52.4	53.8	52.4		0.9		1.4	0.8	1.0	1.1
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		52.4			53.1				1.4			1.1
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	3.8	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	115.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	45.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	739	121	228	1007	209	140	691	170	168	378	76
Future Volume (veh/h)	119	739	121	228	1007	209	140	691	170	168	378	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	125	778	127	240	1060	220	147	727	179	177	398	80
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1050	170	275	1289	267	470	1342	586	342	1397	748
Arrive On Green	0.09	0.24	0.24	0.15	0.31	0.31	0.06	0.38	0.38	0.08	0.39	0.39
Sat Flow, veh/h	1774	4389	710	1774	4197	870	1774	3539	1546	1774	3539	1547
Grp Volume(v), veh/h	125	599	306	240	856	424	147	727	179	177	398	80
Grp Sat Flow(s),veh/h/ln	1774	1695	1708	1774	1695	1677	1774	1770	1546	1774	1770	1547
Q Serve(g_s), s	7.5	17.8	18.1	14.4	25.5	25.5	5.5	17.5	8.9	6.5	8.4	3.1
Cycle Q Clear(g_c), s	7.5	17.8	18.1	14.4	25.5	25.5	5.5	17.5	8.9	6.5	8.4	3.1
Prop In Lane	1.00		0.42	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	811	409	275	1041	515	470	1342	586	342	1397	748
V/C Ratio(X)	0.81	0.74	0.75	0.87	0.82	0.82	0.31	0.54	0.31	0.52	0.28	0.11
Avail Cap(c_a), veh/h	261	872	439	424	1183	585	470	1342	586	428	1397	748
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	38.3	38.4	45.0	35.0	35.0	18.6	26.4	23.7	19.7	22.5	15.4
Incr Delay (d2), s/veh	9.7	3.1	6.5	12.0	4.3	8.4	0.4	1.6	1.3	1.2	0.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	8.7	9.2	8.0	12.5	13.0	2.7	8.8	4.0	3.3	4.2	1.4
LnGrp Delay(d), s/veh	58.6	41.4	44.9	57.0	39.3	43.4	19.0	28.0	25.1	20.9	23.0	15.7
LnGrp LOS	E	D	D	E	D	D	B	C	C	C	C	B
Approach Vol, veh/h		1030			1520			1053			655	
Approach Delay, s/veh		44.5			43.2			26.2			21.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	45.3	20.9	30.1	11.0	47.0	13.5	37.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	36.0	26.0	28.0	7.0	43.0	16.0	38.0
Max Q Clear Time (g_c+I1), s	8.5	19.5	16.4	20.1	7.5	10.4	9.5	27.5
Green Ext Time (p_c), s	0.2	5.1	0.5	3.5	0.0	3.0	0.1	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	37	156	40	178	158	100	73	947	245	91	704	48
Future Volume (veh/h)	37	156	40	178	158	100	73	947	245	91	704	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	39	164	42	187	166	105	77	997	258	96	741	51
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	406	104	292	301	191	433	2262	979	287	2143	147
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1103	1422	364	1167	1055	668	681	3539	1532	441	3352	231
Grp Volume(v), veh/h	39	0	206	187	0	271	77	997	258	96	391	401
Grp Sat Flow(s),veh/h/ln	1103	0	1786	1167	0	1723	681	1770	1532	441	1770	1813
Q Serve(g_s), s	3.3	0.0	9.9	16.4	0.0	14.2	6.3	15.1	7.8	14.9	10.9	10.9
Cycle Q Clear(g_c), s	17.5	0.0	9.9	26.3	0.0	14.2	17.2	15.1	7.8	29.9	10.9	10.9
Prop In Lane	1.00		0.20	1.00		0.39	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	236	0	510	292	0	492	433	2262	979	287	1131	1159
V/C Ratio(X)	0.17	0.00	0.40	0.64	0.00	0.55	0.18	0.44	0.26	0.33	0.35	0.35
Avail Cap(c_a), veh/h	377	0	739	442	0	713	433	2262	979	287	1131	1159
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	0.0	30.7	41.3	0.0	32.2	12.9	9.6	8.3	17.2	8.9	8.9
Incr Delay (d2), s/veh	0.3	0.0	0.5	2.3	0.0	1.0	0.9	0.6	0.7	3.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	4.9	5.5	0.0	6.8	1.3	7.5	3.4	2.1	5.6	5.7
LnGrp Delay(d), s/veh	40.0	0.0	31.2	43.6	0.0	33.2	13.8	10.3	9.0	20.3	9.7	9.7
LnGrp LOS	D		C	D		C	B	B	A	C	A	A
Approach Vol, veh/h		245			458			1332			888	
Approach Delay, s/veh		32.6			37.5			10.2			10.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		34.4		72.0		34.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		44.0		68.0		44.0
Max Q Clear Time (g_c+I1), s		19.2		19.5		31.9		28.3
Green Ext Time (p_c), s		11.5		1.3		7.5		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	124	8	27	9	7	8	43	1193	9	9	837	178
Future Volume (veh/h)	124	8	27	9	7	8	43	1193	9	9	837	178
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.94	0.96		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	129	8	28	9	7	8	45	1243	9	9	872	185
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	47	166	222	105	120	438	2784	1208	365	2272	482
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1338	346	1211	1316	767	877	531	3539	1536	442	2889	613
Grp Volume(v), veh/h	129	0	36	9	0	15	45	1243	9	9	534	523
Grp Sat Flow(s),veh/h/ln	1338	0	1557	1316	0	1644	531	1770	1536	442	1770	1732
Q Serve(g_s), s	9.7	0.0	2.1	0.6	0.0	0.8	3.0	12.0	0.1	0.7	9.6	9.6
Cycle Q Clear(g_c), s	10.5	0.0	2.1	2.8	0.0	0.8	12.6	12.0	0.1	12.8	9.6	9.6
Prop In Lane	1.00		0.78	1.00		0.53	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	241	0	213	222	0	225	438	2784	1208	365	1392	1362
V/C Ratio(X)	0.53	0.00	0.17	0.04	0.00	0.07	0.10	0.45	0.01	0.02	0.38	0.38
Avail Cap(c_a), veh/h	443	0	448	421	0	473	438	2784	1208	365	1392	1362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	0.0	39.8	41.0	0.0	39.2	5.3	3.7	2.4	5.8	3.4	3.4
Incr Delay (d2), s/veh	1.8	0.0	0.4	0.1	0.0	0.1	0.5	0.5	0.0	0.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	0.9	0.2	0.0	0.4	0.5	5.9	0.1	0.1	4.9	4.8
LnGrp Delay(d), s/veh	45.6	0.0	40.1	41.1	0.0	39.3	5.8	4.2	2.4	5.9	4.2	4.2
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		165			24			1297			1066	
Approach Delay, s/veh		44.4			40.0			4.2			4.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.0		18.3		86.0		18.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		82.0		30.0		82.0		30.0
Max Q Clear Time (g_c+I1), s		14.6		12.5		14.8		4.8
Green Ext Time (p_c), s		14.1		0.5		9.1		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	149	51	127	154	58	75	1148	113	43	763	26
Future Volume (veh/h)	35	149	51	127	154	58	75	1148	113	43	763	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	38	160	55	137	166	62	81	1234	122	46	820	28
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	269	329	113	237	468	378	439	2385	1024	267	2385	1023
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	1134	1308	450	1153	1863	1504	646	3539	1519	400	3539	1518
Grp Volume(v), veh/h	38	0	215	137	166	62	81	1234	122	46	820	28
Grp Sat Flow(s),veh/h/ln	1134	0	1758	1153	1863	1504	646	1770	1519	400	1770	1518
Q Serve(g_s), s	3.0	0.0	11.1	12.3	7.8	3.4	6.5	18.6	3.0	6.9	10.5	0.7
Cycle Q Clear(g_c), s	10.9	0.0	11.1	23.4	7.8	3.4	17.0	18.6	3.0	25.6	10.5	0.7
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	0	442	237	468	378	439	2385	1024	267	2385	1023
V/C Ratio(X)	0.14	0.00	0.49	0.58	0.35	0.16	0.18	0.52	0.12	0.17	0.34	0.03
Avail Cap(c_a), veh/h	409	0	658	379	697	563	439	2385	1024	267	2385	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	34.1	44.1	32.9	31.2	11.0	8.7	6.2	15.1	7.4	5.8
Incr Delay (d2), s/veh	0.2	0.0	0.8	2.2	0.5	0.2	0.9	0.8	0.2	1.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	5.5	4.1	4.1	1.5	1.3	9.4	1.3	0.9	5.3	0.3
LnGrp Delay(d), s/veh	37.6	0.0	35.0	46.4	33.3	31.4	11.9	9.5	6.4	16.5	7.8	5.8
LnGrp LOS	D		C	D	C	C	B	A	A	B	A	A
Approach Vol, veh/h		253			365			1437			894	
Approach Delay, s/veh		35.4			37.9			9.4			8.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		30.8		76.0		30.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		20.6		13.1		27.6		25.4
Green Ext Time (p_c), s		14.7		1.4		7.9		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Future Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	191	936	132	222	1438	222	290	1137	132	103	942	156
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1301	183	250	1570	461	354	1380	586	146	1676	489
Arrive On Green	0.12	0.29	0.29	0.14	0.31	0.31	0.10	0.39	0.39	0.04	0.33	0.33
Sat Flow, veh/h	1774	4471	628	1774	5085	1494	3442	3539	1502	3442	5085	1485
Grp Volume(v), veh/h	191	709	359	222	1438	222	290	1137	132	103	942	156
Grp Sat Flow(s),veh/h/ln	1774	1695	1708	1774	1695	1494	1721	1770	1502	1721	1695	1485
Q Serve(g_s), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Cycle Q Clear(g_c), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	986	497	250	1570	461	354	1380	586	146	1676	489
V/C Ratio(X)	0.87	0.72	0.72	0.89	0.92	0.48	0.82	0.82	0.23	0.71	0.56	0.32
Avail Cap(c_a), veh/h	241	986	497	286	1595	469	467	1380	586	146	1676	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	37.5	37.5	49.7	39.3	33.1	51.8	32.3	24.1	55.7	32.5	29.6
Incr Delay (d2), s/veh	26.4	2.6	5.1	24.8	8.6	0.8	8.5	5.7	0.9	14.4	1.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	10.7	11.2	8.8	16.3	6.0	5.0	17.7	3.0	2.0	8.6	4.0
LnGrp Delay(d), s/veh	77.2	40.0	42.7	74.5	47.9	33.9	60.3	38.0	24.9	70.1	33.9	31.3
LnGrp LOS	E	D	D	E	D	C	E	D	C	E	C	C
Approach Vol, veh/h		1259			1882			1559			1201	
Approach Delay, s/veh		46.4			49.4			41.1			36.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	50.0	20.6	38.3	16.1	42.9	18.5	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	46.0	19.0	34.0	16.0	35.0	16.0	37.0
Max Q Clear Time (g_c+I1), s	5.5	36.1	16.5	24.3	11.7	20.0	14.5	34.1
Green Ext Time (p_c), s	0.0	5.5	0.1	4.6	0.4	6.2	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	165	603	88	220	923	129	91	692	208	156	603	251
Future Volume (veh/h)	165	603	88	220	923	129	91	692	208	156	603	251
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	170	622	91	227	952	133	94	713	214	161	622	259
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	199	1081	472	260	1056	148	118	1090	475	190	841	350
Arrive On Green	0.11	0.30	0.30	0.15	0.34	0.34	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1792	3574	1560	1792	3139	438	1792	3574	1557	1792	2438	1014
Grp Volume(v), veh/h	170	622	91	227	542	543	94	713	214	161	456	425
Grp Sat Flow(s),veh/h/ln	1792	1787	1560	1792	1787	1791	1792	1787	1557	1792	1787	1665
Q Serve(g_s), s	10.5	16.6	4.9	14.0	32.6	32.7	5.8	19.6	12.5	10.0	25.4	25.4
Cycle Q Clear(g_c), s	10.5	16.6	4.9	14.0	32.6	32.7	5.8	19.6	12.5	10.0	25.4	25.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.61
Lane Grp Cap(c), veh/h	199	1081	472	260	601	603	118	1090	475	190	616	574
V/C Ratio(X)	0.85	0.58	0.19	0.87	0.90	0.90	0.80	0.65	0.45	0.85	0.74	0.74
Avail Cap(c_a), veh/h	238	1081	472	396	648	649	143	1090	475	222	616	574
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	33.3	29.2	47.3	35.7	35.7	52.1	34.1	31.7	49.7	32.6	32.6
Incr Delay (d2), s/veh	21.8	0.8	0.2	12.8	15.1	15.2	22.2	3.1	3.1	22.7	7.8	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.3	2.1	7.9	18.6	18.7	3.6	10.2	5.8	6.2	13.9	13.0
LnGrp Delay(d), s/veh	71.2	34.1	29.4	60.1	50.8	50.9	74.3	37.2	34.7	72.3	40.4	40.9
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		883			1312			1021			1042	
Approach Delay, s/veh		40.7			52.5			40.1			45.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	38.5	20.4	38.2	11.5	43.0	16.6	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	34.0	25.0	31.0	9.0	39.0	15.0	41.0
Max Q Clear Time (g_c+I1), s	12.0	21.6	16.0	18.6	7.8	27.4	12.5	34.7
Green Ext Time (p_c), s	0.1	4.4	0.4	3.5	0.0	4.2	0.1	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	6	11	198	11	51	10	816	134	33	704	11
Future Volume (veh/h)	9	6	11	198	11	51	10	816	134	33	704	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.92	0.94		0.92	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	6	12	213	12	55	11	877	144	35	757	12
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	284	105	210	327	54	250	534	2214	364	417	2610	41
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1290	535	1070	1335	277	1272	709	3084	506	560	3636	58
Grp Volume(v), veh/h	10	0	18	213	0	67	11	513	508	35	376	393
Grp Sat Flow(s),veh/h/ln	1290	0	1605	1335	0	1549	709	1805	1785	560	1805	1888
Q Serve(g_s), s	0.6	0.0	0.9	14.4	0.0	3.4	0.5	10.5	10.5	2.5	6.9	6.9
Cycle Q Clear(g_c), s	4.0	0.0	0.9	15.2	0.0	3.4	7.4	10.5	10.5	12.9	6.9	6.9
Prop In Lane	1.00		0.67	1.00		0.82	1.00		0.28	1.00		0.03
Lane Grp Cap(c), veh/h	284	0	315	327	0	304	534	1296	1282	417	1296	1356
V/C Ratio(X)	0.04	0.00	0.06	0.65	0.00	0.22	0.02	0.40	0.40	0.08	0.29	0.29
Avail Cap(c_a), veh/h	652	0	774	709	0	747	534	1296	1282	417	1296	1356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	0.0	30.5	36.7	0.0	31.5	6.0	5.2	5.2	7.7	4.7	4.7
Incr Delay (d2), s/veh	0.1	0.0	0.1	2.2	0.0	0.4	0.1	0.9	0.9	0.4	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4	5.5	0.0	1.5	0.1	5.5	5.4	0.4	3.6	3.8
LnGrp Delay(d), s/veh	33.2	0.0	30.6	38.9	0.0	31.9	6.1	6.1	6.1	8.1	5.3	5.2
LnGrp LOS	C		C	D		C	A	A	A	A	A	A
Approach Vol, veh/h		28			280			1032			804	
Approach Delay, s/veh		31.5			37.2			6.1			5.4	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		22.3		71.0		22.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		45.0		67.0		45.0
Max Q Clear Time (g_c+I1), s		12.5		6.0		14.9		17.2
Green Ext Time (p_c), s		8.4		0.1		5.9		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	372	828	180	104	1043	196	310	472	86	160	412	391
Future Volume (veh/h)	372	828	180	104	1043	196	310	472	86	160	412	391
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.96	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	409	910	198	114	1146	215	341	519	95	176	453	430
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	437	1592	686	141	1205	226	370	765	139	293	699	295
Arrive On Green	0.24	0.45	0.45	0.08	0.28	0.28	0.14	0.26	0.26	0.09	0.20	0.20
Sat Flow, veh/h	1792	3574	1541	1792	4304	807	1792	2999	546	1792	3574	1507
Grp Volume(v), veh/h	409	910	198	114	912	449	341	308	306	176	453	430
Grp Sat Flow(s),veh/h/ln	1792	1787	1541	1792	1712	1687	1792	1787	1757	1792	1787	1507
Q Serve(g_s), s	26.3	22.3	9.6	7.4	30.7	30.8	17.0	18.3	18.5	9.2	13.7	23.0
Cycle Q Clear(g_c), s	26.3	22.3	9.6	7.4	30.7	30.8	17.0	18.3	18.5	9.2	13.7	23.0
Prop In Lane	1.00		1.00	1.00		0.48	1.00		0.31	1.00		1.00
Lane Grp Cap(c), veh/h	437	1592	686	141	959	472	370	456	448	293	699	295
V/C Ratio(X)	0.94	0.57	0.29	0.81	0.95	0.95	0.92	0.68	0.68	0.60	0.65	1.46
Avail Cap(c_a), veh/h	472	1592	686	228	960	473	370	456	448	293	699	295
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	24.3	20.8	53.3	41.6	41.6	32.7	39.4	39.5	34.5	43.6	47.3
Incr Delay (d2), s/veh	25.3	0.5	0.2	10.5	18.3	29.3	28.0	7.8	8.2	3.4	4.6	224.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.1	11.1	4.1	4.1	17.0	18.2	11.5	10.0	9.9	4.8	7.2	27.9
LnGrp Delay(d), s/veh	68.9	24.8	21.0	63.8	59.8	70.9	60.7	47.3	47.7	37.9	48.2	271.8
LnGrp LOS	E	C	C	E	E	E	E	D	D	D	D	F
Approach Vol, veh/h		1517			1475			955			1059	
Approach Delay, s/veh		36.2			63.5			52.2			137.3	
Approach LOS		D			E			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	34.0	13.2	56.4	21.0	27.0	32.7	36.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	30.0	15.0	49.0	17.0	23.0	31.0	33.0
Max Q Clear Time (g_c+I1), s	11.2	20.5	9.4	24.3	19.0	25.0	28.3	32.8
Green Ext Time (p_c), s	0.0	2.5	0.1	7.6	0.0	0.0	0.4	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	114	224	41	178	60	286	577	52	56	233	171
Future Volume (veh/h)	104	114	224	41	178	60	286	577	52	56	233	171
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	107	118	231	42	184	62	295	595	54	58	240	176
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	235	148	290	137	356	120	663	2186	198	527	1323	931
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1138	559	1094	1038	1342	452	973	3306	299	786	2000	1407
Grp Volume(v), veh/h	107	0	349	42	0	246	295	321	328	58	213	203
Grp Sat Flow(s),veh/h/ln	1138	0	1654	1038	0	1794	973	1787	1818	786	1787	1620
Q Serve(g_s), s	9.6	0.0	21.4	4.3	0.0	12.7	18.3	8.1	8.1	3.6	5.0	5.3
Cycle Q Clear(g_c), s	22.3	0.0	21.4	25.7	0.0	12.7	23.6	8.1	8.1	11.7	5.0	5.3
Prop In Lane	1.00		0.66	1.00		0.25	1.00		0.16	1.00		0.87
Lane Grp Cap(c), veh/h	235	0	439	137	0	476	663	1182	1202	527	1182	1071
V/C Ratio(X)	0.46	0.00	0.80	0.31	0.00	0.52	0.45	0.27	0.27	0.11	0.18	0.19
Avail Cap(c_a), veh/h	351	0	607	243	0	659	663	1182	1202	527	1182	1071
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	0.0	37.3	49.2	0.0	34.1	11.7	7.6	7.6	10.0	7.1	7.1
Incr Delay (d2), s/veh	1.4	0.0	5.0	1.2	0.0	0.9	2.2	0.6	0.6	0.4	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	10.4	1.3	0.0	6.4	5.3	4.1	4.2	0.8	2.5	2.5
LnGrp Delay(d), s/veh	44.9	0.0	42.3	50.4	0.0	34.9	13.9	8.2	8.2	10.5	7.4	7.5
LnGrp LOS	D		D	D		C	B	A	A	B	A	A
Approach Vol, veh/h		456			288			944			474	
Approach Delay, s/veh		42.9			37.2			10.0			7.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		32.9		76.0		32.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		25.6		24.3		13.7		27.7
Green Ext Time (p_c), s		6.4		2.3		3.2		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	5	10	32	10	215	11	600	47	184	401	3
Future Volume (veh/h)	11	5	10	32	10	215	11	600	47	184	401	3
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.98		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	12	5	11	34	11	229	12	638	50	196	427	3
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	97	91	200	299	13	265	717	1412	1172	537	1412	1172
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1147	512	1126	1383	72	1491	963	1881	1561	759	1881	1561
Grp Volume(v), veh/h	12	0	16	34	0	240	12	638	50	196	427	3
Grp Sat Flow(s),veh/h/ln	1147	0	1638	1383	0	1562	963	1881	1561	759	1881	1561
Q Serve(g_s), s	1.1	0.0	0.9	2.3	0.0	16.7	0.5	14.3	0.9	14.7	8.2	0.1
Cycle Q Clear(g_c), s	17.9	0.0	0.9	3.2	0.0	16.7	8.6	14.3	0.9	29.0	8.2	0.1
Prop In Lane	1.00		0.69	1.00		0.95	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	97	0	291	299	0	278	717	1412	1172	537	1412	1172
V/C Ratio(X)	0.12	0.00	0.05	0.11	0.00	0.86	0.02	0.45	0.04	0.36	0.30	0.00
Avail Cap(c_a), veh/h	180	0	410	399	0	391	717	1412	1172	537	1412	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	0.0	38.2	39.5	0.0	44.7	5.9	5.3	3.6	10.7	4.5	3.5
Incr Delay (d2), s/veh	0.6	0.0	0.1	0.2	0.0	13.4	0.0	1.0	0.1	1.9	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.4	0.9	0.0	8.2	0.1	7.7	0.4	3.3	4.4	0.0
LnGrp Delay(d), s/veh	53.9	0.0	38.3	39.7	0.0	58.1	5.9	6.3	3.7	12.6	5.0	3.5
LnGrp LOS	D		D	D		E	A	A	A	B	A	A
Approach Vol, veh/h		28			274			700			626	
Approach Delay, s/veh		45.0			55.8			6.1			7.4	
Approach LOS		D			E			A			A	

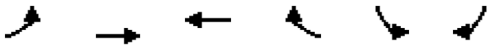
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		88.0		23.9		88.0		23.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		84.0		28.0		84.0		28.0
Max Q Clear Time (g_c+I1), s		16.3		19.9		31.0		18.7
Green Ext Time (p_c), s		5.2		0.0		4.7		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	78	214	72	21	159	33	54	623	66	42	289	33
Future Volume (veh/h)	78	214	72	21	159	33	54	623	66	42	289	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	82	225	76	22	167	35	57	656	69	44	304	35
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	183	375	311	164	299	63	797	1368	1137	492	2345	268
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1183	1881	1560	1083	1499	314	1046	1881	1563	733	3226	368
Grp Volume(v), veh/h	82	225	76	22	0	202	57	656	69	44	167	172
Grp Sat Flow(s),veh/h/ln	1183	1881	1560	1083	0	1813	1046	1881	1563	733	1787	1806
Q Serve(g_s), s	7.3	11.8	4.5	2.0	0.0	10.9	1.9	15.9	1.4	2.9	3.1	3.1
Cycle Q Clear(g_c), s	18.2	11.8	4.5	13.9	0.0	10.9	5.0	15.9	1.4	18.8	3.1	3.1
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	183	375	311	164	0	361	797	1368	1137	492	1300	1313
V/C Ratio(X)	0.45	0.60	0.24	0.13	0.00	0.56	0.07	0.48	0.06	0.09	0.13	0.13
Avail Cap(c_a), veh/h	307	571	474	277	0	551	797	1368	1137	492	1300	1313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	39.6	36.6	45.9	0.0	39.2	5.2	6.2	4.2	10.1	4.5	4.5
Incr Delay (d2), s/veh	1.7	1.5	0.4	0.4	0.0	1.4	0.2	1.2	0.1	0.4	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	6.3	2.0	0.6	0.0	5.6	0.6	8.7	0.6	0.6	1.6	1.6
LnGrp Delay(d), s/veh	49.1	41.1	37.0	46.2	0.0	40.6	5.4	7.4	4.3	10.5	4.7	4.7
LnGrp LOS	D	D	D	D		D	A	A	A	B	A	A
Approach Vol, veh/h		383			224			782			383	
Approach Delay, s/veh		42.0			41.1			7.0			5.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		25.6		83.0		25.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		17.9		20.2		20.8		15.9
Green Ext Time (p_c), s		5.4		1.4		2.5		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.5
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	355	1086	1258	300	285	263
Future Volume (veh/h)	355	1086	1258	300	285	263
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	374	1143	1324	316	300	277
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	417	3479	1668	397	841	387
Arrive On Green	0.23	0.68	0.40	0.40	0.24	0.24
Sat Flow, veh/h	1792	5305	4290	982	3476	1599
Grp Volume(v), veh/h	374	1143	1100	540	300	277
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1679	1738	1599
Q Serve(g_s), s	20.1	9.2	28.0	28.0	7.1	15.8
Cycle Q Clear(g_c), s	20.1	9.2	28.0	28.0	7.1	15.8
Prop In Lane	1.00			0.59	1.00	1.00
Lane Grp Cap(c), veh/h	417	3479	1386	679	841	387
V/C Ratio(X)	0.90	0.33	0.79	0.80	0.36	0.72
Avail Cap(c_a), veh/h	668	4555	1622	795	841	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	6.6	25.9	25.9	31.2	34.5
Incr Delay (d2), s/veh	9.7	0.1	2.4	4.9	1.2	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	4.3	13.6	13.8	3.6	14.6
LnGrp Delay(d), s/veh	46.7	6.7	28.3	30.8	32.4	45.3
LnGrp LOS	D	A	C	C	C	D
Approach Vol, veh/h		1517	1640		577	
Approach Delay, s/veh		16.5	29.1		38.6	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				71.2		28.0	27.1	44.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				88.0		24.0	37.0	47.0
Max Q Clear Time (g_c+I1), s				11.2		17.8	22.1	30.0
Green Ext Time (p_c), s				10.2		1.2	1.0	10.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	390	106	86	394	90	139	882	67	116	624	93
Future Volume (veh/h)	149	390	106	86	394	90	139	882	67	116	624	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	162	424	115	93	428	98	151	959	73	126	678	101
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	258	666	285	227	528	224	466	2194	167	347	1760	262
Arrive On Green	0.09	0.19	0.19	0.05	0.15	0.15	0.05	0.65	0.65	0.57	0.57	0.57
Sat Flow, veh/h	1792	3574	1528	1792	3574	1517	1792	3361	256	549	3111	463
Grp Volume(v), veh/h	162	424	115	93	428	98	151	510	522	126	389	390
Grp Sat Flow(s),veh/h/ln	1792	1787	1528	1792	1787	1517	1792	1787	1830	549	1787	1786
Q Serve(g_s), s	8.3	12.2	7.4	4.9	13.0	6.6	3.8	15.5	15.5	16.2	13.5	13.6
Cycle Q Clear(g_c), s	8.3	12.2	7.4	4.9	13.0	6.6	3.8	15.5	15.5	22.0	13.5	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.26
Lane Grp Cap(c), veh/h	258	666	285	227	528	224	466	1166	1194	347	1011	1011
V/C Ratio(X)	0.63	0.64	0.40	0.41	0.81	0.44	0.32	0.44	0.44	0.36	0.38	0.39
Avail Cap(c_a), veh/h	317	927	396	227	671	285	470	1166	1194	347	1011	1011
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.1	42.0	40.0	37.9	46.1	43.4	9.5	9.4	9.4	17.1	13.5	13.5
Incr Delay (d2), s/veh	2.7	1.0	0.9	1.2	5.9	1.3	0.4	1.2	1.2	2.9	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.2	3.2	2.5	6.9	2.8	1.9	8.0	8.2	2.7	6.9	6.9
LnGrp Delay(d), s/veh	37.8	43.0	41.0	39.1	52.0	44.8	9.9	10.6	10.6	20.1	14.6	14.6
LnGrp LOS	D	D	D	D	D	D	A	B	B	C	B	B
Approach Vol, veh/h		701			619			1183			905	
Approach Delay, s/veh		41.5			48.9			10.5			15.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		77.0	10.0	24.8	9.7	67.3	14.3	20.5
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		73.0	6.0	29.0	6.0	63.0	14.0	21.0
Max Q Clear Time (g_c+I1), s		17.5	6.9	14.2	5.8	24.0	10.3	15.0
Green Ext Time (p_c), s		8.3	0.0	2.7	0.0	7.5	0.1	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	235	72	97	17	169	77	100	593	23	84	418	222
Future Volume (veh/h)	235	72	97	17	169	77	100	593	23	84	418	222
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.98		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	247	76	102	18	178	81	105	624	24	88	440	234
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	380	465	385	247	292	126	462	2181	84	498	1171	1202
Arrive On Green	0.14	0.24	0.24	0.02	0.12	0.12	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	1810	1900	1571	1810	2419	1045	776	3540	136	794	1900	1584
Grp Volume(v), veh/h	247	76	102	18	130	129	105	318	330	88	440	234
Grp Sat Flow(s),veh/h/ln	1810	1900	1571	1810	1805	1659	776	1805	1871	794	1900	1584
Q Serve(g_s), s	11.1	3.1	5.1	0.8	6.7	7.2	7.6	8.0	8.0	5.7	11.3	4.1
Cycle Q Clear(g_c), s	11.1	3.1	5.1	0.8	6.7	7.2	18.9	8.0	8.0	13.7	11.3	4.1
Prop In Lane	1.00		1.00	1.00		0.63	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	380	465	385	247	218	200	462	1112	1153	498	1171	1202
V/C Ratio(X)	0.65	0.16	0.27	0.07	0.60	0.64	0.23	0.29	0.29	0.18	0.38	0.19
Avail Cap(c_a), veh/h	628	819	678	330	389	358	462	1112	1153	498	1171	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	28.9	29.7	36.7	40.6	40.8	14.1	8.7	8.7	11.9	9.3	3.4
Incr Delay (d2), s/veh	1.9	0.2	0.4	0.1	2.6	3.4	1.1	0.6	0.6	0.8	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	1.6	2.2	0.4	3.5	3.5	1.8	4.2	4.3	1.3	6.2	1.9
LnGrp Delay(d), s/veh	31.6	29.1	30.1	36.8	43.2	44.2	15.2	9.4	9.3	12.7	10.3	3.8
LnGrp LOS	C	C	C	D	D	D	B	A	A	B	B	A
Approach Vol, veh/h		425			277			753			762	
Approach Delay, s/veh		30.8			43.3			10.2			8.5	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		64.0	5.5	27.8		64.0	17.6	15.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		60.0	6.0	42.0		60.0	27.0	21.0
Max Q Clear Time (g_c+I1), s		20.9	2.8	7.1		15.7	13.1	9.2
Green Ext Time (p_c), s		5.2	0.0	0.7		4.6	0.6	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Future Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	267	645	94	186	824	98	101	1060	53	126	846	286
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	309	1143	486	351	923	110	258	1335	67	229	1414	603
Arrive On Green	0.12	0.32	0.32	0.09	0.29	0.29	0.05	0.39	0.39	0.06	0.40	0.40
Sat Flow, veh/h	1792	3574	1521	1792	3196	380	1792	3455	173	1792	3574	1525
Grp Volume(v), veh/h	267	645	94	186	461	461	101	548	565	126	846	286
Grp Sat Flow(s),veh/h/ln	1792	1787	1521	1792	1787	1789	1792	1787	1841	1792	1787	1525
Q Serve(g_s), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Cycle Q Clear(g_c), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	309	1143	486	351	516	517	258	691	711	229	1414	603
V/C Ratio(X)	0.87	0.56	0.19	0.53	0.89	0.89	0.39	0.79	0.79	0.55	0.60	0.47
Avail Cap(c_a), veh/h	380	1253	533	413	562	563	314	691	711	252	1414	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	31.4	27.4	24.9	37.9	37.9	21.0	30.2	30.2	23.9	26.6	25.0
Incr Delay (d2), s/veh	15.8	0.5	0.2	1.2	15.7	15.7	1.0	9.1	8.9	2.1	1.9	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	8.3	2.1	4.0	15.8	15.8	1.9	16.7	17.1	2.4	10.6	7.0
LnGrp Delay(d), s/veh	42.4	31.9	27.6	26.2	53.6	53.6	21.9	39.4	39.1	25.9	28.5	27.7
LnGrp LOS	D	C	C	C	D	D	C	D	D	C	C	C
Approach Vol, veh/h		1006			1108			1214			1258	
Approach Delay, s/veh		34.3			49.0			37.8			28.1	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	47.0	14.1	39.6	9.5	48.0	17.6	36.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	14.0	39.0	9.0	42.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	6.7	32.2	10.0	18.7	5.7	22.9	13.2	29.5
Green Ext Time (p_c), s	0.0	5.2	0.2	4.6	0.1	6.8	0.3	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Future Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	174	818	74	156	1141	190	190	924	165	125	756	141
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	205	1245	113	187	1323	525	327	1310	233	243	1412	408
Arrive On Green	0.11	0.38	0.38	0.10	0.37	0.37	0.09	0.30	0.30	0.07	0.28	0.28
Sat Flow, veh/h	1792	3275	296	1792	3574	1419	1792	4333	770	1792	5136	1483
Grp Volume(v), veh/h	174	446	446	156	1141	190	190	729	360	125	756	141
Grp Sat Flow(s),veh/h/ln	1792	1787	1785	1792	1787	1419	1792	1712	1679	1792	1712	1483
Q Serve(g_s), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Cycle Q Clear(g_c), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	205	679	678	187	1323	525	327	1035	507	243	1412	408
V/C Ratio(X)	0.85	0.66	0.66	0.83	0.86	0.36	0.58	0.70	0.71	0.51	0.54	0.35
Avail Cap(c_a), veh/h	279	720	719	295	1473	585	406	1035	507	272	1412	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	28.0	28.0	47.9	31.8	25.0	25.1	33.8	33.8	27.4	33.6	31.7
Incr Delay (d2), s/veh	16.2	2.0	2.0	10.8	5.1	0.4	1.6	4.0	8.2	1.7	1.5	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	11.4	11.4	5.2	16.8	4.2	4.1	10.3	10.7	2.8	6.6	3.7
LnGrp Delay(d), s/veh	63.6	30.0	30.0	58.8	36.9	25.4	26.7	37.8	42.0	29.0	35.1	34.0
LnGrp LOS	E	C	C	E	D	C	C	D	D	C	D	C
Approach Vol, veh/h		1066			1487			1279			1022	
Approach Delay, s/veh		35.5			37.7			37.3			34.2	
Approach LOS		D			D			D			C	

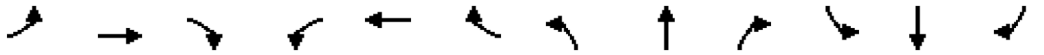
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	37.0	15.4	45.5	14.2	34.0	16.5	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	33.0	18.0	44.0	15.0	27.0	17.0	45.0
Max Q Clear Time (g_c+I1), s	7.4	22.8	11.3	24.5	10.1	15.7	12.4	34.3
Green Ext Time (p_c), s	0.0	5.0	0.2	5.5	0.2	4.2	0.2	6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Future Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.91	1.00		0.89	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	192	449	201	316	1018	347	351	944	115	275	796	136
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	853	340	349	1111	450	380	1184	143	304	938	158
Arrive On Green	0.12	0.24	0.24	0.19	0.31	0.31	0.21	0.26	0.26	0.17	0.22	0.22
Sat Flow, veh/h	1792	3574	1426	1792	3574	1449	1792	4573	554	1792	4331	730
Grp Volume(v), veh/h	192	449	201	316	1018	347	351	705	354	275	627	305
Grp Sat Flow(s),veh/h/ln	1792	1787	1426	1792	1787	1449	1792	1712	1704	1792	1712	1638
Q Serve(g_s), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Cycle Q Clear(g_c), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.45
Lane Grp Cap(c), veh/h	220	853	340	349	1111	450	380	886	441	304	741	355
V/C Ratio(X)	0.87	0.53	0.59	0.91	0.92	0.77	0.92	0.80	0.80	0.91	0.85	0.86
Avail Cap(c_a), veh/h	232	853	340	464	1141	463	417	886	441	340	741	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	38.4	39.1	45.6	38.5	36.2	44.7	40.1	40.2	47.2	43.5	43.7
Incr Delay (d2), s/veh	27.8	0.6	2.7	17.5	11.4	7.6	25.0	7.3	14.2	24.9	11.4	22.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	6.3	6.0	11.6	17.4	11.0	13.7	11.4	12.3	10.7	10.8	11.7
LnGrp Delay(d), s/veh	77.7	39.0	41.8	63.1	49.8	43.8	69.8	47.4	54.4	72.1	55.0	66.6
LnGrp LOS	E	D	D	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		842			1681			1410			1207	
Approach Delay, s/veh		48.5			51.1			54.7			61.8	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	34.0	26.6	31.7	28.6	29.1	18.2	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	30.0	30.0	22.0	27.0	25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	19.4	24.5	22.0	16.5	24.2	22.8	14.2	33.8
Green Ext Time (p_c), s	0.2	3.0	0.6	1.7	0.3	1.2	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Future Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	226	815	87	368	1101	253	333	919	136	317	763	112
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	294	1516	161	447	1315	551	410	1457	425	391	1248	181
Arrive On Green	0.08	0.32	0.32	0.13	0.37	0.37	0.12	0.28	0.28	0.11	0.28	0.28
Sat Flow, veh/h	3476	4682	496	3476	3574	1498	3476	5136	1497	3476	4489	652
Grp Volume(v), veh/h	226	594	308	368	1101	253	333	919	136	317	580	295
Grp Sat Flow(s),veh/h/ln	1738	1712	1754	1738	1787	1498	1738	1712	1497	1738	1712	1717
Q Serve(g_s), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Cycle Q Clear(g_c), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	294	1109	568	447	1315	551	410	1457	425	391	952	477
V/C Ratio(X)	0.77	0.54	0.54	0.82	0.84	0.46	0.81	0.63	0.32	0.81	0.61	0.62
Avail Cap(c_a), veh/h	395	1263	647	625	1555	652	592	1457	425	526	952	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	29.2	29.3	44.9	30.5	25.4	45.5	33.0	29.8	45.8	33.2	33.3
Incr Delay (d2), s/veh	6.3	0.4	0.8	6.2	3.6	0.6	5.6	2.1	2.0	6.9	2.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	7.2	7.5	5.6	15.3	5.7	5.1	8.1	3.4	4.9	7.7	8.3
LnGrp Delay(d), s/veh	53.7	29.6	30.1	51.1	34.2	26.0	51.0	35.1	31.8	52.7	36.1	39.2
LnGrp LOS	D	C	C	D	C	C	D	D	C	D	D	D
Approach Vol, veh/h		1128			1722			1388			1192	
Approach Delay, s/veh		34.6			36.6			38.6			41.3	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	34.0	17.6	38.2	16.5	33.4	12.9	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	19.0	39.0	18.0	28.0	12.0	46.0
Max Q Clear Time (g_c+I1), s	11.4	18.5	12.9	17.2	11.9	17.8	8.7	31.7
Green Ext Time (p_c), s	0.5	5.0	0.7	5.8	0.6	3.9	0.2	7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Future Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	180	19	161	10	22	27	168	1230	13	26	759	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	562	41	72	572	201	2705	29	35	1853	326
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.52	0.52	0.02	0.42	0.42
Sat Flow, veh/h	0	0	1567	0	202	1595	1792	5238	55	1792	4368	769
Grp Volume(v), veh/h	199	0	161	32	0	27	168	804	439	26	593	301
Grp Sat Flow(s),veh/h/ln	0	0	1567	202	0	1595	1792	1712	1869	1792	1712	1714
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Cycle Q Clear(g_c), s	41.0	0.0	8.4	41.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Prop In Lane	0.90		1.00	0.31		1.00	1.00		0.03	1.00		0.45
Lane Grp Cap(c), veh/h	60	0	562	114	0	572	201	1768	965	35	1452	727
V/C Ratio(X)	3.32	0.00	0.29	0.28	0.00	0.05	0.84	0.45	0.45	0.74	0.41	0.41
Avail Cap(c_a), veh/h	60	0	562	114	0	572	439	1768	965	125	1452	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	26.2	29.8	0.0	23.9	49.7	17.5	17.5	55.7	22.9	23.0
Incr Delay (d2), s/veh	1083.5	0.0	0.3	1.3	0.0	0.0	8.9	0.8	1.5	25.5	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	0.0	3.7	0.7	0.0	0.6	5.7	8.1	9.1	1.1	6.7	7.0
LnGrp Delay(d), s/veh	1140.6	0.0	26.4	31.1	0.0	23.9	58.6	18.3	19.0	81.2	23.8	24.7
LnGrp LOS	F		C	C		C	E	B	B	F	C	C
Approach Vol, veh/h		360			59			1411			920	
Approach Delay, s/veh		642.3			27.8			23.3			25.7	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	63.0		45.0	16.8	52.4		45.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	59.0		41.0	28.0	39.0		41.0
Max Q Clear Time (g_c+I1), s	3.6	19.0		43.0	12.5	16.0		43.0
Green Ext Time (p_c), s	0.0	10.0		0.0	0.4	5.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		105.2
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Future Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.90	0.94		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	20	47	82	118	90	55	114	983	84	56	857	32
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	296	227	235	296	229	507	2464	1056	434	2391	89
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.69	0.69	0.03	0.68	0.68
Sat Flow, veh/h	1181	1881	1443	1191	1881	1453	1792	3574	1533	1792	3507	131
Grp Volume(v), veh/h	20	47	82	118	90	55	114	983	84	56	437	452
Grp Sat Flow(s),veh/h/ln	1181	1881	1443	1191	1881	1453	1792	1787	1533	1792	1787	1851
Q Serve(g_s), s	1.5	2.1	5.0	9.4	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Cycle Q Clear(g_c), s	5.7	2.1	5.0	11.5	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	209	296	227	235	296	229	507	2464	1056	434	1219	1262
V/C Ratio(X)	0.10	0.16	0.36	0.50	0.30	0.24	0.22	0.40	0.08	0.13	0.36	0.36
Avail Cap(c_a), veh/h	394	591	454	422	591	457	709	2464	1056	540	1219	1262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	35.9	37.1	40.9	36.8	36.4	4.7	6.6	5.0	4.8	6.6	6.6
Incr Delay (d2), s/veh	0.2	0.2	1.0	1.7	0.6	0.5	0.2	0.5	0.1	0.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	2.0	3.2	2.2	1.4	0.9	5.8	0.8	0.5	5.3	5.4
LnGrp Delay(d), s/veh	39.5	36.2	38.1	42.6	37.4	36.9	5.0	7.1	5.2	5.0	7.4	7.4
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		149			263			1181			945	
Approach Delay, s/veh		37.7			39.6			6.7			7.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	72.0		19.5	7.9	71.3		19.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	68.0		31.0	15.0	62.0		31.0
Max Q Clear Time (g_c+I1), s	2.9	13.6		7.7	3.9	12.1		13.5
Green Ext Time (p_c), s	0.0	9.1		0.6	0.2	7.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	197	1293	408	31	502	55	115	1077	22	142	1075	115
Future Volume (veh/h)	197	1293	408	31	502	55	115	1077	22	142	1075	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	205	1347	425	32	523	57	120	1122	23	148	1120	120
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	349	1489	737	79	972	106	204	1431	29	239	1330	142
Arrive On Green	0.08	0.42	0.42	0.31	0.31	0.31	0.06	0.41	0.41	0.07	0.42	0.42
Sat Flow, veh/h	1757	3505	1529	265	3179	345	1757	3511	72	1757	3186	341
Grp Volume(v), veh/h	205	1347	425	32	288	292	120	560	585	148	615	625
Grp Sat Flow(s),veh/h/ln	1757	1752	1529	265	1752	1771	1757	1752	1830	1757	1752	1775
Q Serve(g_s), s	9.2	42.3	23.5	7.7	16.0	16.2	4.6	32.7	32.8	5.7	37.1	37.3
Cycle Q Clear(g_c), s	9.2	42.3	23.5	36.0	16.0	16.2	4.6	32.7	32.8	5.7	37.1	37.3
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.04	1.00		0.19
Lane Grp Cap(c), veh/h	349	1489	737	79	536	542	204	715	746	239	732	741
V/C Ratio(X)	0.59	0.90	0.58	0.41	0.54	0.54	0.59	0.78	0.78	0.62	0.84	0.84
Avail Cap(c_a), veh/h	349	1489	737	79	536	542	255	715	746	273	732	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	31.6	22.0	56.8	33.9	34.0	25.7	30.3	30.3	24.4	30.8	30.8
Incr Delay (d2), s/veh	2.6	8.2	1.1	3.4	1.1	1.1	2.7	8.4	8.1	3.4	11.2	11.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	22.1	10.2	1.1	7.9	8.0	2.4	17.5	18.2	2.9	20.2	20.5
LnGrp Delay(d), s/veh	27.8	39.8	23.1	60.1	35.0	35.1	28.4	38.7	38.4	27.8	42.0	42.1
LnGrp LOS	C	D	C	E	C	D	C	D	D	C	D	D
Approach Vol, veh/h		1977			612			1265			1388	
Approach Delay, s/veh		35.0			36.3			37.6			40.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	52.0		54.0	10.6	53.1	14.0	40.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	48.0		50.0	10.0	48.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	7.7	34.8		44.3	6.6	39.3	11.2	38.0
Green Ext Time (p_c), s	0.1	6.1		4.4	0.1	5.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	185	773	496	34	360	43	208	900	23	96	1133	105
Future Volume (veh/h)	185	773	496	34	360	43	208	900	23	96	1133	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	193	805	517	35	375	45	217	938	0	100	1180	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	221	996	439	44	642	283	246	1689	756	125	1449	648
Arrive On Green	0.13	0.28	0.28	0.03	0.18	0.18	0.14	0.48	0.00	0.07	0.41	0.00
Sat Flow, veh/h	1757	3505	1543	1757	3505	1542	1757	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	193	805	517	35	375	45	217	938	0	100	1180	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1543	1757	1752	1542	1757	1752	1568	1757	1752	1568
Q Serve(g_s), s	12.5	24.8	33.0	2.3	11.4	2.9	14.1	22.0	0.0	6.5	34.6	0.0
Cycle Q Clear(g_c), s	12.5	24.8	33.0	2.3	11.4	2.9	14.1	22.0	0.0	6.5	34.6	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	996	439	44	642	283	246	1689	756	125	1449	648
V/C Ratio(X)	0.87	0.81	1.18	0.79	0.58	0.16	0.88	0.56	0.00	0.80	0.81	0.00
Avail Cap(c_a), veh/h	257	996	439	61	642	283	287	1689	756	197	1449	648
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	49.8	38.6	41.6	56.3	43.4	39.9	49.0	21.3	0.0	53.1	30.1	0.0
Incr Delay (d2), s/veh	24.0	5.0	101.9	38.0	1.4	0.3	23.7	1.3	0.0	11.8	5.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	12.7	26.4	1.6	5.6	1.2	8.4	10.9	0.0	3.6	17.8	0.0
LnGrp Delay(d), s/veh	73.8	43.7	143.4	94.4	44.7	40.2	72.7	22.6	0.0	65.0	35.3	0.0
LnGrp LOS	E	D	F	F	D	D	E	C		E	D	
Approach Vol, veh/h		1515			455			1155			1280	
Approach Delay, s/veh		81.6			48.1			32.0			37.6	
Approach LOS		F			D			C			D	

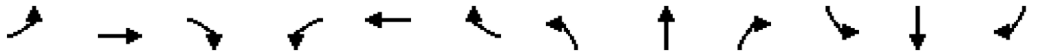
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	60.0	6.9	37.0	20.2	52.0	18.6	25.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	4.0	33.0	19.0	48.0	17.0	20.0
Max Q Clear Time (g_c+I1), s	8.5	24.0	4.3	35.0	16.1	36.6	14.5	13.4
Green Ext Time (p_c), s	0.1	7.1	0.0	0.0	0.2	6.0	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	103	609	130	115	746	35	122	589	141	62	878	176
Future Volume (veh/h)	103	609	130	115	746	35	122	589	141	62	878	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1759
Adj Flow Rate, veh/h	105	621	0	117	761	36	124	601	144	63	896	180
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	131	882	394	144	909	394	151	1733	407	80	1356	592
Arrive On Green	0.08	0.26	0.00	0.09	0.27	0.27	0.09	0.45	0.45	0.05	0.41	0.41
Sat Flow, veh/h	1675	3343	1495	1675	3343	1450	1675	3868	908	1675	3343	1458
Grp Volume(v), veh/h	105	621	0	117	761	36	124	495	250	63	896	180
Grp Sat Flow(s),veh/h/ln	1675	1671	1495	1675	1671	1450	1675	1601	1574	1675	1671	1458
Q Serve(g_s), s	6.4	17.4	0.0	7.1	22.2	1.9	7.5	10.5	10.8	3.9	22.5	8.7
Cycle Q Clear(g_c), s	6.4	17.4	0.0	7.1	22.2	1.9	7.5	10.5	10.8	3.9	22.5	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	131	882	394	144	909	394	151	1434	705	80	1356	592
V/C Ratio(X)	0.80	0.70	0.00	0.81	0.84	0.09	0.82	0.35	0.35	0.79	0.66	0.30
Avail Cap(c_a), veh/h	227	1097	491	259	1162	504	194	1434	705	162	1356	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	34.5	0.0	46.5	35.5	28.1	46.3	18.7	18.8	48.8	25.0	20.9
Incr Delay (d2), s/veh	10.9	1.5	0.0	10.3	4.4	0.1	19.3	0.7	1.4	15.8	2.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	8.2	0.0	3.7	10.8	0.8	4.3	4.7	4.9	2.1	10.8	3.7
LnGrp Delay(d), s/veh	57.9	36.0	0.0	56.8	39.9	28.2	65.6	19.3	20.1	64.6	27.5	22.2
LnGrp LOS	E	D		E	D	C	E	B	C	E	C	C
Approach Vol, veh/h		726			914			869			1139	
Approach Delay, s/veh		39.2			41.6			26.2			28.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	50.4	12.9	31.3	13.3	46.0	12.1	32.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	44.0	16.0	34.0	12.0	42.0	14.0	36.0
Max Q Clear Time (g_c+I1), s	5.9	12.8	9.1	19.4	9.5	24.5	8.4	24.2
Green Ext Time (p_c), s	0.0	5.1	0.1	3.4	0.1	6.3	0.1	3.9

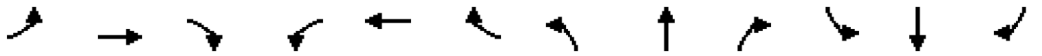
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	726	88	104	597	38	98	545	47	52	463	17
Future Volume (veh/h)	52	726	88	104	597	38	98	545	47	52	463	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	57	789	96	113	649	41	107	592	51	57	503	18
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Cap, veh/h	72	1033	453	144	1177	524	136	1697	145	72	1611	57
Arrive On Green	0.04	0.31	0.31	0.08	0.35	0.35	0.08	0.37	0.37	0.04	0.34	0.34
Sat Flow, veh/h	1691	3374	1480	1691	3374	1502	1691	4541	387	1691	4802	171
Grp Volume(v), veh/h	57	789	96	113	649	41	107	420	223	57	338	183
Grp Sat Flow(s),veh/h/ln	1691	1687	1480	1691	1687	1502	1691	1616	1696	1691	1616	1741
Q Serve(g_s), s	2.8	17.6	4.0	5.4	12.9	1.5	5.2	7.8	7.9	2.8	6.4	6.5
Cycle Q Clear(g_c), s	2.8	17.6	4.0	5.4	12.9	1.5	5.2	7.8	7.9	2.8	6.4	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.10
Lane Grp Cap(c), veh/h	72	1033	453	144	1177	524	136	1207	634	72	1084	584
V/C Ratio(X)	0.79	0.76	0.21	0.79	0.55	0.08	0.79	0.35	0.35	0.79	0.31	0.31
Avail Cap(c_a), veh/h	224	1789	785	367	2074	923	346	1207	634	224	1084	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	26.1	21.4	37.2	21.8	18.1	37.4	18.7	18.7	39.4	20.5	20.5
Incr Delay (d2), s/veh	17.6	1.2	0.2	9.1	0.4	0.1	9.5	0.8	1.5	17.6	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.3	1.6	2.9	6.0	0.6	2.8	3.6	3.9	1.6	3.0	3.3
LnGrp Delay(d), s/veh	57.0	27.3	21.6	46.3	22.2	18.2	46.9	19.5	20.3	57.0	21.2	21.9
LnGrp LOS	E	C	C	D	C	B	D	B	C	E	C	C
Approach Vol, veh/h		942			803			750			578	
Approach Delay, s/veh		28.5			25.4			23.6			25.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	35.0	11.0	29.4	10.7	31.8	7.5	32.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	31.0	18.0	44.0	17.0	25.0	11.0	51.0
Max Q Clear Time (g_c+I1), s	4.8	9.9	7.4	19.6	7.2	8.5	4.8	14.9
Green Ext Time (p_c), s	0.0	3.9	0.2	5.8	0.2	2.8	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↰	↑↑↑					↰↰		↱
Traffic Volume (vph)	0	1072	0	307	717	0	0	0	0	213	0	17
Future Volume (vph)	0	1072	0	307	717	0	0	0	0	213	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3574		1787	5136					3467		1599
Flt Permitted		1.00		0.13	1.00					0.95		1.00
Satd. Flow (perm)		3574		252	5136					3467		1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	1178	0	337	788	0	0	0	0	234	0	19
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	11
Lane Group Flow (vph)	0	1178	0	337	788	0	0	0	0	234	0	8
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		61.0		61.0	61.0					51.0		51.0
Effective Green, g (s)		61.0		61.0	61.0					51.0		51.0
Actuated g/C Ratio		0.51		0.51	0.51					0.43		0.43
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1816		128	2610					1473		679
v/s Ratio Prot		0.33			0.15							
v/s Ratio Perm				c1.34						c0.07		0.01
v/c Ratio		0.65		2.63	0.30					0.16		0.01
Uniform Delay, d1		21.6		29.5	17.1					21.3		19.9
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.8		756.8	0.1					0.2		0.0
Delay (s)		22.4		786.3	17.2					21.5		20.0
Level of Service		C		F	B					C		B
Approach Delay (s/veh)		22.4			247.6			0.0			21.4	
Approach LOS		C			F			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	121.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.51		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	131	927	233	50	553	498	285	537	262	228	323	41
Future Volume (veh/h)	131	927	233	50	553	498	285	537	262	228	323	41
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	138	976	245	53	582	524	300	565	0	240	340	43
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	197	1021	255	65	1226	705	383	1076	481	275	1230	539
Arrive On Green	0.06	0.36	0.36	0.04	0.34	0.34	0.11	0.30	0.00	0.15	0.34	0.34
Sat Flow, veh/h	3476	2811	703	1792	3574	1541	3476	3574	1599	1792	3574	1565
Grp Volume(v), veh/h	138	619	602	53	582	524	300	565	0	240	340	43
Grp Sat Flow(s),veh/h/ln	1738	1787	1727	1792	1787	1541	1738	1787	1599	1792	1787	1565
Q Serve(g_s), s	4.3	37.0	37.3	3.2	14.0	30.9	9.2	14.4	0.0	14.4	7.6	2.0
Cycle Q Clear(g_c), s	4.3	37.0	37.3	3.2	14.0	30.9	9.2	14.4	0.0	14.4	7.6	2.0
Prop In Lane	1.00		0.41	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	649	627	65	1226	705	383	1076	481	275	1230	539
V/C Ratio(X)	0.70	0.95	0.96	0.81	0.47	0.74	0.78	0.53	0.00	0.87	0.28	0.08
Avail Cap(c_a), veh/h	222	652	630	65	1226	705	856	1076	481	441	1230	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	34.0	34.1	52.4	28.3	24.8	47.5	31.8	0.0	45.4	26.1	24.2
Incr Delay (d2), s/veh	8.2	24.4	26.0	51.7	0.3	4.3	3.5	1.8	0.0	10.8	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	22.6	22.2	2.5	6.9	13.9	4.6	7.3	0.0	8.0	3.8	0.9
LnGrp Delay(d), s/veh	59.0	58.4	60.1	104.1	28.5	29.1	51.0	33.6	0.0	56.2	26.6	24.5
LnGrp LOS	E	E	E	F	C	C	D	C		E	C	C
Approach Vol, veh/h		1359			1159			865			623	
Approach Delay, s/veh		59.2			32.3			39.7			37.9	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	41.7	8.0	43.8	20.8	37.0	10.2	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	33.0	4.0	40.0	27.0	33.0	7.0	37.0
Max Q Clear Time (g_c+I1), s	11.2	9.6	5.2	39.3	16.4	16.4	6.3	32.9
Green Ext Time (p_c), s	0.9	2.1	0.0	0.5	0.5	3.1	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	949	44	41	817	141	35	1193	62	275	1054	257
Future Volume (veh/h)	205	949	44	41	817	141	35	1193	62	275	1054	257
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	214	989	46	43	851	147	36	1243	65	286	1098	268
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	168	1452	67	55	996	171	46	1489	661	228	1853	963
Arrive On Green	0.09	0.29	0.29	0.03	0.23	0.23	0.03	0.42	0.42	0.13	0.52	0.52
Sat Flow, veh/h	1792	5025	233	1792	4399	755	1792	3574	1587	1792	3574	1570
Grp Volume(v), veh/h	214	673	362	43	661	337	36	1243	65	286	1098	268
Grp Sat Flow(s),veh/h/ln	1792	1712	1835	1792	1712	1730	1792	1787	1587	1792	1787	1570
Q Serve(g_s), s	11.0	20.5	20.5	2.8	21.8	22.0	2.3	36.6	2.9	15.0	25.1	9.4
Cycle Q Clear(g_c), s	11.0	20.5	20.5	2.8	21.8	22.0	2.3	36.6	2.9	15.0	25.1	9.4
Prop In Lane	1.00		0.13	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	989	530	55	775	392	46	1489	661	228	1853	963
V/C Ratio(X)	1.28	0.68	0.68	0.78	0.85	0.86	0.78	0.83	0.10	1.25	0.59	0.28
Avail Cap(c_a), veh/h	168	989	530	137	844	427	213	1489	661	228	1853	963
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	37.0	37.0	56.6	43.6	43.7	57.0	30.7	20.9	51.3	19.7	10.7
Incr Delay (d2), s/veh	162.7	1.9	3.6	20.2	7.9	15.2	24.1	5.7	0.3	144.1	1.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	9.9	10.9	1.7	11.1	12.1	1.5	19.1	1.3	16.5	12.7	4.3
LnGrp Delay(d), s/veh	216.0	38.9	40.6	76.8	51.6	58.9	81.1	36.4	21.2	195.4	21.1	11.4
LnGrp LOS	F	D	D	E	D	E	F	D	C	F	C	B
Approach Vol, veh/h		1249			1041			1344			1652	
Approach Delay, s/veh		69.8			55.0			36.8			49.7	
Approach LOS		E			D			D			D	

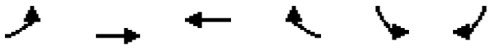
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	53.0	7.6	38.0	7.0	65.0	15.0	30.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	49.0	9.0	31.0	14.0	50.0	11.0	29.0
Max Q Clear Time (g_c+I1), s	17.0	38.6	4.8	22.5	4.3	27.1	13.0	24.0
Green Ext Time (p_c), s	0.0	6.0	0.0	4.0	0.0	9.1	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	1187	195	108	600	120	73	564	90	126	763	104
Future Volume (veh/h)	234	1187	195	108	600	120	73	564	90	126	763	104
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.99		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	252	1276	210	116	645	129	78	606	97	135	820	112
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	1553	256	146	1328	262	225	1623	659	323	1415	193
Arrive On Green	0.12	0.35	0.35	0.08	0.31	0.31	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1792	4423	728	1792	4292	845	604	3574	1451	743	3117	426
Grp Volume(v), veh/h	252	988	498	116	512	262	78	606	97	135	470	462
Grp Sat Flow(s),veh/h/ln	1792	1712	1728	1792	1712	1713	604	1787	1451	743	1787	1755
Q Serve(g_s), s	13.0	27.8	27.8	6.7	12.8	13.2	11.6	11.8	4.1	15.4	20.6	20.6
Cycle Q Clear(g_c), s	13.0	27.8	27.8	6.7	12.8	13.2	32.2	11.8	4.1	27.2	20.6	20.6
Prop In Lane	1.00		0.42	1.00		0.49	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	220	1202	607	146	1060	530	225	1623	659	323	811	797
V/C Ratio(X)	1.14	0.82	0.82	0.80	0.48	0.49	0.35	0.37	0.15	0.42	0.58	0.58
Avail Cap(c_a), veh/h	220	1360	686	305	1522	762	225	1623	659	323	811	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	31.3	31.3	47.7	29.6	29.7	33.3	19.0	16.9	27.9	21.4	21.4
Incr Delay (d2), s/veh	104.9	3.8	7.1	9.5	0.3	0.7	4.2	0.7	0.5	4.0	3.0	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.8	13.8	14.5	3.7	6.1	6.3	2.2	6.0	1.7	3.5	10.9	10.7
LnGrp Delay(d), s/veh	151.2	35.0	38.4	57.2	30.0	30.5	37.5	19.6	17.4	31.9	24.4	24.4
LnGrp LOS	F	D	D	E	C	C	D	B	B	C	C	C
Approach Vol, veh/h		1738			890			781			1067	
Approach Delay, s/veh		52.8			33.7			21.1			25.4	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	12.6	41.1		52.0	17.0	36.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	18.0	42.0		48.0	13.0	47.0
Max Q Clear Time (g_c+I1), s		34.2	8.7	29.8		29.2	15.0	15.2
Green Ext Time (p_c), s		4.6	0.2	7.3		7.1	0.0	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	91	802	404	26	65	47
Future Volume (veh/h)	91	802	404	26	65	47
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	96	844	425	27	68	49
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	372	1251	1251	547	822	733
Arrive On Green	0.37	0.37	0.37	0.37	0.49	0.49
Sat Flow, veh/h	883	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	96	844	425	27	68	49
Grp Sat Flow(s),veh/h/ln	883	1671	1671	1461	1675	1495
Q Serve(g_s), s	5.2	12.5	5.4	0.7	1.3	1.0
Cycle Q Clear(g_c), s	10.6	12.5	5.4	0.7	1.3	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	372	1251	1251	547	822	733
V/C Ratio(X)	0.26	0.67	0.34	0.05	0.08	0.07
Avail Cap(c_a), veh/h	1281	4692	4692	2051	822	733
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.0	15.5	13.3	11.8	8.0	7.9
Incr Delay (d2), s/veh	0.4	0.6	0.2	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	5.9	2.5	0.3	0.6	0.5
LnGrp Delay(d), s/veh	17.4	16.1	13.4	11.8	8.2	8.1
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h		940	452		117	
Approach Delay, s/veh		16.3	13.3		8.2	
Approach LOS		B	B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				26.1		33.0		26.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s				14.5		3.3		7.4
Green Ext Time (p_c), s				7.6		0.3		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	668	130	136	308	146	34	888	227	303	1236	83
Future Volume (veh/h)	130	668	130	136	308	146	34	888	227	303	1236	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	137	703	137	143	324	154	36	935	0	319	1301	87
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	164	802	353	198	445	206	45	1279	572	351	1888	788
Arrive On Green	0.09	0.23	0.23	0.06	0.20	0.20	0.03	0.37	0.00	0.20	0.54	0.54
Sat Flow, veh/h	1740	3471	1527	3375	2277	1055	1740	3471	1553	1740	3471	1449
Grp Volume(v), veh/h	137	703	137	143	245	233	36	935	0	319	1301	87
Grp Sat Flow(s),veh/h/ln	1740	1736	1527	1688	1736	1596	1740	1736	1553	1740	1736	1449
Q Serve(g_s), s	8.8	22.3	8.6	4.7	15.1	15.7	2.3	26.5	0.0	20.4	31.2	3.3
Cycle Q Clear(g_c), s	8.8	22.3	8.6	4.7	15.1	15.7	2.3	26.5	0.0	20.4	31.2	3.3
Prop In Lane	1.00		1.00	1.00		0.66	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	802	353	198	339	312	45	1279	572	351	1888	788
V/C Ratio(X)	0.84	0.88	0.39	0.72	0.72	0.75	0.80	0.73	0.00	0.91	0.69	0.11
Avail Cap(c_a), veh/h	198	883	389	207	350	322	92	1279	572	443	1888	788
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	42.2	37.0	52.7	43.0	43.2	55.2	31.1	0.0	44.5	19.0	12.6
Incr Delay (d2), s/veh	22.1	9.3	0.7	11.2	6.9	8.9	26.2	3.7	0.0	19.7	2.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	11.7	3.7	2.5	7.9	7.7	1.5	13.4	0.0	11.7	15.4	1.4
LnGrp Delay(d), s/veh	72.8	51.5	37.7	63.9	49.9	52.1	81.5	34.8	0.0	64.2	21.0	12.9
LnGrp LOS	E	D	D	E	D	D	F	C		E	C	B
Approach Vol, veh/h		977			621			971			1707	
Approach Delay, s/veh		52.6			53.9			36.6			28.7	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	46.0	10.7	30.3	7.0	66.0	14.7	26.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	39.0	7.0	29.0	6.0	62.0	13.0	23.0
Max Q Clear Time (g_c+I1), s	22.4	28.5	6.7	24.3	4.3	33.2	10.8	17.7
Green Ext Time (p_c), s	0.5	4.4	0.0	2.1	0.0	11.4	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.6
HCM 2010 LOS	D

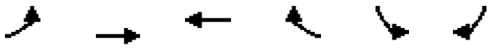
Intersection	
Int Delay, s/veh	0.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	22	1244	644	10	28	18
Future Vol, veh/h	22	1244	644	10	28	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	23	1309	678	11	29	19

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	689	0	-	0	1379	339
Stage 1	-	-	-	-	678	-
Stage 2	-	-	-	-	701	-
Critical Hdwy	4.26	-	-	-	6.96	7.06
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	2.28	-	-	-	3.58	3.38
Pot Cap-1 Maneuver	862	-	-	-	128	640
Stage 1	-	-	-	-	450	-
Stage 2	-	-	-	-	438	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	862	-	-	-	125	640
Mov Cap-2 Maneuver	-	-	-	-	125	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	438	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.2	0	30.1
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	862	-	-	-	125	640
HCM Lane V/C Ratio	0.027	-	-	-	0.236	0.03
HCM Control Delay (s/veh)	9.3	-	-	-	42.5	10.8
HCM Lane LOS	A	-	-	-	E	B
HCM 95th %tile Q(veh)	0.1	-	-	-	0.9	0.1



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	47	1227	567	131	948	29
Future Volume (veh/h)	47	1227	567	131	948	29
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	50	1305	603	139	1009	31
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	62	1703	1407	616	649	579
Arrive On Green	0.04	0.51	0.42	0.42	0.39	0.39
Sat Flow, veh/h	1675	3431	3431	1463	1675	1495
Grp Volume(v), veh/h	50	1305	603	139	1009	31
Grp Sat Flow(s),veh/h/ln	1675	1671	1671	1463	1675	1495
Q Serve(g_s), s	2.3	24.3	9.9	4.7	30.0	1.0
Cycle Q Clear(g_c), s	2.3	24.3	9.9	4.7	30.0	1.0
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	62	1703	1407	616	649	579
V/C Ratio(X)	0.81	0.77	0.43	0.23	1.56	0.05
Avail Cap(c_a), veh/h	281	3538	2804	1227	649	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	15.3	15.8	14.4	23.7	14.9
Incr Delay (d2), s/veh	21.3	0.7	0.2	0.2	257.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	11.2	4.6	1.9	60.1	1.1
LnGrp Delay(d), s/veh	58.3	16.0	16.1	14.5	281.2	15.0
LnGrp LOS	E	B	B	B	F	B
Approach Vol, veh/h		1355	742		1040	
Approach Delay, s/veh		17.6	15.8		273.2	
Approach LOS		B	B		F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				43.5		34.0	6.9	36.6
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				82.0		30.0	13.0	65.0
Max Q Clear Time (g_c+I1), s				26.3		32.0	4.3	11.9
Green Ext Time (p_c), s				13.1		0.0	0.0	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	101.9
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	2044	3	0	567	142	0	0	32	0	0	14
Future Vol, veh/h	0	2044	3	0	567	142	0	0	32	0	0	14
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	2086	3	0	579	145	0	0	33	0	0	14

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	1048	-	-	290
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.02	-	-	3.42
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	179	0	0	678
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	179	-	-	678
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	29.5	10.4
HCM LOS			D	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	179	-	-	-	-	678
HCM Lane V/C Ratio	0.182	-	-	-	-	0.021
HCM Control Delay (s/veh)	29.5	-	-	-	-	10.4
HCM Lane LOS	D	-	-	-	-	B
HCM 95th %tile Q(veh)	0.6	-	-	-	-	0.1



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	549	188	76	1246
Future Volume (vph)	549	188	76	1246
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.96		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4637		1687	4848
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4637		1687	4848
Peak-hour factor, PHF	0.98	0.98	0.98	0.98
Adj. Flow (vph)	560	192	78	1271
RTOR Reduction (vph)	49	0	0	0
Lane Group Flow (vph)	703	0	78	1271
Confl. Peds. (#/hr)		4		
Confl. Bikes (#/hr)				
Heavy Vehicles (%)	7%	7%	7%	7%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	43.0		8.8	28.8
Effective Green, g (s)	43.0		8.8	28.8
Actuated g/C Ratio	0.36		0.07	0.24
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	1650		122	1155
v/s Ratio Prot	0.15		0.05	c0.26
v/s Ratio Perm				
v/c Ratio	0.43		0.64	1.10
Uniform Delay, d1	29.5		54.5	46.0
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	0.8		10.5	58.4
Delay (s)	30.3		65.0	104.4
Level of Service	C		E	F
Approach Delay (s/veh)	147.1			102.1
Approach LOS	F			F

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	355	779	77	126	760	70	64	334	341	85	641	98
Future Volume (veh/h)	355	779	77	126	760	70	64	334	341	85	641	98
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	362	795	79	129	776	0	65	341	348	87	654	100
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	445	1404	139	159	1390	622	83	1141	559	110	1218	510
Arrive On Green	0.13	0.45	0.45	0.09	0.41	0.00	0.05	0.23	0.23	0.06	0.25	0.25
Sat Flow, veh/h	3312	3123	310	1707	3406	1524	1707	4893	1518	1707	4893	1480
Grp Volume(v), veh/h	362	433	441	129	776	0	65	341	348	87	654	100
Grp Sat Flow(s),veh/h/ln	1656	1703	1730	1707	1703	1524	1707	1631	1518	1707	1631	1480
Q Serve(g_s), s	10.6	18.8	18.8	7.4	17.5	0.0	3.8	5.8	18.8	5.0	11.6	4.8
Cycle Q Clear(g_c), s	10.6	18.8	18.8	7.4	17.5	0.0	3.8	5.8	18.8	5.0	11.6	4.8
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	445	766	778	159	1390	622	83	1141	559	110	1218	510
V/C Ratio(X)	0.81	0.57	0.57	0.81	0.56	0.00	0.78	0.30	0.62	0.79	0.54	0.20
Avail Cap(c_a), veh/h	695	766	778	273	1390	622	256	1515	675	205	1369	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	20.3	20.3	44.5	22.7	0.0	47.1	31.6	26.0	46.1	32.6	23.3
Incr Delay (d2), s/veh	4.2	3.0	3.0	9.6	1.6	0.0	14.5	0.1	1.3	11.8	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	9.4	9.6	3.9	8.5	0.0	2.1	2.6	8.1	2.7	5.2	2.0
LnGrp Delay(d), s/veh	46.3	23.4	23.3	54.1	24.3	0.0	61.6	31.8	27.2	57.9	33.0	23.4
LnGrp LOS	D	C	C	D	C		E	C	C	E	C	C
Approach Vol, veh/h		1236			905			754			841	
Approach Delay, s/veh		30.1			28.6			32.3			34.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	49.0	10.5	27.3	17.5	44.8	8.9	28.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	45.0	12.0	31.0	21.0	40.0	15.0	28.0
Max Q Clear Time (g_c+I1), s	9.4	20.8	7.0	20.8	12.6	19.5	5.8	13.6
Green Ext Time (p_c), s	0.1	5.5	0.1	2.5	0.8	5.1	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	196	817	71	40	251	101	197	955	139	259	1116	219
Future Volume (veh/h)	196	817	71	40	251	101	197	955	139	259	1116	219
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	206	860	75	42	264	0	207	1005	146	273	1175	231
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	227	707	310	54	361	162	197	1570	682	303	1782	782
Arrive On Green	0.13	0.20	0.20	0.03	0.10	0.00	0.11	0.45	0.45	0.17	0.51	0.51
Sat Flow, veh/h	1740	3471	1521	1740	3471	1553	1740	3471	1507	1740	3471	1523
Grp Volume(v), veh/h	206	860	75	42	264	0	207	1005	146	273	1175	231
Grp Sat Flow(s),veh/h/ln	1740	1736	1521	1740	1736	1553	1740	1736	1507	1740	1736	1523
Q Serve(g_s), s	13.4	23.4	4.7	2.8	8.5	0.0	13.0	25.7	6.8	17.7	28.6	10.0
Cycle Q Clear(g_c), s	13.4	23.4	4.7	2.8	8.5	0.0	13.0	25.7	6.8	17.7	28.6	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	707	310	54	361	162	197	1570	682	303	1782	782
V/C Ratio(X)	0.91	1.22	0.24	0.78	0.73	0.00	1.05	0.64	0.21	0.90	0.66	0.30
Avail Cap(c_a), veh/h	227	707	310	242	513	230	197	1570	682	363	1782	782
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	45.8	38.3	55.3	49.9	0.0	51.0	24.3	19.1	46.5	20.6	16.1
Incr Delay (d2), s/veh	35.7	110.0	0.4	21.5	3.2	0.0	78.6	2.0	0.7	22.3	1.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	22.0	2.0	1.7	4.2	0.0	10.5	12.7	2.9	10.4	14.2	4.4
LnGrp Delay(d), s/veh	85.0	155.8	38.7	76.8	53.1	0.0	129.5	26.3	19.8	68.8	22.5	17.0
LnGrp LOS	F	F	D	E	D		F	C	B	E	C	B
Approach Vol, veh/h		1141			306			1358			1679	
Approach Delay, s/veh		135.3			56.4			41.3			29.3	
Approach LOS		F			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	56.0	7.5	27.4	17.0	63.0	19.0	16.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	48.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	19.7	27.7	4.8	25.4	15.0	30.6	15.4	10.5
Green Ext Time (p_c), s	0.3	7.4	0.0	0.0	0.0	10.6	0.0	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	61.8
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	108.2

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	846	331	333	0	39	84
Future Vol, veh/h	846	331	333	0	39	84
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	920	360	362	0	42	91

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	362	0	-	0	2562	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	2200	-
Critical Hdwy	4.15	-	-	-	6.45	-
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	-
Pot Cap-1 Maneuver	1180	-	-	-	~ 28	0
Stage 1	-	-	-	-	698	0
Stage 2	-	-	-	-	89	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1180	-	-	-	~ 6	-
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	154	-
Stage 2	-	-	-	-	89	-

Approach	EB	WB	SW
HCM Control Delay, s/v	12.8	0	$ 3911.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1180	-	-	-	6	-
HCM Lane V/C Ratio	0.779	-	-	-	7.065	-
HCM Control Delay (s/veh)	17.9	-	-	-	$ 3911.3	0
HCM Lane LOS	C	-	-	-	F	A
HCM 95th %tile Q(veh)	8.4	-	-	-	6.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	62	421	84	37	141	161	50	976	45	266	1124	49
Future Volume (veh/h)	62	421	84	37	141	161	50	976	45	266	1124	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	64	434	87	38	145	166	52	1006	0	274	1159	51
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	279	468	94	135	235	269	217	1413	632	343	1692	736
Arrive On Green	0.04	0.32	0.32	0.02	0.31	0.31	0.03	0.41	0.00	0.11	0.49	0.49
Sat Flow, veh/h	1740	1473	295	1740	770	881	1740	3471	1553	1740	3471	1510
Grp Volume(v), veh/h	64	0	521	38	0	311	52	1006	0	274	1159	51
Grp Sat Flow(s),veh/h/ln	1740	0	1768	1740	0	1651	1740	1736	1553	1740	1736	1510
Q Serve(g_s), s	2.8	0.0	32.2	1.7	0.0	18.2	2.0	27.3	0.0	9.8	29.0	2.0
Cycle Q Clear(g_c), s	2.8	0.0	32.2	1.7	0.0	18.2	2.0	27.3	0.0	9.8	29.0	2.0
Prop In Lane	1.00		0.17	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	279	0	562	135	0	504	217	1413	632	343	1692	736
V/C Ratio(X)	0.23	0.00	0.93	0.28	0.00	0.62	0.24	0.71	0.00	0.80	0.69	0.07
Avail Cap(c_a), veh/h	291	0	627	154	0	570	245	1413	632	432	1692	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	0.0	37.2	30.3	0.0	33.6	20.5	27.9	0.0	21.7	22.3	15.4
Incr Delay (d2), s/veh	0.4	0.0	19.0	1.1	0.0	1.6	0.6	3.1	0.0	8.1	2.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	18.6	0.8	0.0	8.5	1.0	13.6	0.0	5.4	14.4	0.9
LnGrp Delay(d), s/veh	27.3	0.0	56.3	31.4	0.0	35.2	21.1	31.0	0.0	29.8	24.5	15.5
LnGrp LOS	C		E	C		D	C	C		C	C	B
Approach Vol, veh/h		585			349			1058			1484	
Approach Delay, s/veh		53.1			34.8			30.5			25.2	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	50.0	6.8	39.9	7.2	59.0	8.2	38.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	42.0	4.0	40.0	5.0	55.0	5.0	39.0
Max Q Clear Time (g_c+I1), s	11.8	29.3	3.7	34.2	4.0	31.0	4.8	20.2
Green Ext Time (p_c), s	0.4	5.6	0.0	1.7	0.0	9.3	0.0	1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	733	44	34	207	28	116
Future Vol, veh/h	733	44	34	207	28	116
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	780	47	36	220	30	123

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	827	0	1072	781
Stage 1	-	-	-	-	780	-
Stage 2	-	-	-	-	292	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	779	-	238	385
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	744	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	779	-	225	385
Mov Cap-2 Maneuver	-	-	-	-	225	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	705	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.4	19.6
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	225	385	-	-	779	-
HCM Lane V/C Ratio	0.132	0.321	-	-	0.046	-
HCM Control Delay (s/veh)	23.4	18.7	-	-	9.8	0
HCM Lane LOS	C	C	-	-	A	A
HCM 95th %tile Q(veh)	0.4	1.4	-	-	0.1	-

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	2	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	1571	-	1000	1061
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	1002	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1571	-	1000	1061
Mov Cap-2 Maneuver	-	-	-	-	1000	-
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	1002	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1571	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	--	2147483648	2147483648	2147483648	2147483648	2147483648
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	-69725	1482	1660	1743	1660	1482
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1743	1482	1660	1743	1660	1482
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	2495546772	2121403079	2151249554	2376711372	2128147712	
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2320858559	2732249068	4692034208	5358549537	2512648256	8024320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0			0	0	
Approach Delay, s/veh	0.0			0.0	0.0	
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		0.0		0.0				0.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		19.0		93.0				93.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	0

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	2	0	3	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	1	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	1582	-	1004	1065
Stage 1	-	-	-	-	1006	-
Stage 2	-	-	-	-	1007	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1581	-	1003	1064
Mov Cap-2 Maneuver	-	-	-	-	1003	-
Stage 1	-	-	-	-	1005	-
Stage 2	-	-	-	-	1007	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	-	-	-	-	1581	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	-	-	0	-
HCM Lane LOS	A	A	-	-	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	159	593	83	89	312	37	37	909	116	156	1096	68
Future Volume (veh/h)	159	593	83	89	312	37	37	909	116	156	1096	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	166	618	86	93	325	39	39	947	121	162	1142	71
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	307	782	107	200	633	74	49	1531	196	193	1915	119
Arrive On Green	0.10	0.18	0.18	0.06	0.14	0.14	0.03	0.50	0.50	0.11	0.58	0.58
Sat Flow, veh/h	1723	4361	597	1723	4474	524	1723	3061	391	1723	3282	204
Grp Volume(v), veh/h	166	464	240	93	237	127	39	532	536	162	598	615
Grp Sat Flow(s),veh/h/ln	1723	1647	1665	1723	1647	1705	1723	1719	1733	1723	1719	1767
Q Serve(g_s), s	8.5	14.5	14.9	4.9	7.2	7.5	2.4	24.2	24.2	9.9	24.0	24.0
Cycle Q Clear(g_c), s	8.5	14.5	14.9	4.9	7.2	7.5	2.4	24.2	24.2	9.9	24.0	24.0
Prop In Lane	1.00		0.36	1.00		0.31	1.00		0.23	1.00		0.12
Lane Grp Cap(c), veh/h	307	591	299	200	466	241	49	860	867	193	1003	1031
V/C Ratio(X)	0.54	0.79	0.80	0.46	0.51	0.53	0.80	0.62	0.62	0.84	0.60	0.60
Avail Cap(c_a), veh/h	377	732	370	256	580	300	112	860	867	303	1003	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.4	42.3	42.5	37.0	42.9	43.0	52.1	19.5	19.5	47.0	14.3	14.4
Incr Delay (d2), s/veh	1.5	4.6	9.9	1.7	0.9	1.8	24.8	3.3	3.3	11.4	2.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	6.9	7.7	2.4	3.3	3.6	1.5	12.2	12.3	5.3	12.0	12.4
LnGrp Delay(d), s/veh	34.8	46.9	52.4	38.6	43.7	44.8	76.9	22.9	22.8	58.4	17.0	16.9
LnGrp LOS	C	D	D	D	D	D	E	C	C	E	B	B
Approach Vol, veh/h		870			457			1107			1375	
Approach Delay, s/veh		46.1			43.0			24.8			21.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.1	58.0	10.5	23.4	7.1	67.0	14.6	19.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	51.0	10.0	24.0	7.0	63.0	15.0	19.0
Max Q Clear Time (g_c+I1), s	11.9	26.2	6.9	16.9	4.4	26.0	10.5	9.5
Green Ext Time (p_c), s	0.2	7.6	0.0	2.5	0.0	10.2	0.2	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	208	9	731	253	0	724
Future Volume (veh/h)	208	9	731	253	0	724
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	0	1827
Adj Flow Rate, veh/h	224	10	786	0	0	778
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	0	4
Cap, veh/h	314	145	2858	1423	0	2858
Arrive On Green	0.09	0.09	0.82	0.00	0.00	0.82
Sat Flow, veh/h	3375	1553	3563	1553	0	3654
Grp Volume(v), veh/h	224	10	786	0	0	778
Grp Sat Flow(s),veh/h/ln	1688	1553	1736	1553	0	1736
Q Serve(g_s), s	6.2	0.6	5.0	0.0	0.0	4.9
Cycle Q Clear(g_c), s	6.2	0.6	5.0	0.0	0.0	4.9
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	314	145	2858	1423	0	2858
V/C Ratio(X)	0.71	0.07	0.27	0.00	0.00	0.27
Avail Cap(c_a), veh/h	1161	534	2858	1423	0	2858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	42.3	39.7	1.9	0.0	0.0	1.9
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	0.2	2.4	0.0	0.0	2.4
LnGrp Delay(d), s/veh	45.3	39.9	2.2	0.0	0.0	2.2
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	234		786			778
Approach Delay, s/veh	45.0		2.2			2.2
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		12.9
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		7.0				6.9		8.2
Green Ext Time (p_c), s		6.1				6.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.7
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	24	886	61	598	470	57	88	12	195	33	71	10
Future Volume (veh/h)	24	886	61	598	470	57	88	12	195	33	71	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	26	963	66	650	511	62	96	13	212	36	77	11
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	37	1172	362	691	2752	328	250	34	251	126	113	16
Arrive On Green	0.02	0.23	0.23	0.39	0.59	0.59	0.16	0.16	0.16	0.07	0.07	0.07
Sat Flow, veh/h	1792	5136	1585	1792	4638	553	1587	215	1593	1792	1609	230
Grp Volume(v), veh/h	26	963	66	650	375	198	109	0	212	36	0	88
Grp Sat Flow(s),veh/h/ln	1792	1712	1585	1792	1712	1767	1802	0	1593	1792	0	1838
Q Serve(g_s), s	1.5	18.0	3.4	35.4	5.1	5.2	5.5	0.0	13.1	1.9	0.0	4.7
Cycle Q Clear(g_c), s	1.5	18.0	3.4	35.4	5.1	5.2	5.5	0.0	13.1	1.9	0.0	4.7
Prop In Lane	1.00		1.00	1.00		0.31	0.88		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	37	1172	362	691	2032	1049	284	0	251	126	0	129
V/C Ratio(X)	0.71	0.82	0.18	0.94	0.18	0.19	0.38	0.00	0.84	0.29	0.00	0.68
Avail Cap(c_a), veh/h	71	1172	362	815	2032	1049	428	0	378	284	0	291
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.2	37.1	31.4	29.9	9.4	9.4	38.2	0.0	41.4	44.6	0.0	45.9
Incr Delay (d2), s/veh	22.0	6.6	1.1	17.1	0.2	0.4	0.8	0.0	10.5	1.2	0.0	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.2	1.6	20.8	2.5	2.6	2.8	0.0	6.5	1.0	0.0	2.6
LnGrp Delay(d), s/veh	71.2	43.6	32.5	47.0	9.6	9.8	39.0	0.0	51.8	45.9	0.0	52.2
LnGrp LOS	E	D	C	D	A	A	D		D	D		D
Approach Vol, veh/h		1055			1223			321			124	
Approach Delay, s/veh		43.6			29.5			47.5			50.3	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	64.0		20.0	43.0	27.1		11.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	60.0		24.0	46.0	18.0		16.0
Max Q Clear Time (g_c+I1), s	3.5	7.2		15.1	37.4	20.0		6.7
Green Ext Time (p_c), s	0.0	4.2		0.9	1.6	0.0		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.0
HCM 2010 LOS	D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	23	638	290	320	294	376	2	891	355	111	968	41
Future Volume (veh/h)	23	638	290	320	294	376	2	891	355	111	968	41
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	24	665	302	333	306	392	2	928	370	116	1008	43
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	34	1077	468	402	1424	756	35	1132	503	144	1577	691
Arrive On Green	0.02	0.31	0.31	0.12	0.41	0.41	0.33	0.33	0.33	0.08	0.45	0.45
Sat Flow, veh/h	1740	3471	1510	3375	3471	1529	1	3402	1513	1740	3471	1522
Grp Volume(v), veh/h	24	665	302	333	306	392	499	431	370	116	1008	43
Grp Sat Flow(s),veh/h/ln	1740	1736	1510	1688	1736	1529	1824	1579	1513	1740	1736	1522
Q Serve(g_s), s	1.4	16.9	17.8	9.9	5.9	18.0	0.0	25.9	22.3	6.8	23.0	1.6
Cycle Q Clear(g_c), s	1.4	16.9	17.8	9.9	5.9	18.0	25.8	25.9	22.3	6.8	23.0	1.6
Prop In Lane	1.00		1.00	1.00		1.00	0.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	34	1077	468	402	1424	756	642	526	503	144	1577	691
V/C Ratio(X)	0.72	0.62	0.64	0.83	0.21	0.52	0.78	0.82	0.73	0.81	0.64	0.06
Avail Cap(c_a), veh/h	84	1077	468	491	1424	756	812	674	645	219	2053	900
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	30.4	30.7	44.4	19.7	17.8	31.6	31.6	30.4	46.5	21.6	15.8
Incr Delay (d2), s/veh	24.5	2.7	6.7	9.5	0.3	2.5	3.7	6.4	3.2	12.0	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	8.4	8.3	5.2	2.9	8.1	13.7	12.2	9.7	3.7	11.0	0.7
LnGrp Delay(d), s/veh	74.8	33.0	37.4	53.9	20.0	20.4	35.3	37.9	33.6	58.5	22.1	15.8
LnGrp LOS	E	C	D	D	C	C	D	D	C	E	C	B
Approach Vol, veh/h		991			1031			1300			1167	
Approach Delay, s/veh		35.3			31.1			35.7			25.5	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	46.3	12.5	38.3	16.3	36.0		50.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	42.0	13.0	44.0	15.0	32.0		61.0
Max Q Clear Time (g_c+I1), s	3.4	20.0	8.8	27.9	11.9	19.8		25.0
Green Ext Time (p_c), s	0.0	3.2	0.1	6.5	0.4	4.2		8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.9
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	863	241	387	527	463	25
Future Volume (vph)	863	241	387	527	463	25
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3505	1568	1752	3505	3391	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3505	1568	1752	3505	3391	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	908	254	407	555	487	26
RTOR Reduction (vph)	0	87	0	0	3	0
Lane Group Flow (vph)	908	167	407	555	510	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	50.9	72.9	32.2	87.1	22.0	
Effective Green, g (s)	50.9	72.9	32.2	87.1	22.0	
Actuated g/C Ratio	0.43	0.62	0.27	0.74	0.19	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1523	1029	481	2607	637	
v/s Ratio Prot	c0.26	0.03	c0.23	0.16	c0.15	
v/s Ratio Perm		0.08				
v/c Ratio	0.60	0.16	0.85	0.21	0.80	
Uniform Delay, d1	25.3	9.3	40.1	4.6	45.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	0.1	12.9	0.2	7.1	
Delay (s)	27.0	9.4	53.0	4.8	52.6	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	23.1			25.2	52.6	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	670	316	189	761	546	449
Future Volume (veh/h)	670	316	189	761	546	449
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	698	0	197	793	569	468
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1136	523	345	2035	2035	910
Arrive On Green	0.33	0.00	0.58	0.58	0.58	0.58
Sat Flow, veh/h	3408	1568	537	3597	3597	1568
Grp Volume(v), veh/h	698	0	197	793	569	468
Grp Sat Flow(s),veh/h/ln	1704	1568	537	1752	1752	1568
Q Serve(g_s), s	16.0	0.0	27.0	11.4	7.6	16.6
Cycle Q Clear(g_c), s	16.0	0.0	34.6	11.4	7.6	16.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1136	523	345	2035	2035	910
V/C Ratio(X)	0.61	0.00	0.57	0.39	0.28	0.51
Avail Cap(c_a), veh/h	1136	523	345	2035	2035	910
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	18.4	10.6	9.8	11.7
Incr Delay (d2), s/veh	2.5	0.0	2.2	0.1	0.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	4.2	5.5	3.7	7.7
LnGrp Delay(d), s/veh	28.5	0.0	20.7	10.7	10.1	13.7
LnGrp LOS	C		C	B	B	B
Approach Vol, veh/h	698			990	1037	
Approach Delay, s/veh	28.5			12.7	11.7	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		35.0		58.0				58.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		31.0		54.0				54.0
Max Q Clear Time (g_c+I1), s		18.0		36.6				18.6
Green Ext Time (p_c), s		2.2		6.9				5.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	147

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	200	0	4	1436	0	0	787	2	0	6
Future Vol, veh/h	200	0	4	1436	0	0	787	2	0	6
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	204	0	4	1465	0	0	803	2	0	6

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	1875	733	805	0	-	-	-	0	1545	403
Stage 1	1473	-	-	-	-	-	-	-	804	-
Stage 2	402	-	-	-	-	-	-	-	741	-
Critical Hdwy	7.56	6.96	4.16	-	-	-	-	-	7.56	6.96
Critical Hdwy Stg 1	6.56	-	-	-	-	-	-	-	6.56	-
Critical Hdwy Stg 2	6.56	-	-	-	-	-	-	-	6.56	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	~ 43	361	809	-	0	0	-	-	77	594
Stage 1	~ 132	-	-	-	0	0	-	-	341	-
Stage 2	593	-	-	-	0	0	-	-	372	-
Platoon blocked, %				-			-	-		
Mov Cap-1 Maneuver	~ 42	361	809	-	-	-	-	-	21	594
Mov Cap-2 Maneuver	~ 42	-	-	-	-	-	-	-	21	-
Stage 1	~ 128	-	-	-	-	-	-	-	332	-
Stage 2	587	-	-	-	-	-	-	-	100	-

Approach	NB	SE	NW	SW
HCM Control Delay, s/v$	867	0.1	0	11.1
HCM LOS	F			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SETSWLn1	
Capacity (veh/h)	42	361	-	-	809	-	594
HCM Lane V/C Ratio	4.859	0.724	-	-	0.005	-	0.01
HCM Control Delay (s/veh)	$ 1929.2	37.1	-	-	9.5	0.1	11.1
HCM Lane LOS	F	E	-	-	A	A	B
HCM 95th %tile Q(veh)	23.5	5.5	-	-	0	-	0

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	5.3

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	70	29	19	1689	732	31
Future Vol, veh/h	70	29	19	1689	732	31
Conflicting Peds, #/hr	0	0	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	73	30	20	1759	763	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1714	413	810	0	-	0
Stage 1	794	-	-	-	-	-
Stage 2	920	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	80	585	805	-	-	-
Stage 1	403	-	-	-	-	-
Stage 2	346	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	76	578	795	-	-	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	388	-	-	-	-	-
Stage 2	342	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	135.3	0.1	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	795	-	76	578
HCM Lane V/C Ratio	-	-	0.025	-	0.959	0.052
HCM Control Delay (s/veh)	-	-	9.6	-	186.5	11.6
HCM Lane LOS	-	-	A	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	-	5	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	138	1154	499	104	926	223	165	972	548	282	413	22
Future Volume (veh/h)	138	1154	499	104	926	223	165	972	548	282	413	22
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1706	1706	1706	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	145	1215	525	109	975	235	174	1023	0	297	435	23
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	169	1216	678	102	1155	692	203	1168	523	341	1075	57
Arrive On Green	0.10	0.38	0.38	0.06	0.33	0.33	0.12	0.33	0.00	0.10	0.32	0.32
Sat Flow, veh/h	1625	3242	1422	1757	3505	1549	1757	3505	1568	3408	3383	178
Grp Volume(v), veh/h	145	1215	525	109	975	235	174	1023	0	297	225	233
Grp Sat Flow(s),veh/h/ln	1625	1621	1422	1757	1752	1549	1757	1752	1568	1704	1752	1809
Q Serve(g_s), s	10.5	45.0	36.9	7.0	31.0	11.9	11.7	33.0	0.0	10.3	12.0	12.1
Cycle Q Clear(g_c), s	10.5	45.0	36.9	7.0	31.0	11.9	11.7	33.0	0.0	10.3	12.0	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	169	1216	678	102	1155	692	203	1168	523	341	557	575
V/C Ratio(X)	0.86	1.00	0.77	1.06	0.84	0.34	0.86	0.88	0.00	0.87	0.40	0.41
Avail Cap(c_a), veh/h	176	1216	678	102	1155	692	293	1168	523	341	557	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	37.5	26.2	56.5	37.4	21.8	52.1	37.7	0.0	53.2	32.0	32.1
Incr Delay (d2), s/veh	31.6	25.7	5.6	107.1	5.9	0.3	15.6	9.3	0.0	21.0	2.2	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	24.4	15.5	6.4	16.0	5.1	6.5	17.4	0.0	5.9	6.1	6.4
LnGrp Delay(d), s/veh	84.5	63.1	31.8	164.1	43.2	22.1	67.7	47.0	0.0	74.2	34.2	34.2
LnGrp LOS	F	E	C	F	D	C	E	D		E	C	C
Approach Vol, veh/h		1885			1319			1197			755	
Approach Delay, s/veh		56.0			49.5			50.0			49.9	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	42.1	11.0	49.0	16.0	44.0	16.5	43.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	7.0	45.0	12.0	40.0	13.0	39.0
Max Q Clear Time (g_c+I1), s	13.7	14.1	9.0	47.0	12.3	35.0	12.5	33.0
Green Ext Time (p_c), s	0.2	2.5	0.0	0.0	0.0	2.9	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.1
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	37	689	11	22	1268
Future Vol, veh/h	30	37	689	11	22	1268
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	38	710	11	23	1307

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1413	358	0	0	724	0
Stage 1	713	-	-	-	-	-
Stage 2	700	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	128	636	-	-	868	-
Stage 1	444	-	-	-	-	-
Stage 2	451	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	124	634	-	-	866	-
Mov Cap-2 Maneuver	124	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	439	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	25.5	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	124	634	866	-
HCM Lane V/C Ratio	-	-	0.249	0.06	0.026	-
HCM Control Delay (s/veh)	-	-	43.4	11	9.3	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	0.9	0.2	0.1	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	73	94	600	49	370	915
Future Volume (veh/h)	73	94	600	49	370	915
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	75	97	619	51	381	943
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	141	126	2945	1312	674	2945
Arrive On Green	0.08	0.08	0.85	0.85	0.85	0.85
Sat Flow, veh/h	1740	1553	3563	1546	749	3563
Grp Volume(v), veh/h	75	97	619	51	381	943
Grp Sat Flow(s),veh/h/ln	1740	1553	1736	1546	749	1736
Q Serve(g_s), s	4.7	6.9	3.7	0.6	21.6	6.4
Cycle Q Clear(g_c), s	4.7	6.9	3.7	0.6	25.4	6.4
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	141	126	2945	1312	674	2945
V/C Ratio(X)	0.53	0.77	0.21	0.04	0.57	0.32
Avail Cap(c_a), veh/h	246	220	2945	1312	674	2945
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	51.0	1.6	1.3	3.9	1.8
Incr Delay (d2), s/veh	3.1	9.6	0.2	0.1	3.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	3.3	1.8	0.3	5.0	3.1
LnGrp Delay(d), s/veh	53.1	60.6	1.7	1.4	7.3	2.1
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	172		670			1324
Approach Delay, s/veh	57.3		1.7			3.6
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		100.0				100.0		13.2
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		96.0				96.0		16.0
Max Q Clear Time (g_c+I1), s		5.7				27.4		8.9
Green Ext Time (p_c), s		4.7				13.7		0.3

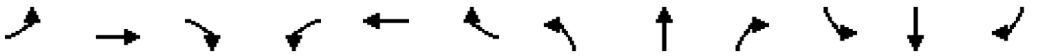
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.3
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	16
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	492	47	39	42	20
Future Vol, veh/h	20	492	47	39	42	20
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	24	579	55	46	49	24
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	17.7	10.5	9.2
HCM LOS	C	B	A

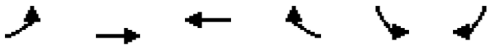
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	55%	100%	0%	0%	0%
Vol Thru, %	45%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	86	20	492	42	20
LT Vol	47	20	0	0	0
Through Vol	39	0	0	42	0
RT Vol	0	0	492	0	20
Lane Flow Rate	101	24	579	49	24
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.172	0.037	0.723	0.086	0.036
Departure Headway (Hd)	6.103	5.703	4.499	6.245	5.536
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	584	628	805	569	641
Service Time	4.182	3.441	2.237	4.03	3.32
HCM Lane V/C Ratio	0.173	0.038	0.719	0.086	0.037
HCM Control Delay, s/veh	10.5	8.7	18.1	9.6	8.5
HCM Lane LOS	B	A	C	A	A
HCM 95th-tile Q	0.6	0.1	6.4	0.3	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	354	1080	3	728	625	427	11	263	577	149	25	6
Future Volume (vph)	354	1080	3	728	625	427	11	263	577	149	25	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.94			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1752	5034		1752	4680			3497	1568	1595	3237	1537
Flt Permitted	0.95	1.00		0.95	1.00			0.94	1.00	0.95	0.60	1.00
Satd. Flow (perm)	1752	5034		1752	4680			3307	1568	1595	2026	1537
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	361	1102	3	743	638	436	11	268	589	152	26	6
RTOR Reduction (vph)	0	0	0	0	93	0	0	0	486	0	0	4
Lane Group Flow (vph)	361	1105	0	743	981	0	0	279	103	76	102	2
Confl. Peds. (#/hr)	6					6	3					3
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	29.6	26.0		51.0	47.4			21.0	21.0	6.0	31.0	31.0
Effective Green, g (s)	29.6	26.0		51.0	47.4			21.0	21.0	6.0	31.0	31.0
Actuated g/C Ratio	0.25	0.22		0.43	0.39			0.18	0.18	0.05	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	432	1090		744	1848			578	274	79	583	397
v/s Ratio Prot	0.21	c0.22		c0.42	0.21					c0.05	0.01	
v/s Ratio Perm								c0.08	0.07		0.04	0.00
v/c Ratio	0.84	1.01		1.00	0.53			0.48	0.38	0.96	0.92dl	0.00
Uniform Delay, d1	42.9	47.0		34.5	27.8			44.6	43.7	56.9	34.6	33.0
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	13.1	30.7		32.4	0.3			2.9	3.9	87.9	0.1	0.0
Delay (s)	56.0	77.7		66.9	28.1			47.5	47.6	144.8	34.7	33.1
Level of Service	E	E		E	C			D	D	F	C	C
Approach Delay (s/veh)		72.4			43.9			47.6			80.1	
Approach LOS		E			D			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.5%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	43	1295	1063	40	317	189
Future Volume (veh/h)	43	1295	1063	40	317	189
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1827	1827	1827	1827
Adj Flow Rate, veh/h	46	1378	1131	43	337	201
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	196	1667	1802	805	697	622
Arrive On Green	0.52	0.52	0.52	0.52	0.40	0.40
Sat Flow, veh/h	432	3295	3563	1551	1740	1553
Grp Volume(v), veh/h	46	1378	1131	43	337	201
Grp Sat Flow(s),veh/h/ln	432	1605	1736	1551	1740	1553
Q Serve(g_s), s	8.5	36.1	23.2	1.4	14.4	8.9
Cycle Q Clear(g_c), s	31.7	36.1	23.2	1.4	14.4	8.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	196	1667	1802	805	697	622
V/C Ratio(X)	0.23	0.83	0.63	0.05	0.48	0.32
Avail Cap(c_a), veh/h	283	2316	2504	1119	697	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	20.2	17.1	11.9	22.2	20.6
Incr Delay (d2), s/veh	0.6	1.8	0.4	0.0	2.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	16.3	11.1	0.6	7.4	4.0
LnGrp Delay(d), s/veh	29.0	22.1	17.5	11.9	24.6	22.0
LnGrp LOS	C	C	B	B	C	C
Approach Vol, veh/h		1424	1174		538	
Approach Delay, s/veh		22.3	17.3		23.6	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				55.8		44.0		55.8
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s				38.1		16.4		25.2
Green Ext Time (p_c), s				13.7		1.8		10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	1307	145	159	723	104	34	1008	157	174	852	241
Future Volume (veh/h)	229	1307	145	159	723	104	34	1008	157	174	852	241
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	244	1390	154	169	769	111	36	1072	167	185	906	256
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	272	1430	158	192	1183	170	46	1180	522	207	1501	657
Arrive On Green	0.15	0.31	0.31	0.11	0.26	0.26	0.03	0.33	0.33	0.12	0.42	0.42
Sat Flow, veh/h	1774	4638	514	1774	4492	644	1774	3539	1565	1774	3539	1548
Grp Volume(v), veh/h	244	1016	528	169	579	301	36	1072	167	185	906	256
Grp Sat Flow(s),veh/h/ln	1774	1695	1761	1774	1695	1746	1774	1770	1565	1774	1770	1548
Q Serve(g_s), s	16.2	35.5	35.5	11.3	18.2	18.4	2.4	34.8	9.6	12.3	23.8	13.7
Cycle Q Clear(g_c), s	16.2	35.5	35.5	11.3	18.2	18.4	2.4	34.8	9.6	12.3	23.8	13.7
Prop In Lane	1.00		0.29	1.00		0.37	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	272	1045	543	192	893	460	46	1180	522	207	1501	657
V/C Ratio(X)	0.90	0.97	0.97	0.88	0.65	0.65	0.79	0.91	0.32	0.89	0.60	0.39
Avail Cap(c_a), veh/h	310	1045	543	192	893	460	89	1180	522	207	1501	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	41.0	41.0	52.7	39.3	39.3	58.1	38.3	29.9	52.3	26.7	23.8
Incr Delay (d2), s/veh	25.0	21.3	31.5	34.0	1.6	3.3	25.0	11.8	1.6	35.2	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	19.7	22.1	7.4	8.7	9.3	1.5	18.9	4.4	8.1	12.0	6.2
LnGrp Delay(d), s/veh	74.9	62.3	72.5	86.8	40.9	42.7	83.1	50.0	31.5	87.4	28.5	25.6
LnGrp LOS	E	E	E	F	D	D	F	D	C	F	C	C
Approach Vol, veh/h		1788			1049			1275			1347	
Approach Delay, s/veh		67.0			48.8			48.5			36.1	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	44.0	17.0	41.0	7.1	54.9	22.4	35.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	40.0	13.0	37.0	6.0	48.0	21.0	29.0
Max Q Clear Time (g_c+I1), s	14.3	36.8	13.3	37.5	4.4	25.8	18.2	20.4
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	7.0	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	203	1293	165	220	815	126	72	906	109	130	1035	95
Future Volume (veh/h)	203	1293	165	220	815	126	72	906	109	130	1035	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	209	1333	170	227	840	130	74	934	112	134	1067	98
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	239	1400	179	252	1390	214	94	1060	127	148	1289	773
Arrive On Green	0.13	0.31	0.31	0.14	0.31	0.31	0.05	0.33	0.33	0.08	0.36	0.36
Sat Flow, veh/h	1774	4549	580	1774	4416	678	1774	3176	381	1774	3539	1536
Grp Volume(v), veh/h	209	993	510	227	643	327	74	520	526	134	1067	98
Grp Sat Flow(s),veh/h/ln	1774	1695	1739	1774	1695	1704	1774	1770	1788	1774	1770	1536
Q Serve(g_s), s	13.9	34.4	34.4	15.1	19.2	19.5	4.9	33.3	33.3	9.0	32.9	4.1
Cycle Q Clear(g_c), s	13.9	34.4	34.4	15.1	19.2	19.5	4.9	33.3	33.3	9.0	32.9	4.1
Prop In Lane	1.00		0.33	1.00		0.40	1.00		0.21	1.00		1.00
Lane Grp Cap(c), veh/h	239	1043	535	252	1067	536	94	590	596	148	1289	773
V/C Ratio(X)	0.87	0.95	0.95	0.90	0.60	0.61	0.79	0.88	0.88	0.91	0.83	0.13
Avail Cap(c_a), veh/h	340	1046	537	252	1067	536	104	590	596	148	1289	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	40.6	40.6	50.6	34.7	34.8	56.1	37.7	37.7	54.5	34.7	16.1
Incr Delay (d2), s/veh	16.1	17.5	27.3	32.3	1.0	2.0	29.8	17.1	17.0	47.1	6.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	18.5	20.5	9.6	9.2	9.5	3.2	19.0	19.2	6.3	17.1	1.8
LnGrp Delay(d), s/veh	67.0	58.1	67.9	82.9	35.7	36.8	85.9	54.8	54.7	101.6	40.9	16.4
LnGrp LOS	E	E	E	F	D	D	F	D	D	F	D	B
Approach Vol, veh/h		1712			1197			1120			1299	
Approach Delay, s/veh		62.1			45.0			56.8			45.3	
Approach LOS		E			D			E			D	

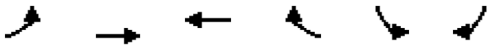
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	44.0	21.0	40.9	10.4	47.6	20.2	41.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	40.0	17.0	37.0	7.0	43.0	23.0	31.0
Max Q Clear Time (g_c+I1), s	11.0	35.3	17.1	36.4	6.9	34.9	15.9	21.5
Green Ext Time (p_c), s	0.0	2.6	0.0	0.5	0.0	4.4	0.3	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1340	89	281	892	173	144	217	153	122	243	144
Future Volume (veh/h)	149	1340	89	281	892	173	144	217	153	122	243	144
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	0.99		0.95	0.98		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	152	1367	91	287	910	177	147	221	156	124	248	147
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	1698	113	326	1819	352	334	841	359	381	484	274
Arrive On Green	0.10	0.35	0.35	0.18	0.43	0.43	0.08	0.24	0.24	0.07	0.23	0.23
Sat Flow, veh/h	1774	4861	324	1774	4242	821	1774	3539	1510	1774	2138	1211
Grp Volume(v), veh/h	152	953	505	287	726	361	147	221	156	124	203	192
Grp Sat Flow(s),veh/h/ln	1774	1695	1795	1774	1695	1673	1774	1770	1510	1774	1770	1579
Q Serve(g_s), s	8.5	25.7	25.7	15.9	15.7	15.9	6.3	5.1	8.9	5.3	10.1	10.8
Cycle Q Clear(g_c), s	8.5	25.7	25.7	15.9	15.7	15.9	6.3	5.1	8.9	5.3	10.1	10.8
Prop In Lane	1.00		0.18	1.00		0.49	1.00		1.00	1.00		0.77
Lane Grp Cap(c), veh/h	185	1184	627	326	1454	717	334	841	359	381	401	358
V/C Ratio(X)	0.82	0.80	0.80	0.88	0.50	0.50	0.44	0.26	0.43	0.33	0.51	0.54
Avail Cap(c_a), veh/h	316	1377	729	527	1779	878	382	841	359	414	401	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	29.7	29.7	40.1	21.0	21.0	27.0	31.3	32.7	26.9	34.1	34.4
Incr Delay (d2), s/veh	8.7	3.1	5.8	9.8	0.3	0.5	0.9	0.8	3.8	0.5	4.5	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	12.6	13.8	8.7	7.4	7.4	3.2	2.6	4.1	2.7	5.5	5.2
LnGrp Delay(d), s/veh	53.0	32.9	35.5	50.0	21.2	21.6	27.9	32.1	36.5	27.4	38.6	40.0
LnGrp LOS	D	C	D	D	C	C	C	C	D	C	D	D
Approach Vol, veh/h		1610			1374			524			519	
Approach Delay, s/veh		35.6			27.3			32.2			36.5	
Approach LOS		D			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	28.0	22.5	39.3	12.3	26.9	14.5	47.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	24.0	30.0	41.0	11.0	22.0	18.0	53.0
Max Q Clear Time (g_c+I1), s	7.3	10.9	17.9	27.7	8.3	12.8	10.5	17.9
Green Ext Time (p_c), s	0.0	1.6	0.6	7.6	0.1	1.7	0.2	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.4
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	1392	1192	0	340	267
Future Volume (veh/h)	0	1392	1192	0	340	267
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1723	1723
Adj Flow Rate, veh/h	0	1465	1255	0	358	281
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1757	1757	0	699	624
Arrive On Green	0.00	0.50	0.50	0.00	0.43	0.43
Sat Flow, veh/h	0	3725	3725	0	1641	1465
Grp Volume(v), veh/h	0	1465	1255	0	358	281
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1641	1465
Q Serve(g_s), s	0.0	36.7	28.6	0.0	16.5	14.1
Cycle Q Clear(g_c), s	0.0	36.7	28.6	0.0	16.5	14.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1757	1757	0	699	624
V/C Ratio(X)	0.00	0.83	0.71	0.00	0.51	0.45
Avail Cap(c_a), veh/h	0	2331	2331	0	699	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	22.3	20.3	0.0	21.7	21.0
Incr Delay (d2), s/veh	0.0	2.1	0.7	0.0	2.7	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.4	14.1	0.0	8.0	6.1
LnGrp Delay(d), s/veh	0.0	24.4	21.0	0.0	24.4	23.4
LnGrp LOS		C	C		C	C
Approach Vol, veh/h		1465	1255		639	
Approach Delay, s/veh		24.4	21.0		24.0	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				55.3		48.0		55.3
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				68.0		44.0		68.0
Max Q Clear Time (g_c+I1), s				38.7		18.5		30.6
Green Ext Time (p_c), s				12.5		2.1		10.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	221	1122	387	201	855	257	192	550	142	241	534	177
Future Volume (veh/h)	221	1122	387	201	855	257	192	550	142	241	534	177
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	226	1145	395	205	872	262	196	561	145	246	545	181
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1276	440	235	1169	505	226	808	351	276	909	397
Arrive On Green	0.14	0.34	0.34	0.13	0.33	0.33	0.13	0.23	0.23	0.16	0.26	0.26
Sat Flow, veh/h	1774	3730	1286	1774	3539	1528	1774	3539	1539	1774	3539	1545
Grp Volume(v), veh/h	226	1041	499	205	872	262	196	561	145	246	545	181
Grp Sat Flow(s),veh/h/ln	1774	1695	1626	1774	1770	1528	1774	1770	1539	1774	1770	1545
Q Serve(g_s), s	14.1	32.9	32.9	12.8	24.7	15.6	12.2	16.4	9.1	15.3	15.3	11.1
Cycle Q Clear(g_c), s	14.1	32.9	32.9	12.8	24.7	15.6	12.2	16.4	9.1	15.3	15.3	11.1
Prop In Lane	1.00		0.79	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1159	556	235	1169	505	226	808	351	276	909	397
V/C Ratio(X)	0.88	0.90	0.90	0.87	0.75	0.52	0.87	0.69	0.41	0.89	0.60	0.46
Avail Cap(c_a), veh/h	299	1201	576	283	1222	528	267	808	351	330	909	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	35.3	35.3	48.1	33.6	30.6	48.4	40.0	37.1	46.7	36.9	35.3
Incr Delay (d2), s/veh	23.1	9.0	16.5	21.8	2.4	0.8	22.4	4.9	3.6	22.0	2.9	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	16.8	17.3	7.7	12.5	6.7	7.4	8.6	4.2	9.2	7.9	5.2
LnGrp Delay(d), s/veh	70.5	44.3	51.8	69.8	36.0	31.4	70.7	44.8	40.7	68.7	39.8	39.1
LnGrp LOS	E	D	D	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1766			1339			902			972	
Approach Delay, s/veh		49.7			40.3			49.8			47.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	29.8	18.9	42.6	18.4	33.0	20.3	41.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	25.0	18.0	40.0	17.0	29.0	19.0	39.0
Max Q Clear Time (g_c+I1), s	17.3	18.4	14.8	34.9	14.2	17.3	16.1	26.7
Green Ext Time (p_c), s	0.2	2.4	0.2	3.7	0.1	3.3	0.2	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	163	988	98	118	694	264	110	850	86	189	761	141
Future Volume (veh/h)	163	988	98	118	694	264	110	850	86	189	761	141
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	170	1029	102	123	723	275	115	885	90	197	793	147
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	201	1234	122	151	850	319	329	1473	640	338	1571	683
Arrive On Green	0.11	0.27	0.27	0.09	0.24	0.24	0.05	0.42	0.42	0.08	0.45	0.45
Sat Flow, veh/h	1757	4651	460	1757	3585	1345	1757	3505	1523	1757	3505	1524
Grp Volume(v), veh/h	170	742	389	123	676	322	115	885	90	197	793	147
Grp Sat Flow(s),veh/h/ln	1757	1679	1753	1757	1679	1572	1757	1752	1523	1757	1752	1524
Q Serve(g_s), s	10.4	22.8	22.9	7.5	21.0	21.4	4.0	21.4	4.0	6.7	17.6	6.4
Cycle Q Clear(g_c), s	10.4	22.8	22.9	7.5	21.0	21.4	4.0	21.4	4.0	6.7	17.6	6.4
Prop In Lane	1.00		0.26	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	891	465	151	796	373	329	1473	640	338	1571	683
V/C Ratio(X)	0.85	0.83	0.84	0.81	0.85	0.86	0.35	0.60	0.14	0.58	0.50	0.22
Avail Cap(c_a), veh/h	289	983	513	225	860	403	379	1473	640	435	1571	683
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	37.9	37.9	49.1	39.8	40.0	17.4	24.6	19.5	18.2	21.5	18.4
Incr Delay (d2), s/veh	14.4	5.8	10.6	13.1	7.7	16.4	0.6	1.8	0.5	1.6	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	11.2	12.4	4.2	10.6	11.0	2.0	10.7	1.7	3.3	8.7	2.8
LnGrp Delay(d), s/veh	61.9	43.6	48.5	62.2	47.5	56.4	18.0	26.4	20.0	19.8	22.7	19.1
LnGrp LOS	E	D	D	E	D	E	B	C	B	B	C	B
Approach Vol, veh/h		1301			1121			1090			1137	
Approach Delay, s/veh		47.5			51.7			25.0			21.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	49.9	13.4	33.0	9.9	53.0	16.5	29.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	43.0	14.0	32.0	9.0	49.0	18.0	28.0
Max Q Clear Time (g_c+I1), s	8.7	23.4	9.5	24.9	6.0	19.6	12.4	23.4
Green Ext Time (p_c), s	0.3	6.1	0.1	3.9	0.1	6.3	0.2	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	1133	70	31	763	256	122	352	22	314	241	150
Future Volume (veh/h)	184	1133	70	31	763	256	122	352	22	314	241	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	188	1156	71	32	779	261	124	359	22	320	246	153
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	219	1667	102	40	903	300	550	1797	110	537	1878	840
Arrive On Green	0.12	0.34	0.34	0.02	0.24	0.24	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1774	4895	300	1774	3763	1249	981	3386	207	998	3539	1582
Grp Volume(v), veh/h	188	800	427	32	701	339	124	187	194	320	246	153
Grp Sat Flow(s),veh/h/ln	1774	1695	1805	1774	1695	1621	981	1770	1823	998	1770	1582
Q Serve(g_s), s	11.8	23.0	23.1	2.0	22.4	22.7	8.2	6.3	6.3	28.0	4.0	5.7
Cycle Q Clear(g_c), s	11.8	23.0	23.1	2.0	22.4	22.7	12.2	6.3	6.3	34.4	4.0	5.7
Prop In Lane	1.00		0.17	1.00		0.77	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	219	1155	615	40	814	389	550	939	967	537	1878	840
V/C Ratio(X)	0.86	0.69	0.69	0.80	0.86	0.87	0.23	0.20	0.20	0.60	0.13	0.18
Avail Cap(c_a), veh/h	298	1259	670	94	870	416	550	939	967	537	1878	840
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.6	32.2	32.2	55.0	41.2	41.3	16.5	13.9	13.9	23.0	13.4	13.8
Incr Delay (d2), s/veh	16.8	1.5	2.8	28.9	8.5	17.1	0.9	0.5	0.5	4.8	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	11.0	12.0	1.3	11.5	12.0	2.4	3.2	3.3	8.4	2.0	2.6
LnGrp Delay(d), s/veh	65.4	33.7	35.0	83.9	49.6	58.4	17.4	14.4	14.4	27.8	13.5	14.3
LnGrp LOS	E	C	C	F	D	E	B	B	B	C	B	B
Approach Vol, veh/h		1415			1072			505			719	
Approach Delay, s/veh		38.3			53.4			15.1			20.0	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		64.0	6.6	42.5		64.0	17.9	31.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		60.0	6.0	42.0		60.0	19.0	29.0
Max Q Clear Time (g_c+I1), s		14.2	4.0	25.1		36.4	13.8	24.7
Green Ext Time (p_c), s		2.9	0.0	7.3		3.7	0.2	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	166	1247	85	62	808	95	116	553	164	126	462	123
Future Volume (vph)	166	1247	85	62	808	95	116	553	164	126	462	123
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5081		1787	5055		1784	3574	1576	1786	3574	1574
Flt Permitted	0.95	1.00		0.95	1.00		0.44	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1787	5081		1787	5055		834	3574	1576	733	3574	1574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	173	1299	89	65	842	99	121	576	171	131	481	128
RTOR Reduction (vph)	0	7	0	0	12	0	0	0	21	0	0	60
Lane Group Flow (vph)	173	1381	0	65	929	0	121	576	150	131	481	68
Confl. Peds. (#/hr)			1	1			2		1	1		2
Confl. Bikes (#/hr)			4						1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4!			7!	8!			2			6	
Permitted Phases		4!					2		2	6		6
Actuated Green, G (s)	39.6	39.6		7.8	27.8		54.3	54.3	54.3	54.3	54.3	54.3
Effective Green, g (s)	39.6	39.6		7.8	27.8		54.3	54.3	54.3	54.3	54.3	54.3
Actuated g/C Ratio	0.39	0.39		0.08	0.27		0.53	0.53	0.53	0.53	0.53	0.53
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	694	1974		136	1379		444	1904	839	390	1904	838
v/s Ratio Prot	0.10			0.04	0.18			0.16			0.13	
v/s Ratio Perm		c0.27					0.15		0.10	c0.18		0.04
v/c Ratio	0.25	0.70		0.48	0.67		0.27	0.30	0.18	0.34	0.25	0.08
Uniform Delay, d1	21.1	26.2		45.1	33.0		13.0	13.3	12.3	13.5	12.8	11.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.1		2.6	1.3		1.5	0.4	0.5	2.3	0.3	0.2
Delay (s)	21.3	27.3		47.7	34.3		14.5	13.7	12.8	15.9	13.2	11.8
Level of Service	C	C		D	C		B	B	B	B	B	B
Approach Delay (s/veh)		26.6			35.2			13.6			13.4	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	101.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.0%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Intersection	
Int Delay, s/veh	21.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	175	297	0	1056	674	0
Future Vol, veh/h	175	297	0	1056	674	0
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	192	326	0	1160	741	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1321	371	-	0	-	0
Stage 1	741	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	-	-
Pot Cap-1 Maneuver	~ 147	623	0	-	-	0
Stage 1	429	-	0	-	-	0
Stage 2	520	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 147	623	-	-	-	-
Mov Cap-2 Maneuver	~ 147	-	-	-	-	-
Stage 1	429	-	-	-	-	-
Stage 2	520	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	98.8	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	147	623	-
HCM Lane V/C Ratio	-	1.308	0.524	-
HCM Control Delay (s/veh)	-	237.5	17	-
HCM Lane LOS	-	F	C	-
HCM 95th %tile Q(veh)	-	11.8	3.1	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	3	8	326	0	230	9	645	79	224	928	5
Future Volume (veh/h)	1	3	8	326	0	230	9	645	79	224	928	5
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1	3	9	354	0	250	10	701	86	243	1009	5
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	124	314	456	526	442	344	2279	1006	447	2279	1018
Arrive On Green	0.28	0.28	0.28	0.28	0.00	0.28	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	54	440	1111	1371	1863	1565	554	3539	1562	685	3539	1581
Grp Volume(v), veh/h	13	0	0	354	0	250	10	701	86	243	1009	5
Grp Sat Flow(s),veh/h/ln	1605	0	0	1371	1863	1565	554	1770	1562	685	1770	1581
Q Serve(g_s), s	0.0	0.0	0.0	26.3	0.0	14.8	1.0	9.6	2.3	26.5	15.4	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0	26.9	0.0	14.8	16.4	9.6	2.3	36.1	15.4	0.1
Prop In Lane	0.08		0.69	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	489	0	0	456	526	442	344	2279	1006	447	2279	1018
V/C Ratio(X)	0.03	0.00	0.00	0.78	0.00	0.57	0.03	0.31	0.09	0.54	0.44	0.00
Avail Cap(c_a), veh/h	652	0	0	598	720	605	344	2279	1006	447	2279	1018
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.2	0.0	0.0	37.6	0.0	33.3	13.7	8.6	7.3	16.6	9.6	6.9
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.7	0.0	1.1	0.2	0.4	0.2	4.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	10.8	0.0	6.5	0.2	4.8	1.0	5.6	7.6	0.1
LnGrp Delay(d), s/veh	28.2	0.0	0.0	42.3	0.0	34.4	13.9	8.9	7.5	21.3	10.3	6.9
LnGrp LOS	C			D		C	B	A	A	C	B	A
Approach Vol, veh/h		13			604			797			1257	
Approach Delay, s/veh		28.2			39.0			8.8			12.4	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		34.7		74.0		34.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		18.4		2.6		38.1		28.9
Green Ext Time (p_c), s		6.0		0.0		11.4		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.3

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	552	17	194	1150	62	219
Future Vol, veh/h	552	17	194	1150	62	219
Conflicting Peds, #/hr	0	7	7	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	587	18	206	1223	66	233

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	612	0	1627	-
Stage 1	-	-	-	-	603	-
Stage 2	-	-	-	-	1024	-
Critical Hdwy	-	-	4.1	-	6.8	-
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	-
Pot Cap-1 Maneuver	-	-	977	-	95	0
Stage 1	-	-	-	-	515	0
Stage 2	-	-	-	-	312	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	971	-	74	-
Mov Cap-2 Maneuver	-	-	-	-	74	-
Stage 1	-	-	-	-	512	-
Stage 2	-	-	-	-	246	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	1.4	171
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	74	-	971	-
HCM Lane V/C Ratio	-	-	0.891	-	0.213	-
HCM Control Delay (s/veh)	-	-	171	0	9.7	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4.5	-	0.8	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	46	1149	163	129	1336	105	164	133	96	105	207	95
Future Volume (veh/h)	46	1149	163	129	1336	105	164	133	96	105	207	95
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	52	1306	185	147	1518	119	186	151	109	119	235	108
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	67	1690	239	181	2117	166	223	958	427	150	812	356
Arrive On Green	0.04	0.38	0.38	0.10	0.44	0.44	0.13	0.27	0.27	0.08	0.23	0.23
Sat Flow, veh/h	1774	4491	636	1774	4803	376	1774	3539	1578	1774	3539	1554
Grp Volume(v), veh/h	52	986	505	147	1071	566	186	151	109	119	235	108
Grp Sat Flow(s),veh/h/ln	1774	1695	1737	1774	1695	1790	1774	1770	1578	1774	1770	1554
Q Serve(g_s), s	2.8	24.6	24.6	7.8	24.8	24.8	9.8	3.1	5.2	6.3	5.3	5.5
Cycle Q Clear(g_c), s	2.8	24.6	24.6	7.8	24.8	24.8	9.8	3.1	5.2	6.3	5.3	5.5
Prop In Lane	1.00		0.37	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	67	1276	654	181	1494	789	223	958	427	150	812	356
V/C Ratio(X)	0.78	0.77	0.77	0.81	0.72	0.72	0.83	0.16	0.26	0.80	0.29	0.30
Avail Cap(c_a), veh/h	166	1588	814	332	1906	1006	388	958	427	277	812	356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	26.3	26.3	42.2	22.0	22.0	41.0	26.7	27.4	43.2	30.5	30.6
Incr Delay (d2), s/veh	17.5	1.9	3.7	8.4	0.9	1.8	8.0	0.4	1.4	9.2	0.9	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	11.8	12.5	4.3	11.8	12.7	5.3	1.6	2.4	3.5	2.7	2.6
LnGrp Delay(d), s/veh	63.3	28.3	30.0	50.6	22.9	23.8	49.0	27.0	28.9	52.3	31.4	32.8
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1543			1784			446			462	
Approach Delay, s/veh		30.0			25.5			36.6			37.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	30.0	13.8	40.1	16.1	26.0	7.6	46.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	26.0	18.0	45.0	21.0	20.0	9.0	54.0
Max Q Clear Time (g_c+I1), s	8.3	7.2	9.8	26.6	11.8	7.5	4.8	26.8
Green Ext Time (p_c), s	0.1	1.1	0.2	9.6	0.3	1.3	0.0	13.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	38	155	74	126	390	171	120	819	118	128	698	115
Future Volume (veh/h)	38	155	74	126	390	171	120	819	118	128	698	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	41	168	80	137	424	186	130	890	128	139	759	125
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	52	359	163	169	523	227	436	1873	835	375	2340	382
Arrive On Green	0.03	0.15	0.15	0.10	0.22	0.22	0.05	0.53	0.53	0.06	0.54	0.54
Sat Flow, veh/h	1757	2331	1058	1757	2368	1027	1757	3505	1562	1757	4353	711
Grp Volume(v), veh/h	41	124	124	137	313	297	130	890	128	139	584	300
Grp Sat Flow(s),veh/h/ln	1757	1752	1636	1757	1752	1643	1757	1752	1562	1757	1679	1707
Q Serve(g_s), s	2.3	6.5	7.0	7.7	17.0	17.3	3.3	15.9	4.2	3.5	9.8	9.9
Cycle Q Clear(g_c), s	2.3	6.5	7.0	7.7	17.0	17.3	3.3	15.9	4.2	3.5	9.8	9.9
Prop In Lane	1.00		0.65	1.00		0.63	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	52	270	252	169	387	363	436	1873	835	375	1804	917
V/C Ratio(X)	0.79	0.46	0.49	0.81	0.81	0.82	0.30	0.48	0.15	0.37	0.32	0.33
Avail Cap(c_a), veh/h	122	349	326	332	558	523	536	1873	835	504	1804	917
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	38.7	38.9	44.5	37.1	37.2	9.8	14.6	11.9	10.8	13.0	13.0
Incr Delay (d2), s/veh	23.0	1.2	1.5	8.9	5.7	6.7	0.4	0.9	0.4	0.6	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	3.2	3.2	4.1	8.9	8.5	1.6	7.9	1.9	1.8	4.7	4.9
LnGrp Delay(d), s/veh	71.5	39.9	40.4	53.4	42.8	43.9	10.2	15.5	12.2	11.5	13.5	14.0
LnGrp LOS	E	D	D	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		289			747			1148			1023	
Approach Delay, s/veh		44.6			45.2			14.5			13.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	57.7	13.7	19.5	9.3	58.0	7.0	26.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	52.0	19.0	20.0	11.0	54.0	7.0	32.0
Max Q Clear Time (g_c+I1), s	5.5	17.9	9.7	9.0	5.3	11.9	4.3	19.3
Green Ext Time (p_c), s	0.2	8.1	0.2	0.9	0.1	7.2	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	94	388	62	70	416	218	93	791	65	206	623	92
Future Volume (veh/h)	94	388	62	70	416	218	93	791	65	206	623	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	99	408	65	74	438	229	98	833	68	217	656	97
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	164	630	528	200	630	524	409	2074	927	343	2074	927
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	759	1845	1546	908	1845	1533	700	3505	1567	610	3505	1567
Grp Volume(v), veh/h	99	408	65	74	438	229	98	833	68	217	656	97
Grp Sat Flow(s),veh/h/ln	759	1845	1546	908	1845	1533	700	1752	1567	610	1752	1567
Q Serve(g_s), s	15.5	22.4	3.5	9.0	24.6	13.9	9.8	15.3	2.2	35.5	11.3	3.2
Cycle Q Clear(g_c), s	40.1	22.4	3.5	31.4	24.6	13.9	21.1	15.3	2.2	50.8	11.3	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	630	528	200	630	524	409	2074	927	343	2074	927
V/C Ratio(X)	0.60	0.65	0.12	0.37	0.69	0.44	0.24	0.40	0.07	0.63	0.32	0.10
Avail Cap(c_a), veh/h	164	630	528	200	630	524	409	2074	927	343	2074	927
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	33.4	27.1	46.7	34.1	30.6	17.6	13.1	10.5	26.7	12.3	10.7
Incr Delay (d2), s/veh	6.2	2.3	0.1	1.1	3.3	0.6	1.4	0.6	0.2	8.6	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	11.9	1.5	2.3	13.1	5.9	2.0	7.5	1.0	6.8	5.6	1.5
LnGrp Delay(d), s/veh	57.6	35.7	27.2	47.8	37.4	31.1	19.0	13.7	10.6	35.3	12.7	10.9
LnGrp LOS	E	D	C	D	D	C	B	B	B	D	B	B
Approach Vol, veh/h		572			741			999			970	
Approach Delay, s/veh		38.5			36.5			14.0			17.6	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		45.0		75.0		45.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		41.0		71.0		41.0
Max Q Clear Time (g_c+I1), s		23.1		42.1		52.8		33.4
Green Ext Time (p_c), s		7.7		0.0		6.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.4
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	8.3

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	28	334	360	815	593	18
Future Vol, veh/h	28	334	360	815	593	18
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	31	367	396	896	652	20

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1892	326	672	0	-	0
Stage 1	652	-	-	-	-	-
Stage 2	1240	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	62	670	915	-	-	-
Stage 1	480	-	-	-	-	-
Stage 2	236	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	35	670	915	-	-	-
Mov Cap-2 Maneuver	35	-	-	-	-	-
Stage 1	272	-	-	-	-	-
Stage 2	236	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	37.4	3.6	0
HCM LOS	E		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	915	-	35	670	-	-
HCM Lane V/C Ratio	0.432	-	0.879	0.548	-	-
HCM Control Delay (s/veh)	11.9	-	284.2	16.7	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.2	-	3.1	3.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	938	262	241	550	65	258	967	188	80	733	57
Future Volume (veh/h)	110	938	262	241	550	65	258	967	188	80	733	57
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	111	947	265	243	556	66	261	977	190	81	740	58
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1041	290	273	1569	184	291	1360	595	103	985	427
Arrive On Green	0.08	0.26	0.26	0.15	0.34	0.34	0.16	0.38	0.38	0.06	0.28	0.28
Sat Flow, veh/h	1774	3935	1098	1774	4607	539	1774	3539	1549	1774	3539	1534
Grp Volume(v), veh/h	111	815	397	243	407	215	261	977	190	81	740	58
Grp Sat Flow(s),veh/h/ln	1774	1695	1643	1774	1695	1756	1774	1770	1549	1774	1770	1534
Q Serve(g_s), s	7.0	26.7	26.8	15.4	10.3	10.5	16.5	26.9	9.9	5.2	21.8	3.2
Cycle Q Clear(g_c), s	7.0	26.7	26.8	15.4	10.3	10.5	16.5	26.9	9.9	5.2	21.8	3.2
Prop In Lane	1.00		0.67	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	896	434	273	1154	598	291	1360	595	103	985	427
V/C Ratio(X)	0.81	0.91	0.91	0.89	0.35	0.36	0.90	0.72	0.32	0.79	0.75	0.14
Avail Cap(c_a), veh/h	232	918	445	325	1154	598	341	1360	595	124	985	427
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	40.8	40.8	47.5	28.3	28.4	46.9	30.0	24.7	53.2	37.7	31.0
Incr Delay (d2), s/veh	10.5	12.7	22.8	22.4	0.2	0.4	23.0	3.3	1.4	23.9	5.3	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.0	14.9	9.3	4.8	5.2	10.0	13.8	4.4	3.2	11.4	1.5
LnGrp Delay(d), s/veh	62.4	53.5	63.6	69.9	28.5	28.7	69.9	33.3	26.2	77.2	43.0	31.7
LnGrp LOS	E	D	E	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		1323			865			1428			879	
Approach Delay, s/veh		57.3			40.2			39.0			45.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	48.0	21.6	34.3	22.8	35.9	12.9	43.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	21.0	31.0	22.0	30.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.2	28.9	17.4	28.8	18.5	23.8	9.0	12.5
Green Ext Time (p_c), s	0.0	6.4	0.2	1.5	0.3	2.5	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	63	39	111	41	87	38	114	1303	48	39	1114	76
Future Volume (veh/h)	63	39	111	41	87	38	114	1303	48	39	1114	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	66	41	116	43	91	40	119	1357	50	41	1160	79
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	51	20	332	42	68	326	147	2321	1013	52	2132	930
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.08	0.66	0.66	0.03	0.60	0.60
Sat Flow, veh/h	0	96	1581	0	325	1555	1774	3539	1545	1774	3539	1545
Grp Volume(v), veh/h	107	0	116	134	0	40	119	1357	50	41	1160	79
Grp Sat Flow(s),veh/h/ln	96	0	1581	325	0	1555	1774	1770	1545	1774	1770	1545
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	2.4	7.5	24.5	1.3	2.6	22.2	2.5
Cycle Q Clear(g_c), s	24.0	0.0	7.2	24.0	0.0	2.4	7.5	24.5	1.3	2.6	22.2	2.5
Prop In Lane	0.62		1.00	0.32		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	332	110	0	326	147	2321	1013	52	2132	930
V/C Ratio(X)	1.50	0.00	0.35	1.22	0.00	0.12	0.81	0.58	0.05	0.78	0.54	0.08
Avail Cap(c_a), veh/h	71	0	332	110	0	326	295	2321	1013	140	2132	930
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	0.0	38.5	43.6	0.0	36.7	51.6	11.0	7.0	55.1	13.5	9.5
Incr Delay (d2), s/veh	286.8	0.0	0.6	156.5	0.0	0.2	10.0	1.1	0.1	21.8	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	3.2	8.2	0.0	1.0	4.1	12.2	0.6	1.6	11.1	1.1
LnGrp Delay(d), s/veh	337.3	0.0	39.2	200.1	0.0	36.8	61.6	12.1	7.1	76.9	14.5	9.7
LnGrp LOS	F		D	F		D	E	B	A	E	B	A
Approach Vol, veh/h		223			174			1526			1280	
Approach Delay, s/veh		182.2			162.5			15.8			16.2	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	79.0		28.0	13.5	72.9		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	75.0		24.0	19.0	65.0		24.0
Max Q Clear Time (g_c+I1), s	4.6	26.5		26.0	9.5	24.2		26.0
Green Ext Time (p_c), s	0.0	13.3		0.0	0.2	10.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	867	88	177	734	188	96	1121	43	184	1031	50
Future Volume (veh/h)	150	867	88	177	734	188	96	1121	43	184	1031	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	885	90	181	749	192	98	1144	44	188	1052	51
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	938	410	207	993	436	122	1301	570	207	1472	647
Arrive On Green	0.10	0.27	0.27	0.12	0.28	0.28	0.07	0.37	0.37	0.12	0.42	0.42
Sat Flow, veh/h	1774	3539	1548	1774	3539	1554	1774	3539	1552	1774	3539	1556
Grp Volume(v), veh/h	153	885	90	181	749	192	98	1144	44	188	1052	51
Grp Sat Flow(s),veh/h/ln	1774	1770	1548	1774	1770	1554	1774	1770	1552	1774	1770	1556
Q Serve(g_s), s	10.2	29.3	5.4	12.0	23.1	12.1	6.5	36.2	2.2	12.5	29.6	2.4
Cycle Q Clear(g_c), s	10.2	29.3	5.4	12.0	23.1	12.1	6.5	36.2	2.2	12.5	29.6	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	938	410	207	993	436	122	1301	570	207	1472	647
V/C Ratio(X)	0.85	0.94	0.22	0.87	0.75	0.44	0.81	0.88	0.08	0.91	0.71	0.08
Avail Cap(c_a), veh/h	207	946	414	207	993	436	133	1301	570	207	1472	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	43.1	34.3	52.0	39.3	35.4	55.0	35.4	24.6	52.2	29.1	21.1
Incr Delay (d2), s/veh	24.5	17.1	0.3	31.1	3.3	0.7	27.4	8.7	0.3	37.7	3.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	16.6	2.4	7.7	11.8	5.3	4.1	19.2	1.0	8.3	15.1	1.1
LnGrp Delay(d), s/veh	77.4	60.3	34.6	83.1	42.6	36.1	82.4	44.1	24.9	89.9	32.0	21.3
LnGrp LOS	E	E	C	F	D	D	F	D	C	F	C	C
Approach Vol, veh/h		1128			1122			1286			1291	
Approach Delay, s/veh		60.5			48.0			46.3			40.1	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	48.0	18.0	35.7	12.2	53.8	16.1	37.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	44.0	14.0	32.0	9.0	49.0	14.0	32.0
Max Q Clear Time (g_c+I1), s	14.5	38.2	14.0	31.3	8.5	31.6	12.2	25.1
Green Ext Time (p_c), s	0.0	3.5	0.0	0.4	0.0	6.7	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	139	152	75	116	109	81	1163	140	109	1165	12
Future Volume (veh/h)	9	139	152	75	116	109	81	1163	140	109	1165	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	9	145	158	78	121	114	84	1211	0	114	1214	12
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	15	223	194	100	312	268	107	2021	904	142	3067	30
Arrive On Green	0.01	0.13	0.13	0.06	0.18	0.18	0.06	0.58	0.00	0.08	0.60	0.60
Sat Flow, veh/h	1740	1736	1514	1740	1764	1516	1740	3471	1553	1740	5093	50
Grp Volume(v), veh/h	9	145	158	78	119	116	84	1211	0	114	793	433
Grp Sat Flow(s),veh/h/ln	1740	1736	1514	1740	1736	1544	1740	1736	1553	1740	1663	1818
Q Serve(g_s), s	0.5	8.4	10.8	4.7	6.4	7.1	5.1	23.8	0.0	6.8	13.2	13.2
Cycle Q Clear(g_c), s	0.5	8.4	10.8	4.7	6.4	7.1	5.1	23.8	0.0	6.8	13.2	13.2
Prop In Lane	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	15	223	194	100	307	273	107	2021	904	142	2003	1095
V/C Ratio(X)	0.59	0.65	0.81	0.78	0.39	0.42	0.79	0.60	0.00	0.80	0.40	0.40
Avail Cap(c_a), veh/h	65	261	228	196	392	349	196	2021	904	246	2003	1095
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	44.0	45.1	49.4	38.6	38.9	49.2	14.2	0.0	48.0	11.0	11.0
Incr Delay (d2), s/veh	31.2	4.4	17.3	12.5	0.8	1.0	11.9	1.3	0.0	10.2	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.3	5.5	2.6	3.1	3.1	2.8	11.6	0.0	3.7	6.2	6.9
LnGrp Delay(d), s/veh	83.7	48.4	62.3	61.9	39.4	40.0	61.1	15.6	0.0	58.1	11.6	12.1
LnGrp LOS	F	D	E	E	D	D	E	B		E	B	B
Approach Vol, veh/h		312			313			1295			1340	
Approach Delay, s/veh		56.5			45.2			18.5			15.7	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	65.9	10.1	17.7	10.5	68.0	4.9	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	61.0	12.0	16.0	12.0	64.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	8.8	25.8	6.7	12.8	7.1	15.2	2.5	9.1
Green Ext Time (p_c), s	0.1	10.1	0.1	0.5	0.1	9.6	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	88	35	0	17	44	1310	11	5	1353	30
Future Volume (veh/h)	40	0	88	35	0	17	44	1310	11	5	1353	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	42	0	92	36	0	18	46	1365	11	5	1409	31
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	63	0	265	63	0	269	59	2484	1084	9	3450	76
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.03	0.72	0.72	0.01	0.69	0.69
Sat Flow, veh/h	0	0	1519	0	0	1540	1740	3471	1514	1740	5022	110
Grp Volume(v), veh/h	42	0	92	36	0	18	46	1365	11	5	933	507
Grp Sat Flow(s),veh/h/ln	0	0	1519	0	0	1540	1740	1736	1514	1740	1663	1807
Q Serve(g_s), s	0.0	0.0	6.1	0.0	0.0	1.1	3.0	21.1	0.2	0.3	14.0	14.0
Cycle Q Clear(g_c), s	20.0	0.0	6.1	20.0	0.0	1.1	3.0	21.1	0.2	0.3	14.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	63	0	265	63	0	269	59	2484	1084	9	2284	1241
V/C Ratio(X)	0.67	0.00	0.35	0.57	0.00	0.07	0.78	0.55	0.01	0.56	0.41	0.41
Avail Cap(c_a), veh/h	63	0	265	63	0	269	182	2484	1084	91	2284	1241
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.3	0.0	41.6	57.3	0.0	39.5	54.9	7.6	4.7	56.9	7.8	7.8
Incr Delay (d2), s/veh	23.9	0.0	0.8	12.0	0.0	0.1	19.8	0.9	0.0	45.0	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	0.0	2.6	1.3	0.0	0.5	1.8	10.4	0.1	0.3	6.5	7.2
LnGrp Delay(d), s/veh	81.2	0.0	42.3	69.2	0.0	39.6	74.7	8.5	4.7	101.9	8.3	8.8
LnGrp LOS	F		D	E		D	E	A	A	F	A	A
Approach Vol, veh/h		134			54			1422			1445	
Approach Delay, s/veh		54.5			59.4			10.6			8.8	
Approach LOS		D			E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.6	86.0		24.0	7.9	82.7		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	82.0		20.0	12.0	76.0		20.0
Max Q Clear Time (g_c+I1), s	2.3	23.1		22.0	5.0	16.0		22.0
Green Ext Time (p_c), s	0.0	13.6		0.0	0.0	12.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.6
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	961	136	63	822	155	186
Future Volume (veh/h)	961	136	63	822	155	186
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1900	1845	1845	1845	1845
Adj Flow Rate, veh/h	1092	155	72	934	176	211
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1576	223	93	2303	780	696
Arrive On Green	0.35	0.35	0.05	0.46	0.44	0.44
Sat Flow, veh/h	4609	630	1757	5202	1757	1568
Grp Volume(v), veh/h	825	422	72	934	176	211
Grp Sat Flow(s),veh/h/ln	1679	1715	1757	1679	1757	1568
Q Serve(g_s), s	17.0	17.1	3.3	10.0	5.0	7.0
Cycle Q Clear(g_c), s	17.0	17.1	3.3	10.0	5.0	7.0
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1191	608	93	2303	780	696
V/C Ratio(X)	0.69	0.69	0.77	0.41	0.23	0.30
Avail Cap(c_a), veh/h	2319	1185	347	4721	780	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.4	22.4	37.9	14.7	13.9	14.5
Incr Delay (d2), s/veh	0.7	1.4	12.5	0.1	0.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	8.3	1.9	4.6	2.6	3.2
LnGrp Delay(d), s/veh	23.1	23.8	50.4	14.8	14.6	15.6
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	1247			1006	387	
Approach Delay, s/veh	23.3			17.3	15.1	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		40.0	8.3	32.8				41.1
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		36.0	16.0	56.0				76.0
Max Q Clear Time (g_c+I1), s		9.0	5.3	19.1				12.0
Green Ext Time (p_c), s		1.2	0.1	9.7				7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.8
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	13.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	11	131	13	54	141	102	29	128	28	79	159	24
Future Vol, veh/h	11	131	13	54	141	102	29	128	28	79	159	24
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	136	14	56	147	106	30	133	29	82	166	25
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	12.5	16.8	11.7	12.1
HCM LOS	B	C	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	18%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	91%	47%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	9%	34%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	29	128	28	11	144	297	79	159	24
LT Vol	29	0	0	11	0	54	79	0	0
Through Vol	0	128	0	0	131	141	0	159	0
RT Vol	0	0	28	0	13	102	0	0	24
Lane Flow Rate	30	133	29	11	150	309	82	166	25
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.064	0.264	0.051	0.024	0.292	0.55	0.168	0.314	0.042
Departure Headway (Hd)	7.635	7.123	6.416	7.573	7.004	6.398	7.441	6.93	6.213
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	471	507	561	476	516	560	485	522	580
Service Time	5.345	4.833	4.116	5.273	4.704	4.194	5.141	4.63	3.913
HCM Lane V/C Ratio	0.064	0.262	0.052	0.023	0.291	0.552	0.169	0.318	0.043
HCM Control Delay, s/veh	10.9	12.4	9.5	10.5	12.6	16.8	11.6	12.8	9.2
HCM Lane LOS	B	B	A	B	B	C	B	B	A
HCM 95th-tile Q	0.2	1.1	0.2	0.1	1.2	3.3	0.6	1.3	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	72	1024	45	6	916	80	60	35	28	88	14	68
Future Volume (veh/h)	72	1024	45	6	916	80	60	35	28	88	14	68
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	75	1067	47	6	954	83	62	36	29	92	15	71
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	97	1468	641	11	1296	566	80	29	643	92	8	635
Arrive On Green	0.06	0.42	0.42	0.01	0.37	0.37	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1757	3505	1530	1757	3505	1531	0	71	1567	0	20	1547
Grp Volume(v), veh/h	75	1067	47	6	954	83	98	0	29	107	0	71
Grp Sat Flow(s),veh/h/ln	1757	1752	1530	1757	1752	1531	71	0	1567	20	0	1547
Q Serve(g_s), s	3.1	18.6	1.3	0.2	17.2	2.6	0.0	0.0	0.8	0.0	0.0	2.1
Cycle Q Clear(g_c), s	3.1	18.6	1.3	0.2	17.2	2.6	30.0	0.0	0.8	30.0	0.0	2.1
Prop In Lane	1.00		1.00	1.00		1.00	0.63		1.00	0.86		1.00
Lane Grp Cap(c), veh/h	97	1468	641	11	1296	566	110	0	643	100	0	635
V/C Ratio(X)	0.77	0.73	0.07	0.54	0.74	0.15	0.89	0.00	0.05	1.07	0.00	0.11
Avail Cap(c_a), veh/h	409	3454	1508	144	2927	1278	110	0	643	100	0	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.0	17.7	12.7	36.2	19.9	15.3	27.7	0.0	12.9	34.1	0.0	13.3
Incr Delay (d2), s/veh	12.0	0.7	0.0	35.8	0.8	0.1	60.5	0.0	0.1	110.6	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	9.0	0.6	0.2	8.4	1.1	3.8	0.0	0.4	5.1	0.0	1.0
LnGrp Delay(d), s/veh	46.1	18.4	12.8	72.0	20.8	15.5	88.3	0.0	13.1	145.0	0.0	13.7
LnGrp LOS	D	B	B	E	C	B	F		B	F		B
Approach Vol, veh/h		1189			1043			127			178	
Approach Delay, s/veh		20.0			20.6			71.1			92.6	
Approach LOS		B			C			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	4.5	34.6		34.0	8.0	31.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0	6.0	72.0		30.0	17.0	61.0
Max Q Clear Time (g_c+I1), s		32.0	2.2	20.6		32.0	5.1	19.2
Green Ext Time (p_c), s		0.0	0.0	9.1		0.0	0.1	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	7	13	107	0	79	4	1358	167	119	1121	7
Future Volume (veh/h)	5	7	13	107	0	79	4	1358	167	119	1121	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	5	8	14	118	0	87	4	1492	184	131	1232	8
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	54	68	88	216	0	164	7	2426	1059	161	2732	1193
Arrive On Green	0.10	0.10	0.10	0.10	0.00	0.10	0.00	0.69	0.69	0.09	0.78	0.78
Sat Flow, veh/h	135	645	840	1367	0	1563	1757	3505	1529	1757	3505	1531
Grp Volume(v), veh/h	27	0	0	118	0	87	4	1492	184	131	1232	8
Grp Sat Flow(s),veh/h/ln	1619	0	0	1367	0	1563	1757	1752	1529	1757	1752	1531
Q Serve(g_s), s	0.0	0.0	0.0	7.0	0.0	5.7	0.2	24.6	4.5	7.9	12.9	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.0	8.6	0.0	5.7	0.2	24.6	4.5	7.9	12.9	0.1
Prop In Lane	0.19		0.52	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	0	0	216	0	164	7	2426	1059	161	2732	1193
V/C Ratio(X)	0.13	0.00	0.00	0.55	0.00	0.53	0.54	0.61	0.17	0.82	0.45	0.01
Avail Cap(c_a), veh/h	335	0	0	326	0	290	65	2426	1059	277	2732	1193
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	0.0	0.0	46.9	0.0	45.7	53.6	8.9	5.8	48.1	4.0	2.6
Incr Delay (d2), s/veh	0.3	0.0	0.0	2.1	0.0	2.6	50.5	1.2	0.4	9.6	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	3.6	0.0	2.6	0.2	12.2	2.0	4.2	6.4	0.1
LnGrp Delay(d), s/veh	44.1	0.0	0.0	49.0	0.0	48.3	104.1	10.1	6.2	57.7	4.6	2.6
LnGrp LOS	D			D		D	F	B	A	E	A	A
Approach Vol, veh/h		27			205			1680			1371	
Approach Delay, s/veh		44.1			48.7			9.9			9.6	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	78.6		15.3	4.5	88.0		15.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	71.0		20.0	4.0	84.0		20.0
Max Q Clear Time (g_c+I1), s	9.9	26.6		3.6	2.2	14.9		10.6
Green Ext Time (p_c), s	0.2	16.2		0.1	0.0	11.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.5
HCM 2010 LOS	B

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	236	161	1374	244	5	502	39	0	0	3	56	224
Future Volume (vph)	236	161	1374	244	5	502	39	0	0	3	56	224
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%		15%				0%
Total Lost time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Lane Util. Factor		1.00	0.91		1.00	0.91					1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Frt		1.00	0.98		1.00	0.99					1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00					0.95	1.00
Satd. Flow (prot)		1805	5059		1805	5131					1805	1900
Flt Permitted		0.95	1.00		0.22	1.00					0.51	1.00
Satd. Flow (perm)		1805	5059		409	5131					974	1900
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	254	173	1477	262	5	540	42	0	0	3	60	241
RTOR Reduction (vph)	0	0	17	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	427	1722	0	5	582	0	0	0	0	63	241
Confl. Peds. (#/hr)				1	1			5				
Confl. Bikes (#/hr)				2								
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Perm	Perm	Perm	NA
Protected Phases	7	7	4		3	8		9				6
Permitted Phases					8				10	6	6	
Actuated Green, G (s)		24.7	42.6		19.3	18.6					28.3	28.3
Effective Green, g (s)		24.7	42.6		19.3	18.6					28.3	28.3
Actuated g/C Ratio		0.30	0.51		0.23	0.22					0.34	0.34
Clearance Time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0					3.0	3.0
Lane Grp Cap (vph)		533	2577		106	1141					329	643
v/s Ratio Prot		c0.24	c0.34		0.00	0.11						0.13
v/s Ratio Perm					0.01						0.06	
v/c Ratio		0.80	0.67		0.05	0.51					0.19	0.37
Uniform Delay, d1		27.2	15.2		24.8	28.5					19.6	20.9
Progression Factor		1.00	1.00		1.00	1.00					1.00	1.00
Incremental Delay, d2		8.5	0.7		0.2	0.4					0.3	0.4
Delay (s)		35.6	15.9		25.0	28.9					19.8	21.3
Level of Service		D	B		C	C					B	C
Approach Delay (s/veh)			19.8			28.9		0.0				20.6
Approach LOS			B			C		A				C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	83.6	Sum of lost time (s)	20.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	SER	NWL	NWT	NWR	NWR2
Lane Configurations					
Traffic Volume (vph)	61	125	223	20	16
Future Volume (vph)	61	125	223	20	16
Ideal Flow (vphpl)	1900	1900	1900	1900	1900
Grade (%)			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	
Frt	0.85	1.00	1.00	0.85	
Flt Protected	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1615	1805	1900	1615	
Flt Permitted	1.00	0.51	1.00	1.00	
Satd. Flow (perm)	1615	971	1900	1615	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	66	134	240	22	17
RTOR Reduction (vph)	44	0	0	26	0
Lane Group Flow (vph)	22	134	240	13	0
Confl. Peds. (#/hr)					
Confl. Bikes (#/hr)					
Heavy Vehicles (%)	0%	0%	0%	0%	0%
Turn Type	Perm	Perm	NA	Perm	
Protected Phases			2		
Permitted Phases	6	2		2	
Actuated Green, G (s)	28.3	28.3	28.3	28.3	
Effective Green, g (s)	28.3	28.3	28.3	28.3	
Actuated g/C Ratio	0.34	0.34	0.34	0.34	
Clearance Time (s)	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	546	328	643	546	
v/s Ratio Prot			0.13		
v/s Ratio Perm	0.01	c0.14		0.01	
v/c Ratio	0.04	0.41	0.37	0.02	
Uniform Delay, d1	18.5	21.2	20.9	18.4	
Progression Factor	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	3.7	1.7	0.1	
Delay (s)	18.6	25.0	22.6	18.5	
Level of Service	B	C	C	B	
Approach Delay (s/veh)			23.0		
Approach LOS			C		

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	273	2504	47	30	1967	131	281	29	334	92	37	19
Future Volume (vph)	273	2504	47	30	1967	131	281	29	334	92	37	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	0.98	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.87	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5117		1787	5136	1566	1768	1536	1490	1780	1881	1550
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.73	1.00	1.00	0.47	1.00	1.00
Satd. Flow (perm)	3467	5117		1787	5136	1566	1361	1536	1490	879	1881	1550
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	1.00	0.93	1.00
Adj. Flow (vph)	294	2692	51	32	2115	141	302	31	359	92	40	19
RTOR Reduction (vph)	0	1	0	0	0	57	0	106	106	0	0	14
Lane Group Flow (vph)	294	2742	0	32	2115	84	302	90	88	92	40	5
Confl. Peds. (#/hr)			7	7			5		3	3		5
Confl. Bikes (#/hr)			2			1			1			9
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	12.6	74.1		2.3	63.8	63.8	29.3	29.3	29.3	29.3	29.3	29.3
Effective Green, g (s)	12.6	74.1		2.3	63.8	63.8	29.3	29.3	29.3	29.3	29.3	29.3
Actuated g/C Ratio	0.11	0.63		0.02	0.54	0.54	0.25	0.25	0.25	0.25	0.25	0.25
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	371	3221		34	2784	848	338	382	370	218	468	385
v/s Ratio Prot	c0.08	c0.54		0.02	0.41			0.06			0.02	
v/s Ratio Perm						0.05	c0.22		0.06	0.10		0.00
v/c Ratio	0.79	0.85		0.94	0.76	0.10	0.89	0.24	0.24	0.42	0.09	0.01
Uniform Delay, d1	51.3	17.4		57.6	21.0	13.0	42.7	35.3	35.3	37.1	33.9	33.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	11.0	3.1		129.7	2.0	0.2	24.4	0.3	0.3	1.3	0.1	0.0
Delay (s)	62.3	20.5		187.4	23.0	13.3	67.1	35.6	35.6	38.4	34.0	33.3
Level of Service	E	C		F	C	B	E	D	D	D	C	C
Approach Delay (s/veh)		24.5			24.7			49.3			36.6	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	117.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	727	199	321	34	49	10	257	1070	0	9	829	166
Future Volume (veh/h)	727	199	321	34	49	10	257	1070	0	9	829	166
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	757	207	334	35	51	10	268	1115	0	9	864	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	889	548	465	46	93	18	350	1843	825	16	1515	678
Arrive On Green	0.25	0.29	0.29	0.03	0.06	0.06	0.10	0.51	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3510	1900	1612	1810	1541	302	3510	3610	1615	1810	3610	1615
Grp Volume(v), veh/h	757	207	334	35	0	61	268	1115	0	9	864	0
Grp Sat Flow(s),veh/h/ln	1755	1900	1612	1810	0	1843	1755	1805	1615	1810	1805	1615
Q Serve(g_s), s	19.7	8.3	17.8	1.8	0.0	3.1	7.1	21.0	0.0	0.5	17.5	0.0
Cycle Q Clear(g_c), s	19.7	8.3	17.8	1.8	0.0	3.1	7.1	21.0	0.0	0.5	17.5	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	889	548	465	46	0	112	350	1843	825	16	1515	678
V/C Ratio(X)	0.85	0.38	0.72	0.76	0.00	0.55	0.77	0.60	0.00	0.56	0.57	0.00
Avail Cap(c_a), veh/h	1280	891	756	113	0	307	549	1843	825	75	1515	678
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.1	27.3	30.6	46.5	0.0	43.8	42.1	16.6	0.0	47.4	21.2	0.0
Incr Delay (d2), s/veh	3.9	0.4	2.1	22.8	0.0	4.1	3.5	1.5	0.0	27.0	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.4	8.2	1.2	0.0	1.7	3.6	10.8	0.0	0.4	9.0	0.0
LnGrp Delay(d), s/veh	38.1	27.7	32.7	69.2	0.0	47.9	45.6	18.1	0.0	74.4	22.8	0.0
LnGrp LOS	D	C	C	E		D	D	B		E	C	
Approach Vol, veh/h		1298			96			1383			873	
Approach Delay, s/veh		35.0			55.7			23.4			23.3	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	53.0	6.4	31.7	13.6	44.3	28.3	9.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	49.0	6.0	45.0	15.0	38.0	35.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	23.0	3.8	19.8	9.1	19.5	21.7	5.1
Green Ext Time (p_c), s	0.0	8.6	0.0	2.5	0.4	5.5	2.6	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.4
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	607	1915	266	179	1400	94	290	570	273	269	667	139
Future Volume (veh/h)	607	1915	266	179	1400	94	290	570	273	269	667	139
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	632	1995	277	186	1458	98	302	594	284	280	695	145
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	695	2344	716	214	1931	754	359	681	614	337	781	161
Arrive On Green	0.20	0.46	0.46	0.12	0.38	0.38	0.10	0.19	0.19	0.10	0.18	0.18
Sat Flow, veh/h	3476	5136	1570	1792	5136	1567	3476	3574	1545	3476	4249	874
Grp Volume(v), veh/h	632	1995	277	186	1458	98	302	594	284	280	558	282
Grp Sat Flow(s),veh/h/ln	1738	1712	1570	1792	1712	1567	1738	1787	1545	1738	1712	1700
Q Serve(g_s), s	20.8	40.4	13.6	11.9	28.9	4.1	10.0	18.9	16.1	9.3	18.6	19.0
Cycle Q Clear(g_c), s	20.8	40.4	13.6	11.9	28.9	4.1	10.0	18.9	16.1	9.3	18.6	19.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	695	2344	716	214	1931	754	359	681	614	337	630	313
V/C Ratio(X)	0.91	0.85	0.39	0.87	0.76	0.13	0.84	0.87	0.46	0.83	0.89	0.90
Avail Cap(c_a), veh/h	743	2344	716	245	1931	754	386	703	623	356	644	320
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	28.3	21.0	50.6	31.8	16.9	51.5	46.0	26.6	51.9	46.6	46.7
Incr Delay (d2), s/veh	14.7	4.1	1.6	24.4	2.8	0.4	14.5	11.4	0.5	14.7	13.9	26.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	19.9	6.2	7.3	14.1	1.8	5.5	10.4	6.9	5.1	10.0	11.3
LnGrp Delay(d), s/veh	60.4	32.4	22.6	75.0	34.6	17.3	66.0	57.4	27.2	66.6	60.4	73.6
LnGrp LOS	E	C	C	E	C	B	E	E	C	E	E	E
Approach Vol, veh/h		2904			1742			1180			1120	
Approach Delay, s/veh		37.6			37.9			52.3			65.3	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	57.4	15.3	26.3	27.4	48.0	16.1	25.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	53.0	12.0	23.0	25.0	44.0	13.0	22.0
Max Q Clear Time (g_c+I1), s	13.9	42.4	11.3	20.9	22.8	30.9	12.0	21.0
Green Ext Time (p_c), s	0.1	8.6	0.1	1.0	0.6	8.0	0.1	0.5

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		44.6	
HCM 2010 LOS		D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	11	25	18	13	102	14	2516	8	64	2086	137
Future Volume (veh/h)	135	11	25	18	13	102	14	2516	8	64	2086	137
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	136	11	25	18	13	103	14	2541	8	65	2107	138
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	59	0	305	48	23	305	22	3463	11	84	3391	221
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.66	0.66	0.05	0.69	0.69
Sat Flow, veh/h	0	0	1559	0	118	1557	1792	5285	17	1792	4918	320
Grp Volume(v), veh/h	147	0	25	31	0	103	14	1646	903	65	1462	783
Grp Sat Flow(s),veh/h/ln	0	0	1559	118	0	1557	1792	1712	1878	1792	1712	1814
Q Serve(g_s), s	0.0	0.0	1.5	0.0	0.0	6.7	0.9	37.5	37.5	4.2	27.2	27.7
Cycle Q Clear(g_c), s	23.0	0.0	1.5	23.0	0.0	6.7	0.9	37.5	37.5	4.2	27.2	27.7
Prop In Lane	0.93		1.00	0.58		1.00	1.00		0.01	1.00		0.18
Lane Grp Cap(c), veh/h	59	0	305	72	0	305	22	2243	1231	84	2361	1251
V/C Ratio(X)	2.49	0.00	0.08	0.43	0.00	0.34	0.63	0.73	0.73	0.78	0.62	0.63
Avail Cap(c_a), veh/h	59	0	305	72	0	305	61	2243	1231	153	2361	1251
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	0.0	38.6	42.1	0.0	40.7	57.7	13.4	13.5	55.4	9.9	10.0
Incr Delay (d2), s/veh	718.8	0.0	0.1	4.1	0.0	0.6	25.3	2.2	3.9	14.0	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.7	0.0	0.7	1.1	0.0	2.9	0.6	18.3	20.7	2.4	13.0	14.5
LnGrp Delay(d), s/veh	777.5	0.0	38.7	46.2	0.0	41.3	83.0	15.6	17.4	69.4	11.1	12.3
LnGrp LOS	F		D	D		D	F	B	B	E	B	B
Approach Vol, veh/h		172			134			2563			2310	
Approach Delay, s/veh		670.1			42.5			16.6			13.2	
Approach LOS		F			D			B			B	

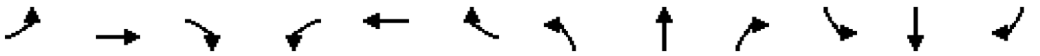
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.5	81.0		27.0	5.5	85.0		27.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	75.0		23.0	4.0	81.0		23.0
Max Q Clear Time (g_c+I1), s	6.2	39.5		25.0	2.9	29.7		25.0
Green Ext Time (p_c), s	0.0	26.5		0.0	0.0	29.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		37.4
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	576	603	73	96	464	223	73	1720	34	120	1693	318
Future Volume (veh/h)	576	603	73	96	464	223	73	1720	34	120	1693	318
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	613	641	78	102	494	237	78	1830	36	128	1801	338
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	678	1142	497	155	604	260	118	2329	46	177	2023	374
Arrive On Green	0.20	0.32	0.32	0.04	0.17	0.17	0.03	0.45	0.45	0.05	0.47	0.47
Sat Flow, veh/h	3476	3574	1556	3476	3574	1537	3476	5182	102	3476	4338	802
Grp Volume(v), veh/h	613	641	78	102	494	237	78	1209	657	128	1416	723
Grp Sat Flow(s),veh/h/ln	1738	1787	1556	1738	1787	1537	1738	1712	1860	1738	1712	1716
Q Serve(g_s), s	20.3	17.5	4.2	3.4	15.7	17.9	2.6	35.4	35.5	4.3	44.4	45.9
Cycle Q Clear(g_c), s	20.3	17.5	4.2	3.4	15.7	17.9	2.6	35.4	35.5	4.3	44.4	45.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.05	1.00		0.47
Lane Grp Cap(c), veh/h	678	1142	497	155	604	260	118	1538	836	177	1597	800
V/C Ratio(X)	0.90	0.56	0.16	0.66	0.82	0.91	0.66	0.79	0.79	0.72	0.89	0.90
Avail Cap(c_a), veh/h	737	1152	501	206	606	261	118	1538	836	177	1597	800
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	33.3	28.7	55.5	47.3	48.2	56.3	27.6	27.7	55.2	28.6	29.0
Incr Delay (d2), s/veh	13.9	0.6	0.1	4.7	8.6	33.5	12.9	4.1	7.4	13.6	7.7	15.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	8.7	1.8	1.7	8.5	10.0	1.5	17.5	19.8	2.4	22.5	25.2
LnGrp Delay(d), s/veh	60.3	33.9	28.9	60.2	55.9	81.7	69.2	31.8	35.0	68.8	36.3	44.6
LnGrp LOS	E	C	C	E	E	F	E	C	D	E	D	D
Approach Vol, veh/h		1332			833			1944			2267	
Approach Delay, s/veh		45.7			63.7			34.4			40.8	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	57.0	9.2	41.7	8.0	59.0	27.0	23.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	53.0	7.0	38.0	4.0	55.0	25.0	20.0
Max Q Clear Time (g_c+I1), s	6.3	37.5	5.4	19.5	4.6	47.9	22.3	19.9
Green Ext Time (p_c), s	0.0	10.6	0.0	4.1	0.0	6.2	0.7	0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	12	793	230	339	828	25	378	109	485	23	52	11
Future Volume (vph)	12	793	230	339	828	25	378	109	485	23	52	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00		0.99	
Satd. Flow (prot)	1805	3610	1587	3502	3592		1715	1756	1588		1841	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.71	0.79	1.00		0.89	
Satd. Flow (perm)	1805	3610	1587	3502	3592		1282	1431	1588		1665	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	13	835	242	357	872	26	398	115	511	24	55	12
RTOR Reduction (vph)	0	0	165	0	2	0	0	0	201	0	4	0
Lane Group Flow (vph)	13	835	77	357	896	0	251	262	310	0	87	0
Confl. Peds. (#/hr)			2	2					2	2		
Confl. Bikes (#/hr)			2			2			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	1.5	35.6	35.6	16.2	50.3		47.4	47.4	47.4		47.4	
Effective Green, g (s)	1.5	35.6	35.6	16.2	50.3		47.4	47.4	47.4		47.4	
Actuated g/C Ratio	0.01	0.32	0.32	0.15	0.45		0.43	0.43	0.43		0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	24	1155	508	510	1624		546	609	676		709	
v/s Ratio Prot	0.01	c0.23		c0.10	0.25							
v/s Ratio Perm			0.05				c0.20	0.18	0.19		0.05	
v/c Ratio	0.54	0.72	0.15	0.70	0.55		0.46	0.43	0.46		0.12	
Uniform Delay, d1	54.5	33.4	27.0	45.2	22.2		22.8	22.4	22.7		19.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	22.7	2.3	0.1	4.3	0.4		2.8	2.2	2.2		0.4	
Delay (s)	77.2	35.7	27.2	49.5	22.6		25.5	24.6	25.0		19.7	
Level of Service	E	D	C	D	C		C	C	C		B	
Approach Delay (s/veh)		34.3			30.3			25.0			19.7	
Approach LOS		C			C			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	13	0	14	29	1	23	14	966	62	13	572	29
Future Volume (veh/h)	13	0	14	29	1	23	14	966	62	13	572	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.97		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	14	0	15	32	1	25	15	1062	68	14	629	32
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	188	0	114	104	15	48	24	2831	1239	23	2828	1238
Arrive On Green	0.07	0.00	0.07	0.07	0.07	0.07	0.01	0.79	0.79	0.01	0.79	0.79
Sat Flow, veh/h	1549	0	1525	648	197	641	1792	3574	1565	1792	3574	1564
Grp Volume(v), veh/h	14	0	15	58	0	0	15	1062	68	14	629	32
Grp Sat Flow(s),veh/h/ln	1549	0	1525	1486	0	0	1792	1787	1565	1792	1787	1564
Q Serve(g_s), s	0.0	0.0	0.9	2.3	0.0	0.0	0.8	8.8	0.9	0.8	4.4	0.4
Cycle Q Clear(g_c), s	0.7	0.0	0.9	3.6	0.0	0.0	0.8	8.8	0.9	0.8	4.4	0.4
Prop In Lane	1.00		1.00	0.55		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	114	167	0	0	24	2831	1239	23	2828	1238
V/C Ratio(X)	0.07	0.00	0.13	0.35	0.00	0.00	0.61	0.38	0.05	0.61	0.22	0.03
Avail Cap(c_a), veh/h	373	0	321	362	0	0	162	2831	1239	144	2828	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	0.0	43.1	44.3	0.0	0.0	48.9	3.1	2.3	49.0	2.6	2.2
Incr Delay (d2), s/veh	0.2	0.0	0.5	1.2	0.0	0.0	22.4	0.4	0.1	22.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.4	1.6	0.0	0.0	0.6	4.4	0.4	0.5	2.3	0.2
LnGrp Delay(d), s/veh	43.2	0.0	43.6	45.5	0.0	0.0	71.3	3.4	2.3	71.9	2.8	2.3
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		29			58			1145			675	
Approach Delay, s/veh		43.4			45.5			4.3			4.2	
Approach LOS		D			D			A			A	

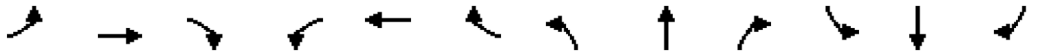
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	83.0		11.5	5.4	82.9		11.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	79.0		21.0	9.0	78.0		21.0
Max Q Clear Time (g_c+I1), s	2.8	10.8		2.9	2.8	6.4		5.6
Green Ext Time (p_c), s	0.0	9.8		0.1	0.0	4.7		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	431	275	106	49	225	36	84	563	33	14	291	308
Future Volume (veh/h)	431	275	106	49	225	36	84	563	33	14	291	308
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	459	293	113	52	239	38	89	599	35	15	310	328
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	579	837	315	261	353	55	438	1755	763	396	1755	771
Arrive On Green	0.25	0.33	0.33	0.03	0.11	0.11	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1792	2530	953	1792	3088	483	794	3574	1555	797	3574	1570
Grp Volume(v), veh/h	459	205	201	52	137	140	89	599	35	15	310	328
Grp Sat Flow(s),veh/h/ln	1792	1787	1696	1792	1787	1784	794	1787	1555	797	1787	1570
Q Serve(g_s), s	17.6	7.2	7.5	2.1	6.1	6.3	5.9	8.6	1.0	1.0	4.0	11.2
Cycle Q Clear(g_c), s	17.6	7.2	7.5	2.1	6.1	6.3	9.9	8.6	1.0	9.5	4.0	11.2
Prop In Lane	1.00		0.56	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	579	591	561	261	204	204	438	1755	763	396	1755	771
V/C Ratio(X)	0.79	0.35	0.36	0.20	0.67	0.69	0.20	0.34	0.05	0.04	0.18	0.43
Avail Cap(c_a), veh/h	1137	1284	1218	349	428	427	438	1755	763	396	1755	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.6	21.1	21.2	31.2	35.5	35.6	14.6	13.0	11.1	15.9	11.9	13.7
Incr Delay (d2), s/veh	2.5	0.3	0.4	0.4	3.8	4.1	1.0	0.5	0.1	0.2	0.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	3.6	3.6	1.1	3.3	3.3	1.4	4.3	0.4	0.2	2.0	5.2
LnGrp Delay(d), s/veh	24.1	21.5	21.6	31.5	39.3	39.7	15.7	13.5	11.2	16.1	12.1	15.4
LnGrp LOS	C	C	C	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		865			329			723			653	
Approach Delay, s/veh		22.9			38.2			13.7			13.8	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		45.0	6.9	31.6		45.0	25.0	13.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		41.0	7.0	60.0		41.0	47.0	20.0
Max Q Clear Time (g_c+I1), s		11.9	4.1	9.5		13.2	19.6	8.3
Green Ext Time (p_c), s		4.9	0.0	2.5		3.2	1.4	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.0
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	9	580	133	126	465	10	293	93	221	23	47	7
Future Volume (veh/h)	9	580	133	126	465	10	293	93	221	23	47	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	10	617	141	134	495	11	312	99	235	24	50	7
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	296	778	178	257	1187	26	790	894	748	493	1141	156
Arrive On Green	0.01	0.27	0.27	0.07	0.33	0.33	0.13	0.47	0.47	0.02	0.36	0.36
Sat Flow, veh/h	1810	2918	666	1810	3608	80	1810	1900	1590	1810	3184	436
Grp Volume(v), veh/h	10	381	377	134	247	259	312	99	235	24	28	29
Grp Sat Flow(s),veh/h/ln	1810	1805	1779	1810	1805	1883	1810	1900	1590	1810	1805	1815
Q Serve(g_s), s	0.4	18.4	18.4	4.8	10.0	10.0	9.5	2.7	8.6	0.8	0.9	1.0
Cycle Q Clear(g_c), s	0.4	18.4	18.4	4.8	10.0	10.0	9.5	2.7	8.6	0.8	0.9	1.0
Prop In Lane	1.00		0.37	1.00		0.04	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	296	481	474	257	594	619	790	894	748	493	647	651
V/C Ratio(X)	0.03	0.79	0.79	0.52	0.42	0.42	0.39	0.11	0.31	0.05	0.04	0.04
Avail Cap(c_a), veh/h	355	810	799	398	1003	1047	1093	894	748	535	647	651
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.7	31.9	31.9	23.4	24.4	24.4	13.5	13.8	15.4	18.3	19.5	19.6
Incr Delay (d2), s/veh	0.0	3.0	3.1	1.6	0.5	0.4	0.3	0.3	1.1	0.0	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	9.5	9.4	2.5	5.0	5.2	4.8	1.5	4.0	0.4	0.5	0.5
LnGrp Delay(d), s/veh	24.8	34.9	35.0	25.1	24.9	24.9	13.9	14.1	16.5	18.4	19.7	19.7
LnGrp LOS	C	C	C	C	C	C	B	B	B	B	B	B
Approach Vol, veh/h		768			640			646			81	
Approach Delay, s/veh		34.8			24.9			14.9			19.3	
Approach LOS		C			C			B			B	

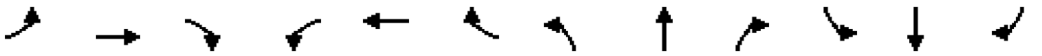
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.9	48.0	10.7	28.9	16.3	37.5	4.9	34.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	44.0	14.0	42.0	28.0	20.0	4.0	52.0
Max Q Clear Time (g_c+I1), s	2.8	10.6	6.8	20.4	11.5	3.0	2.4	12.0
Green Ext Time (p_c), s	0.0	1.3	0.2	4.5	0.8	0.2	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	354	59	43	472	244	42	293	46	135	209	76
Future Volume (veh/h)	114	354	59	43	472	244	42	293	46	135	209	76
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	116	361	60	44	482	249	43	299	47	138	213	78
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	149	1157	509	56	617	317	54	1119	174	175	1105	392
Arrive On Green	0.08	0.32	0.32	0.03	0.27	0.27	0.03	0.36	0.36	0.10	0.43	0.43
Sat Flow, veh/h	1792	3574	1571	1792	2272	1167	1792	3094	480	1792	2576	913
Grp Volume(v), veh/h	116	361	60	44	379	352	43	171	175	138	146	145
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1651	1792	1787	1787	1792	1787	1701
Q Serve(g_s), s	5.5	6.6	2.3	2.1	16.9	17.0	2.1	5.8	6.0	6.5	4.4	4.6
Cycle Q Clear(g_c), s	5.5	6.6	2.3	2.1	16.9	17.0	2.1	5.8	6.0	6.5	4.4	4.6
Prop In Lane	1.00		1.00	1.00		0.71	1.00		0.27	1.00		0.54
Lane Grp Cap(c), veh/h	149	1157	509	56	486	449	54	647	646	175	767	730
V/C Ratio(X)	0.78	0.31	0.12	0.79	0.78	0.79	0.79	0.26	0.27	0.79	0.19	0.20
Avail Cap(c_a), veh/h	374	2031	893	187	829	766	187	647	646	436	767	730
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.7	21.9	20.5	41.5	29.0	29.1	41.5	19.4	19.5	38.0	15.3	15.4
Incr Delay (d2), s/veh	8.4	0.2	0.1	21.2	2.8	3.1	21.8	1.0	1.0	7.7	0.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	3.2	1.0	1.4	8.7	8.1	1.3	3.0	3.1	3.6	2.3	2.3
LnGrp Delay(d), s/veh	47.2	22.1	20.6	62.7	31.8	32.1	63.3	20.4	20.5	45.7	15.8	16.0
LnGrp LOS	D	C	C	E	C	C	E	C	C	D	B	B
Approach Vol, veh/h		537			775			389			429	
Approach Delay, s/veh		27.3			33.7			25.2			25.5	
Approach LOS		C			C			C			C	

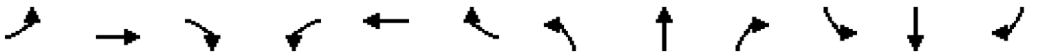
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	35.2	6.7	31.9	6.6	41.0	11.2	27.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	25.0	9.0	49.0	9.0	37.0	18.0	40.0
Max Q Clear Time (g_c+I1), s	8.5	8.0	4.1	8.6	4.1	6.6	7.5	19.0
Green Ext Time (p_c), s	0.3	1.7	0.0	2.6	0.0	1.6	0.2	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.9
HCM 2010 LOS	C



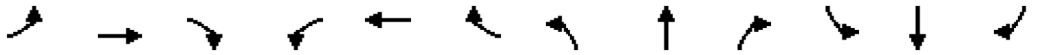
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	542	310	26	81	402	351	33	339	53	359	287	622
Future Volume (vph)	542	310	26	81	402	351	33	339	53	359	287	622
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		1.00		1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.98		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1626	3324		1787	3574	1584		3479		1698	1774	2743
Flt Permitted	0.95	0.55		0.95	1.00	1.00		0.90		0.95	0.93	1.00
Satd. Flow (perm)	1626	1866		1787	3574	1584		3136		1698	1660	2743
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	565	323	27	84	419	366	34	353	55	374	299	648
RTOR Reduction (vph)	0	3	0	0	0	48	0	9	0	0	0	26
Lane Group Flow (vph)	299	613	0	84	419	318	0	433	0	329	344	622
Confl. Peds. (#/hr)	3		2	2		3	5		7	7		5
Confl. Bikes (#/hr)			2			2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	26.3	52.9		6.1	22.6	47.0		25.2		24.4	53.6	79.9
Effective Green, g (s)	26.3	52.9		6.1	22.6	47.0		25.2		24.4	53.6	79.9
Actuated g/C Ratio	0.23	0.46		0.05	0.20	0.41		0.22		0.21	0.47	0.70
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	373	1197		95	705	705		690		361	801	2009
v/s Ratio Prot	c0.18	0.12		0.05	c0.12	0.10				c0.19	0.09	0.07
v/s Ratio Perm		0.12				0.10		c0.14			0.11	0.16
v/c Ratio	0.80	0.51		0.88	0.59	0.45		0.63		0.91	0.43	0.31
Uniform Delay, d1	41.6	21.7		53.8	41.8	24.4		40.4		44.0	20.3	6.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	11.7	0.4		56.2	1.4	0.5		4.3		26.4	0.4	0.1
Delay (s)	53.4	22.1		110.1	43.1	24.9		44.7		70.4	20.6	6.8
Level of Service	D	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		32.3			41.9			44.7			26.2	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	114.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	329	414	441	394	3	445	3	383	3	6	1
Future Volume (vph)	1	329	414	441	394	3	445	3	383	3	6	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.98	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1760	3574	1577	1784	3568		1698	1703	1561	1756	1841	
Flt Permitted	0.51	1.00	1.00	0.30	1.00		0.95	0.63	1.00	0.95	1.00	
Satd. Flow (perm)	948	3574	1577	573	3568		1698	1125	1561	1756	1841	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1	339	427	455	406	3	459	3	395	3	6	1
RTOR Reduction (vph)	0	0	279	0	1	0	0	0	71	0	1	0
Lane Group Flow (vph)	1	339	148	455	408	0	229	233	324	3	6	0
Confl. Peds. (#/hr)	17		8	8		17			13	13		
Confl. Bikes (#/hr)			2			3			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	18.0	17.4	35.8	46.7	42.1		18.4	48.9	69.6	0.6	26.5	
Effective Green, g (s)	18.0	17.4	35.8	46.7	42.1		18.4	48.9	69.6	0.6	26.5	
Actuated g/C Ratio	0.17	0.17	0.35	0.45	0.41		0.18	0.47	0.67	0.01	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	169	600	605	554	1449		301	633	1108	10	470	
v/s Ratio Prot	0.00	0.09	0.04	c0.20	0.11		c0.13	0.07	0.07	0.00	0.00	
v/s Ratio Perm	0.00		0.05	c0.17				c0.11	0.14			
v/c Ratio	0.01	0.56	0.24	0.82	0.28		0.76	0.37	0.29	0.30	0.01	
Uniform Delay, d1	35.4	39.6	24.2	21.8	20.6		40.5	17.5	6.9	51.3	28.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.0	1.2	0.2	9.5	0.1		10.8	0.4	0.1	16.1	0.1	
Delay (s)	35.4	40.8	24.4	31.3	20.7		51.3	17.8	7.1	67.4	28.8	
Level of Service	D	D	C	C	C		D	B	A	E	C	
Approach Delay (s/veh)		31.7			26.3			21.8			40.4	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	103.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	199	91	118	198	92	85	706	87	59	768	45
Future Volume (veh/h)	69	199	91	118	198	92	85	706	87	59	768	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.95	0.99		0.93	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	72	207	95	123	206	96	89	735	91	61	800	47
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	241	320	140	261	386	171	450	1924	238	454	2050	120
Arrive On Green	0.05	0.13	0.13	0.08	0.16	0.16	0.04	0.60	0.60	0.03	0.59	0.59
Sat Flow, veh/h	1810	2403	1051	1810	2380	1051	1810	3227	399	1810	3461	203
Grp Volume(v), veh/h	72	153	149	123	154	148	89	411	415	61	417	430
Grp Sat Flow(s),veh/h/ln	1810	1805	1648	1810	1805	1626	1810	1805	1821	1810	1805	1859
Q Serve(g_s), s	3.4	7.9	8.5	5.6	7.7	8.3	1.9	11.8	11.8	1.3	12.1	12.1
Cycle Q Clear(g_c), s	3.4	7.9	8.5	5.6	7.7	8.3	1.9	11.8	11.8	1.3	12.1	12.1
Prop In Lane	1.00		0.64	1.00		0.65	1.00		0.22	1.00		0.11
Lane Grp Cap(c), veh/h	241	240	219	261	293	264	450	1076	1086	454	1069	1101
V/C Ratio(X)	0.30	0.64	0.68	0.47	0.52	0.56	0.20	0.38	0.38	0.13	0.39	0.39
Avail Cap(c_a), veh/h	302	401	366	416	547	493	584	1076	1086	522	1069	1101
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.8	40.6	40.9	32.9	38.0	38.2	8.0	10.4	10.4	7.9	10.7	10.7
Incr Delay (d2), s/veh	0.7	2.8	3.7	1.3	1.5	1.9	0.2	1.0	1.0	0.1	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	4.1	4.1	2.9	4.0	3.9	1.0	6.1	6.2	0.7	6.3	6.5
LnGrp Delay(d), s/veh	35.5	43.4	44.6	34.3	39.4	40.1	8.2	11.5	11.5	8.1	11.8	11.7
LnGrp LOS	D	D	D	C	D	D	A	B	B	A	B	B
Approach Vol, veh/h		374			425			915			908	
Approach Delay, s/veh		42.4			38.2			11.2			11.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	63.0	11.5	17.2	7.7	62.6	8.6	20.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	59.0	16.0	22.0	11.0	55.0	8.0	30.0
Max Q Clear Time (g_c+I1), s	3.3	13.8	7.6	10.5	3.9	14.1	5.4	10.3
Green Ext Time (p_c), s	0.0	5.9	0.2	1.3	0.1	6.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	699	103	187	865	197	216	1236	210	144	832	225
Future Volume (veh/h)	169	699	103	187	865	197	216	1236	210	144	832	225
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	171	706	104	189	874	199	218	1248	212	145	840	227
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	231	1062	155	251	1005	227	251	1617	817	174	1464	739
Arrive On Green	0.07	0.24	0.24	0.07	0.24	0.24	0.14	0.45	0.45	0.10	0.41	0.41
Sat Flow, veh/h	3476	4498	654	3476	4151	939	1792	3574	1549	1792	3574	1545
Grp Volume(v), veh/h	171	535	275	189	720	353	218	1248	212	145	840	227
Grp Sat Flow(s),veh/h/ln	1738	1712	1729	1738	1712	1667	1792	1787	1549	1792	1787	1545
Q Serve(g_s), s	5.4	16.0	16.3	6.0	22.7	23.0	13.4	33.1	8.5	9.0	20.4	10.2
Cycle Q Clear(g_c), s	5.4	16.0	16.3	6.0	22.7	23.0	13.4	33.1	8.5	9.0	20.4	10.2
Prop In Lane	1.00		0.38	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	231	808	408	251	829	403	251	1617	817	174	1464	739
V/C Ratio(X)	0.74	0.66	0.67	0.75	0.87	0.88	0.87	0.77	0.26	0.83	0.57	0.31
Avail Cap(c_a), veh/h	277	820	414	339	881	429	381	1617	817	238	1464	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	39.0	39.1	51.3	41.0	41.1	47.5	26.0	14.8	50.0	25.7	18.1
Incr Delay (d2), s/veh	8.3	2.0	4.2	6.3	8.9	17.4	12.8	3.6	0.8	16.2	1.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.7	8.3	3.1	11.7	12.5	7.6	17.1	3.8	5.2	10.4	4.5
LnGrp Delay(d), s/veh	60.0	41.0	43.3	57.6	49.9	58.5	60.2	29.6	15.5	66.2	27.3	19.2
LnGrp LOS	E	D	D	E	D	E	E	C	B	E	C	B
Approach Vol, veh/h		981			1262			1678			1212	
Approach Delay, s/veh		44.9			53.5			31.8			30.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	55.0	12.1	30.6	19.8	50.2	11.5	31.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	51.0	11.0	27.0	24.0	42.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	11.0	35.1	8.0	18.3	15.4	22.4	7.4	25.0
Green Ext Time (p_c), s	0.1	8.7	0.2	3.2	0.4	6.5	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	379	828	101	491	920	124	193	912	445	80	503	202
Future Volume (veh/h)	379	828	101	491	920	124	193	912	445	80	503	202
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	391	854	104	506	948	128	199	940	459	82	519	208
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	593	2605	316	648	2888	883	197	1358	597	122	589	235
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.11	0.38	0.38	0.23	0.23	0.23
Sat Flow, veh/h	1033	4679	567	1155	5187	1587	1810	3610	1587	391	2515	1004
Grp Volume(v), veh/h	391	630	328	506	948	128	199	940	459	82	372	355
Grp Sat Flow(s),veh/h/ln	516	1729	1788	577	1729	1587	1810	1805	1587	391	1805	1714
Q Serve(g_s), s	39.5	11.8	11.9	50.6	11.9	4.7	13.0	26.3	30.3	18.7	23.8	23.9
Cycle Q Clear(g_c), s	51.4	11.8	11.9	62.6	11.9	4.7	13.0	26.3	30.3	28.0	23.8	23.9
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	593	1925	996	648	2888	883	197	1358	597	122	423	401
V/C Ratio(X)	0.66	0.33	0.33	0.78	0.33	0.14	1.01	0.69	0.77	0.67	0.88	0.89
Avail Cap(c_a), veh/h	597	1937	1002	652	2906	889	197	1358	597	122	423	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	14.4	14.4	31.4	14.4	12.8	53.3	31.4	32.7	52.8	44.2	44.2
Incr Delay (d2), s/veh	2.7	0.1	0.2	6.0	0.1	0.1	67.2	2.9	9.2	26.1	22.1	23.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	5.6	5.9	8.6	5.6	2.0	10.1	13.6	14.8	3.6	14.5	14.0
LnGrp Delay(d), s/veh	30.9	14.5	14.6	37.4	14.4	12.9	120.6	34.4	41.9	78.8	66.3	67.9
LnGrp LOS	C	B	B	D	B	B	F	C	D	E	E	E
Approach Vol, veh/h		1349			1582			1598			809	
Approach Delay, s/veh		19.3			21.7			47.3			68.3	
Approach LOS		B			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		49.0		70.6	17.0	32.0		70.6
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0	13.0	28.0		67.0
Max Q Clear Time (g_c+I1), s		32.3		53.4	15.0	30.0		64.6
Green Ext Time (p_c), s		6.4		8.3	0.0	0.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.8
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	258	79	69	1164	1037	209
Future Volume (veh/h)	258	79	69	1164	1037	209
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	79	69	1164	1037	209
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	300	267	89	2706	1975	397
Arrive On Green	0.17	0.17	0.05	0.76	0.67	0.67
Sat Flow, veh/h	1792	1599	1792	3668	3045	593
Grp Volume(v), veh/h	258	79	69	1164	627	619
Grp Sat Flow(s),veh/h/ln	1792	1599	1792	1787	1787	1756
Q Serve(g_s), s	14.8	4.6	4.0	12.4	18.9	19.0
Cycle Q Clear(g_c), s	14.8	4.6	4.0	12.4	18.9	19.0
Prop In Lane	1.00	1.00	1.00			0.34
Lane Grp Cap(c), veh/h	300	267	89	2706	1196	1176
V/C Ratio(X)	0.86	0.30	0.77	0.43	0.52	0.53
Avail Cap(c_a), veh/h	543	484	203	2706	1196	1176
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	38.5	49.6	4.6	8.9	8.9
Incr Delay (d2), s/veh	7.2	0.6	13.1	0.5	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	4.3	2.3	6.2	9.8	9.7
LnGrp Delay(d), s/veh	50.0	39.2	62.7	5.1	10.5	10.6
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	337			1233	1246	
Approach Delay, s/veh	47.5			8.3	10.6	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		84.0		21.7	9.3	74.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		80.0		32.0	12.0	64.0		
Max Q Clear Time (g_c+I1), s		14.4		16.8	6.0	21.0		
Green Ext Time (p_c), s		10.9		0.9	0.1	10.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	572	0	0	826	10	9	141	14	512	0	329
Future Volume (veh/h)	147	572	0	0	826	10	9	141	14	512	0	329
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1900	1881	1900	1881	0	1881
Adj Flow Rate, veh/h	155	602	0	0	869	0	9	148	15	539	0	346
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1	1	0	1
Cap, veh/h	357	1783	0	0	1255	561	35	583	59	0	0	0
Arrive On Green	0.08	0.50	0.00	0.00	0.35	0.00	0.37	0.37	0.37	0.00	0.00	0.00
Sat Flow, veh/h	1792	3668	0	0	3668	1599	96	1587	161		0	
Grp Volume(v), veh/h	155	602	0	0	869	0	172	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1792	1787	0	0	1787	1599	1844	0	0			
Q Serve(g_s), s	3.0	6.1	0.0	0.0	12.5	0.0	3.9	0.0	0.0			
Cycle Q Clear(g_c), s	3.0	6.1	0.0	0.0	12.5	0.0	3.9	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.05		0.09			
Lane Grp Cap(c), veh/h	357	1783	0	0	1255	561	678	0	0			
V/C Ratio(X)	0.43	0.34	0.00	0.00	0.69	0.00	0.25	0.00	0.00			
Avail Cap(c_a), veh/h	571	3404	0	0	2449	1095	678	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.7	9.0	0.0	0.0	16.7	0.0	13.2	0.0	0.0			
Incr Delay (d2), s/veh	0.8	0.1	0.0	0.0	0.7	0.0	0.9	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.5	3.0	0.0	0.0	6.3	0.0	2.1	0.0	0.0			
LnGrp Delay(d), s/veh	12.5	9.2	0.0	0.0	17.3	0.0	14.1	0.0	0.0			
LnGrp LOS	B	A			B		B					
Approach Vol, veh/h		757			869			172				
Approach Delay, s/veh		9.8			17.3			14.1				
Approach LOS		A			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		26.0		33.8			8.8	25.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		22.0		57.0			12.0	41.0
Max Q Clear Time (g_c+I1), s		5.9		8.1			5.0	14.5
Green Ext Time (p_c), s		0.8		4.5			0.2	6.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	157	1218	250	145	712	115	285	936	140	162	807	113
Future Volume (veh/h)	157	1218	250	145	712	115	285	936	140	162	807	113
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	160	1243	255	148	727	117	291	955	143	165	823	115
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	1367	281	175	1395	222	348	1330	580	221	1055	147
Arrive On Green	0.11	0.32	0.32	0.10	0.32	0.32	0.10	0.38	0.38	0.06	0.34	0.34
Sat Flow, veh/h	1774	4212	864	1774	4407	702	3442	3539	1544	3442	3114	435
Grp Volume(v), veh/h	160	1000	498	148	557	287	291	955	143	165	468	470
Grp Sat Flow(s),veh/h/ln	1774	1695	1686	1774	1695	1718	1721	1770	1544	1721	1770	1780
Q Serve(g_s), s	10.4	33.1	33.1	9.6	15.7	16.0	9.7	27.0	7.5	5.5	27.8	27.8
Cycle Q Clear(g_c), s	10.4	33.1	33.1	9.6	15.7	16.0	9.7	27.0	7.5	5.5	27.8	27.8
Prop In Lane	1.00		0.51	1.00		0.41	1.00		1.00	1.00		0.24
Lane Grp Cap(c), veh/h	189	1101	547	175	1073	544	348	1330	580	221	599	603
V/C Ratio(X)	0.84	0.91	0.91	0.85	0.52	0.53	0.84	0.72	0.25	0.75	0.78	0.78
Avail Cap(c_a), veh/h	288	1129	562	197	1073	544	382	1330	580	235	599	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	37.9	37.9	51.9	32.7	32.8	51.6	31.2	25.1	53.9	34.8	34.8
Incr Delay (d2), s/veh	13.2	10.6	18.6	25.1	0.4	0.9	13.8	3.4	1.0	11.7	9.7	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	17.1	18.2	6.0	7.4	7.7	5.3	13.8	3.3	3.0	15.1	15.2
LnGrp Delay(d), s/veh	64.5	48.5	56.4	77.0	33.2	33.8	65.5	34.6	26.1	65.5	44.5	44.5
LnGrp LOS	E	D	E	E	C	C	E	C	C	E	D	D
Approach Vol, veh/h		1658			992			1389			1103	
Approach Delay, s/veh		52.4			39.9			40.2			47.6	
Approach LOS		D			D			D			D	

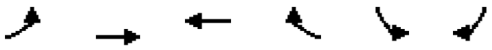
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	48.0	15.6	42.0	15.9	43.7	16.5	41.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	13.0	39.0	13.0	39.0	19.0	33.0
Max Q Clear Time (g_c+I1), s	7.5	29.0	11.6	35.1	11.7	29.8	12.4	18.0
Green Ext Time (p_c), s	0.0	5.9	0.0	2.9	0.1	3.7	0.2	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	208	1120	217	162	707	186	169	855	240	244	882	147
Future Volume (veh/h)	208	1120	217	162	707	186	169	855	240	244	882	147
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	224	1204	233	174	760	200	182	919	258	262	948	158
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	1368	588	202	958	249	211	1106	665	292	1268	789
Arrive On Green	0.14	0.27	0.27	0.11	0.24	0.24	0.12	0.31	0.31	0.16	0.36	0.36
Sat Flow, veh/h	1774	5085	1486	1774	3983	1035	1774	3539	1550	1774	3539	1571
Grp Volume(v), veh/h	224	1204	233	174	645	315	182	919	258	262	948	158
Grp Sat Flow(s),veh/h/ln	1774	1695	1486	1774	1695	1627	1774	1770	1550	1774	1770	1571
Q Serve(g_s), s	14.2	26.0	13.0	11.0	20.4	20.8	11.5	27.6	13.1	16.6	26.9	6.4
Cycle Q Clear(g_c), s	14.2	26.0	13.0	11.0	20.4	20.8	11.5	27.6	13.1	16.6	26.9	6.4
Prop In Lane	1.00		1.00	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	1368	588	202	815	391	211	1106	665	292	1268	789
V/C Ratio(X)	0.88	0.88	0.40	0.86	0.79	0.80	0.86	0.83	0.39	0.90	0.75	0.20
Avail Cap(c_a), veh/h	294	1422	604	232	829	398	248	1106	665	341	1268	789
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	40.1	25.4	49.8	40.8	40.9	49.5	36.5	22.6	46.9	32.2	15.8
Incr Delay (d2), s/veh	23.5	6.5	0.4	23.9	5.2	11.2	22.9	7.3	1.7	23.1	4.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	13.0	5.4	6.8	10.2	10.6	7.0	14.5	5.9	10.0	13.9	2.9
LnGrp Delay(d), s/veh	71.6	46.6	25.9	73.7	46.0	52.1	72.4	43.8	24.3	70.0	36.3	16.4
LnGrp LOS	E	D	C	E	D	D	E	D	C	E	D	B
Approach Vol, veh/h		1661			1134			1359			1368	
Approach Delay, s/veh		47.1			51.9			43.9			40.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.8	39.8	17.1	34.8	17.6	45.0	20.3	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	35.0	15.0	32.0	16.0	41.0	19.0	28.0
Max Q Clear Time (g_c+I1), s	18.6	29.6	13.0	28.0	13.5	28.9	16.2	22.8
Green Ext Time (p_c), s	0.2	3.1	0.1	2.8	0.1	5.3	0.2	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.6
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	822	944	218	674	197
Future Volume (vph)	30	822	944	218	674	197
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1687	3374	3374	1459	3271	1374
Flt Permitted	0.14	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	242	3374	3374	1459	3271	1374
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	31	839	963	222	688	201
RTOR Reduction (vph)	0	0	0	119	1	41
Lane Group Flow (vph)	31	839	963	103	707	140
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				2		
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	34.8	34.8	34.8	34.8	50.3	50.3
Effective Green, g (s)	34.8	34.8	34.8	34.8	50.3	50.3
Actuated g/C Ratio	0.37	0.37	0.37	0.37	0.54	0.54
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	90	1261	1261	545	1767	742
v/s Ratio Prot		0.25	c0.29		c0.22	
v/s Ratio Perm	0.13			0.07		0.10
v/c Ratio	0.34	0.67	0.76	0.19	0.40	0.19
Uniform Delay, d1	21.0	24.3	25.5	19.6	12.5	11.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	1.3	2.8	0.2	0.7	0.6
Delay (s)	23.2	25.6	28.4	19.8	13.2	11.5
Level of Service	C	C	C	B	B	B
Approach Delay (s/veh)		25.6	26.8		12.9	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	93.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	3.8

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	25	17	27	1222	1544	21
Future Vol, veh/h	25	17	27	1222	1544	21
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	100	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	27	18	29	1314	1660	23

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2377	832	1685	0	-	0
Stage 1	1662	-	-	-	-	-
Stage 2	715	-	-	-	-	-
Critical Hdwy	6.88	6.98	4.18	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.34	2.24	-	-	-
Pot Cap-1 Maneuver	28	308	367	-	-	-
Stage 1	137	-	-	-	-	-
Stage 2	440	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 26	307	366	-	-	-
Mov Cap-2 Maneuver	~ 26	-	-	-	-	-
Stage 1	126	-	-	-	-	-
Stage 2	439	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	248.2	0.3	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	366	-	26	307	-	-
HCM Lane V/C Ratio	0.079	-	1.034	0.06	-	-
HCM Control Delay (s/veh)	15.7	-	$ 405	17.5	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	3.2	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	15	1423	74	69	1050	47	88	41	83	75	66	20
Future Volume (veh/h)	15	1423	74	69	1050	47	88	41	83	75	66	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	15	1437	75	70	1061	47	89	41	84	76	67	20
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	2684	140	225	2708	120	515	638	538	513	638	531
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.34	0.34	0.34	0.34	0.34	0.34
Sat Flow, veh/h	506	4940	258	344	4985	221	1297	1863	1571	1253	1863	1551
Grp Volume(v), veh/h	15	986	526	70	721	387	89	41	84	76	67	20
Grp Sat Flow(s),veh/h/ln	506	1695	1808	344	1695	1815	1297	1863	1571	1253	1863	1551
Q Serve(g_s), s	1.2	13.1	13.1	11.5	8.6	8.7	3.5	1.0	2.6	3.0	1.7	0.6
Cycle Q Clear(g_c), s	9.9	13.1	13.1	24.6	8.6	8.7	5.2	1.0	2.6	4.1	1.7	0.6
Prop In Lane	1.00		0.14	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	1842	982	225	1842	986	515	638	538	513	638	531
V/C Ratio(X)	0.05	0.54	0.54	0.31	0.39	0.39	0.17	0.06	0.16	0.15	0.11	0.04
Avail Cap(c_a), veh/h	676	4258	2270	471	4258	2280	515	638	538	513	638	531
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.2	10.3	10.3	18.2	9.3	9.3	17.5	15.5	16.0	16.9	15.7	15.3
Incr Delay (d2), s/veh	0.1	0.2	0.5	0.8	0.1	0.3	0.7	0.2	0.6	0.6	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.1	6.6	1.1	4.0	4.4	1.4	0.6	1.2	1.1	0.9	0.3
LnGrp Delay(d), s/veh	12.2	10.5	10.8	19.0	9.4	9.5	18.2	15.7	16.6	17.5	16.0	15.5
LnGrp LOS	B	B	B	B	A	A	B	B	B	B	B	B
Approach Vol, veh/h		1527			1178			214			163	
Approach Delay, s/veh		10.6			10.0			17.1			16.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		28.0		42.1		28.0		42.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		24.0		88.0		24.0		88.0
Max Q Clear Time (g_c+I1), s		7.2		15.1		6.1		26.6
Green Ext Time (p_c), s		0.7		15.5		0.6		11.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	32	0	53	1	0	5	58	776	7	63	1034	34
Future Volume (veh/h)	32	0	53	1	0	5	58	776	7	63	1034	34
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	34	0	57	1	0	5	62	834	8	68	1112	37
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	0	291	76	0	291	80	2299	1001	87	2315	1032
Arrive On Green	0.18	0.00	0.18	0.18	0.00	0.18	0.04	0.65	0.65	0.05	0.65	0.65
Sat Flow, veh/h	60	0	1583	31	0	1581	1774	3539	1540	1774	3539	1577
Grp Volume(v), veh/h	34	0	57	1	0	5	62	834	8	68	1112	37
Grp Sat Flow(s),veh/h/ln	60	0	1583	31	0	1581	1774	1770	1540	1774	1770	1577
Q Serve(g_s), s	0.8	0.0	3.1	0.1	0.0	0.3	3.5	11.1	0.2	3.9	16.2	0.9
Cycle Q Clear(g_c), s	18.8	0.0	3.1	18.5	0.0	0.3	3.5	11.1	0.2	3.9	16.2	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	0	291	76	0	291	80	2299	1001	87	2315	1032
V/C Ratio(X)	0.42	0.00	0.20	0.01	0.00	0.02	0.78	0.36	0.01	0.78	0.48	0.04
Avail Cap(c_a), veh/h	207	0	433	76	0	291	225	2299	1001	242	2315	1032
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	0.0	35.4	50.8	0.0	34.2	48.4	8.2	6.3	48.1	8.9	6.3
Incr Delay (d2), s/veh	3.4	0.0	0.3	0.1	0.0	0.0	14.9	0.4	0.0	13.7	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	1.4	0.0	0.0	0.1	2.1	5.5	0.1	2.2	8.1	0.4
LnGrp Delay(d), s/veh	54.5	0.0	35.7	50.8	0.0	34.2	63.4	8.7	6.3	61.9	9.7	6.3
LnGrp LOS	D		D	D		C	E	A	A	E	A	A
Approach Vol, veh/h		91			6			904			1217	
Approach Delay, s/veh		42.7			37.0			12.4			12.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.1	70.6		23.3	8.6	71.0		23.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	66.0		28.0	13.0	67.0		16.0
Max Q Clear Time (g_c+I1), s	5.9	13.1		20.8	5.5	18.2		20.5
Green Ext Time (p_c), s	0.1	6.9		0.1	0.1	10.6		0.0

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		13.8	
HCM 2010 LOS		B	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	0	56	35	2	4	67	389	64	6	417	2
Future Volume (veh/h)	1	0	56	35	2	4	67	389	64	6	417	2
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	1	0	57	36	2	4	68	397	65	6	426	2
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	61	0	301	60	2	289	190	1092	1150	35	1385	1152
Arrive On Green	0.19	0.00	0.19	0.19	0.19	0.19	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	4	0	1571	10	10	1507	210	1472	1550	7	1867	1553
Grp Volume(v), veh/h	1	0	57	38	0	4	465	0	65	432	0	2
Grp Sat Flow(s),veh/h/ln	4	0	1571	20	0	1507	1682	0	1550	1874	0	1553
Q Serve(g_s), s	0.1	0.0	3.7	0.2	0.0	0.3	0.0	0.0	1.4	0.0	0.0	0.0
Cycle Q Clear(g_c), s	23.0	0.0	3.7	23.0	0.0	0.3	10.2	0.0	1.4	9.2	0.0	0.0
Prop In Lane	1.00		1.00	0.95		1.00	0.15		1.00	0.01		1.00
Lane Grp Cap(c), veh/h	61	0	301	62	0	289	1282	0	1150	1421	0	1152
V/C Ratio(X)	0.02	0.00	0.19	0.61	0.00	0.01	0.36	0.00	0.06	0.30	0.00	0.00
Avail Cap(c_a), veh/h	61	0	301	62	0	289	1282	0	1150	1421	0	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	59.9	0.0	40.7	58.9	0.0	39.3	5.3	0.0	4.2	5.2	0.0	4.0
Incr Delay (d2), s/veh	0.1	0.0	0.3	16.1	0.0	0.0	0.8	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	1.6	1.5	0.0	0.1	5.5	0.0	0.6	4.9	0.0	0.0
LnGrp Delay(d), s/veh	60.0	0.0	41.0	75.0	0.0	39.3	6.1	0.0	4.3	5.7	0.0	4.0
LnGrp LOS	E		D	E		D	A		A	A		A
Approach Vol, veh/h		58			42			530			434	
Approach Delay, s/veh		41.3			71.6			5.9			5.7	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		93.0		27.0		93.0		27.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		89.0		23.0		89.0		23.0
Max Q Clear Time (g_c+I1), s		12.2		25.0		11.2		25.0
Green Ext Time (p_c), s		4.1		0.0		3.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	125	89	93	51	42	61	40	1133	75	77	1130	46
Future Volume (veh/h)	125	89	93	51	42	61	40	1133	75	77	1130	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	132	94	98	54	44	64	42	1193	79	81	1189	48
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	162	291	284	70	70	102	92	2009	133	104	2223	980
Arrive On Green	0.09	0.16	0.16	0.04	0.10	0.10	0.03	0.60	0.60	0.06	0.63	0.63
Sat Flow, veh/h	1774	1863	1547	1774	672	977	3442	3369	223	1774	3539	1560
Grp Volume(v), veh/h	132	94	98	54	0	108	42	626	646	81	1189	48
Grp Sat Flow(s),veh/h/ln	1774	1863	1547	1774	0	1649	1721	1770	1823	1774	1770	1560
Q Serve(g_s), s	7.8	4.8	5.9	3.2	0.0	6.7	1.3	23.6	23.7	4.8	20.1	1.3
Cycle Q Clear(g_c), s	7.8	4.8	5.9	3.2	0.0	6.7	1.3	23.6	23.7	4.8	20.1	1.3
Prop In Lane	1.00		1.00	1.00		0.59	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	162	291	284	70	0	171	92	1055	1087	104	2223	980
V/C Ratio(X)	0.81	0.32	0.35	0.78	0.00	0.63	0.46	0.59	0.59	0.78	0.53	0.05
Avail Cap(c_a), veh/h	266	402	376	150	0	247	161	1055	1087	200	2223	980
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	40.0	38.0	50.8	0.0	45.8	51.2	13.5	13.5	49.5	11.1	7.6
Incr Delay (d2), s/veh	9.5	0.6	0.7	16.6	0.0	3.8	3.5	2.5	2.4	11.9	0.9	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	2.5	2.6	1.9	0.0	3.2	0.7	12.2	12.6	2.7	10.0	0.6
LnGrp Delay(d), s/veh	57.1	40.6	38.8	67.4	0.0	49.6	54.7	15.9	15.9	61.4	12.0	7.7
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	A
Approach Vol, veh/h		324			162			1314			1318	
Approach Delay, s/veh		46.8			55.5			17.1			14.9	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	67.6	8.2	20.7	6.8	71.0	13.7	15.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	60.0	9.0	23.0	5.0	67.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	6.8	25.7	5.2	7.9	3.3	22.1	9.8	8.7
Green Ext Time (p_c), s	0.1	10.2	0.0	0.6	0.0	11.1	0.1	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.3
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	14.7
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	26	36	84	48	27	6	65	269	46	6	316	33
Future Vol, veh/h	26	36	84	48	27	6	65	269	46	6	316	33
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	28	39	91	52	29	7	71	292	50	7	343	36
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	10.4	11.4	16.2	15.5
HCM LOS	B	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	19%	0%	42%	0%	64%	0%	2%	0%
Vol Thru, %	81%	0%	58%	0%	36%	0%	98%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	334	46	62	84	75	6	322	33
LT Vol	65	0	26	0	48	0	6	0
Through Vol	269	0	36	0	27	0	316	0
RT Vol	0	46	0	84	0	6	0	33
Lane Flow Rate	363	50	67	91	82	7	350	36
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.6	0.071	0.133	0.156	0.166	0.011	0.573	0.052
Departure Headway (Hd)	5.948	5.141	7.085	6.157	7.337	6.295	5.897	5.179
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	606	695	505	580	488	566	613	690
Service Time	3.693	2.885	4.849	3.921	5.108	4.065	3.643	2.924
HCM Lane V/C Ratio	0.599	0.072	0.133	0.157	0.168	0.012	0.571	0.052
HCM Control Delay, s/veh	17.3	8.3	10.9	10.1	11.6	9.1	16.3	8.2
HCM Lane LOS	C	A	B	B	B	A	C	A
HCM 95th-tile Q	4	0.2	0.5	0.5	0.6	0	3.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	199	888	167	50	686	207	158	859	53	269	622	207
Future Volume (veh/h)	199	888	167	50	686	207	158	859	53	269	622	207
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	209	935	176	53	722	218	166	904	56	283	655	218
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	190	1340	577	138	1340	586	353	1907	118	295	1996	878
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	600	3574	1540	510	3574	1563	638	3415	212	588	3574	1573
Grp Volume(v), veh/h	209	935	176	53	722	218	166	473	487	283	655	218
Grp Sat Flow(s),veh/h/ln	600	1787	1540	510	1787	1563	638	1787	1839	588	1787	1573
Q Serve(g_s), s	26.0	26.6	9.7	11.8	19.0	12.2	22.8	19.1	19.1	47.9	11.9	8.5
Cycle Q Clear(g_c), s	45.0	26.6	9.7	38.3	19.0	12.2	34.7	19.1	19.1	67.0	11.9	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		1.00
Lane Grp Cap(c), veh/h	190	1340	577	138	1340	586	353	998	1027	295	1996	878
V/C Ratio(X)	1.10	0.70	0.30	0.38	0.54	0.37	0.47	0.47	0.47	0.96	0.33	0.25
Avail Cap(c_a), veh/h	190	1340	577	138	1340	586	353	998	1027	295	1996	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	31.7	26.5	48.0	29.4	27.2	23.7	15.9	15.9	40.1	14.3	13.6
Incr Delay (d2), s/veh	94.6	1.6	0.3	1.7	0.4	0.4	4.4	1.6	1.6	43.0	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	13.4	4.2	1.7	9.4	5.3	4.4	9.8	10.1	12.9	5.9	3.9
LnGrp Delay(d), s/veh	145.7	33.4	26.8	49.7	29.8	27.6	28.2	17.5	17.5	83.1	14.8	14.3
LnGrp LOS	F	C	C	D	C	C	C	B	B	F	B	B
Approach Vol, veh/h		1320			993			1126			1156	
Approach Delay, s/veh		50.3			30.4			19.1			31.4	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		49.0		71.0		49.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		45.0		67.0		45.0
Max Q Clear Time (g_c+I1), s		36.7		47.0		69.0		40.3
Green Ext Time (p_c), s		8.6		0.0		0.0		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	229	899	125	137	822	213	108	930	211	67	1021	323
Future Volume (veh/h)	229	899	125	137	822	213	108	930	211	67	1021	323
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	239	936	130	143	856	222	112	969	220	70	1064	336
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	267	1301	180	171	940	242	165	1194	271	89	1488	653
Arrive On Green	0.15	0.29	0.29	0.10	0.24	0.24	0.05	0.42	0.42	0.05	0.42	0.42
Sat Flow, veh/h	1757	4460	617	1757	3968	1022	3408	2828	641	1757	3505	1539
Grp Volume(v), veh/h	239	704	362	143	723	355	112	600	589	70	1064	336
Grp Sat Flow(s),veh/h/ln	1757	1679	1720	1757	1679	1633	1704	1752	1716	1757	1752	1539
Q Serve(g_s), s	15.5	21.8	21.9	9.3	24.3	24.6	3.8	34.9	35.0	4.6	29.1	18.6
Cycle Q Clear(g_c), s	15.5	21.8	21.9	9.3	24.3	24.6	3.8	34.9	35.0	4.6	29.1	18.6
Prop In Lane	1.00		0.36	1.00		0.63	1.00		0.37	1.00		1.00
Lane Grp Cap(c), veh/h	267	979	502	171	795	387	165	740	725	89	1488	653
V/C Ratio(X)	0.89	0.72	0.72	0.84	0.91	0.92	0.68	0.81	0.81	0.79	0.71	0.51
Avail Cap(c_a), veh/h	303	979	502	227	810	394	206	740	725	106	1488	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	36.8	36.9	51.5	43.1	43.2	54.3	29.4	29.5	54.4	27.6	24.6
Incr Delay (d2), s/veh	25.0	2.6	5.1	18.2	14.1	25.7	6.3	9.4	9.7	27.0	3.0	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	10.4	11.1	5.4	12.8	13.8	1.9	18.7	18.5	2.9	14.7	8.4
LnGrp Delay(d), s/veh	73.3	39.4	41.9	69.7	57.1	68.8	60.6	38.8	39.2	81.4	30.5	27.4
LnGrp LOS	E	D	D	E	E	E	E	D	D	F	C	C
Approach Vol, veh/h		1305			1221			1301			1470	
Approach Delay, s/veh		46.3			62.0			40.8			32.3	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	53.0	15.3	37.8	9.6	53.3	21.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	49.0	15.0	33.0	7.0	49.0	20.0	28.0
Max Q Clear Time (g_c+I1), s	6.6	37.0	11.3	23.9	5.8	31.1	17.5	26.6
Green Ext Time (p_c), s	0.0	5.7	0.1	4.3	0.0	8.7	0.2	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	248	54	169	246	110	27	1608	131	129	1696	66
Future Volume (veh/h)	100	248	54	169	246	110	27	1608	131	129	1696	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	110	273	59	186	270	121	30	1767	144	142	1864	73
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	138	528	258	251	343	148	39	2589	210	173	3091	121
Arrive On Green	0.08	0.15	0.15	0.07	0.14	0.14	0.02	0.54	0.54	0.10	0.61	0.61
Sat Flow, veh/h	1792	3574	1511	3476	2391	1034	1792	4833	393	1792	5067	198
Grp Volume(v), veh/h	110	273	59	186	199	192	30	1250	661	142	1259	678
Grp Sat Flow(s),veh/h/ln	1792	1787	1511	1738	1787	1638	1792	1712	1802	1792	1712	1842
Q Serve(g_s), s	6.5	7.6	3.7	5.7	11.6	12.3	1.8	28.9	29.1	8.4	24.5	24.6
Cycle Q Clear(g_c), s	6.5	7.6	3.7	5.7	11.6	12.3	1.8	28.9	29.1	8.4	24.5	24.6
Prop In Lane	1.00		1.00	1.00		0.63	1.00		0.22	1.00		0.11
Lane Grp Cap(c), veh/h	138	528	258	251	256	235	39	1834	965	173	2089	1123
V/C Ratio(X)	0.80	0.52	0.23	0.74	0.78	0.82	0.76	0.68	0.68	0.82	0.60	0.60
Avail Cap(c_a), veh/h	215	694	328	353	314	288	99	1834	965	265	2089	1123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	42.5	38.8	49.2	44.7	45.0	52.6	18.4	18.4	48.0	13.0	13.0
Incr Delay (d2), s/veh	10.9	0.8	0.4	5.1	9.6	13.9	25.6	2.1	3.9	11.5	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	3.8	1.6	2.9	6.4	6.4	1.2	14.1	15.4	4.7	11.9	13.2
LnGrp Delay(d), s/veh	60.0	43.3	39.2	54.2	54.3	58.9	78.2	20.4	22.3	59.5	14.3	15.4
LnGrp LOS	E	D	D	D	D	E	E	C	C	E	B	B
Approach Vol, veh/h		442			577			1941			2079	
Approach Delay, s/veh		46.9			55.8			22.0			17.8	
Approach LOS		D			E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	62.0	11.8	20.0	6.4	70.0	12.3	19.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	56.0	11.0	21.0	6.0	66.0	13.0	19.0
Max Q Clear Time (g_c+I1), s	10.4	31.1	7.7	9.6	3.8	26.6	8.5	14.3
Green Ext Time (p_c), s	0.2	15.6	0.2	1.3	0.0	20.5	0.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	5.3

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	19	3	2	66	70	22
Future Vol, veh/h	19	3	2	66	70	22
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	21	3	2	72	76	24

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	74	0	-	0	47	2
Stage 1	-	-	-	-	2	-
Stage 2	-	-	-	-	45	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1526	-	-	-	963	1082
Stage 1	-	-	-	-	1021	-
Stage 2	-	-	-	-	977	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1526	-	-	-	950	1082
Mov Cap-2 Maneuver	-	-	-	-	950	-
Stage 1	-	-	-	-	1007	-
Stage 2	-	-	-	-	977	-

Approach	EB	WB	SB
HCM Control Delay, s/v	6.4	0	8.9
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1526	-	-	-	950	1082
HCM Lane V/C Ratio	0.014	-	-	-	0.08	0.022
HCM Control Delay (s/veh)	7.4	0	-	-	9.1	8.4
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.3	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	26	0	86	25	0	0	30	461	12	70	357	0
Future Vol, veh/h	26	0	86	25	0	0	30	461	12	70	357	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	28	0	93	27	0	0	33	501	13	76	388	0

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	920	1114	257	857	1120	194	388	0	0	514	0	0
Stage 1	574	574	-	540	540	-	-	-	-	-	-	-
Stage 2	346	540	-	317	580	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	226	207	742	251	205	815	1167	-	-	1048	-	-
Stage 1	471	501	-	494	519	-	-	-	-	-	-	-
Stage 2	643	519	-	669	498	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	209	187	742	203	185	815	1167	-	-	1048	-	-
Mov Cap-2 Maneuver	209	187	-	203	185	-	-	-	-	-	-	-
Stage 1	458	487	-	480	481	-	-	-	-	-	-	-
Stage 2	596	481	-	568	484	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	13.5	25.5	0.5	1.4
HCM LOS	B	D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	209	466	742	1048	-	-	1167	-	-	203
HCM Lane V/C Ratio	0.09	0.087	0.084	0.073	-	-	0.028	-	-	0.134
HCM Control Delay (s/veh)	23.9	13.5	10.3	8.7	-	-	8.2	-	-	25.5
HCM Lane LOS	C	B	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.3	0.3	0.3	0.2	-	-	0.1	-	-	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	548	0	0	262	64	0	0	0	58	0	19
Future Volume (veh/h)	20	548	0	0	262	64	0	0	0	58	0	19
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	22	596	0	0	285	70	0	0	0	63	0	21
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	874	0	0	733	177	0	1135	964	753	15	221
Arrive On Green	0.26	0.26	0.00	0.00	0.26	0.26	0.00	0.00	0.00	0.61	0.00	0.61
Sat Flow, veh/h	56	3455	0	0	2922	683	0	1863	1583	1065	24	363
Grp Volume(v), veh/h	329	289	0	0	177	178	0	0	0	84	0	0
Grp Sat Flow(s),veh/h/ln	1816	1610	0	0	1770	1742	0	1863	1583	1452	0	0
Q Serve(g_s), s	1.6	9.8	0.0	0.0	5.0	5.1	0.0	0.0	0.0	0.6	0.0	0.0
Cycle Q Clear(g_c), s	9.8	9.8	0.0	0.0	5.0	5.1	0.0	0.0	0.0	1.3	0.0	0.0
Prop In Lane	0.07		0.00	0.00		0.39	0.00		1.00	0.75		0.25
Lane Grp Cap(c), veh/h	534	417	0	0	459	452	0	1135	964	988	0	0
V/C Ratio(X)	0.62	0.69	0.00	0.00	0.38	0.40	0.00	0.00	0.00	0.08	0.00	0.00
Avail Cap(c_a), veh/h	2256	1988	0	0	2185	2151	0	1135	964	988	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	20.3	20.3	0.0	0.0	18.5	18.6	0.0	0.0	0.0	4.9	0.0	0.0
Incr Delay (d2), s/veh	1.2	2.1	0.0	0.0	0.5	0.6	0.0	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	4.6	0.0	0.0	2.5	2.5	0.0	0.0	0.0	0.6	0.0	0.0
LnGrp Delay(d), s/veh	21.4	22.4	0.0	0.0	19.0	19.1	0.0	0.0	0.0	5.1	0.0	0.0
LnGrp LOS	C	C			B	B				A		
Approach Vol, veh/h		618			355			0			84	
Approach Delay, s/veh		21.9			19.1			0.0			5.1	
Approach LOS		C			B						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		41.0		19.7		41.0		19.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		37.0		75.0		37.0		75.0
Max Q Clear Time (g_c+I1), s		0.0		11.8		3.3		7.1
Green Ext Time (p_c), s		0.0		3.9		0.5		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	602	0	0	323	0	0	0	0	15	0	6
Future Volume (veh/h)	4	602	0	0	323	0	0	0	0	15	0	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	4	654	0	0	351	0	0	0	0	16	0	7
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1017	0	0	1039	0	0	1006	0	655	22	241
Arrive On Green	0.29	0.29	0.00	0.00	0.29	0.00	0.00	0.00	0.00	0.54	0.00	0.54
Sat Flow, veh/h	5	3549	0	0	3725	0	0	1863	0	978	41	446
Grp Volume(v), veh/h	353	305	0	0	351	0	0	0	0	23	0	0
Grp Sat Flow(s),veh/h/ln	1859	1610	0	0	1770	0	0	1863	0	1466	0	0
Q Serve(g_s), s	0.0	7.9	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.9	7.9	0.0	0.0	3.7	0.0	0.0	0.0	0.0	0.3	0.0	0.0
Prop In Lane	0.01		0.00	0.00		0.00	0.00		0.00	0.70		0.30
Lane Grp Cap(c), veh/h	621	473	0	0	1039	0	0	1006	0	919	0	0
V/C Ratio(X)	0.57	0.65	0.00	0.00	0.34	0.00	0.00	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	3377	2877	0	0	6323	0	0	1006	0	919	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.8	14.8	0.0	0.0	13.3	0.0	0.0	0.0	0.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	0.8	1.5	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.7	0.0	0.0	1.8	0.0	0.0	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	15.6	16.3	0.0	0.0	13.5	0.0	0.0	0.0	0.0	5.2	0.0	0.0
LnGrp LOS	B	B			B					A		
Approach Vol, veh/h		658			351			0			23	
Approach Delay, s/veh		15.9			13.5			0.0			5.2	
Approach LOS		B			B						A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		18.1		30.0		18.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		26.0		86.0		26.0		86.0
Max Q Clear Time (g_c+I1), s		0.0		9.9		2.3		5.7
Green Ext Time (p_c), s		0.0		4.2		0.1		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	615	0	0	355	15	0	0	0	15	0	6
Future Volume (veh/h)	2	615	0	0	355	15	0	0	0	15	0	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	2	668	0	0	386	16	0	0	0	16	0	7
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	999	0	0	997	41	0	1047	0	667	20	251
Arrive On Green	0.29	0.29	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.56	0.00	0.56
Sat Flow, veh/h	2	3554	0	0	3557	143	0	1863	0	983	36	446
Grp Volume(v), veh/h	359	311	0	0	197	205	0	0	0	23	0	0
Grp Sat Flow(s),veh/h/ln	1861	1610	0	0	1770	1837	0	1863	0	1465	0	0
Q Serve(g_s), s	0.0	9.1	0.0	0.0	4.8	4.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.1	9.1	0.0	0.0	4.8	4.8	0.0	0.0	0.0	0.3	0.0	0.0
Prop In Lane	0.01		0.00	0.00		0.08	0.00		0.00	0.70		0.30
Lane Grp Cap(c), veh/h	604	464	0	0	509	529	0	1047	0	938	0	0
V/C Ratio(X)	0.60	0.67	0.00	0.00	0.39	0.39	0.00	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	2918	2475	0	0	2719	2824	0	1047	0	938	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.8	16.8	0.0	0.0	15.2	15.2	0.0	0.0	0.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	0.9	1.7	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	4.2	0.0	0.0	2.4	2.5	0.0	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	17.7	18.5	0.0	0.0	15.7	15.7	0.0	0.0	0.0	5.2	0.0	0.0
LnGrp LOS	B	B			B	B				A		
Approach Vol, veh/h		670			402			0			23	
Approach Delay, s/veh		18.1			15.7			0.0			5.2	
Approach LOS		B			B						A	

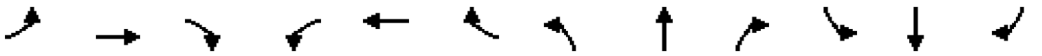
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		34.0		19.4		34.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		82.0		30.0		82.0
Max Q Clear Time (g_c+I1), s		0.0		11.1		2.3		6.8
Green Ext Time (p_c), s		0.0		4.3		0.1		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	4	626	0	0	383	8	0	0	0	20	0	8
Future Volume (veh/h)	4	626	0	0	383	8	0	0	0	20	0	8
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	4	680	0	0	416	9	0	0	0	22	0	9
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	65	992	0	0	1015	22	0	1070	0	685	18	244
Arrive On Green	0.29	0.29	0.00	0.00	0.29	0.29	0.00	0.00	0.00	0.57	0.00	0.57
Sat Flow, veh/h	5	3549	0	0	3635	77	0	1863	0	1006	31	424
Grp Volume(v), veh/h	367	317	0	0	208	217	0	0	0	31	0	0
Grp Sat Flow(s),veh/h/ln	1858	1610	0	0	1770	1849	0	1863	0	1461	0	0
Q Serve(g_s), s	0.0	10.1	0.0	0.0	5.4	5.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.0	10.1	0.0	0.0	5.4	5.5	0.0	0.0	0.0	0.4	0.0	0.0
Prop In Lane	0.01		0.00	0.00		0.04	0.00		0.00	0.71		0.29
Lane Grp Cap(c), veh/h	596	461	0	0	507	530	0	1070	0	946	0	0
V/C Ratio(X)	0.62	0.69	0.00	0.00	0.41	0.41	0.00	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	2602	2214	0	0	2433	2543	0	1070	0	946	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	0.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.2	18.2	0.0	0.0	16.6	16.6	0.0	0.0	0.0	5.3	0.0	0.0
Incr Delay (d2), s/veh	1.0	1.8	0.0	0.0	0.5	0.5	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	4.6	0.0	0.0	2.7	2.9	0.0	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	19.3	20.1	0.0	0.0	17.1	17.1	0.0	0.0	0.0	5.4	0.0	0.0
LnGrp LOS	B	C			B	B				A		
Approach Vol, veh/h		684			425			0			31	
Approach Delay, s/veh		19.6			17.1			0.0			5.4	
Approach LOS		B			B						A	

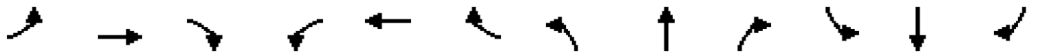
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.0		20.5		37.0		20.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		33.0		79.0		33.0		79.0
Max Q Clear Time (g_c+I1), s		0.0		12.1		2.4		7.5
Green Ext Time (p_c), s		0.0		4.4		0.1		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.3
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	82	564	0	0	398	383	0	0	0	101	0	23
Future Volume (vph)	82	564	0	0	398	383	0	0	0	101	0	23
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0					4.0	4.0	4.0
Lane Util. Factor		0.95			0.95					0.95	0.91	0.95
Frt		1.00			0.93					1.00	0.99	0.85
Flt Protected		0.99			1.00					0.95	0.95	1.00
Satd. Flow (prot)		3517			3279					1681	1606	1504
Flt Permitted		0.65			1.00					0.95	0.83	1.00
Satd. Flow (perm)		2307			3279					1681	1400	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	89	613	0	0	433	416	0	0	0	110	0	25
RTOR Reduction (vph)	0	0	0	0	270	0	0	0	0	0	26	10
Lane Group Flow (vph)	0	702	0	0	579	0	0	0	0	57	30	12
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		23.6			23.6					5.0	35.9	35.9
Effective Green, g (s)		23.6			23.6					5.0	35.9	35.9
Actuated g/C Ratio		0.35			0.35					0.07	0.53	0.53
Clearance Time (s)		4.0			4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		806			1146					124	759	799
v/s Ratio Prot					0.18					c0.03	0.00	0.01
v/s Ratio Perm		c0.30									c0.02	
v/c Ratio		0.87			0.51					0.46	0.04	0.01
Uniform Delay, d1		20.5			17.3					30.0	7.6	7.5
Progression Factor		1.00			1.00					1.00	1.00	1.00
Incremental Delay, d2		10.2			0.4					2.7	0.0	0.0
Delay (s)		30.7			17.7					32.6	7.6	7.5
Level of Service		C			B					C	A	A
Approach Delay (s/veh)		30.7			17.7			0.0			18.1	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	67.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	46	616	3	5	683	408	2	4	9	177	2	82
Future Volume (vph)	46	616	3	5	683	408	2	4	9	177	2	82
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.92		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		1695		1681	1601	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.75	0.78	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		1679		1322	1302	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	50	670	3	5	742	443	2	4	10	192	2	89
RTOR Reduction (vph)	0	0	2	0	0	209	0	6	0	0	2	47
Lane Group Flow (vph)	50	670	1	5	742	234	0	10	0	102	99	33
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	4.6	29.1	29.1	1.0	25.5	25.5		30.0		30.0	30.0	30.0
Effective Green, g (s)	4.6	29.1	29.1	1.0	25.5	25.5		30.0		30.0	30.0	30.0
Actuated g/C Ratio	0.06	0.40	0.40	0.01	0.35	0.35		0.42		0.42	0.42	0.42
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	112	1428	638	24	1251	559		698		550	541	625
v/s Ratio Prot	c0.03	c0.19		0.00	c0.21							
v/s Ratio Perm			0.00			0.15		0.01		c0.08	0.08	0.02
v/c Ratio	0.45	0.47	0.00	0.21	0.59	0.42		0.01		0.19	0.18	0.05
Uniform Delay, d1	32.5	15.8	12.8	35.2	19.1	17.7		12.4		13.3	13.3	12.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	2.8	0.2	0.0	4.3	0.8	0.5		0.0		0.7	0.7	0.2
Delay (s)	35.3	16.1	12.8	39.4	19.8	18.2		12.4		14.1	14.0	12.7
Level of Service	D	B	B	D	B	B		B		B	B	B
Approach Delay (s/veh)		17.4			19.3			12.4			13.7	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	72.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	44.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	33	67	29	202	47	35	83	741	110	43	1091	44
Future Volume (veh/h)	33	67	29	202	47	35	83	741	110	43	1091	44
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	36	73	32	220	51	38	90	805	120	47	1186	48
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	63	528	54	0	528	236	2124	950	350	2080	84
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	0	189	1583	0	0	1583	450	3539	1583	602	3467	140
Grp Volume(v), veh/h	109	0	32	271	0	38	90	805	120	47	605	629
Grp Sat Flow(s),veh/h/ln	189	0	1583	0	0	1583	450	1770	1583	602	1770	1838
Q Serve(g_s), s	0.0	0.0	1.7	0.0	0.0	2.0	18.3	14.1	3.9	5.3	24.9	25.0
Cycle Q Clear(g_c), s	40.0	0.0	1.7	40.0	0.0	2.0	43.2	14.1	3.9	19.4	24.9	25.0
Prop In Lane	0.33		1.00	0.81		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	103	0	528	54	0	528	236	2124	950	350	1062	1103
V/C Ratio(X)	1.06	0.00	0.06	4.99	0.00	0.07	0.38	0.38	0.13	0.13	0.57	0.57
Avail Cap(c_a), veh/h	103	0	528	54	0	528	236	2124	950	350	1062	1103
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	27.2	60.0	0.0	27.3	27.7	12.4	10.4	17.4	14.6	14.6
Incr Delay (d2), s/veh	105.8	0.0	0.0	1834.1	0.0	0.1	4.6	0.5	0.3	0.8	2.2	2.1
Initial Q Delay(d3),s/veh	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	0.0	0.7	29.5	0.0	0.9	2.6	7.0	1.8	1.0	12.8	13.2
LnGrp Delay(d), s/veh	143.1	0.0	27.3	1894.1	0.0	27.4	32.4	12.9	10.7	18.2	16.8	16.7
LnGrp LOS	F		C	F		C	C	B	B	B	B	B
Approach Vol, veh/h		141			309			1015			1281	
Approach Delay, s/veh		116.8			1664.6			14.4			16.8	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		44.0		76.0		44.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		45.2		42.0		27.0		42.0
Green Ext Time (p_c), s		7.8		0.0		12.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		206.5
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	0.1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	27	961	4	4	1320
Future Vol, veh/h	0	27	961	4	4	1320
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	29	1033	4	4	1419

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1754	520	0	0	1038	0
Stage 1	1036	-	-	-	-	-
Stage 2	718	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	77	504	-	-	671	-
Stage 1	305	-	-	-	-	-
Stage 2	447	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	76	504	-	-	670	-
Mov Cap-2 Maneuver	76	-	-	-	-	-
Stage 1	305	-	-	-	-	-
Stage 2	444	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	12.6	0	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	504	670	-
HCM Lane V/C Ratio	-	-	-	0.058	0.006	-
HCM Control Delay (s/veh)	-	-	0	12.6	10.4	-
HCM Lane LOS	-	-	A	B	B	-
HCM 95th %tile Q(veh)	-	-	-	0.2	0	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	161	113	827	168	180	1296
Future Volume (vph)	161	113	827	168	180	1296
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.97		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	1599	3459		1786	3574
Flt Permitted	0.95	1.00	1.00		0.21	1.00
Satd. Flow (perm)	1787	1599	3459		397	3574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	168	118	861	175	188	1350
RTOR Reduction (vph)	0	83	12	0	0	0
Lane Group Flow (vph)	168	35	1024	0	188	1350
Confl. Peds. (#/hr)	12			6	6	
Confl. Bikes (#/hr)				3		
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)	15.4	32.1	64.2		80.9	84.9
Effective Green, g (s)	15.4	32.1	64.2		80.9	84.9
Actuated g/C Ratio	0.14	0.30	0.59		0.75	0.78
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	254	533	2050		510	2801
v/s Ratio Prot	c0.09	0.01	c0.30		0.06	c0.38
v/s Ratio Perm		0.01			0.22	
v/c Ratio	0.66	0.07	0.50		0.37	0.48
Uniform Delay, d1	44.0	27.3	12.8		13.1	4.1
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	6.3	0.1	0.9		0.5	0.1
Delay (s)	50.3	27.4	13.6		13.6	4.2
Level of Service	D	C	B		B	A
Approach Delay (s/veh)	40.9		13.6			5.3
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	108.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

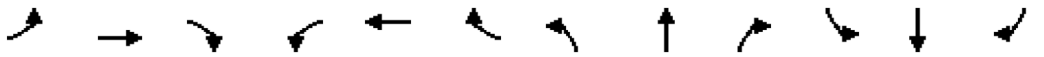
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	34	2	21	4	0	4	2	656	6	7	874	7
Future Vol, veh/h	34	2	21	4	0	4	2	656	6	7	874	7
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	4	4	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	38	2	23	4	0	4	2	729	7	8	971	8

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1291	1739	495	1147	1740	372	983	0	0	740	0	0
Stage 1	995	995	-	741	741	-	-	-	-	-	-	-
Stage 2	296	744	-	406	999	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	172	86	445	209	86	534	399	-	-	522	-	-
Stage 1	201	321	-	300	421	-	-	-	-	-	-	-
Stage 2	631	420	-	542	319	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	167	84	443	190	84	532	398	-	-	520	-	-
Mov Cap-2 Maneuver	167	84	-	190	84	-	-	-	-	-	-	-
Stage 1	199	315	-	298	418	-	-	-	-	-	-	-
Stage 2	623	417	-	502	313	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	29.9	18.3	0	0.1
HCM LOS	D	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	398	-	-	207	280	520	-	-
HCM Lane V/C Ratio	0.006	-	-	0.306	0.032	0.015	-	-
HCM Control Delay (s/veh)	14.1	-	-	29.9	18.3	12	-	-
HCM Lane LOS	B	-	-	D	C	B	-	-
HCM 95th %tile Q(veh)	0	-	-	1.2	0.1	0	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	273	81	98	235	112	26	396	97	116	670	184
Future Volume (veh/h)	109	273	81	98	235	112	26	396	97	116	670	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	0.99		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	116	290	86	104	250	119	28	421	103	123	713	196
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	353	105	263	298	142	331	1670	391	497	1766	477
Arrive On Green	0.07	0.26	0.26	0.06	0.25	0.25	0.02	0.41	0.41	0.06	0.45	0.45
Sat Flow, veh/h	1774	1368	406	1774	1185	564	1774	4064	951	1774	3926	1060
Grp Volume(v), veh/h	116	0	376	104	0	369	28	348	176	123	614	295
Grp Sat Flow(s),veh/h/ln	1774	0	1774	1774	0	1749	1774	1695	1624	1774	1695	1596
Q Serve(g_s), s	3.7	0.0	15.5	3.3	0.0	15.6	0.7	5.2	5.6	3.0	9.5	9.7
Cycle Q Clear(g_c), s	3.7	0.0	15.5	3.3	0.0	15.6	0.7	5.2	5.6	3.0	9.5	9.7
Prop In Lane	1.00		0.23	1.00		0.32	1.00		0.59	1.00		0.66
Lane Grp Cap(c), veh/h	268	0	457	263	0	440	331	1393	668	497	1525	718
V/C Ratio(X)	0.43	0.00	0.82	0.40	0.00	0.84	0.08	0.25	0.26	0.25	0.40	0.41
Avail Cap(c_a), veh/h	600	0	729	606	0	719	746	1393	668	842	1525	718
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	27.2	21.0	0.0	27.7	13.0	15.1	15.1	11.4	14.4	14.4
Incr Delay (d2), s/veh	1.1	0.0	4.2	1.0	0.0	4.8	0.1	0.4	1.0	0.3	0.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	0.0	8.2	1.7	0.0	8.1	0.3	2.5	2.7	1.4	4.6	4.6
LnGrp Delay(d), s/veh	22.1	0.0	31.4	22.0	0.0	32.4	13.1	15.5	16.1	11.6	15.2	16.2
LnGrp LOS	C		C	C		C	B	B	B	B	B	B
Approach Vol, veh/h		492			473			552			1032	
Approach Delay, s/veh		29.2			30.1			15.6			15.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	36.0	8.9	24.1	5.8	39.0	9.4	23.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	20.0	32.0	20.0	32.0	20.0	32.0
Max Q Clear Time (g_c+I1), s	5.0	7.6	5.3	17.5	2.7	11.7	5.7	17.6
Green Ext Time (p_c), s	0.2	3.2	0.2	2.0	0.0	5.8	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	929	49	53	190	18	7
Future Vol, veh/h	929	49	53	190	18	7
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	968	51	55	198	19	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1020	0	1303	995
Stage 1	-	-	-	-	995	-
Stage 2	-	-	-	-	308	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	688	-	179	300
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	750	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	687	-	163	300
Mov Cap-2 Maneuver	-	-	-	-	163	-
Stage 1	-	-	-	-	361	-
Stage 2	-	-	-	-	683	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.3	26.4
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	163	300	-	-	687	-
HCM Lane V/C Ratio	0.115	0.024	-	-	0.08	-
HCM Control Delay (s/veh)	29.9	17.3	-	-	10.7	0
HCM Lane LOS	D	C	-	-	B	A
HCM 95th %tile Q(veh)	0.4	0.1	-	-	0.3	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	47	33	7	906	865	18
Future Volume (veh/h)	47	33	7	906	865	18
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	52	36	8	996	951	20
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	388	346	418	2562	2564	54
Arrive On Green	0.22	0.22	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1792	1599	582	3668	3672	75
Grp Volume(v), veh/h	52	36	8	996	475	496
Grp Sat Flow(s),veh/h/ln	1792	1599	582	1787	1787	1866
Q Serve(g_s), s	2.8	2.2	0.6	13.1	12.3	12.3
Cycle Q Clear(g_c), s	2.8	2.2	13.0	13.1	12.3	12.3
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	388	346	418	2562	1281	1337
V/C Ratio(X)	0.13	0.10	0.02	0.39	0.37	0.37
Avail Cap(c_a), veh/h	388	346	418	2562	1281	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	37.7	9.1	6.7	6.6	6.6
Incr Delay (d2), s/veh	0.7	0.6	0.0	0.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.0	0.1	6.4	6.2	6.5
LnGrp Delay(d), s/veh	38.6	38.3	9.1	6.8	7.4	7.4
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	88			1004	971	
Approach Delay, s/veh	38.5			6.8	7.4	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				90.0		30.0		90.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				86.0		26.0		86.0
Max Q Clear Time (g_c+I1), s				15.1		4.8		14.3
Green Ext Time (p_c), s				8.3		0.2		6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.4
HCM 2010 LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	598	467	126	914	0	19	0	359	35	152	6
Future Volume (veh/h)	0	598	467	126	914	0	19	0	359	35	152	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1827	1827	1827	0	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	0	680	531	143	1039	0	15	0	416	40	173	7
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	4	4	4	4	0	4	4	4	4	4	4
Cap, veh/h	0	2110	648	219	3370	0	25	0	900	98	1058	473
Arrive On Green	0.00	0.42	0.42	0.06	0.54	0.00	0.01	0.00	0.29	0.03	0.30	0.30
Sat Flow, veh/h	0	5152	1532	3375	6540	0	1740	0	3106	3375	3471	1553
Grp Volume(v), veh/h	0	680	531	143	1039	0	15	0	416	40	173	7
Grp Sat Flow(s),veh/h/ln	0	1663	1532	1688	1571	0	1740	0	1553	1688	1736	1553
Q Serve(g_s), s	0.0	7.5	25.3	3.4	7.6	0.0	0.7	0.0	9.1	1.0	3.0	0.3
Cycle Q Clear(g_c), s	0.0	7.5	25.3	3.4	7.6	0.0	0.7	0.0	9.1	1.0	3.0	0.3
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2110	648	219	3370	0	25	0	900	98	1058	473
V/C Ratio(X)	0.00	0.32	0.82	0.65	0.31	0.00	0.61	0.00	0.46	0.41	0.16	0.01
Avail Cap(c_a), veh/h	0	3975	1221	408	6071	0	126	0	900	163	1058	473
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.0	21.1	37.8	10.7	0.0	40.6	0.0	24.1	39.5	21.1	20.1
Incr Delay (d2), s/veh	0.0	0.1	2.6	3.3	0.1	0.0	22.2	0.0	1.7	2.7	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	11.1	1.7	3.3	0.0	0.5	0.0	4.1	0.5	1.5	0.1
LnGrp Delay(d), s/veh	0.0	16.0	23.7	41.1	10.7	0.0	62.8	0.0	25.8	42.2	21.4	20.2
LnGrp LOS		B	C	D	B		E		C	D	C	C
Approach Vol, veh/h		1211			1182			431			220	
Approach Delay, s/veh		19.4			14.4			27.1			25.1	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	28.0	9.4	39.0	5.2	29.2		48.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	24.0	10.0	66.0	6.0	22.0		80.0
Max Q Clear Time (g_c+I1), s	3.0	11.1	5.4	27.3	2.7	5.0		9.6
Green Ext Time (p_c), s	0.0	1.4	0.2	7.7	0.0	0.9		8.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	52	959	0	0	700	45	0	0	0	311	331	263
Future Volume (vph)	52	959	0	0	700	45	0	0	0	311	331	263
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	0.98				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.95	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3367	6285			5913	1239				1406	5520	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3367	6285			5913	1239				1406	5520	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	60	1102	0	0	805	52	0	0	0	357	380	302
RTOR Reduction (vph)	0	0	0	0	1	37	0	0	0	0	19	0
Lane Group Flow (vph)	60	1102	0	0	809	10	0	0	0	211	809	0
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	5.8	30.6			20.8	20.8				56.3	56.3	
Effective Green, g (s)	5.8	30.6			20.8	20.8				56.3	56.3	
Actuated g/C Ratio	0.06	0.32			0.22	0.22				0.59	0.59	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	205	2026			1296	271				834	3274	
v/s Ratio Prot	0.02	c0.18			c0.14					c0.15	0.15	
v/s Ratio Perm						0.01						
v/c Ratio	0.29	0.54			0.62	0.04				0.25	0.25	
Uniform Delay, d1	42.6	26.4			33.5	29.2				9.2	9.2	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	0.8	0.3			0.9	0.1				0.2	0.0	
Delay (s)	43.4	26.7			34.5	29.2				9.4	9.2	
Level of Service	D	C			C	C				A	A	
Approach Delay (s/veh)		27.6			34.2			0.0			9.3	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	94.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	34.9%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	335	856	24	32	562	56	17	61	13	78	9	151
Future Volume (veh/h)	335	856	24	32	562	56	17	61	13	78	9	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	394	1007	28	38	661	66	20	72	15	92	11	178
Adj No. of Lanes	1	3	1	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	454	2200	666	52	1045	318	518	530	110	521	662	554
Arrive On Green	0.26	0.44	0.44	0.03	0.21	0.21	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1740	4988	1509	1740	4988	1518	1165	1463	305	1278	1827	1529
Grp Volume(v), veh/h	394	1007	28	38	661	66	20	0	87	92	11	178
Grp Sat Flow(s),veh/h/ln	1740	1663	1509	1740	1663	1518	1165	0	1768	1278	1827	1529
Q Serve(g_s), s	15.5	10.2	0.8	1.6	8.7	2.6	0.8	0.0	2.4	3.7	0.3	6.0
Cycle Q Clear(g_c), s	15.5	10.2	0.8	1.6	8.7	2.6	1.1	0.0	2.4	6.1	0.3	6.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.17	1.00		1.00
Lane Grp Cap(c), veh/h	454	2200	666	52	1045	318	518	0	640	521	662	554
V/C Ratio(X)	0.87	0.46	0.04	0.74	0.63	0.21	0.04	0.00	0.14	0.18	0.02	0.32
Avail Cap(c_a), veh/h	1285	5072	1535	218	2015	613	518	0	640	521	662	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.3	14.1	11.4	34.6	25.8	23.4	15.0	0.0	15.4	17.4	14.7	16.5
Incr Delay (d2), s/veh	5.2	0.1	0.0	18.4	0.6	0.3	0.1	0.0	0.4	0.7	0.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	4.7	0.3	1.0	4.0	1.1	0.3	0.0	1.2	1.4	0.1	2.7
LnGrp Delay(d), s/veh	30.5	14.2	11.5	52.9	26.5	23.8	15.2	0.0	15.8	18.1	14.7	18.1
LnGrp LOS	C	B	B	D	C	C	B		B	B	B	B
Approach Vol, veh/h		1429			765			107			281	
Approach Delay, s/veh		18.6			27.6			15.7			18.0	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.1	35.7		30.0	22.7	19.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	9.0	73.0		26.0	53.0	29.0
Max Q Clear Time (g_c+I1), s		4.4	3.6	12.2		8.1	17.5	10.7
Green Ext Time (p_c), s		0.4	0.0	8.6		0.8	1.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	18	189	19	17	65	11	99	0	10	14	0	10
Future Volume (vph)	18	189	19	17	65	11	99	0	10	14	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.99		1.00	0.98		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1770	5006		3433	4956		1770		2787	1770		2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1770	5006		3433	4956		1770		2787	1770		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	19	203	20	18	70	12	106	0	11	15	0	11
RTOR Reduction (vph)	0	12	0	0	11	0	0	0	3	0	0	3
Lane Group Flow (vph)	19	211	0	18	71	0	106	0	8	15	0	8
Confl. Peds. (#/hr)	4		4	4		4						
Confl. Bikes (#/hr)			3			3						
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	1.4	8.6		1.2	8.4		56.7		56.7	56.7		56.7
Effective Green, g (s)	1.4	8.6		1.2	8.4		56.7		56.7	56.7		56.7
Actuated g/C Ratio	0.02	0.11		0.02	0.11		0.72		0.72	0.72		0.72
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	31	548		52	530		1278		2013	1278		2013
v/s Ratio Prot	c0.01	c0.04		0.01	0.01							
v/s Ratio Perm							c0.06		0.00	0.01		0.00
v/c Ratio	0.61	0.38		0.35	0.13		0.08		0.00	0.01		0.00
Uniform Delay, d1	38.3	32.5		38.3	31.8		3.2		3.0	3.1		3.0
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	30.9	0.5		4.0	0.1		0.1		0.0	0.0		0.0
Delay (s)	69.2	32.9		42.2	31.9		3.3		3.0	3.1		3.0
Level of Service	E	C		D	C		A		A	A		A
Approach Delay (s/veh)		35.8			33.7			3.3			3.1	
Approach LOS		D			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	78.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	24.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	258	846	316	225	863	101	117	461	88	278	920	238
Future Volume (veh/h)	258	846	316	225	863	101	117	461	88	278	920	238
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	266	872	326	232	890	104	121	475	91	287	948	245
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	301	1047	390	266	1239	144	178	1570	471	358	1444	372
Arrive On Green	0.17	0.29	0.29	0.15	0.27	0.27	0.05	0.31	0.31	0.10	0.36	0.36
Sat Flow, veh/h	1774	3621	1348	1774	4604	535	3442	5085	1526	3442	3998	1030
Grp Volume(v), veh/h	266	816	382	232	654	340	121	475	91	287	803	390
Grp Sat Flow(s),veh/h/ln	1774	1695	1578	1774	1695	1749	1721	1695	1526	1721	1695	1637
Q Serve(g_s), s	15.8	24.3	24.5	13.8	18.9	19.0	3.7	7.7	4.7	8.8	21.4	21.5
Cycle Q Clear(g_c), s	15.8	24.3	24.5	13.8	18.9	19.0	3.7	7.7	4.7	8.8	21.4	21.5
Prop In Lane	1.00		0.85	1.00		0.31	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	301	980	456	266	912	471	178	1570	471	358	1224	591
V/C Ratio(X)	0.88	0.83	0.84	0.87	0.72	0.72	0.68	0.30	0.19	0.80	0.66	0.66
Avail Cap(c_a), veh/h	460	1099	512	394	973	502	191	1570	471	510	1224	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	35.9	36.0	44.9	35.7	35.8	50.3	28.5	27.4	47.3	28.9	28.9
Incr Delay (d2), s/veh	12.3	5.1	10.6	13.3	2.4	4.7	8.6	0.5	0.9	6.0	2.8	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	12.0	12.0	7.8	9.1	9.8	2.0	3.7	2.1	4.5	10.5	10.7
LnGrp Delay(d), s/veh	56.1	41.1	46.7	58.2	38.1	40.5	58.9	29.0	28.4	53.2	31.6	34.6
LnGrp LOS	E	D	D	E	D	D	E	C	C	D	C	C
Approach Vol, veh/h		1464			1226			687			1480	
Approach Delay, s/veh		45.3			42.6			34.2			36.6	
Approach LOS		D			D			C			D	

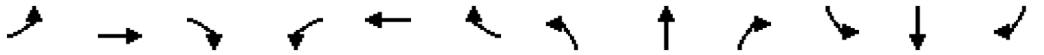
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	37.3	20.2	35.2	9.6	43.0	22.3	33.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	29.0	24.0	35.0	6.0	39.0	28.0	31.0
Max Q Clear Time (g_c+I1), s	10.8	9.7	15.8	26.5	5.7	23.5	17.8	21.0
Green Ext Time (p_c), s	0.4	3.2	0.4	4.7	0.0	6.9	0.5	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	18	26	29	72	35	44	571	65	120	1304	103
Future Volume (veh/h)	35	18	26	29	72	35	44	571	65	120	1304	103
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	36	19	27	30	75	36	46	595	68	125	1358	107
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	78	111	187	135	65	333	4121	1254	671	3888	306
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1266	685	974	1339	1185	569	360	5085	1547	769	4797	378
Grp Volume(v), veh/h	36	0	46	30	0	111	46	595	68	125	960	505
Grp Sat Flow(s),veh/h/ln	1266	0	1659	1339	0	1753	360	1695	1547	769	1695	1785
Q Serve(g_s), s	2.9	0.0	2.7	2.2	0.0	6.4	4.1	2.7	0.9	4.4	7.9	7.9
Cycle Q Clear(g_c), s	9.3	0.0	2.7	4.9	0.0	6.4	12.1	2.7	0.9	7.1	7.9	7.9
Prop In Lane	1.00		0.59	1.00		0.32	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	137	0	190	187	0	200	333	4121	1254	671	2747	1447
V/C Ratio(X)	0.26	0.00	0.24	0.16	0.00	0.55	0.14	0.14	0.05	0.19	0.35	0.35
Avail Cap(c_a), veh/h	302	0	407	362	0	430	333	4121	1254	671	2747	1447
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	0.0	42.8	45.0	0.0	44.4	4.3	2.2	2.0	2.9	2.7	2.7
Incr Delay (d2), s/veh	1.0	0.0	0.7	0.4	0.0	2.4	0.9	0.1	0.1	0.6	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.3	0.8	0.0	3.2	0.5	1.2	0.4	1.1	3.7	4.1
LnGrp Delay(d), s/veh	49.9	0.0	43.5	45.4	0.0	46.8	5.1	2.2	2.1	3.5	3.0	3.3
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		82			141			709			1590	
Approach Delay, s/veh		46.3			46.5			2.4			3.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		90.0		16.1		90.0		16.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		86.0		26.0		86.0		26.0
Max Q Clear Time (g_c+I1), s		14.1		11.3		9.9		8.4
Green Ext Time (p_c), s		5.8		0.2		16.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.8
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	211	77	42	195	26	70	630	24	69	1132	88
Future Volume (veh/h)	71	211	77	42	195	26	70	630	24	69	1132	88
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	76	227	83	45	210	28	75	677	26	74	1217	95
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	419	148	160	515	68	98	3298	126	96	3151	246
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.05	0.66	0.66	0.05	0.66	0.66
Sat Flow, veh/h	1133	2548	903	1061	3137	412	1774	5023	192	1774	4805	375
Grp Volume(v), veh/h	76	155	155	45	117	121	75	456	247	74	859	453
Grp Sat Flow(s),veh/h/ln	1133	1770	1681	1061	1770	1779	1774	1695	1825	1774	1695	1789
Q Serve(g_s), s	6.2	7.7	8.1	3.9	5.7	5.8	4.0	5.1	5.2	4.0	11.2	11.2
Cycle Q Clear(g_c), s	12.0	7.7	8.1	12.0	5.7	5.8	4.0	5.1	5.2	4.0	11.2	11.2
Prop In Lane	1.00		0.54	1.00		0.23	1.00		0.11	1.00		0.21
Lane Grp Cap(c), veh/h	192	291	276	160	291	292	98	2226	1198	96	2223	1173
V/C Ratio(X)	0.40	0.53	0.56	0.28	0.40	0.41	0.77	0.20	0.21	0.77	0.39	0.39
Avail Cap(c_a), veh/h	348	535	508	306	535	538	314	2226	1198	296	2223	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.4	36.7	36.9	42.4	35.9	36.0	44.7	6.5	6.5	44.8	7.6	7.6
Incr Delay (d2), s/veh	1.3	1.5	1.8	1.0	0.9	0.9	11.9	0.2	0.4	12.1	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.9	3.9	1.2	2.8	2.9	2.3	2.4	2.7	2.3	5.3	5.7
LnGrp Delay(d), s/veh	42.7	38.3	38.7	43.4	36.8	36.9	56.7	6.7	6.9	56.9	8.1	8.6
LnGrp LOS	D	D	D	D	D	D	E	A	A	E	A	A
Approach Vol, veh/h		386			283			778			1386	
Approach Delay, s/veh		39.3			37.9			11.6			10.9	
Approach LOS		D			D			B			B	

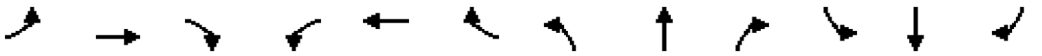
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.2	67.0		19.8	9.3	66.9		19.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	63.0		29.0	17.0	62.0		29.0
Max Q Clear Time (g_c+I1), s	6.0	7.2		14.0	6.0	13.2		14.0
Green Ext Time (p_c), s	0.1	4.8		1.7	0.1	11.4		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	5	0	200	8	89	12	647	88	101	1152	6
Future Volume (veh/h)	1	5	0	200	8	89	12	647	88	101	1152	6
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	1	6	0	222	9	99	13	719	98	112	1280	7
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	36	191	0	187	5	649	21	1873	253	140	2513	14
Arrive On Green	0.41	0.41	0.00	0.41	0.41	0.41	0.01	0.41	0.41	0.08	0.48	0.48
Sat Flow, veh/h	0	468	0	309	13	1593	1792	4564	616	1792	5271	29
Grp Volume(v), veh/h	7	0	0	231	0	99	13	538	279	112	831	456
Grp Sat Flow(s),veh/h/ln	468	0	0	322	0	1593	1792	1712	1756	1792	1712	1876
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	4.5	0.8	12.7	12.9	7.1	19.4	19.4
Cycle Q Clear(g_c), s	47.0	0.0	0.0	47.0	0.0	4.5	0.8	12.7	12.9	7.1	19.4	19.4
Prop In Lane	0.14		0.00	0.96		1.00	1.00		0.35	1.00		0.02
Lane Grp Cap(c), veh/h	226	0	0	192	0	649	21	1405	721	140	1632	894
V/C Ratio(X)	0.03	0.00	0.00	1.20	0.00	0.15	0.61	0.38	0.39	0.80	0.51	0.51
Avail Cap(c_a), veh/h	226	0	0	192	0	649	93	1405	721	326	1632	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	0.0	0.0	41.7	0.0	21.6	56.7	23.8	23.8	52.3	20.9	20.9
Incr Delay (d2), s/veh	0.1	0.0	0.0	129.7	0.0	0.1	25.5	0.8	1.6	10.0	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	0.0	13.0	0.0	2.0	0.6	6.1	6.5	3.9	9.4	10.5
LnGrp Delay(d), s/veh	25.8	0.0	0.0	171.4	0.0	21.7	82.3	24.6	25.4	62.3	22.0	22.9
LnGrp LOS	C			F		C	F	C	C	E	C	C
Approach Vol, veh/h		7			330			830			1399	
Approach Delay, s/veh		25.8			126.5			25.8			25.5	
Approach LOS		C			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	51.3		51.0	5.4	59.0		51.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	21.0	40.0		47.0	6.0	55.0		47.0
Max Q Clear Time (g_c+I1), s	9.1	14.9		49.0	2.8	21.4		49.0
Green Ext Time (p_c), s	0.2	5.3		0.0	0.0	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.6
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	131	459	176	442	539	26	141	518	252	116	1135	120
Future Volume (vph)	131	459	176	442	539	26	141	518	252	116	1135	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5899	1237	3433	5085	1542	3433	5085	1539	3433	5085	1549
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5899	1237	3433	5085	1542	3433	5085	1539	3433	5085	1549
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	138	483	185	465	567	27	148	545	265	122	1195	126
RTOR Reduction (vph)	0	20	101	0	0	20	0	0	148	0	0	71
Lane Group Flow (vph)	138	530	17	465	567	7	148	545	117	122	1195	55
Confl. Peds. (#/hr)	7		12	12		7	4		8	8		4
Confl. Bikes (#/hr)									1			3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.4	15.6	15.6	19.8	26.0	26.0	9.5	47.3	47.3	8.8	46.6	46.6
Effective Green, g (s)	9.4	15.6	15.6	19.8	26.0	26.0	9.5	47.3	47.3	8.8	46.6	46.6
Actuated g/C Ratio	0.09	0.15	0.15	0.18	0.24	0.24	0.09	0.44	0.44	0.08	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	300	856	179	632	1229	372	303	2237	677	281	2204	671
v/s Ratio Prot	0.04	c0.09		c0.14	0.11		c0.04	0.11		0.04	c0.23	
v/s Ratio Perm			0.01			0.00			0.08			0.04
v/c Ratio	0.46	0.62	0.10	0.74	0.46	0.02	0.49	0.24	0.17	0.43	0.54	0.08
Uniform Delay, d1	46.6	43.2	39.8	41.4	34.8	31.0	46.7	18.9	18.2	47.0	22.6	17.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.1	1.3	0.2	4.4	0.3	0.0	1.2	0.3	0.6	1.1	1.0	0.2
Delay (s)	47.8	44.5	40.1	45.8	35.1	31.0	47.9	19.1	18.8	48.1	23.5	18.1
Level of Service	D	D	D	D	D	C	D	B	B	D	C	B
Approach Delay (s/veh)		44.4			39.7			23.5			25.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	107.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	61.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	205	5	97	0	0	0	18	828	1	3	1423	132
Future Volume (veh/h)	205	5	97	0	0	0	18	828	1	3	1423	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	225	5	107	0	0	0	20	910	1	3	1564	145
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	357	281	245	77	561	0	60	3724	4	11	3291	305
Arrive On Green	0.16	0.16	0.16	0.00	0.00	0.00	0.02	0.71	0.71	0.00	0.70	0.70
Sat Flow, veh/h	1764	1770	1547	1276	3632	0	3442	5246	6	3442	4730	438
Grp Volume(v), veh/h	225	5	107	0	0	0	20	588	323	3	1121	588
Grp Sat Flow(s),veh/h/ln	1764	1770	1547	1276	1770	0	1721	1695	1862	1721	1695	1778
Q Serve(g_s), s	11.5	0.2	5.8	0.0	0.0	0.0	0.5	5.7	5.7	0.1	14.0	14.1
Cycle Q Clear(g_c), s	11.5	0.2	5.8	0.0	0.0	0.0	0.5	5.7	5.7	0.1	14.0	14.1
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.25
Lane Grp Cap(c), veh/h	357	281	245	77	561	0	60	2406	1321	11	2358	1237
V/C Ratio(X)	0.63	0.02	0.44	0.00	0.00	0.00	0.34	0.24	0.24	0.27	0.48	0.48
Avail Cap(c_a), veh/h	813	739	646	407	1477	0	147	2406	1321	147	2358	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	33.2	35.5	0.0	0.0	0.0	45.4	4.8	4.8	46.5	6.5	6.5
Incr Delay (d2), s/veh	1.8	0.0	1.2	0.0	0.0	0.0	3.3	0.2	0.4	12.7	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.1	2.6	0.0	0.0	0.0	0.3	2.7	3.0	0.1	6.8	7.3
LnGrp Delay(d), s/veh	39.8	33.2	36.8	0.0	0.0	0.0	48.6	5.0	5.2	59.1	7.2	7.8
LnGrp LOS	D	C	D				D	A	A	E	A	A
Approach Vol, veh/h		337			0			931			1712	
Approach Delay, s/veh		38.7			0.0			6.0			7.5	
Approach LOS		D						A			A	

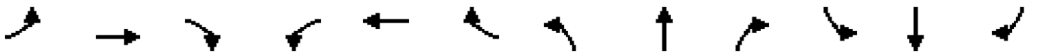
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.3	70.3		18.8	5.6	69.0		18.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	65.0		39.0	4.0	65.0		39.0
Max Q Clear Time (g_c+I1), s	2.1	7.7		13.5	2.5	16.1		0.0
Green Ext Time (p_c), s	0.0	6.7		1.2	0.0	17.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1389	73	168	389	47	95	613	222	226	1301	180
Future Volume (veh/h)	210	1389	73	168	389	47	95	613	222	226	1301	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	1510	79	183	423	51	103	666	241	246	1414	196
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	295	1847	97	247	1656	196	159	1561	503	314	2117	293
Arrive On Green	0.08	0.37	0.37	0.07	0.36	0.36	0.05	0.32	0.32	0.09	0.37	0.37
Sat Flow, veh/h	3476	4992	261	3476	4647	549	3476	4853	1563	3476	5776	799
Grp Volume(v), veh/h	228	1036	553	183	309	165	103	666	241	246	1188	422
Grp Sat Flow(s),veh/h/ln	1738	1712	1829	1738	1712	1772	1738	1618	1563	1738	1618	1721
Q Serve(g_s), s	7.0	29.8	29.8	5.6	7.0	7.2	3.2	11.8	13.5	7.6	22.4	22.5
Cycle Q Clear(g_c), s	7.0	29.8	29.8	5.6	7.0	7.2	3.2	11.8	13.5	7.6	22.4	22.5
Prop In Lane	1.00		0.14	1.00		0.31	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	295	1267	677	247	1220	632	159	1561	503	314	1779	631
V/C Ratio(X)	0.77	0.82	0.82	0.74	0.25	0.26	0.65	0.43	0.48	0.78	0.67	0.67
Avail Cap(c_a), veh/h	414	1443	771	350	1380	714	223	1561	503	446	1779	631
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	31.0	31.1	49.7	24.9	24.9	51.2	29.1	29.7	48.6	29.0	29.0
Incr Delay (d2), s/veh	5.8	3.4	6.2	5.0	0.1	0.2	4.4	0.9	3.3	5.8	2.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	14.7	16.2	2.9	3.3	3.6	1.6	5.4	6.3	3.9	10.3	11.7
LnGrp Delay(d), s/veh	54.7	34.5	37.2	54.7	25.0	25.1	55.6	30.0	32.9	54.4	31.0	34.6
LnGrp LOS	D	C	D	D	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1817			657			1010			1856	
Approach Delay, s/veh		37.8			33.3			33.3			34.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	39.1	11.8	44.4	9.0	44.0	13.3	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	33.0	11.0	46.0	7.0	40.0	13.0	44.0
Max Q Clear Time (g_c+I1), s	9.6	15.5	7.6	31.8	5.2	24.5	9.0	9.2
Green Ext Time (p_c), s	0.3	5.5	0.2	8.6	0.0	9.2	0.3	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	2	839	1	39	988	43	1	0	130	74	0	20
Future Volume (vph)	2	839	1	39	988	43	1	0	130	74	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.98	1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		0.99	1.00	1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3396	6344		3400	6301		1736	1457	1457	1752		1534
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3396	6344		3400	6301		1736	1457	1457	1752		1534
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	2	912	1	42	1074	47	1	0	141	80	0	22
RTOR Reduction (vph)	0	0	0	0	6	0	0	42	41	0	0	11
Lane Group Flow (vph)	2	913	0	42	1115	0	1	29	29	80	0	11
Confl. Peds. (#/hr)	2		1	1		2	6		6	6		6
Confl. Bikes (#/hr)						3			1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	0.9	22.5		3.9	25.5		0.9	35.2	35.2	7.7		42.0
Effective Green, g (s)	0.9	22.5		3.9	25.5		0.9	35.2	35.2	7.7		42.0
Actuated g/C Ratio	0.01	0.26		0.05	0.30		0.01	0.41	0.41	0.09		0.49
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	35	1673		155	1883		18	601	601	158		755
v/s Ratio Prot	0.00	0.14		c0.01	c0.18		0.00	c0.02		c0.05		
v/s Ratio Perm									0.02			0.01
v/c Ratio	0.06	0.55		0.27	0.59		0.06	0.05	0.05	0.51		0.01
Uniform Delay, d1	41.8	27.0		39.3	25.5		41.8	15.0	15.0	37.0		11.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	0.7	0.4		0.9	0.5		1.3	0.2	0.2	2.5		0.0
Delay (s)	42.5	27.4		40.3	26.0		43.1	15.2	15.2	39.5		11.1
Level of Service	D	C		D	C		D	B	B	D		B
Approach Delay (s/veh)		27.4			26.5			15.4			33.4	
Approach LOS		C			C			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	85.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	41.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1093	32	387	1014	145	33	85	142	439	500	205
Future Volume (veh/h)	90	1093	32	387	1014	145	33	85	142	439	500	205
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	1104	32	391	1024	146	33	86	143	443	505	207
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	144	1351	39	464	1272	559	287	438	382	624	1045	426
Arrive On Green	0.04	0.27	0.27	0.13	0.36	0.36	0.02	0.25	0.25	0.21	0.43	0.43
Sat Flow, veh/h	3442	5076	147	3442	3539	1556	1774	1770	1541	1774	2432	991
Grp Volume(v), veh/h	91	737	399	391	1024	146	33	86	143	443	367	345
Grp Sat Flow(s),veh/h/ln	1721	1695	1833	1721	1770	1556	1774	1770	1541	1774	1770	1654
Q Serve(g_s), s	2.8	22.3	22.3	12.1	28.5	7.3	1.5	4.2	8.4	19.3	16.3	16.5
Cycle Q Clear(g_c), s	2.8	22.3	22.3	12.1	28.5	7.3	1.5	4.2	8.4	19.3	16.3	16.5
Prop In Lane	1.00		0.08	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	144	902	488	464	1272	559	287	438	382	624	760	710
V/C Ratio(X)	0.63	0.82	0.82	0.84	0.81	0.26	0.11	0.20	0.37	0.71	0.48	0.49
Avail Cap(c_a), veh/h	220	1053	570	598	1488	654	311	438	382	811	760	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	37.6	37.7	46.2	31.6	24.8	29.6	32.6	34.1	21.2	22.5	22.5
Incr Delay (d2), s/veh	4.5	4.5	8.0	8.4	2.9	0.2	0.2	1.0	2.8	2.0	2.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	11.0	12.4	6.3	14.4	3.2	0.7	2.2	3.9	9.6	8.4	8.0
LnGrp Delay(d), s/veh	56.1	42.1	45.6	54.6	34.5	25.0	29.8	33.6	36.9	23.2	24.6	24.9
LnGrp LOS	E	D	D	D	C	C	C	C	D	C	C	C
Approach Vol, veh/h		1227			1561			262			1155	
Approach Delay, s/veh		44.3			38.7			34.9			24.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.4	31.1	18.8	33.1	6.5	51.0	8.6	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	34.0	17.0	19.0	34.0	4.0	47.0	7.0	46.0
Max Q Clear Time (g_c+I1), s	21.3	10.4	14.1	24.3	3.5	18.5	4.8	30.5
Green Ext Time (p_c), s	1.2	0.6	0.6	4.8	0.0	4.8	0.0	6.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	194	38	3	81	32	9	87	12	210	413	170
Future Volume (veh/h)	61	194	38	3	81	32	9	87	12	210	413	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	67	213	42	3	89	35	10	96	13	231	454	187
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	175	350	68	123	298	111	649	2556	340	700	1308	542
Arrive On Green	0.12	0.12	0.12	0.12	0.12	0.12	0.81	0.81	0.81	0.81	0.81	0.81
Sat Flow, veh/h	1274	2981	576	1131	2537	945	793	3172	422	803	1623	672
Grp Volume(v), veh/h	67	126	129	3	61	63	10	53	56	432	0	440
Grp Sat Flow(s),veh/h/ln	1274	1787	1770	1131	1787	1694	793	1787	1807	1515	0	1583
Q Serve(g_s), s	5.3	7.0	7.2	0.3	3.3	3.5	0.4	0.6	0.6	7.2	0.0	7.8
Cycle Q Clear(g_c), s	8.8	7.0	7.2	7.5	3.3	3.5	8.2	0.6	0.6	7.8	0.0	7.8
Prop In Lane	1.00		0.33	1.00		0.56	1.00		0.23	0.54		0.42
Lane Grp Cap(c), veh/h	175	210	208	123	210	199	649	1440	1456	1274	0	1276
V/C Ratio(X)	0.38	0.60	0.62	0.02	0.29	0.32	0.02	0.04	0.04	0.34	0.00	0.35
Avail Cap(c_a), veh/h	368	480	475	294	480	455	649	1440	1456	1274	0	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	46.2	43.7	43.8	47.4	42.0	42.2	3.8	2.0	2.0	2.7	0.0	2.7
Incr Delay (d2), s/veh	1.4	2.8	3.0	0.1	0.8	0.9	0.0	0.0	0.0	0.7	0.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.6	3.7	0.1	1.7	1.7	0.1	0.3	0.3	3.5	0.0	3.6
LnGrp Delay(d), s/veh	47.6	46.4	46.8	47.4	42.8	43.1	3.9	2.1	2.1	3.4	0.0	3.5
LnGrp LOS	D	D	D	D	D	D	A	A	A	A		A
Approach Vol, veh/h		322			127			119			872	
Approach Delay, s/veh		46.8			43.0			2.2			3.4	
Approach LOS		D			D			A			A	

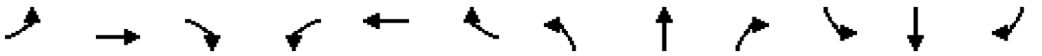
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		88.0		16.2		88.0		16.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		84.0		28.0		84.0		28.0
Max Q Clear Time (g_c+I1), s		10.2		10.8		9.8		9.5
Green Ext Time (p_c), s		0.7		1.4		6.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	94	867	81	145	886	263	231	41	111	7	6	19
Future Volume (vph)	94	867	81	145	886	263	231	41	111	7	6	19
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1568	3400	5036	1568	3400	1615	1469	1752	1845	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1568	3400	5036	1568	3400	1615	1469	1752	1845	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	99	913	85	153	933	277	243	43	117	7	6	20
RTOR Reduction (vph)	0	0	59	0	0	184	0	30	66	0	0	15
Lane Group Flow (vph)	99	913	26	153	933	93	243	53	11	7	6	5
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	6.5	24.2	24.2	9.2	26.9	26.9	11.5	11.5	11.5	19.3	19.3	19.3
Effective Green, g (s)	6.5	24.2	24.2	9.2	26.9	26.9	11.5	11.5	11.5	19.3	19.3	19.3
Actuated g/C Ratio	0.08	0.30	0.30	0.11	0.34	0.34	0.14	0.14	0.14	0.24	0.24	0.24
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	275	1519	473	390	1689	525	487	231	210	421	443	377
v/s Ratio Prot	0.03	0.18		c0.05	c0.19		c0.07	0.03		c0.00	0.00	
v/s Ratio Perm			0.02			0.06			0.01			0.00
v/c Ratio	0.36	0.60	0.05	0.39	0.55	0.18	0.50	0.23	0.05	0.02	0.01	0.01
Uniform Delay, d1	34.9	23.9	19.9	32.9	21.7	18.8	31.7	30.4	29.6	23.2	23.2	23.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.8	0.7	0.0	0.7	0.4	0.2	0.8	0.5	0.1	0.1	0.1	0.1
Delay (s)	35.7	24.6	19.9	33.6	22.1	19.0	32.5	30.9	29.8	23.3	23.3	23.3
Level of Service	D	C	B	C	C	B	C	C	C	C	C	C
Approach Delay (s/veh)		25.2			22.8			31.7			23.3	
Approach LOS		C			C			C			C	

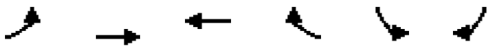
Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.37		
Actuated Cycle Length (s)	80.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	44.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



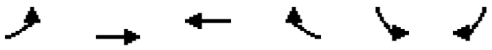
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1638	63	73	655	0	17	0	76	0	0	0
Future Volume (vph)	0	1638	63	73	655	0	17	0	76	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frt		0.99		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3555		1787	3574		1626	2919				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3555		1787	3574		1626	2919				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1780	68	79	712	0	18	0	83	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	69	0	0	0	0
Lane Group Flow (vph)	0	1846	0	79	712	0	16	16	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		61.0		6.0	71.0		18.0	18.0				
Effective Green, g (s)		61.0		6.0	71.0		18.0	18.0				
Actuated g/C Ratio		0.63		0.06	0.73		0.19	0.19				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		2235		110	2616		301	541				
v/s Ratio Prot		c0.52		c0.04	0.20		c0.01	0.01				
v/s Ratio Perm												
v/c Ratio		0.83		0.72	0.27		0.05	0.03				
Uniform Delay, d1		13.9		44.7	4.4		32.5	32.3				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		2.6		20.0	0.1		0.3	0.1				
Delay (s)		16.5		64.6	4.4		32.8	32.4				
Level of Service		B		E	A		C	C				
Approach Delay (s/veh)		16.5			10.4			32.5			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	97.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



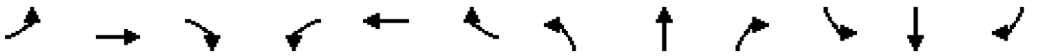
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1153	817	0	455	748
Future Volume (vph)	0	1153	817	0	455	748
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.96	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5036	5036		1707	1490
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5036	5036		1707	1490
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1189	842	0	469	771
RTOR Reduction (vph)	0	0	0	0	11	14
Lane Group Flow (vph)	0	1189	842	0	635	580
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		34.9	34.9		71.1	71.1
Effective Green, g (s)		34.9	34.9		71.1	71.1
Actuated g/C Ratio		0.31	0.31		0.62	0.62
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1541	1541		1064	929
v/s Ratio Prot		c0.24	0.17		0.37	
v/s Ratio Perm						c0.39
v/c Ratio		0.77	0.55		0.60	0.62
Uniform Delay, d1		35.9	33.0		12.9	13.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		2.5	0.4		2.5	3.2
Delay (s)		38.4	33.4		15.3	16.4
Level of Service		D	C		B	B
Approach Delay (s/veh)		38.4	33.4		15.8	
Approach LOS		D	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	114.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	840	973	0	127	318
Future Volume (vph)	0	840	973	0	127	318
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.92	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5036	5036		3209	1427
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5036	5036		3209	1427
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	884	1024	0	134	335
RTOR Reduction (vph)	0	0	0	0	35	35
Lane Group Flow (vph)	0	884	1024	0	267	132
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				7		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		23.9	23.9		47.1	47.1
Effective Green, g (s)		23.9	23.9		47.1	47.1
Actuated g/C Ratio		0.30	0.30		0.60	0.60
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1523	1523		1913	850
v/s Ratio Prot		0.18	c0.20		0.08	
v/s Ratio Perm						c0.09
v/c Ratio		0.58	0.67		0.14	0.16
Uniform Delay, d1		23.3	24.1		7.0	7.1
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.6	1.2		0.2	0.4
Delay (s)		23.9	25.3		7.2	7.5
Level of Service		C	C		A	A
Approach Delay (s/veh)		23.9	25.3		7.3	
Approach LOS		C	C		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	79.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1489	252	246	439	0	0	0	0	214	33	279
Future Volume (vph)	0	1489	252	246	439	0	0	0	0	214	33	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.91	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3414	1436	1787	3574					1698	1536	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3414	1436	1787	3574					1698	1536	1519
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	1692	286	280	499	0	0	0	0	243	38	317
RTOR Reduction (vph)	0	1	120	0	0	0	0	0	0	0	51	156
Lane Group Flow (vph)	0	1720	137	280	499	0	0	0	0	207	150	34
Confl. Peds. (#/hr)	5					5						
Confl. Bikes (#/hr)			3			9						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		62.4	62.4	21.2	87.6					21.1	21.1	21.1
Effective Green, g (s)		62.4	62.4	21.2	87.6					21.1	21.1	21.1
Actuated g/C Ratio		0.53	0.53	0.18	0.75					0.18	0.18	0.18
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1825	767	324	2682					307	277	274
v/s Ratio Prot		c0.50		c0.16	0.14							
v/s Ratio Perm			0.10							c0.12	0.10	0.02
v/c Ratio		0.94	0.18	0.86	0.19					0.67	0.54	0.13
Uniform Delay, d1		25.5	14.0	46.4	4.2					44.6	43.4	40.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		10.4	0.1	20.5	0.0					11.3	7.4	0.9
Delay (s)		35.9	14.1	66.9	4.3					55.9	50.8	41.0
Level of Service		D	B	E	A					E	D	D
Approach Delay (s/veh)		33.1			26.8			0.0			49.5	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	116.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	1454	153	78	585	0	15	7	8	158	50	168
Future Volume (veh/h)	16	1454	153	78	585	0	15	7	8	158	50	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	17	1580	166	85	636	0	16	8	9	172	54	183
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	28	2192	230	110	1829	0	154	77	201	222	70	252
Arrive On Green	0.02	0.47	0.47	0.06	0.51	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	1792	4705	494	1792	3668	0	1214	607	1584	1379	433	1564
Grp Volume(v), veh/h	17	1149	597	85	636	0	24	0	9	226	0	183
Grp Sat Flow(s),veh/h/ln	1792	1712	1775	1792	1787	0	1821	0	1584	1812	0	1564
Q Serve(g_s), s	0.8	23.4	23.5	4.0	9.2	0.0	1.0	0.0	0.4	10.4	0.0	9.6
Cycle Q Clear(g_c), s	0.8	23.4	23.5	4.0	9.2	0.0	1.0	0.0	0.4	10.4	0.0	9.6
Prop In Lane	1.00		0.28	1.00		0.00	0.67		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	28	1595	827	110	1829	0	231	0	201	292	0	252
V/C Ratio(X)	0.61	0.72	0.72	0.77	0.35	0.00	0.10	0.00	0.04	0.77	0.00	0.73
Avail Cap(c_a), veh/h	103	2174	1127	248	2558	0	231	0	201	544	0	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.4	18.6	18.6	40.1	12.6	0.0	33.5	0.0	33.2	34.8	0.0	34.5
Incr Delay (d2), s/veh	19.8	0.8	1.5	10.8	0.1	0.0	0.9	0.0	0.4	4.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	11.2	11.8	2.3	4.5	0.0	0.6	0.0	0.2	5.5	0.0	4.4
LnGrp Delay(d), s/veh	62.2	19.4	20.1	50.8	12.7	0.0	34.4	0.0	33.6	39.2	0.0	38.5
LnGrp LOS	E	B	C	D	B		C		C	D		D
Approach Vol, veh/h		1763			721			33			409	
Approach Delay, s/veh		20.0			17.2			34.2			38.9	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	9.3	44.4		18.0	5.3	48.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		11.0	12.0	55.0		26.0	5.0	62.0
Max Q Clear Time (g_c+I1), s		3.0	6.0	25.5		12.4	2.8	11.2
Green Ext Time (p_c), s		0.0	0.1	14.9		1.5	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.1
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1346	0	0	659	294	444
Future Volume (veh/h)	1346	0	0	659	294	444
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	0	0	1845	1845	1845
Adj Flow Rate, veh/h	1479	0	0	724	323	488
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	1881	0	0	1881	973	868
Arrive On Green	0.37	0.00	0.00	0.37	0.55	0.55
Sat Flow, veh/h	5368	0	0	5368	1757	1568
Grp Volume(v), veh/h	1479	0	0	724	323	488
Grp Sat Flow(s),veh/h/ln	1679	0	0	1679	1757	1568
Q Serve(g_s), s	28.7	0.0	0.0	11.6	11.1	22.2
Cycle Q Clear(g_c), s	28.7	0.0	0.0	11.6	11.1	22.2
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1881	0	0	1881	973	868
V/C Ratio(X)	0.79	0.00	0.00	0.38	0.33	0.56
Avail Cap(c_a), veh/h	2332	0	0	2332	973	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	0.0	25.2	13.4	15.9
Incr Delay (d2), s/veh	1.5	0.0	0.0	0.1	0.9	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	0.0	0.0	5.4	5.6	10.1
LnGrp Delay(d), s/veh	32.1	0.0	0.0	25.4	14.3	18.5
LnGrp LOS	C			C	B	B
Approach Vol, veh/h	1479			724	811	
Approach Delay, s/veh	32.1			25.4	16.9	
Approach LOS	C			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		65.0		45.1				45.1
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		61.0		51.0				51.0
Max Q Clear Time (g_c+I1), s		24.2		30.7				13.6
Green Ext Time (p_c), s		2.8		10.4				5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.4
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑↑			↑↑↑↑	↰↰↑	↱
Traffic Volume (vph)	652	0	0	745	382	528
Future Volume (vph)	652	0	0	745	382	528
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.94	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7471			6346	3272	1427
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7471			6346	3272	1427
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	701	0	0	801	411	568
RTOR Reduction (vph)	0	0	0	0	18	18
Lane Group Flow (vph)	701	0	0	801	649	294
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	19.6			19.6	72.1	72.1
Effective Green, g (s)	19.6			19.6	72.1	72.1
Actuated g/C Ratio	0.20			0.20	0.72	0.72
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1468			1247	2366	1031
v/s Ratio Prot	0.09			c0.13	0.20	
v/s Ratio Perm						c0.21
v/c Ratio	0.48			0.64	0.27	0.29
Uniform Delay, d1	35.5			36.8	4.8	4.8
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.2			1.1	0.3	0.7
Delay (s)	35.8			38.0	5.1	5.5
Level of Service	D			D	A	A
Approach Delay (s/veh)	35.8			38.0	5.2	
Approach LOS	D			D	A	

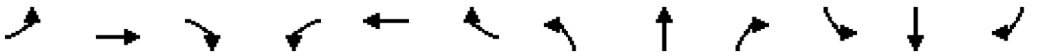
Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	99.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	36.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



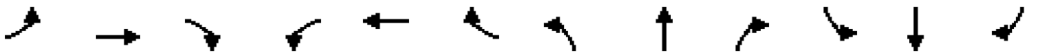
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1279	0	0	796	62	410
Future Volume (vph)	1279	0	0	796	62	410
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.88	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3574			3574	3192	1455
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3574			3574	3192	1455
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	1437	0	0	894	70	461
RTOR Reduction (vph)	0	0	0	0	29	29
Lane Group Flow (vph)	1437	0	0	894	272	201
Confl. Peds. (#/hr)		1	1			
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	45.5			45.5	37.4	37.4
Effective Green, g (s)	45.5			45.5	37.4	37.4
Actuated g/C Ratio	0.50			0.50	0.41	0.41
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1788			1788	1313	598
v/s Ratio Prot	c0.40			0.25	0.09	
v/s Ratio Perm						c0.14
v/c Ratio	0.80			0.50	0.21	0.34
Uniform Delay, d1	19.0			15.1	17.2	18.3
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	2.7			0.2	0.4	1.5
Delay (s)	21.7			15.3	17.6	19.8
Level of Service	C			B	B	B
Approach Delay (s/veh)	21.7			15.3	18.5	
Approach LOS	C			B	B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	90.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	58.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1123	0	0	844	197	32	0	120	0	0	0
Future Volume (vph)	1	1123	0	0	844	197	32	0	120	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00		0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			
Frt	1.00	1.00			0.97		1.00		0.85			
Flt Protected	0.95	1.00			1.00		0.95		1.00			
Satd. Flow (prot)	1787	3574			4969		1787		1579			
Flt Permitted	0.19	1.00			1.00		0.95		1.00			
Satd. Flow (perm)	364	3574			4969		1787		1579			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	1	1221	0	0	917	214	35	0	130	0	0	0
RTOR Reduction (vph)	0	0	0	0	52	0	0	0	79	0	0	0
Lane Group Flow (vph)	1	1221	0	0	1079	0	35	0	51	0	0	0
Confl. Peds. (#/hr)	1		7	7		1						
Confl. Bikes (#/hr)			7			1			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			1
Actuated Green, G (s)	28.0	28.0			28.0		23.2		23.2			
Effective Green, g (s)	28.0	28.0			28.0		23.2		23.2			
Actuated g/C Ratio	0.47	0.47			0.47		0.39		0.39			
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	172	1690			2350		700		618			
v/s Ratio Prot		c0.34			0.22		0.02					
v/s Ratio Perm	0.00								c0.03			
v/c Ratio	0.01	0.72			0.46		0.05		0.08			
Uniform Delay, d1	8.2	12.5			10.5		11.2		11.3			
Progression Factor	1.00	1.00			1.00		1.00		1.00			
Incremental Delay, d2	0.0	1.6			0.1		0.1		0.3			
Delay (s)	8.3	14.0			10.6		11.3		11.6			
Level of Service	A	B			B		B		B			
Approach Delay (s/veh)		14.0			10.6			11.5			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	59.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



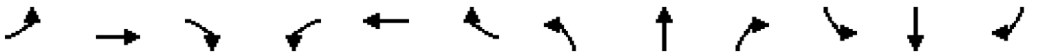
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	258	788	101	66	627	150	75	12	27	156	13	55
Future Volume (vph)	258	788	101	66	627	150	75	12	27	156	13	55
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1547	3400	5036	1544	3400	1845	1524	1752	1586	1490
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1547	3400	5036	1544	3400	1845	1524	1752	1586	1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	280	857	110	72	682	163	82	13	29	170	14	60
RTOR Reduction (vph)	0	0	75	0	0	124	0	0	22	0	20	25
Lane Group Flow (vph)	280	857	35	72	682	39	82	13	7	170	18	11
Confl. Peds. (#/hr)	2		1	1		2			9	9		
Confl. Bikes (#/hr)									3			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	12.4	26.3	26.3	5.7	19.6	19.6	20.4	20.4	20.4	13.6	13.6	26.0
Effective Green, g (s)	12.4	26.3	26.3	5.7	19.6	19.6	20.4	20.4	20.4	13.6	13.6	26.0
Actuated g/C Ratio	0.15	0.32	0.32	0.07	0.24	0.24	0.25	0.25	0.25	0.17	0.17	0.32
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	514	1615	496	236	1203	369	845	459	379	290	263	545
v/s Ratio Prot	c0.08	c0.17		0.02	0.14		c0.02	0.01		c0.10	0.01	0.00
v/s Ratio Perm			0.02			0.03			0.00			0.00
v/c Ratio	0.54	0.53	0.07	0.31	0.57	0.11	0.10	0.03	0.02	0.59	0.07	0.02
Uniform Delay, d1	32.2	22.8	19.4	36.3	27.5	24.4	23.7	23.3	23.2	31.6	28.9	19.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.2	0.3	0.1	0.7	0.6	0.1	0.2	0.1	0.1	3.0	0.1	0.0
Delay (s)	33.4	23.1	19.4	37.0	28.1	24.5	23.9	23.4	23.3	34.6	29.0	19.3
Level of Service	C	C	B	D	C	C	C	C	C	C	C	B
Approach Delay (s/veh)		25.1			28.1			23.7			31.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	82.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	47.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	36	0	0	12	0	0
Future Volume (vph)	36	0	0	12	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.98		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3396			1536		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3396			1536		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	38	0	0	13	0	0
RTOR Reduction (vph)	0	0	0	12	0	0
Lane Group Flow (vph)	38	0	0	1	0	0
Confl. Peds. (#/hr)	4			1	1	
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	0.8			0.7		
Effective Green, g (s)	0.8			0.7		
Actuated g/C Ratio	0.08			0.07		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	285			113		
v/s Ratio Prot	c0.01					
v/s Ratio Perm				c0.00		
v/c Ratio	0.13			0.01		
Uniform Delay, d1	4.0			4.1		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	4.2			4.1		
Level of Service	A			A		
Approach Delay (s/veh)	4.2		4.1			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-0.04		
Actuated Cycle Length (s)	9.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	13.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	92	968	456	363	711	8	196	24	106	12	68	90
Future Volume (vph)	92	968	456	363	711	8	196	24	106	12	68	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1736	3471	1525	1736	3471	1506	1649	1670	1528	1736	1671	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1736	3471	1525	1736	3471	1506	1649	1670	1528	1736	1671	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	95	998	470	374	733	8	202	25	109	12	70	93
RTOR Reduction (vph)	0	0	236	0	0	4	0	0	92	0	41	0
Lane Group Flow (vph)	95	998	234	374	733	4	113	114	17	12	122	0
Confl. Peds. (#/hr)	3		3	3		3			2	2		
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	9.0	38.0	38.0	27.5	56.5	56.5	17.2	17.2	17.2	12.4	12.4	
Effective Green, g (s)	9.0	38.0	38.0	27.5	56.5	56.5	17.2	17.2	17.2	12.4	12.4	
Actuated g/C Ratio	0.08	0.34	0.34	0.25	0.51	0.51	0.15	0.15	0.15	0.11	0.11	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	140	1187	521	429	1765	765	255	258	236	193	186	
v/s Ratio Prot	0.05	c0.29		c0.22	0.21		c0.07	0.07		0.01	c0.07	
v/s Ratio Perm			0.15			0.00			0.01			
v/c Ratio	0.68	0.84	0.45	0.87	0.42	0.01	0.44	0.44	0.07	0.06	0.66	
Uniform Delay, d1	49.6	33.8	28.4	40.1	17.0	13.5	42.6	42.6	40.1	44.1	47.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	12.3	5.5	0.6	17.4	0.2	0.0	5.5	5.4	0.6	0.1	8.1	
Delay (s)	62.0	39.3	29.0	57.5	17.2	13.5	48.1	48.0	40.7	44.3	55.4	
Level of Service	E	D	C	E	B	B	D	D	D	D	E	
Approach Delay (s/veh)		37.6			30.7			45.7			54.6	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	82.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	472	83	252	713	88	67	210	149	68	706	109
Future Volume (veh/h)	67	472	83	252	713	88	67	210	149	68	706	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	71	502	88	268	759	94	71	223	159	72	751	116
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	765	229	312	1394	506	125	1587	690	93	1645	715
Arrive On Green	0.05	0.15	0.15	0.18	0.27	0.27	0.04	0.45	0.45	0.05	0.46	0.46
Sat Flow, veh/h	1774	5085	1525	1774	5085	1543	3442	3539	1539	1774	3539	1538
Grp Volume(v), veh/h	71	502	88	268	759	94	71	223	159	72	751	116
Grp Sat Flow(s),veh/h/ln	1774	1695	1525	1774	1695	1543	1721	1770	1539	1774	1770	1538
Q Serve(g_s), s	3.7	8.6	4.8	13.6	11.8	4.0	1.9	3.4	5.9	3.7	13.3	4.0
Cycle Q Clear(g_c), s	3.7	8.6	4.8	13.6	11.8	4.0	1.9	3.4	5.9	3.7	13.3	4.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	92	765	229	312	1394	506	125	1587	690	93	1645	715
V/C Ratio(X)	0.77	0.66	0.38	0.86	0.54	0.19	0.57	0.14	0.23	0.77	0.46	0.16
Avail Cap(c_a), veh/h	230	1154	346	652	2364	800	223	1587	690	230	1645	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	37.1	35.4	37.0	28.6	22.3	43.9	15.0	15.7	43.3	16.8	14.3
Incr Delay (d2), s/veh	12.8	1.0	1.1	6.9	0.3	0.2	4.0	0.2	0.8	12.6	0.9	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	4.1	2.1	7.2	5.5	1.7	1.0	1.7	2.6	2.1	6.7	1.8
LnGrp Delay(d), s/veh	56.1	38.0	36.5	43.9	29.0	22.5	47.9	15.2	16.5	55.9	17.7	14.8
LnGrp LOS	E	D	D	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		661			1121			453			939	
Approach Delay, s/veh		39.8			32.0			20.8			20.3	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	45.5	20.2	17.9	7.4	47.0	8.8	29.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	37.0	34.0	21.0	6.0	43.0	12.0	43.0
Max Q Clear Time (g_c+I1), s	5.7	7.9	15.6	10.6	3.9	15.3	5.7	13.8
Green Ext Time (p_c), s	0.1	1.9	0.7	2.5	0.0	5.7	0.1	5.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	12	93	149	15	20	15	97	382	12	42	953	37
Future Volume (veh/h)	12	93	149	15	20	15	97	382	12	42	953	37
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	13	103	166	17	22	17	108	424	13	47	1059	41
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	235	252	207	160	252	211	425	2796	1249	788	2796	1234
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1344	1863	1530	1096	1863	1559	510	3539	1580	947	3539	1562
Grp Volume(v), veh/h	13	103	166	17	22	17	108	424	13	47	1059	41
Grp Sat Flow(s),veh/h/ln	1344	1863	1530	1096	1863	1559	510	1770	1580	947	1770	1562
Q Serve(g_s), s	0.9	5.4	11.3	1.6	1.1	1.0	8.6	3.1	0.2	1.3	9.6	0.6
Cycle Q Clear(g_c), s	2.0	5.4	11.3	7.0	1.1	1.0	18.3	3.1	0.2	4.4	9.6	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	235	252	207	160	252	211	425	2796	1249	788	2796	1234
V/C Ratio(X)	0.06	0.41	0.80	0.11	0.09	0.08	0.25	0.15	0.01	0.06	0.38	0.03
Avail Cap(c_a), veh/h	390	468	384	287	468	391	425	2796	1249	788	2796	1234
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.6	42.6	45.1	45.8	40.7	40.6	6.1	2.7	2.4	3.2	3.4	2.4
Incr Delay (d2), s/veh	0.1	1.1	7.0	0.3	0.1	0.2	1.4	0.1	0.0	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	2.9	5.2	0.5	0.6	0.5	1.4	1.5	0.1	0.4	4.7	0.3
LnGrp Delay(d), s/veh	41.7	43.6	52.1	46.0	40.8	40.8	7.6	2.8	2.4	3.4	3.8	2.5
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		282			56			545			1147	
Approach Delay, s/veh		48.5			42.4			3.7			3.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		18.6		89.0		18.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		20.3		13.3		11.6		9.0
Green Ext Time (p_c), s		4.7		0.9		10.0		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	106	17	209	302	103	21	357	144	69	771	201
Future Volume (veh/h)	69	106	17	209	302	103	21	357	144	69	771	201
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	71	109	18	215	311	106	22	368	148	71	795	207
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	92	248	109	260	583	255	34	1341	531	92	2039	911
Arrive On Green	0.05	0.07	0.07	0.15	0.16	0.16	0.02	0.54	0.54	0.05	0.58	0.58
Sat Flow, veh/h	1774	3539	1556	1774	3539	1549	1774	2468	977	1774	3539	1582
Grp Volume(v), veh/h	71	109	18	215	311	106	22	262	254	71	795	207
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1774	1770	1549	1774	1770	1675	1774	1770	1582
Q Serve(g_s), s	3.4	2.5	0.9	10.0	6.8	5.2	1.0	6.8	6.9	3.4	10.4	5.4
Cycle Q Clear(g_c), s	3.4	2.5	0.9	10.0	6.8	5.2	1.0	6.8	6.9	3.4	10.4	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.58	1.00		1.00
Lane Grp Cap(c), veh/h	92	248	109	260	583	255	34	961	910	92	2039	911
V/C Ratio(X)	0.77	0.44	0.16	0.83	0.53	0.42	0.65	0.27	0.28	0.77	0.39	0.23
Avail Cap(c_a), veh/h	271	749	329	626	1456	637	146	961	910	271	2039	911
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.8	37.9	37.2	35.3	32.5	31.8	41.4	10.4	10.5	39.8	9.9	8.8
Incr Delay (d2), s/veh	12.7	1.2	0.7	6.6	0.8	1.1	19.1	0.7	0.8	12.7	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	1.3	0.4	5.4	3.4	2.3	0.7	3.5	3.4	2.0	5.2	2.5
LnGrp Delay(d), s/veh	52.5	39.1	37.9	41.9	33.3	32.9	60.5	11.1	11.2	52.5	10.4	9.4
LnGrp LOS	D	D	D	D	C	C	E	B	B	D	B	A
Approach Vol, veh/h		198			632			538			1073	
Approach Delay, s/veh		43.8			36.1			13.2			13.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	50.2	16.5	10.0	5.6	53.0	8.4	18.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	43.0	30.0	18.0	7.0	49.0	13.0	35.0
Max Q Clear Time (g_c+I1), s	5.4	8.9	12.0	4.5	3.0	12.4	5.4	8.8
Green Ext Time (p_c), s	0.1	3.2	0.5	0.4	0.0	6.8	0.1	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	187	300	248	132	261	11	99	417	71	13	816	124
Future Volume (veh/h)	187	300	248	132	261	11	99	417	71	13	816	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	215	345	285	152	300	13	114	479	82	15	938	143
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	384	403	458	339	339	15	141	1564	681	24	1331	592
Arrive On Green	0.21	0.21	0.21	0.19	0.19	0.19	0.08	0.44	0.44	0.01	0.37	0.37
Sat Flow, veh/h	1792	1881	1551	1792	1787	77	1792	3574	1555	1792	3574	1591
Grp Volume(v), veh/h	215	345	285	152	0	313	114	479	82	15	938	143
Grp Sat Flow(s),veh/h/ln	1792	1881	1551	1792	0	1864	1792	1787	1555	1792	1787	1591
Q Serve(g_s), s	11.8	19.4	17.5	8.3	0.0	18.0	6.9	9.6	3.4	0.9	24.6	6.8
Cycle Q Clear(g_c), s	11.8	19.4	17.5	8.3	0.0	18.0	6.9	9.6	3.4	0.9	24.6	6.8
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	384	403	458	339	0	353	141	1564	681	24	1331	592
V/C Ratio(X)	0.56	0.86	0.62	0.45	0.00	0.89	0.81	0.31	0.12	0.63	0.70	0.24
Avail Cap(c_a), veh/h	456	478	520	390	0	406	179	1564	681	81	1331	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	41.6	33.7	39.5	0.0	43.5	49.9	20.1	18.4	54.1	29.4	23.8
Incr Delay (d2), s/veh	1.3	12.5	1.9	0.9	0.0	18.6	19.0	0.5	0.4	23.8	3.2	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	11.5	7.7	4.2	0.0	11.1	4.2	4.8	1.5	0.6	12.7	3.1
LnGrp Delay(d), s/veh	39.9	54.2	35.6	40.5	0.0	62.1	68.9	20.6	18.7	77.9	32.6	24.8
LnGrp LOS	D	D	D	D		E	E	C	B	E	C	C
Approach Vol, veh/h		845			465			675			1096	
Approach Delay, s/veh		44.3			55.0			28.5			32.2	
Approach LOS		D			D			C			C	

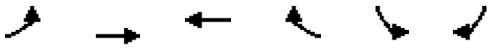
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.5	52.2		27.6	12.7	45.0		24.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	47.0		28.0	11.0	41.0		24.0
Max Q Clear Time (g_c+I1), s	2.9	11.6		21.4	8.9	26.6		20.0
Green Ext Time (p_c), s	0.0	3.7		2.2	0.0	5.8		0.9

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		38.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Future Volume (veh/h)	149	1124	155	120	731	54	121	473	189	234	948	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	152	1147	158	122	746	55	123	483	193	239	967	135
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1472	203	152	1571	468	185	1161	496	313	1858	553
Arrive On Green	0.11	0.33	0.33	0.09	0.31	0.31	0.05	0.33	0.33	0.09	0.37	0.37
Sat Flow, veh/h	1757	4451	613	1757	5036	1499	3408	3505	1497	3408	5036	1499
Grp Volume(v), veh/h	152	865	440	122	746	55	123	483	193	239	967	135
Grp Sat Flow(s),veh/h/ln	1757	1679	1707	1757	1679	1499	1704	1752	1497	1704	1679	1499
Q Serve(g_s), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Cycle Q Clear(g_c), s	8.5	23.3	23.3	6.8	12.0	2.6	3.6	10.7	9.9	6.9	15.0	6.3
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1110	564	152	1571	468	185	1161	496	313	1858	553
V/C Ratio(X)	0.82	0.78	0.78	0.80	0.47	0.12	0.67	0.42	0.39	0.76	0.52	0.24
Avail Cap(c_a), veh/h	350	1406	715	298	1958	583	272	1161	496	476	1858	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	30.3	30.3	45.0	27.9	24.7	46.5	26.0	25.7	44.5	24.7	22.0
Incr Delay (d2), s/veh	8.6	2.2	4.3	9.3	0.2	0.1	4.1	1.1	2.3	3.9	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	11.2	11.7	3.7	5.6	1.1	1.8	5.3	4.4	3.4	7.2	2.8
LnGrp Delay(d), s/veh	52.6	32.5	34.6	54.3	28.1	24.8	50.6	27.1	28.0	48.4	25.8	23.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1457			923			799			1341	
Approach Delay, s/veh		35.2			31.4			31.0			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	37.2	12.7	37.2	9.4	41.0	14.6	35.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	17.0	42.0	8.0	37.0	20.0	39.0
Max Q Clear Time (g_c+I1), s	8.9	12.7	8.8	25.3	5.6	17.0	10.5	14.0
Green Ext Time (p_c), s	0.4	3.5	0.2	7.8	0.1	7.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	166	1074	1057	171	381	383
Future Volume (veh/h)	166	1074	1057	171	381	383
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	173	1119	1101	178	397	399
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	210	2504	1461	236	1428	657
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4518	703	3408	1568
Grp Volume(v), veh/h	173	1119	849	430	397	399
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1698	1704	1568
Q Serve(g_s), s	9.2	13.7	21.5	21.5	7.3	18.9
Cycle Q Clear(g_c), s	9.2	13.7	21.5	21.5	7.3	18.9
Prop In Lane	1.00			0.41	1.00	1.00
Lane Grp Cap(c), veh/h	210	2504	1127	570	1428	657
V/C Ratio(X)	0.82	0.45	0.75	0.75	0.28	0.61
Avail Cap(c_a), veh/h	442	3798	1548	783	1428	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	15.5	28.2	28.2	18.2	21.6
Incr Delay (d2), s/veh	7.9	0.1	1.4	2.8	0.5	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	6.3	10.1	10.5	3.5	17.4
LnGrp Delay(d), s/veh	48.9	15.6	29.6	31.0	18.7	25.7
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		1292	1279		796	
Approach Delay, s/veh		20.1	30.1		22.2	
Approach LOS		C	C		C	

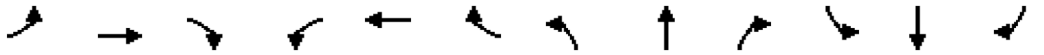
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.5		44.0	15.4	36.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				72.0		40.0	24.0	44.0
Max Q Clear Time (g_c+I1), s				15.7		20.9	11.2	23.5
Green Ext Time (p_c), s				9.8		2.8	0.3	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	1085	103	211	1097	112	42	123	137	2	15	7
Future Volume (veh/h)	86	1085	103	211	1097	112	42	123	137	2	15	7
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	91	1154	110	224	1167	119	45	131	146	2	16	7
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	119	1832	561	345	1841	188	585	667	557	443	440	192
Arrive On Green	0.07	0.36	0.36	0.10	0.40	0.40	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1757	5036	1543	3408	4631	472	1364	1845	1542	1085	1216	532
Grp Volume(v), veh/h	91	1154	110	224	846	440	45	131	146	2	0	23
Grp Sat Flow(s),veh/h/ln	1757	1679	1543	1704	1679	1746	1364	1845	1542	1085	0	1748
Q Serve(g_s), s	3.5	13.1	3.4	4.4	14.0	14.0	1.5	3.4	4.6	0.1	0.0	0.6
Cycle Q Clear(g_c), s	3.5	13.1	3.4	4.4	14.0	14.0	2.1	3.4	4.6	3.5	0.0	0.6
Prop In Lane	1.00		1.00	1.00		0.27	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	119	1832	561	345	1335	694	585	667	557	443	0	632
V/C Ratio(X)	0.77	0.63	0.20	0.65	0.63	0.63	0.08	0.20	0.26	0.00	0.00	0.04
Avail Cap(c_a), veh/h	406	3640	1116	1626	3252	1691	585	667	557	443	0	632
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	31.7	18.2	15.1	29.9	16.8	16.8	15.0	15.2	15.6	16.4	0.0	14.3
Incr Delay (d2), s/veh	9.9	0.4	0.2	2.1	0.5	1.0	0.3	0.7	1.1	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	6.0	1.5	2.2	6.6	6.9	0.6	1.8	2.1	0.0	0.0	0.3
LnGrp Delay(d), s/veh	41.6	18.5	15.2	32.0	17.3	17.7	15.2	15.8	16.7	16.4	0.0	14.4
LnGrp LOS	D	B	B	C	B	B	B	B	B	B		B
Approach Vol, veh/h		1355			1510			322			25	
Approach Delay, s/veh		19.8			19.6			16.2			14.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	11.0	29.2		29.0	8.7	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	33.0	50.0		25.0	16.0	67.0
Max Q Clear Time (g_c+I1), s		6.6	6.4	15.1		5.5	5.5	16.0
Green Ext Time (p_c), s		1.1	0.7	10.1		0.1	0.1	11.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.3
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	65	428	36	49	258	28	24	191	68	62	189	43
Future Volume (veh/h)	65	428	36	49	258	28	24	191	68	62	189	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	71	470	40	54	284	31	26	210	75	68	208	47
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	281	833	368	207	833	365	40	1924	860	89	2020	891
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.02	0.54	0.54	0.05	0.57	0.57
Sat Flow, veh/h	1057	3539	1567	883	3539	1551	1774	3539	1582	1774	3539	1561
Grp Volume(v), veh/h	71	470	40	54	284	31	26	210	75	68	208	47
Grp Sat Flow(s),veh/h/ln	1057	1770	1567	883	1770	1551	1774	1770	1582	1774	1770	1561
Q Serve(g_s), s	4.2	8.2	1.4	4.0	4.7	1.1	1.0	2.0	1.6	2.7	1.9	0.9
Cycle Q Clear(g_c), s	8.9	8.2	1.4	12.2	4.7	1.1	1.0	2.0	1.6	2.7	1.9	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	833	368	207	833	365	40	1924	860	89	2020	891
V/C Ratio(X)	0.25	0.56	0.11	0.26	0.34	0.08	0.65	0.11	0.09	0.77	0.10	0.05
Avail Cap(c_a), veh/h	816	2626	1162	655	2626	1151	405	1924	860	608	2020	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	23.6	21.0	29.0	22.3	20.9	34.0	7.8	7.7	32.9	6.9	6.7
Incr Delay (d2), s/veh	0.5	0.6	0.1	0.7	0.2	0.1	16.1	0.1	0.2	12.8	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	4.1	0.6	1.0	2.3	0.5	0.7	1.0	0.7	1.6	0.9	0.4
LnGrp Delay(d), s/veh	26.4	24.2	21.2	29.7	22.5	21.0	50.0	7.9	7.9	45.7	7.0	6.8
LnGrp LOS	C	C	C	C	C	C	D	A	A	D	A	A
Approach Vol, veh/h		581			369			311			323	
Approach Delay, s/veh		24.3			23.4			11.4			15.1	
Approach LOS		C			C			B			B	

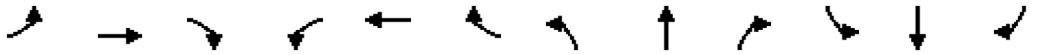
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	42.1		20.5	5.6	44.0		20.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	32.0		52.0	16.0	40.0		52.0
Max Q Clear Time (g_c+I1), s	4.7	4.0		10.9	3.0	3.9		14.2
Green Ext Time (p_c), s	0.1	1.4		3.7	0.0	1.4		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1125	73	427	373	0	67	0	522	0	0	0
Future Volume (veh/h)	0	1125	73	427	373	0	67	0	522	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1210	78	459	401	0	72	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	2461	158	319	2584	0	332	0	301	0	2	0
Arrive On Green	0.00	0.73	0.73	0.73	0.73	0.00	0.19	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	980	3371	217	427	3632	0	1749	0	1583	0	1863	0
Grp Volume(v), veh/h	0	634	654	459	401	0	72	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	980	1770	1818	427	1770	0	1749	0	1583	0	1863	0
Q Serve(g_s), s	0.0	15.1	15.2	57.8	3.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	15.1	15.2	73.0	3.5	0.0	3.5	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.12	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1292	1327	319	2584	0	332	0	301	0	2	0
V/C Ratio(X)	0.00	0.49	0.49	1.44	0.16	0.00	0.22	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1292	1327	319	2584	0	332	0	301	0	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.7	5.7	27.6	4.1	0.0	34.2	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	214.5	0.0	0.0	1.5	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.3	7.5	27.8	1.7	0.0	1.8	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	6.0	6.0	242.1	4.1	0.0	35.7	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	F	A		D					
Approach Vol, veh/h		1288			860			72			0	
Approach Delay, s/veh		6.0			131.2			35.7			0.0	
Approach LOS		A			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		23.0		77.0		0.0		77.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		19.0		73.0		16.0		73.0
Max Q Clear Time (g_c+I1), s		5.5		17.2		0.0		75.0
Green Ext Time (p_c), s		0.2		11.3		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.4
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	112	1195	165	405	544	77	60	259	230	55	612	27
Future Volume (veh/h)	112	1195	165	405	544	77	60	259	230	55	612	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	115	1232	170	418	561	79	62	267	237	57	631	28
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	1394	192	452	1712	756	80	468	386	73	853	38
Arrive On Green	0.08	0.31	0.31	0.25	0.48	0.48	0.04	0.25	0.25	0.04	0.25	0.25
Sat Flow, veh/h	1774	4504	621	1774	3539	1564	1774	1863	1537	1774	3447	153
Grp Volume(v), veh/h	115	927	475	418	561	79	62	267	237	57	324	335
Grp Sat Flow(s),veh/h/ln	1774	1695	1735	1774	1770	1564	1774	1863	1537	1774	1770	1830
Q Serve(g_s), s	7.1	29.0	29.0	25.6	10.8	3.1	3.9	14.0	15.2	3.5	18.8	18.8
Cycle Q Clear(g_c), s	7.1	29.0	29.0	25.6	10.8	3.1	3.9	14.0	15.2	3.5	18.8	18.8
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	143	1049	537	452	1712	756	80	468	386	73	438	453
V/C Ratio(X)	0.81	0.88	0.88	0.93	0.33	0.10	0.78	0.57	0.61	0.78	0.74	0.74
Avail Cap(c_a), veh/h	239	1095	560	541	1746	771	111	468	386	95	438	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	36.6	36.6	40.5	17.7	15.7	52.7	36.5	37.0	52.9	38.6	38.6
Incr Delay (d2), s/veh	10.2	8.5	15.1	20.0	0.1	0.1	20.1	5.0	7.1	25.4	10.7	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.8	16.1	15.0	5.3	1.3	2.3	7.8	7.2	2.3	10.5	10.8
LnGrp Delay(d), s/veh	60.6	45.1	51.6	60.5	17.8	15.7	72.8	41.5	44.1	78.3	49.3	49.0
LnGrp LOS	E	D	D	E	B	B	E	D	D	E	D	D
Approach Vol, veh/h		1517			1058			566			716	
Approach Delay, s/veh		48.3			34.5			46.0			51.5	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	32.0	32.4	38.5	9.0	31.6	13.0	57.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	28.0	34.0	36.0	7.0	27.0	15.0	55.0
Max Q Clear Time (g_c+I1), s	5.5	17.2	27.6	31.0	5.9	20.8	9.1	12.8
Green Ext Time (p_c), s	0.0	1.7	0.8	3.5	0.0	1.9	0.1	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1185	462	56	472	0	764	1203	324	0	0	0
Future Volume (veh/h)	0	1185	462	56	472	0	764	1203	324	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1247	486	59	497	0	804	1266	341			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2006	611	106	2352	0	1629	1888	508			
Arrive On Green	0.00	0.39	0.39	0.03	0.46	0.00	0.47	0.47	0.47			
Sat Flow, veh/h	0	5305	1563	3476	5305	0	3476	4029	1084			
Grp Volume(v), veh/h	0	1247	486	59	497	0	804	1076	531			
Grp Sat Flow(s),veh/h/ln	0	1712	1563	1738	1712	0	1738	1712	1690			
Q Serve(g_s), s	0.0	21.3	29.9	1.8	6.3	0.0	17.4	26.5	26.5			
Cycle Q Clear(g_c), s	0.0	21.3	29.9	1.8	6.3	0.0	17.4	26.5	26.5			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.64			
Lane Grp Cap(c), veh/h	0	2006	611	106	2352	0	1629	1604	792			
V/C Ratio(X)	0.00	0.62	0.80	0.56	0.21	0.00	0.49	0.67	0.67			
Avail Cap(c_a), veh/h	0	2453	747	160	2878	0	1629	1604	792			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	26.7	29.3	52.0	17.7	0.0	20.0	22.4	22.4			
Incr Delay (d2), s/veh	0.0	0.3	4.9	4.5	0.0	0.0	1.1	2.2	4.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	10.1	13.7	0.9	3.0	0.0	8.6	12.9	13.4			
LnGrp Delay(d), s/veh	0.0	27.0	34.3	56.5	17.7	0.0	21.1	24.7	26.9			
LnGrp LOS		C	C	E	B		C	C	C			
Approach Vol, veh/h		1733			556			2411				
Approach Delay, s/veh		29.1			21.9			24.0				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			7.3	46.5		55.0		53.8
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			5.0	52.0		51.0		61.0
Max Q Clear Time (g_c+I1), s			3.8	31.9		28.5		8.3
Green Ext Time (p_c), s			0.0	10.6		15.2		3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	1482	252	326	710	70	83	573	306	214	1389	405
Future Volume (veh/h)	196	1482	252	326	710	70	83	573	306	214	1389	405
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.85	1.00		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	211	1594	271	351	763	75	89	616	329	230	1494	435
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	280	1776	578	404	1960	579	139	1591	1073	291	1816	622
Arrive On Green	0.08	0.35	0.35	0.12	0.39	0.39	0.04	0.31	0.31	0.08	0.36	0.36
Sat Flow, veh/h	3442	5085	1473	3442	5085	1503	3442	5085	2382	3442	5085	1380
Grp Volume(v), veh/h	211	1594	271	351	763	75	89	616	329	230	1494	435
Grp Sat Flow(s),veh/h/ln	1721	1695	1473	1721	1695	1503	1721	1695	1191	1721	1695	1380
Q Serve(g_s), s	7.1	35.0	16.2	11.8	12.8	3.8	3.0	11.1	10.7	7.7	31.5	30.4
Cycle Q Clear(g_c), s	7.1	35.0	16.2	11.8	12.8	3.8	3.0	11.1	10.7	7.7	31.5	30.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	280	1776	578	404	1960	579	139	1591	1073	291	1816	622
V/C Ratio(X)	0.75	0.90	0.47	0.87	0.39	0.13	0.64	0.39	0.31	0.79	0.82	0.70
Avail Cap(c_a), veh/h	614	1816	590	410	1960	579	176	1591	1073	380	1816	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	36.3	26.9	51.0	26.1	23.4	55.6	31.6	22.1	52.8	34.4	27.1
Incr Delay (d2), s/veh	4.1	6.3	0.6	17.5	0.1	0.1	5.1	0.7	0.7	8.2	4.4	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	17.4	6.6	6.6	6.0	1.6	1.5	5.3	3.6	4.0	15.4	12.6
LnGrp Delay(d), s/veh	57.0	42.6	27.5	68.5	26.3	23.5	60.7	32.3	22.9	61.0	38.8	33.5
LnGrp LOS	E	D	C	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		2076			1189			1034			2159	
Approach Delay, s/veh		42.1			38.6			31.8			40.1	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	40.8	17.8	45.1	8.7	46.0	13.6	49.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	14.0	42.0	6.0	42.0	21.0	35.0
Max Q Clear Time (g_c+I1), s	9.7	13.1	13.8	37.0	5.0	33.5	9.1	14.8
Green Ext Time (p_c), s	0.2	5.9	0.0	4.1	0.0	6.5	0.5	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	308	1642	0	0	450	149	0	0	0	77	76	22
Future Volume (veh/h)	308	1642	0	0	450	149	0	0	0	77	76	22
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	331	1766	0	0	484	160				83	82	24
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	549	3678	0	0	2388	731				175	264	75
Arrive On Green	0.16	0.72	0.00	0.00	0.47	0.47				0.10	0.10	0.10
Sat Flow, veh/h	3476	5305	0	0	5305	1571				1792	2695	761
Grp Volume(v), veh/h	331	1766	0	0	484	160				83	51	55
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1571				1792	1712	1744
Q Serve(g_s), s	3.8	6.4	0.0	0.0	2.4	2.6				1.9	1.2	1.3
Cycle Q Clear(g_c), s	3.8	6.4	0.0	0.0	2.4	2.6				1.9	1.2	1.3
Prop In Lane	1.00		0.00	0.00		1.00				1.00		0.44
Lane Grp Cap(c), veh/h	549	3678	0	0	2388	731				175	168	171
V/C Ratio(X)	0.60	0.48	0.00	0.00	0.20	0.22				0.47	0.30	0.32
Avail Cap(c_a), veh/h	2585	10625	0	0	6327	1936				958	915	933
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	2.6	0.0	0.0	6.8	6.9				18.4	18.0	18.1
Incr Delay (d2), s/veh	1.1	0.1	0.0	0.0	0.0	0.1				2.0	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.0	0.0	0.0	1.1	1.1				1.0	0.6	0.7
LnGrp Delay(d), s/veh	17.9	2.7	0.0	0.0	6.8	7.0				20.3	19.1	19.2
LnGrp LOS	B	A			A	A				C	B	B
Approach Vol, veh/h		2097			644						189	
Approach Delay, s/veh		5.1			6.9						19.6	
Approach LOS		A			A						B	

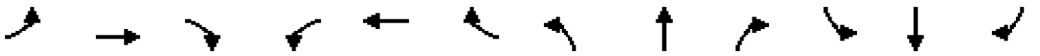
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		8.2		34.8			10.8	24.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		23.0		89.0			32.0	53.0
Max Q Clear Time (g_c+I1), s		3.9		8.4			5.8	4.6
Green Ext Time (p_c), s		0.8		22.4			1.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	1344	51	322	947	35	38	8	102	362	384	29
Future Volume (veh/h)	26	1344	51	322	947	35	38	8	102	362	384	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	29	1510	57	362	1064	39	43	9	115	407	431	33
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	1668	63	421	2206	651	264	277	736	455	853	65
Arrive On Green	0.02	0.33	0.33	0.12	0.43	0.43	0.15	0.15	0.15	0.26	0.26	0.26
Sat Flow, veh/h	1774	5015	189	3442	5085	1501	1774	1863	2657	1774	3326	254
Grp Volume(v), veh/h	29	1021	546	362	1064	39	43	9	115	407	228	236
Grp Sat Flow(s),veh/h/ln	1774	1695	1814	1721	1695	1501	1774	1863	1329	1774	1770	1810
Q Serve(g_s), s	1.9	32.9	32.9	11.8	17.1	1.7	2.4	0.5	3.8	25.3	12.6	12.7
Cycle Q Clear(g_c), s	1.9	32.9	32.9	11.8	17.1	1.7	2.4	0.5	3.8	25.3	12.6	12.7
Prop In Lane	1.00		0.10	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	37	1128	604	421	2206	651	264	277	736	455	454	464
V/C Ratio(X)	0.78	0.90	0.91	0.86	0.48	0.06	0.16	0.03	0.16	0.89	0.50	0.51
Avail Cap(c_a), veh/h	93	1156	619	451	2206	651	264	277	736	512	511	522
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.7	36.4	36.4	49.2	23.2	18.8	42.5	41.6	31.8	41.0	36.3	36.3
Incr Delay (d2), s/veh	28.2	10.0	16.7	14.7	0.2	0.0	1.3	0.2	0.5	16.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	16.9	19.2	6.5	8.0	0.7	1.3	0.3	1.4	14.6	6.3	6.5
LnGrp Delay(d), s/veh	83.9	46.5	53.1	64.0	23.3	18.9	43.8	41.9	32.2	57.8	37.2	37.2
LnGrp LOS	F	D	D	E	C	B	D	D	C	E	D	D
Approach Vol, veh/h		1596			1465			167			871	
Approach Delay, s/veh		49.4			33.3			35.7			46.8	
Approach LOS		D			C			D			D	

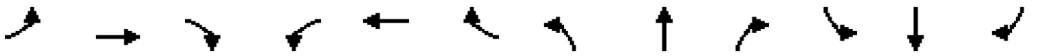
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.0	18.0	42.0		33.3	6.4	53.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		17.0	15.0	39.0		33.0	6.0	48.0
Max Q Clear Time (g_c+I1), s		5.8	13.8	34.9		27.3	3.9	19.1
Green Ext Time (p_c), s		0.4	0.2	3.2		2.0	0.0	8.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D



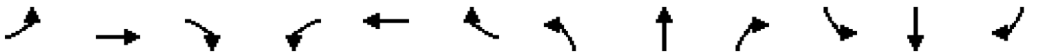
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	39	225	479	0	0	0	0	795	5	0	1509	0
Future Volume (vph)	39	225	479	0	0	0	0	795	5	0	1509	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					1.00			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1786	2814					7609			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1786	2814					7609			6471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	42	245	521	0	0	0	0	864	5	0	1640	0
RTOR Reduction (vph)	0	0	18	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	38	249	503	0	0	0	0	869	0	0	1640	0
Confl. Peds. (#/hr)							6		16	16		6
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	23.1	23.1	23.1					62.2			62.2	
Effective Green, g (s)	23.1	23.1	23.1					62.2			62.2	
Actuated g/C Ratio	0.25	0.25	0.25					0.67			0.67	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	420	442	696					5072			4314	
v/s Ratio Prot	0.02	0.14						0.11			c0.25	
v/s Ratio Perm			c0.18									
v/c Ratio	0.09	0.56	0.72					0.17			0.38	
Uniform Delay, d1	27.0	30.7	32.2					5.9			6.9	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.1	1.6	3.7					0.1			0.3	
Delay (s)	27.1	32.3	35.9					5.9			7.2	
Level of Service	C	C	D					A			A	
Approach Delay (s/veh)		34.4			0.0			5.9			7.2	
Approach LOS		C			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	93.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1346	566	133	568	0	559	0	59	204	0	4
Future Volume (vph)	0	1346	566	133	568	0	559	0	59	204	0	4
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.98	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5920	1231	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5920	1231	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1447	609	143	611	0	601	0	63	219	0	4
RTOR Reduction (vph)	0	26	208	0	0	0	0	0	39	0	0	3
Lane Group Flow (vph)	0	1665	157	143	611	0	601	0	24	219	0	1
Confl. Peds. (#/hr)			18	18								
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		47.5	47.5	9.9	61.4		41.3		41.3	41.3		41.3
Effective Green, g (s)		47.5	47.5	9.9	61.4		41.3		41.3	41.3		41.3
Actuated g/C Ratio		0.43	0.43	0.09	0.55		0.37		0.37	0.37		0.37
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2540	528	310	2848		1293		596	1293		596
v/s Ratio Prot		c0.28		c0.04	0.12							
v/s Ratio Perm			0.13				c0.17		0.01	0.06		0.00
v/c Ratio		0.66	0.30	0.46	0.21		0.46		0.04	0.17		0.00
Uniform Delay, d1		25.1	20.7	47.9	12.5		26.3		22.1	23.2		21.8
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.6	0.3	1.1	0.0		1.2		0.1	0.3		0.0
Delay (s)		25.7	21.0	49.0	12.5		27.5		22.2	23.5		21.8
Level of Service		C	C	D	B		C		C	C		C
Approach Delay (s/veh)		24.9			19.4			27.0			23.5	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	110.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	125	120	355	38	644	0	35	1640	29
Future Volume (vph)	0	0	0	125	120	355	38	644	0	35	1640	29
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3378	2814	3467	6471		1787	6471	1553
Flt Permitted				0.95	0.99	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3378	2814	3467	6471		1787	6471	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	136	130	386	41	700	0	38	1783	32
RTOR Reduction (vph)	0	0	0	0	0	321	0	0	0	0	0	10
Lane Group Flow (vph)	0	0	0	87	179	65	41	700	0	38	1783	22
Confl. Peds. (#/hr)							8		15	15		8
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				17.8	17.8	17.8	4.1	70.9		5.0	71.8	71.8
Effective Green, g (s)				17.8	17.8	17.8	4.1	70.9		5.0	71.8	71.8
Actuated g/C Ratio				0.17	0.17	0.17	0.04	0.67		0.05	0.68	0.68
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				273	568	473	134	4340		84	4395	1054
v/s Ratio Prot				c0.05	0.05		0.01	0.11		c0.02	c0.28	
v/s Ratio Perm						0.02						0.01
v/c Ratio				0.32	0.32	0.14	0.31	0.16		0.45	0.41	0.02
Uniform Delay, d1				38.6	38.6	37.4	49.4	6.4		49.0	7.5	5.5
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.7	0.3	0.1	1.3	0.1		3.8	0.3	0.0
Delay (s)				39.3	38.9	37.5	50.7	6.5		52.9	7.8	5.5
Level of Service				D	D	D	D	A		D	A	A
Approach Delay (s/veh)		0.0			38.2			8.9			8.7	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	105.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	40.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	101	1520	743	203	53	147
Future Volume (veh/h)	101	1520	743	203	53	147
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	111	1670	816	223	58	162
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	146	2975	1674	445	784	699
Arrive On Green	0.08	0.46	0.33	0.33	0.44	0.44
Sat Flow, veh/h	1792	6735	5383	1360	1792	1599
Grp Volume(v), veh/h	111	1670	772	267	58	162
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1626	1792	1599
Q Serve(g_s), s	4.7	14.6	9.9	10.3	1.5	4.9
Cycle Q Clear(g_c), s	4.7	14.6	9.9	10.3	1.5	4.9
Prop In Lane	1.00			0.84	1.00	1.00
Lane Grp Cap(c), veh/h	146	2975	1587	532	784	699
V/C Ratio(X)	0.76	0.56	0.49	0.50	0.07	0.23
Avail Cap(c_a), veh/h	622	6493	2934	983	784	699
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	15.3	20.9	21.1	12.7	13.7
Incr Delay (d2), s/veh	7.9	0.2	0.2	0.7	0.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	6.5	4.5	4.7	0.8	5.6
LnGrp Delay(d), s/veh	42.9	15.5	21.2	21.8	12.9	14.5
LnGrp LOS	D	B	C	C	B	B
Approach Vol, veh/h		1781	1039		220	
Approach Delay, s/veh		17.2	21.3		14.1	
Approach LOS		B	C		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				39.7		38.0	10.3	29.4
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				78.0		34.0	27.0	47.0
Max Q Clear Time (g_c+I1), s				16.6		6.9	6.7	12.3
Green Ext Time (p_c), s				19.1		0.7	0.2	8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	NWL2	NWR
Lane Configurations										
Traffic Volume (vph)	2	0	5	102	37	23	147	30	10	10
Future Volume (vph)	2	0	5	102	37	23	147	30	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	0.88	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	0.99		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	0.94		1.00	1.00	1.00	0.85
Flt Protected	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	1641		1641	2584	3067		1641	3282	1641	1468
Flt Permitted	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1641		1641	2584	3067		1641	3282	1641	1468
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	3	0	7	136	49	31	196	40	13	13
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	3	0	7	136	80	0	196	40	13	13
Confl. Peds. (#/hr)			2			5				
Confl. Bikes (#/hr)						1				
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA	Prot	Prot
Protected Phases	4	4	8	1	2		1	6	7	7
Permitted Phases				8						
Actuated Green, G (s)	0.9		1.0	14.3	41.6		13.3	58.9	2.5	2.5
Effective Green, g (s)	0.9		1.0	14.3	41.6		13.3	58.9	2.5	2.5
Actuated g/C Ratio	0.01		0.01	0.18	0.52		0.17	0.74	0.03	0.03
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	18		20	596	1608		275	2437	51	46
v/s Ratio Prot	c0.00		0.00	c0.04	c0.03		c0.12	0.01	0.01	c0.01
v/s Ratio Perm				0.01						
v/c Ratio	0.17		0.35	0.23	0.05		0.71	0.02	0.25	0.28
Uniform Delay, d1	38.8		38.8	27.8	9.2		31.2	2.7	37.5	37.5
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	4.3		10.3	0.2	0.1		8.4	0.0	2.6	3.4
Delay (s)	43.2		49.1	28.0	9.3		39.6	2.7	40.1	40.9
Level of Service	D		D	C	A		D	A	D	D
Approach Delay (s/veh)					9.3			33.4		
Approach LOS					A			C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	79.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	36.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	0	0	0	0	0	0	52	0	14	15	3
Future Volume (veh/h)	4	0	0	0	0	0	0	52	0	14	15	3
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	0	1681				0	1681	0	1681	1681	1900
Adj Flow Rate, veh/h	6	0	0				0	76	0	21	22	4
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.68	0.68	0.68				0.68	0.68	0.68	0.68	0.68	0.68
Percent Heavy Veh, %	13	0	13				0	13	0	13	13	13
Cap, veh/h	10	0	9				0	2712	0	29	2467	436
Arrive On Green	0.01	0.00	0.00				0.00	0.85	0.00	0.02	0.91	0.91
Sat Flow, veh/h	1601	0	1429				0	3363	0	1601	2714	479
Grp Volume(v), veh/h	6	0	0				0	76	0	21	13	13
Grp Sat Flow(s),veh/h/ln	1601	0	1429				0	1597	0	1601	1597	1596
Q Serve(g_s), s	0.4	0.0	0.0				0.0	0.3	0.0	1.2	0.1	0.1
Cycle Q Clear(g_c), s	0.4	0.0	0.0				0.0	0.3	0.0	1.2	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.30
Lane Grp Cap(c), veh/h	10	0	9				0	2712	0	29	1452	1451
V/C Ratio(X)	0.61	0.00	0.00				0.00	0.03	0.00	0.73	0.01	0.01
Avail Cap(c_a), veh/h	440	0	393				0	2712	0	694	1452	1451
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	0.0	0.0				0.0	1.1	0.0	46.2	0.4	0.4
Incr Delay (d2), s/veh	47.9	0.0	0.0				0.0	0.0	0.0	29.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0				0.0	0.1	0.0	0.8	0.0	0.0
LnGrp Delay(d), s/veh	94.8	0.0	0.0				0.0	1.1	0.0	75.8	0.4	0.4
LnGrp LOS	F							A		E	A	A
Approach Vol, veh/h		6						76			47	
Approach Delay, s/veh		94.8						1.1			34.1	
Approach LOS		F						A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.7	84.3		4.6		90.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	41.0	41.0		26.0		86.0		
Max Q Clear Time (g_c+I1), s	3.2	2.3		2.4		2.1		
Green Ext Time (p_c), s	0.0	0.5		0.0		0.1		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	11	0	0	16
Future Vol, veh/h	0	0	11	0	0	16
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	0	15	0	0	23

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	28	10	0	0	16	0
Stage 1	16	-	-	-	-	-
Stage 2	12	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	989	1075	-	-	1615	-
Stage 1	1010	-	-	-	-	-
Stage 2	1015	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	988	1073	-	-	1614	-
Mov Cap-2 Maneuver	988	-	-	-	-	-
Stage 1	1009	-	-	-	-	-
Stage 2	1015	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NERWBLn1	SWL	SWT
Capacity (veh/h)	-	- -	1614	-
HCM Lane V/C Ratio	-	- -	-	-
HCM Control Delay (s/veh)	-	- 0	0	-
HCM Lane LOS	-	- A	A	-
HCM 95th %tile Q(veh)	-	- -	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	959	21	0	843	0	7
Future Vol, veh/h	959	21	0	843	0	7
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1042	23	0	916	0	8

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	521
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	-	-	0	-	0	426
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	426
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	13.6
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	426	-	-	-
HCM Lane V/C Ratio	0.018	-	-	-
HCM Control Delay (s/veh)	13.6	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Future Volume (veh/h)	264	769	167	181	586	55	56	746	75	123	1036	197
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	284	827	180	195	630	59	60	802	81	132	1114	212
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	355	987	407	279	786	73	198	1329	134	309	1561	646
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.03	0.41	0.41	0.06	0.44	0.44
Sat Flow, veh/h	1774	3539	1460	1774	3244	303	1774	3217	325	1774	3539	1463
Grp Volume(v), veh/h	284	827	180	195	343	346	60	441	442	132	1114	212
Grp Sat Flow(s),veh/h/ln	1774	1770	1460	1774	1770	1777	1774	1770	1772	1774	1770	1463
Q Serve(g_s), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Cycle Q Clear(g_c), s	12.5	23.9	11.0	8.8	19.8	19.9	2.1	21.2	21.2	4.5	27.9	10.3
Prop In Lane	1.00		1.00	1.00		0.17	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	355	987	407	279	429	431	198	731	732	309	1561	646
V/C Ratio(X)	0.80	0.84	0.44	0.70	0.80	0.80	0.30	0.60	0.60	0.43	0.71	0.33
Avail Cap(c_a), veh/h	469	1171	483	360	488	490	207	731	732	350	1561	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	36.9	32.3	29.0	38.7	38.8	20.7	24.9	24.9	18.6	24.8	19.9
Incr Delay (d2), s/veh	7.2	4.8	0.8	4.1	8.2	8.4	0.8	3.7	3.7	0.9	2.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	12.4	4.5	4.6	10.7	10.8	1.1	11.0	11.1	2.2	14.2	4.4
LnGrp Delay(d), s/veh	33.8	41.7	33.0	33.1	46.9	47.1	21.5	28.6	28.6	19.6	27.6	21.2
LnGrp LOS	C	D	C	C	D	D	C	C	C	B	C	C
Approach Vol, veh/h		1291			884			943			1458	
Approach Delay, s/veh		38.7			44.0			28.2			25.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	15.0	34.3	7.4	52.0	19.0	30.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	16.0	36.0	4.0	48.0	22.0	30.0
Max Q Clear Time (g_c+I1), s	6.5	23.2	10.8	25.9	4.1	29.9	14.5	21.9
Green Ext Time (p_c), s	0.1	5.5	0.2	4.4	0.0	8.4	0.5	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Future Volume (veh/h)	174	899	105	148	905	86	123	595	108	203	1030	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	179	927	108	153	933	89	127	613	111	209	1062	144
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	213	1096	128	185	1176	466	262	1288	228	379	1694	495
Arrive On Green	0.12	0.34	0.34	0.10	0.33	0.33	0.07	0.30	0.30	0.10	0.33	0.33
Sat Flow, veh/h	1792	3181	371	1792	3574	1417	1792	4338	769	1792	5136	1500
Grp Volume(v), veh/h	179	521	514	153	933	89	127	481	243	209	1062	144
Grp Sat Flow(s),veh/h/ln	1792	1787	1764	1792	1787	1417	1792	1712	1684	1792	1712	1500
Q Serve(g_s), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Cycle Q Clear(g_c), s	10.1	27.8	27.8	8.6	24.4	4.6	5.0	11.8	12.2	8.0	18.0	7.3
Prop In Lane	1.00		0.21	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	213	616	608	185	1176	466	262	1017	500	379	1694	495
V/C Ratio(X)	0.84	0.85	0.85	0.83	0.79	0.19	0.48	0.47	0.49	0.55	0.63	0.29
Avail Cap(c_a), veh/h	330	763	753	278	1422	564	316	1017	500	479	1694	495
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	31.2	31.2	45.3	31.4	24.8	23.9	29.6	29.8	21.5	29.2	25.6
Incr Delay (d2), s/veh	10.9	7.3	7.4	11.8	2.6	0.2	1.4	1.6	3.4	1.3	1.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	14.8	14.7	4.9	12.5	1.8	2.6	5.8	6.1	4.0	8.7	3.2
LnGrp Delay(d), s/veh	55.3	38.5	38.6	57.1	34.0	24.9	25.3	31.2	33.1	22.8	30.9	27.1
LnGrp LOS	E	D	D	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1214			1175			851			1415	
Approach Delay, s/veh		41.0			36.3			30.9			29.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	34.6	14.7	39.5	10.9	38.0	16.3	37.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	28.0	16.0	44.0	10.0	34.0	19.0	41.0
Max Q Clear Time (g_c+I1), s	10.0	14.2	10.6	29.8	7.0	20.0	12.1	26.4
Green Ext Time (p_c), s	0.3	3.9	0.2	5.7	0.1	6.6	0.3	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	1123	381	189	866	100	605	620	252	141	937	413
Future Volume (veh/h)	182	1123	381	189	866	100	605	620	252	141	937	413
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	200	1234	419	208	952	110	665	681	277	155	1030	454
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	256	1392	425	265	1274	147	733	2291	704	213	1523	459
Arrive On Green	0.07	0.27	0.27	0.08	0.28	0.28	0.21	0.45	0.45	0.06	0.30	0.30
Sat Flow, veh/h	3442	5085	1554	3442	4609	531	3442	5085	1563	3442	5085	1533
Grp Volume(v), veh/h	200	1234	419	208	699	363	665	681	277	155	1030	454
Grp Sat Flow(s),veh/h/ln	1721	1695	1554	1721	1695	1749	1721	1695	1563	1721	1695	1533
Q Serve(g_s), s	6.7	27.2	31.3	6.9	22.0	22.1	22.0	9.9	13.8	5.2	20.8	34.5
Cycle Q Clear(g_c), s	6.7	27.2	31.3	6.9	22.0	22.1	22.0	9.9	13.8	5.2	20.8	34.5
Prop In Lane	1.00		1.00	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	256	1392	425	265	937	484	733	2291	704	213	1523	459
V/C Ratio(X)	0.78	0.89	0.99	0.78	0.75	0.75	0.91	0.30	0.39	0.73	0.68	0.99
Avail Cap(c_a), veh/h	265	1392	425	294	957	494	795	2291	704	294	1523	459
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	40.7	42.2	53.0	38.6	38.6	44.9	20.4	21.5	53.9	36.0	40.8
Incr Delay (d2), s/veh	13.7	7.3	39.6	11.9	3.2	6.2	13.5	0.3	1.6	5.5	2.4	39.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.6	18.0	3.7	10.7	11.5	11.8	4.7	6.3	2.6	10.1	19.6
LnGrp Delay(d), s/veh	66.8	48.0	81.8	64.9	41.7	44.8	58.4	20.7	23.1	59.4	38.4	80.2
LnGrp LOS	E	D	F	E	D	D	E	C	C	E	D	F
Approach Vol, veh/h		1853			1270			1623			1639	
Approach Delay, s/veh		57.7			46.4			36.6			52.0	
Approach LOS		E			D			D			D	

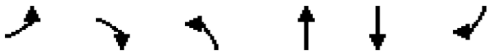
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	56.7	13.0	36.0	28.9	39.0	12.7	36.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	52.0	10.0	32.0	27.0	35.0	9.0	33.0
Max Q Clear Time (g_c+I1), s	7.2	15.8	8.9	33.3	24.0	36.5	8.7	24.1
Green Ext Time (p_c), s	0.1	7.0	0.1	0.0	0.9	0.0	0.0	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.6
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	72	773	679	0	15	1519
Future Volume (vph)	72	773	679	0	15	1519
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.87	0.85	1.00		1.00	1.00
Flt Protected	0.99	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3102	1427	5036		1752	6346
Flt Permitted	0.99	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3102	1427	5036		1752	6346
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	74	797	700	0	15	1566
RTOR Reduction (vph)	168	168	0	0	0	0
Lane Group Flow (vph)	305	230	700	0	15	1566
Confl. Peds. (#/hr)				17	17	
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	18.1	18.1	52.6		1.2	57.8
Effective Green, g (s)	18.1	18.1	52.6		1.2	57.8
Actuated g/C Ratio	0.22	0.22	0.63		0.01	0.69
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	669	307	3157		25	4371
v/s Ratio Prot	0.10		0.14		0.01	c0.25
v/s Ratio Perm		c0.16				
v/c Ratio	0.46	0.75	0.22		0.60	0.36
Uniform Delay, d1	28.6	30.8	6.8		41.1	5.4
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.5	9.6	0.2		34.4	0.2
Delay (s)	29.1	40.4	6.9		75.6	5.6
Level of Service	C	D	A		E	A
Approach Delay (s/veh)	34.3		6.9			6.3
Approach LOS	C		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	83.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	206	259	33	628	985	0
Future Volume (veh/h)	206	259	33	628	985	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	217	273	35	661	1037	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	671	309	44	4647	3384	0
Arrive On Green	0.20	0.20	0.03	0.73	0.67	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	217	273	35	661	1037	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	6.2	19.2	2.2	3.5	9.6	0.0
Cycle Q Clear(g_c), s	6.2	19.2	2.2	3.5	9.6	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	671	309	44	4647	3384	0
V/C Ratio(X)	0.32	0.88	0.79	0.14	0.31	0.00
Avail Cap(c_a), veh/h	872	401	217	4647	3384	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.0	44.2	54.9	4.5	7.7	0.0
Incr Delay (d2), s/veh	0.3	16.7	26.1	0.1	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	16.9	1.4	1.5	4.5	0.0
LnGrp Delay(d), s/veh	39.3	61.0	81.0	4.6	7.9	0.0
LnGrp LOS	D	E	F	A	A	
Approach Vol, veh/h	490			696	1037	
Approach Delay, s/veh	51.4			8.4	7.9	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		87.0		26.3	6.9	80.1		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		83.0		29.0	14.0	65.0		
Max Q Clear Time (g_c+I1), s		5.5		21.2	4.2	11.6		
Green Ext Time (p_c), s		5.2		1.1	0.0	9.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	98	787	87	220	468	80	74	432	218	70	490	116
Future Volume (veh/h)	98	787	87	220	468	80	74	432	218	70	490	116
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.86	1.00		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	105	846	94	237	503	86	80	465	234	75	527	125
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	167	1198	311	321	1426	381	133	2183	587	126	2172	585
Arrive On Green	0.05	0.24	0.24	0.10	0.29	0.29	0.04	0.45	0.45	0.04	0.44	0.44
Sat Flow, veh/h	3312	4893	1270	3312	4893	1308	3312	4893	1317	3312	4893	1317
Grp Volume(v), veh/h	105	846	94	237	503	86	80	465	234	75	527	125
Grp Sat Flow(s),veh/h/ln	1656	1631	1270	1656	1631	1308	1656	1631	1317	1656	1631	1317
Q Serve(g_s), s	2.9	14.5	5.5	6.4	7.5	4.6	2.2	5.3	11.0	2.0	6.2	5.4
Cycle Q Clear(g_c), s	2.9	14.5	5.5	6.4	7.5	4.6	2.2	5.3	11.0	2.0	6.2	5.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	167	1198	311	321	1426	381	133	2183	587	126	2172	585
V/C Ratio(X)	0.63	0.71	0.30	0.74	0.35	0.23	0.60	0.21	0.40	0.60	0.24	0.21
Avail Cap(c_a), veh/h	360	1970	511	649	2396	641	324	2183	587	288	2172	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	31.7	28.3	40.4	25.7	24.7	43.4	15.6	17.1	43.5	15.9	15.7
Incr Delay (d2), s/veh	3.9	0.8	0.5	3.3	0.1	0.3	4.3	0.2	2.0	4.4	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.6	2.0	3.1	3.4	1.7	1.1	2.5	4.3	1.0	2.8	2.1
LnGrp Delay(d), s/veh	46.7	32.5	28.8	43.7	25.9	25.0	47.7	15.8	19.2	47.9	16.2	16.5
LnGrp LOS	D	C	C	D	C	C	D	B	B	D	B	B
Approach Vol, veh/h		1045			826			779			727	
Approach Delay, s/veh		33.6			30.9			20.1			19.5	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	45.0	12.9	26.5	7.7	44.8	8.6	30.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	41.0	18.0	37.0	9.0	40.0	10.0	45.0
Max Q Clear Time (g_c+I1), s	4.0	13.0	8.4	16.5	4.2	8.2	4.9	9.5
Green Ext Time (p_c), s	0.1	4.2	0.5	6.0	0.1	4.4	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Future Volume (veh/h)	116	545	219	169	493	237	163	506	141	229	783	51
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.89	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	118	556	223	172	503	242	166	516	144	234	799	52
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	150	773	300	212	897	355	206	1246	333	279	1747	113
Arrive On Green	0.08	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.16	0.36	0.36
Sat Flow, veh/h	1774	3539	1373	1774	3539	1402	1774	3906	1044	1774	4853	314
Grp Volume(v), veh/h	118	556	223	172	503	242	166	445	215	234	557	294
Grp Sat Flow(s),veh/h/ln	1774	1770	1373	1774	1770	1402	1774	1695	1560	1774	1695	1776
Q Serve(g_s), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Cycle Q Clear(g_c), s	5.6	12.5	13.0	8.1	10.6	13.4	7.9	8.9	9.4	11.0	10.8	10.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.67	1.00		0.18
Lane Grp Cap(c), veh/h	150	773	300	212	897	355	206	1081	497	279	1221	640
V/C Ratio(X)	0.78	0.72	0.74	0.81	0.56	0.68	0.81	0.41	0.43	0.84	0.46	0.46
Avail Cap(c_a), veh/h	309	1192	462	453	1480	586	453	1081	497	577	1221	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.6	31.2	31.4	36.9	28.0	29.0	37.1	23.0	23.2	35.2	21.1	21.1
Incr Delay (d2), s/veh	8.7	1.3	3.6	7.2	0.6	2.3	7.3	1.2	2.7	6.7	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.2	5.2	4.4	5.2	5.4	4.2	4.3	4.4	5.9	5.2	5.7
LnGrp Delay(d), s/veh	47.3	32.5	35.0	44.2	28.5	31.3	44.4	24.1	25.9	41.9	22.3	23.5
LnGrp LOS	D	C	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		897			917			826			1085	
Approach Delay, s/veh		35.0			32.2			28.7			26.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	31.5	14.3	22.8	14.0	35.0	11.3	25.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	25.0	22.0	29.0	22.0	31.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	13.0	11.4	10.1	15.0	9.9	12.9	7.6	15.4
Green Ext Time (p_c), s	0.5	3.4	0.3	3.8	0.3	5.0	0.1	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Future Volume (veh/h)	189	884	117	410	924	133	127	483	89	267	877	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	195	911	121	423	953	137	131	498	92	275	904	72
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	1196	158	518	1194	517	196	1622	483	356	1750	139
Arrive On Green	0.08	0.26	0.26	0.15	0.34	0.34	0.06	0.32	0.32	0.10	0.37	0.37
Sat Flow, veh/h	3442	4523	598	3442	3539	1534	3442	5085	1514	3442	4788	380
Grp Volume(v), veh/h	195	682	350	423	953	137	131	498	92	275	639	337
Grp Sat Flow(s),veh/h/ln	1721	1695	1731	1721	1770	1534	1721	1695	1514	1721	1695	1778
Q Serve(g_s), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Cycle Q Clear(g_c), s	5.5	18.2	18.4	11.7	24.1	6.4	3.7	7.3	4.3	7.7	14.5	14.6
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	268	896	458	518	1194	517	196	1622	483	356	1239	650
V/C Ratio(X)	0.73	0.76	0.77	0.82	0.80	0.26	0.67	0.31	0.19	0.77	0.52	0.52
Avail Cap(c_a), veh/h	419	1205	615	839	1689	732	315	1622	483	594	1239	650
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	33.4	33.4	40.5	29.6	23.7	45.5	25.3	24.3	43.0	24.4	24.5
Incr Delay (d2), s/veh	3.8	2.0	4.0	3.3	1.9	0.3	3.9	0.5	0.9	3.6	1.5	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.8	9.3	5.8	12.0	2.8	1.9	3.5	1.9	3.8	7.0	7.6
LnGrp Delay(d), s/veh	48.2	35.4	37.4	43.8	31.5	24.0	49.4	25.8	25.2	46.6	26.0	27.4
LnGrp LOS	D	D	D	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1227			1513			721			1251	
Approach Delay, s/veh		38.0			34.2			30.0			30.9	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	35.4	18.8	30.0	9.6	40.0	11.7	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	28.0	24.0	35.0	9.0	36.0	12.0	47.0
Max Q Clear Time (g_c+I1), s	9.7	9.3	13.7	20.4	5.7	16.6	7.5	26.1
Green Ext Time (p_c), s	0.5	3.3	1.1	5.7	0.1	6.0	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Future Volume (veh/h)	138	84	251	20	76	58	142	720	10	38	1216	119
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	157	95	285	23	86	66	161	818	11	43	1382	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	3	495	37	119	495	191	2864	38	55	2235	218
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.11	0.55	0.55	0.03	0.47	0.47
Sat Flow, veh/h	0	9	1561	0	375	1559	1792	5217	70	1792	4727	462
Grp Volume(v), veh/h	252	0	285	109	0	66	161	536	293	43	1001	516
Grp Sat Flow(s),veh/h/ln	9	0	1561	375	0	1559	1792	1712	1864	1792	1712	1765
Q Serve(g_s), s	0.0	0.0	17.8	0.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Cycle Q Clear(g_c), s	37.0	0.0	17.8	37.0	0.0	3.5	10.3	9.8	9.8	2.8	25.4	25.4
Prop In Lane	0.62		1.00	0.21		1.00	1.00		0.04	1.00		0.26
Lane Grp Cap(c), veh/h	53	0	495	157	0	495	191	1879	1023	55	1619	834
V/C Ratio(X)	4.75	0.00	0.58	0.70	0.00	0.13	0.84	0.29	0.29	0.78	0.62	0.62
Avail Cap(c_a), veh/h	53	0	495	157	0	495	323	1879	1023	108	1619	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	33.2	32.6	0.0	28.4	51.1	14.1	14.1	56.1	22.9	22.9
Incr Delay (d2), s/veh	1729.6	0.0	1.6	12.6	0.0	0.1	9.5	0.4	0.7	20.4	1.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	27.2	0.0	7.9	3.1	0.0	1.5	5.6	4.7	5.2	1.7	12.4	13.1
LnGrp Delay(d), s/veh	1785.8	0.0	34.9	45.2	0.0	28.5	60.6	14.5	14.8	76.5	24.7	26.3
LnGrp LOS	F		C	D		C	E	B	B	E	C	C
Approach Vol, veh/h		537			175			990			1560	
Approach Delay, s/veh		856.5			38.9			22.0			26.6	
Approach LOS		F			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	68.0		41.0	16.5	59.1		41.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	64.0		37.0	21.0	50.0		37.0
Max Q Clear Time (g_c+I1), s	4.8	11.8		39.0	12.3	27.4		39.0
Green Ext Time (p_c), s	0.0	5.9		0.0	0.2	10.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		162.5
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Future Volume (veh/h)	8	76	61	92	74	36	36	557	89	62	1309	11
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.74		0.63	0.75		0.63	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	9	81	65	98	79	38	38	593	95	66	1393	12
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	314	168	189	314	168	303	2424	1022	590	2486	21
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.03	0.68	0.68	0.03	0.69	0.69
Sat Flow, veh/h	935	1863	996	925	1863	996	1774	3539	1492	1774	3594	31
Grp Volume(v), veh/h	9	81	65	98	79	38	38	593	95	66	686	719
Grp Sat Flow(s),veh/h/ln	935	1863	996	925	1863	996	1774	1770	1492	1774	1770	1855
Q Serve(g_s), s	0.9	4.0	6.1	10.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Cycle Q Clear(g_c), s	4.8	4.0	6.1	14.8	3.9	3.5	0.7	6.7	2.3	1.1	20.5	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	192	314	168	189	314	168	303	2424	1022	590	1224	1283
V/C Ratio(X)	0.05	0.26	0.39	0.52	0.25	0.23	0.13	0.24	0.09	0.11	0.56	0.56
Avail Cap(c_a), veh/h	319	567	303	315	567	303	326	2424	1022	599	1224	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	38.0	38.9	44.4	38.0	37.8	6.6	6.3	5.6	4.6	8.2	8.2
Incr Delay (d2), s/veh	0.1	0.4	1.5	2.2	0.4	0.7	0.2	0.2	0.2	0.1	1.9	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	2.1	1.8	2.9	2.0	1.0	0.3	3.3	1.0	0.5	10.5	11.0
LnGrp Delay(d), s/veh	40.1	38.4	40.3	46.6	38.4	38.5	6.8	6.5	5.8	4.7	10.0	9.9
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	A
Approach Vol, veh/h		155			215			726			1471	
Approach Delay, s/veh		39.3			42.1			6.4			9.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.4	76.0		21.7	6.7	76.7		21.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	72.0		32.0	4.0	72.0		32.0
Max Q Clear Time (g_c+I1), s	3.1	8.7		8.1	2.7	22.5		16.8
Green Ext Time (p_c), s	0.0	4.9		0.8	0.0	14.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	11	7	23	206	17	85	66	795	371	209	1121	45
Future Volume (veh/h)	11	7	23	206	17	85	66	795	371	209	1121	45
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	12	7	24	219	18	90	70	846	395	222	1193	48
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	322	74	254	329	376	316	90	2586	788	261	3030	122
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.05	0.52	0.52	0.15	0.62	0.62
Sat Flow, veh/h	1245	360	1234	1334	1827	1537	1740	4988	1520	1740	4910	197
Grp Volume(v), veh/h	12	0	31	219	18	90	70	846	395	222	808	433
Grp Sat Flow(s),veh/h/ln	1245	0	1594	1334	1827	1537	1740	1663	1520	1740	1663	1782
Q Serve(g_s), s	0.7	0.0	1.5	15.2	0.8	4.7	3.8	9.4	16.2	11.9	11.7	11.8
Cycle Q Clear(g_c), s	1.5	0.0	1.5	16.7	0.8	4.7	3.8	9.4	16.2	11.9	11.7	11.8
Prop In Lane	1.00		0.77	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	322	0	328	329	376	316	90	2586	788	261	2052	1100
V/C Ratio(X)	0.04	0.00	0.09	0.67	0.05	0.28	0.78	0.33	0.50	0.85	0.39	0.39
Avail Cap(c_a), veh/h	547	0	617	571	707	595	218	2586	788	528	2052	1100
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	0.0	30.8	37.5	30.5	32.0	44.8	13.3	15.0	39.6	9.3	9.3
Incr Delay (d2), s/veh	0.0	0.0	0.1	2.3	0.1	0.5	13.3	0.3	2.3	7.5	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.7	5.8	0.4	2.0	2.2	4.4	7.2	6.3	5.5	6.1
LnGrp Delay(d), s/veh	31.1	0.0	30.9	39.9	30.5	32.5	58.1	13.7	17.2	47.1	9.8	10.3
LnGrp LOS	C		C	D	C	C	E	B	B	D	A	B
Approach Vol, veh/h		43			327			1311			1463	
Approach Delay, s/veh		30.9			37.3			17.1			15.6	
Approach LOS		C			D			B			B	

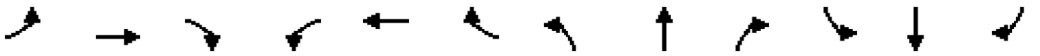
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.4	53.6		23.7	8.9	63.0		23.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	29.0	42.0		37.0	12.0	59.0		37.0
Max Q Clear Time (g_c+I1), s	13.9	18.2		3.5	5.8	13.8		18.7
Green Ext Time (p_c), s	0.5	7.9		0.2	0.1	10.8		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	89	0	0	417	713	20
Future Volume (veh/h)	89	0	0	417	713	20
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	92	0	0	430	735	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2486	0	0	2486	1017	322
Arrive On Green	0.70	0.00	0.00	0.70	0.20	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	92	0	0	430	735	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	0.6	0.0	0.0	3.2	10.6	0.0
Cycle Q Clear(g_c), s	0.6	0.0	0.0	3.2	10.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2486	0	0	2486	1017	322
V/C Ratio(X)	0.04	0.00	0.00	0.17	0.72	0.00
Avail Cap(c_a), veh/h	2486	0	0	2486	3775	1195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.7	0.0	0.0	4.1	29.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	1.6	5.0	0.0
LnGrp Delay(d), s/veh	3.7	0.0	0.0	4.2	30.0	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	92			430	735	
Approach Delay, s/veh	3.7			4.2	30.0	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		58.0				58.0		19.6
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		54.0				54.0		58.0
Max Q Clear Time (g_c+I1), s		2.6				5.2		12.6
Green Ext Time (p_c), s		0.5				2.8		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	286	1066	117	312	699	88	121	317	227	463	430	115
Future Volume (vph)	286	1066	117	312	699	88	121	317	227	463	430	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	0.99		1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	0.99	
Satd. Flow (prot)	3433	5085	1367	3433	4967		1610	3115	1417	1522	4578	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.74	
Satd. Flow (perm)	3433	5085	1367	3433	4967		1610	2922	1417	1522	3421	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	295	1099	121	322	721	91	125	327	234	477	443	119
RTOR Reduction (vph)	0	0	91	0	13	0	0	10	48	0	20	0
Lane Group Flow (vph)	295	1099	30	322	799	0	112	389	127	258	761	0
Confl. Peds. (#/hr)	21		58	58		21	26		5	5		26
Confl. Bikes (#/hr)			1			3						
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	14.3	29.2	29.2	13.6	28.5		12.5	46.5	47.6	23.6	61.6	
Effective Green, g (s)	14.3	29.2	29.2	13.6	28.5		12.5	46.5	47.6	23.6	61.6	
Actuated g/C Ratio	0.12	0.25	0.25	0.12	0.24		0.11	0.40	0.41	0.20	0.53	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	421	1275	342	401	1216		172	1188	628	308	2045	
v/s Ratio Prot	0.09	c0.22		c0.09	0.16		0.07	0.04	0.02	c0.17	0.08	
v/s Ratio Perm			0.02					0.10	0.07		c0.12	
v/c Ratio	0.70	0.86	0.09	0.80	0.66		0.65	0.33	0.20	0.84	0.37	
Uniform Delay, d1	49.0	41.7	33.4	50.1	39.6		49.9	24.1	22.2	44.6	16.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.2	6.2	0.1	11.1	1.3		8.5	0.2	0.2	17.7	0.1	
Delay (s)	54.2	47.9	33.5	61.2	40.8		58.4	24.3	22.3	62.2	16.2	
Level of Service	D	D	C	E	D		E	C	C	E	B	
Approach Delay (s/veh)		48.0			46.6			29.4			27.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	116.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	592	313	310	598	55	177	627	102	81	856	135
Future Volume (veh/h)	135	592	313	310	598	55	177	627	102	81	856	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	142	623	329	326	629	58	186	660	107	85	901	142
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	173	783	459	360	1158	598	252	1328	902	109	1285	559
Arrive On Green	0.10	0.22	0.22	0.20	0.32	0.32	0.07	0.37	0.37	0.06	0.36	0.36
Sat Flow, veh/h	1792	3574	1564	1792	3574	1548	3476	3574	1562	1792	3574	1555
Grp Volume(v), veh/h	142	623	329	326	629	58	186	660	107	85	901	142
Grp Sat Flow(s),veh/h/ln	1792	1787	1564	1792	1787	1548	1738	1787	1562	1792	1787	1555
Q Serve(g_s), s	8.4	17.9	20.5	19.3	15.7	2.6	5.7	15.4	3.4	5.1	23.4	7.0
Cycle Q Clear(g_c), s	8.4	17.9	20.5	19.3	15.7	2.6	5.7	15.4	3.4	5.1	23.4	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	783	459	360	1158	598	252	1328	902	109	1285	559
V/C Ratio(X)	0.82	0.80	0.72	0.90	0.54	0.10	0.74	0.50	0.12	0.78	0.70	0.25
Avail Cap(c_a), veh/h	281	824	477	463	1186	611	385	1328	902	198	1285	559
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	40.1	34.5	42.3	30.1	21.3	49.3	26.3	10.6	50.2	29.7	24.5
Incr Delay (d2), s/veh	9.7	5.2	4.9	17.9	0.5	0.1	4.2	1.3	0.3	11.4	3.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	9.4	9.5	11.3	7.8	1.1	2.9	7.9	1.5	2.8	12.1	3.1
LnGrp Delay(d), s/veh	57.7	45.3	39.4	60.2	30.6	21.4	53.5	27.6	10.9	61.7	32.9	25.6
LnGrp LOS	E	D	D	E	C	C	D	C	B	E	C	C
Approach Vol, veh/h		1094			1013			953			1128	
Approach Delay, s/veh		45.1			39.6			30.8			34.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	44.3	25.8	27.8	11.9	43.0	14.5	39.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	39.0	28.0	25.0	12.0	39.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	7.1	17.4	21.3	22.5	7.7	25.4	10.4	17.7
Green Ext Time (p_c), s	0.1	4.8	0.6	1.3	0.2	5.4	0.2	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.6
HCM 2010 LOS	D

ANAHEIM STATION - 2015 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	542	435	271	2203	0	23	0	245	45	66	9
Future Volume (veh/h)	0	542	435	271	2203	0	23	0	245	45	66	9
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	0	565	453	282	2295	0	16	0	264	47	69	9
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	0	2346	728	373	3935	0	26	0	736	106	879	393
Arrive On Green	0.00	0.46	0.46	0.11	0.61	0.00	0.01	0.00	0.23	0.03	0.25	0.25
Sat Flow, veh/h	0	5305	1593	3476	6735	0	1792	0	3198	3476	3574	1599
Grp Volume(v), veh/h	0	565	453	282	2295	0	16	0	264	47	69	9
Grp Sat Flow(s),veh/h/ln	0	1712	1593	1738	1618	0	1792	0	1599	1738	1787	1599
Q Serve(g_s), s	0.0	6.1	19.7	7.2	19.7	0.0	0.8	0.0	6.3	1.2	1.4	0.4
Cycle Q Clear(g_c), s	0.0	6.1	19.7	7.2	19.7	0.0	0.8	0.0	6.3	1.2	1.4	0.4
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2346	728	373	3935	0	26	0	736	106	879	393
V/C Ratio(X)	0.00	0.24	0.62	0.76	0.58	0.00	0.61	0.00	0.36	0.44	0.08	0.02
Avail Cap(c_a), veh/h	0	3319	1029	685	5741	0	137	0	736	228	879	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	15.1	18.8	39.6	10.9	0.0	44.7	0.0	29.5	43.5	26.5	26.1
Incr Delay (d2), s/veh	0.0	0.1	0.9	3.1	0.1	0.0	20.9	0.0	1.4	2.9	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.9	8.8	3.6	8.6	0.0	0.6	0.0	2.9	0.6	0.7	0.2
LnGrp Delay(d), s/veh	0.0	15.2	19.7	42.7	11.0	0.0	65.6	0.0	30.9	46.4	26.6	26.2
LnGrp LOS		B	B	D	B		E		C	D	C	C
Approach Vol, veh/h		1018			2577			280			125	
Approach Delay, s/veh		17.2			14.5			32.9			34.0	
Approach LOS		B			B			C			C	

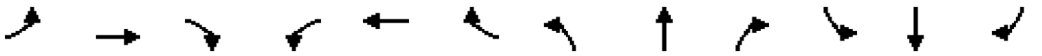
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.8	25.0	13.8	45.7	5.3	26.5		59.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	21.0	18.0	59.0	7.0	20.0		81.0
Max Q Clear Time (g_c+I1), s	3.2	8.3	9.2	21.7	2.8	3.4		21.7
Green Ext Time (p_c), s	0.0	0.8	0.6	6.0	0.0	0.3		33.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	57	774	0	0	1680	106	0	0	0	768	1076	66
Future Volume (vph)	57	774	0	0	1680	106	0	0	0	768	1076	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.99	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3467	6471			6089	1295				1448	5976	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3467	6471			6089	1295				1448	5976	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	63	851	0	0	1846	116	0	0	0	844	1182	73
RTOR Reduction (vph)	0	0	0	0	1	28	0	0	0	0	5	0
Lane Group Flow (vph)	63	851	0	0	1857	76	0	0	0	422	1672	0
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	3.9	53.1			45.2	45.2				56.2	56.2	
Effective Green, g (s)	3.9	53.1			45.2	45.2				56.2	56.2	
Actuated g/C Ratio	0.03	0.45			0.39	0.39				0.48	0.48	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	115	2929			2346	499				693	2863	
v/s Ratio Prot	c0.02	0.13			c0.31					c0.29	0.28	
v/s Ratio Perm						0.06						
v/c Ratio	0.55	0.29			0.79	0.15				0.61	0.58	
Uniform Delay, d1	55.8	20.2			31.9	23.5				22.5	22.1	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	5.3	0.1			1.9	0.1				1.5	0.3	
Delay (s)	61.1	20.3			33.8	23.7				24.0	22.4	
Level of Service	E	C			C	C				C	C	
Approach Delay (s/veh)		23.1			33.3			0.0			22.7	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.68		
Actuated Cycle Length (s)	117.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	84	753	3	32	1468	52	22	148	23	66	4	288
Future Volume (vph)	84	753	3	32	1468	52	22	148	23	66	4	288
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	5136	1534	1787	5136	1571	1787	1840		1785	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.76	1.00		0.58	1.00	1.00
Satd. Flow (perm)	1787	5136	1534	1787	5136	1571	1421	1840		1081	1881	1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	92	827	3	35	1613	57	24	163	25	73	4	316
RTOR Reduction (vph)	0	0	2	0	0	32	0	4	0	0	0	109
Lane Group Flow (vph)	92	827	1	35	1613	25	24	184	0	73	4	207
Confl. Peds. (#/hr)	3		6	6		3			1	1		
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	8.7	50.4	50.4	4.3	46.0	46.0	37.9	37.9		37.9	37.9	37.9
Effective Green, g (s)	8.7	50.4	50.4	4.3	46.0	46.0	37.9	37.9		37.9	37.9	37.9
Actuated g/C Ratio	0.08	0.48	0.48	0.04	0.44	0.44	0.36	0.36		0.36	0.36	0.36
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	148	2474	739	73	2258	690	514	666		391	681	579
v/s Ratio Prot	c0.05	0.16		0.02	c0.31			0.10			0.00	
v/s Ratio Perm			0.00			0.02	0.02			0.07		c0.13
v/c Ratio	0.62	0.33	0.00	0.48	0.71	0.04	0.05	0.28		0.19	0.01	0.36
Uniform Delay, d1	46.4	16.7	14.1	49.1	23.9	16.7	21.6	23.6		22.8	21.3	24.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	7.9	0.1	0.0	4.9	1.1	0.0	0.2	1.0		1.1	0.0	1.7
Delay (s)	54.2	16.8	14.1	53.9	25.0	16.7	21.8	24.7		23.9	21.3	26.1
Level of Service	D	B	B	D	C	B	C	C		C	C	C
Approach Delay (s/veh)		20.5			25.3			24.3			25.7	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	104.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	14	68	26	24	174	65	20	0	9	95	0	12
Future Volume (vph)	14	68	26	24	174	65	20	0	9	95	0	12
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.96		1.00	0.96		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1805	4969		3502	4957		1805		2804	1802		2842
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1805	4969		3502	4957		1805		2804	1802		2842
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	16	77	30	27	198	74	23	0	10	108	0	14
RTOR Reduction (vph)	0	26	0	0	64	0	0	0	3	0	0	4
Lane Group Flow (vph)	16	81	0	27	208	0	23	0	7	108	0	10
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	1.3	8.7		2.4	9.8		50.8		50.8	50.8		50.8
Effective Green, g (s)	1.3	8.7		2.4	9.8		50.8		50.8	50.8		50.8
Actuated g/C Ratio	0.02	0.12		0.03	0.13		0.69		0.69	0.69		0.69
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	31	584		113	657		1240		1927	1238		1953
v/s Ratio Prot	c0.01	0.02		0.01	c0.04							
v/s Ratio Perm							0.01		0.00	c0.06		0.00
v/c Ratio	0.52	0.14		0.24	0.32		0.02		0.00	0.09		0.00
Uniform Delay, d1	36.0	29.2		34.9	29.0		3.7		3.6	3.8		3.6
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	13.7	0.1		1.1	0.3		0.0		0.0	0.1		0.0
Delay (s)	49.7	29.3		36.0	29.3		3.7		3.6	4.0		3.6
Level of Service	D	C		D	C		A		A	A		A
Approach Delay (s/veh)		32.0			29.9			3.7			3.9	
Approach LOS		C			C			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.13		
Actuated Cycle Length (s)	73.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	33.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	965	192	182	1068	215	299	940	161	279	645	192
Future Volume (veh/h)	219	965	192	182	1068	215	299	940	161	279	645	192
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	228	1005	200	190	1112	224	311	979	168	291	672	200
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	263	1434	285	224	1337	269	382	1459	442	361	1088	318
Arrive On Green	0.15	0.34	0.34	0.13	0.31	0.31	0.11	0.28	0.28	0.10	0.28	0.28
Sat Flow, veh/h	1792	4274	849	1792	4260	858	3476	5136	1556	3476	3914	1143
Grp Volume(v), veh/h	228	805	400	190	894	442	311	979	168	291	586	286
Grp Sat Flow(s),veh/h/ln	1792	1712	1699	1792	1712	1694	1738	1712	1556	1738	1712	1634
Q Serve(g_s), s	13.1	21.6	21.6	11.0	25.6	25.6	9.2	17.8	9.2	8.6	15.8	16.2
Cycle Q Clear(g_c), s	13.1	21.6	21.6	11.0	25.6	25.6	9.2	17.8	9.2	8.6	15.8	16.2
Prop In Lane	1.00		0.50	1.00		0.51	1.00		1.00	1.00		0.70
Lane Grp Cap(c), veh/h	263	1149	570	224	1075	532	382	1459	442	361	951	454
V/C Ratio(X)	0.87	0.70	0.70	0.85	0.83	0.83	0.81	0.67	0.38	0.81	0.62	0.63
Avail Cap(c_a), veh/h	390	1264	627	356	1199	593	494	1459	442	461	951	454
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	30.5	30.5	45.2	33.6	33.6	45.9	33.4	30.3	46.3	33.2	33.4
Incr Delay (d2), s/veh	12.8	1.6	3.2	10.4	4.7	9.0	7.9	2.5	2.5	8.0	3.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	10.4	10.6	6.1	12.7	13.3	4.9	8.8	4.3	4.6	7.8	8.1
LnGrp Delay(d), s/veh	56.9	32.0	33.7	55.6	38.3	42.7	53.8	35.9	32.8	54.3	36.2	39.9
LnGrp LOS	E	C	C	E	D	D	D	D	C	D	D	D
Approach Vol, veh/h		1433			1526			1458			1163	
Approach Delay, s/veh		36.4			41.7			39.4			41.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	34.0	17.2	39.4	15.6	33.3	19.5	37.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	30.0	21.0	39.0	15.0	29.0	23.0	37.0
Max Q Clear Time (g_c+I1), s	10.6	19.8	13.0	23.6	11.2	18.2	15.1	27.6
Green Ext Time (p_c), s	0.3	4.9	0.3	6.9	0.4	4.1	0.4	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	30	27	71	45	84	38	1215	32	24	991	54
Future Volume (veh/h)	61	30	27	71	45	84	38	1215	32	24	991	54
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	70	34	31	82	52	97	44	1397	37	28	1139	62
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	166	145	133	240	93	174	393	3920	1193	322	3800	207
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1244	907	827	1342	582	1086	468	5136	1563	375	4979	271
Grp Volume(v), veh/h	70	0	65	82	0	149	44	1397	37	28	783	418
Grp Sat Flow(s),veh/h/ln	1244	0	1733	1342	0	1668	468	1712	1563	375	1712	1826
Q Serve(g_s), s	5.8	0.0	3.4	5.9	0.0	8.6	3.3	9.3	0.6	2.8	7.4	7.4
Cycle Q Clear(g_c), s	14.4	0.0	3.4	9.4	0.0	8.6	10.7	9.3	0.6	12.0	7.4	7.4
Prop In Lane	1.00		0.48	1.00		0.65	1.00		1.00	1.00		0.15
Lane Grp Cap(c), veh/h	166	0	278	240	0	268	393	3920	1193	322	2613	1394
V/C Ratio(X)	0.42	0.00	0.23	0.34	0.00	0.56	0.11	0.36	0.03	0.09	0.30	0.30
Avail Cap(c_a), veh/h	346	0	529	435	0	509	393	3920	1193	322	2613	1394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	0.0	38.4	42.5	0.0	40.6	5.5	4.0	3.0	6.0	3.8	3.8
Incr Delay (d2), s/veh	1.7	0.0	0.4	0.8	0.0	1.8	0.6	0.3	0.0	0.5	0.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	0.0	1.7	2.3	0.0	4.1	0.5	4.4	0.3	0.3	3.5	3.8
LnGrp Delay(d), s/veh	48.9	0.0	38.8	43.3	0.0	42.4	6.0	4.3	3.1	6.5	4.1	4.4
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		135			231			1478			1229	
Approach Delay, s/veh		44.0			42.7			4.3			4.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		84.0		20.8		84.0		20.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		80.0		32.0		80.0		32.0
Max Q Clear Time (g_c+I1), s		12.7		16.4		14.0		11.4
Green Ext Time (p_c), s		15.7		0.4		11.0		1.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		8.9
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	250	99	75	296	78	92	1032	32	32	963	77
Future Volume (veh/h)	100	250	99	75	296	78	92	1032	32	32	963	77
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	108	269	106	81	318	84	99	1110	34	34	1035	83
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	224	629	242	234	697	181	127	3078	94	44	2687	215
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.07	0.60	0.60	0.02	0.56	0.56
Sat Flow, veh/h	987	2523	969	1012	2798	726	1792	5118	157	1792	4841	388
Grp Volume(v), veh/h	108	189	186	81	201	201	99	742	402	34	731	387
Grp Sat Flow(s),veh/h/ln	987	1787	1705	1012	1787	1737	1792	1712	1851	1792	1712	1805
Q Serve(g_s), s	10.1	8.5	8.9	7.1	9.2	9.5	5.2	10.6	10.7	1.8	11.7	11.7
Cycle Q Clear(g_c), s	19.5	8.5	8.9	16.0	9.2	9.5	5.2	10.6	10.7	1.8	11.7	11.7
Prop In Lane	1.00		0.57	1.00		0.42	1.00		0.08	1.00		0.21
Lane Grp Cap(c), veh/h	224	446	425	234	446	433	127	2059	1113	44	1901	1002
V/C Ratio(X)	0.48	0.42	0.44	0.35	0.45	0.46	0.78	0.36	0.36	0.77	0.38	0.39
Avail Cap(c_a), veh/h	408	778	742	422	778	756	334	2059	1113	149	1901	1002
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.0	30.4	30.5	37.2	30.6	30.7	44.0	9.8	9.8	46.7	12.1	12.1
Incr Delay (d2), s/veh	1.6	0.6	0.7	0.9	0.7	0.8	9.7	0.5	0.9	23.4	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	4.3	4.3	2.0	4.6	4.6	2.9	5.1	5.6	1.2	5.6	6.1
LnGrp Delay(d), s/veh	40.6	31.0	31.2	38.1	31.3	31.5	53.7	10.3	10.7	70.1	12.7	13.3
LnGrp LOS	D	C	C	D	C	C	D	B	B	E	B	B
Approach Vol, veh/h		483			483			1243			1152	
Approach Delay, s/veh		33.2			32.5			13.9			14.6	
Approach LOS		C			C			B			B	

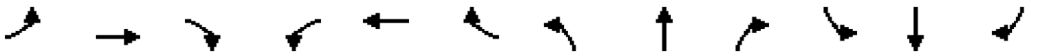
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	62.0		28.0	10.9	57.5		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	58.0		42.0	18.0	48.0		42.0
Max Q Clear Time (g_c+I1), s	3.8	12.7		21.5	7.2	13.7		18.0
Green Ext Time (p_c), s	0.0	9.1		2.5	0.1	8.5		2.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		19.6
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	8	2	219	2	159	8	944	100	63	1113	1
Future Volume (veh/h)	5	8	2	219	2	159	8	944	100	63	1113	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	5	8	2	231	2	167	8	994	105	66	1172	1
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	75	13	318	2	604	14	2194	231	86	2681	2
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.01	0.47	0.47	0.05	0.51	0.51
Sat Flow, veh/h	30	197	35	670	6	1591	1792	4709	496	1792	5300	5
Grp Volume(v), veh/h	15	0	0	233	0	167	8	722	377	66	757	416
Grp Sat Flow(s),veh/h/ln	262	0	0	676	0	1591	1792	1712	1781	1792	1712	1880
Q Serve(g_s), s	0.4	0.0	0.0	0.0	0.0	8.2	0.5	16.1	16.1	4.1	15.8	15.8
Cycle Q Clear(g_c), s	40.7	0.0	0.0	40.3	0.0	8.2	0.5	16.1	16.1	4.1	15.8	15.8
Prop In Lane	0.33		0.13	0.99		1.00	1.00		0.28	1.00		0.00
Lane Grp Cap(c), veh/h	142	0	0	320	0	604	14	1596	830	86	1732	951
V/C Ratio(X)	0.11	0.00	0.00	0.73	0.00	0.28	0.57	0.45	0.45	0.77	0.44	0.44
Avail Cap(c_a), veh/h	173	0	0	348	0	636	95	1596	830	223	1732	951
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	0.0	0.0	34.2	0.0	24.2	55.7	20.4	20.4	53.0	17.7	17.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	6.9	0.0	0.2	31.3	0.9	1.8	13.5	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.0	7.7	0.0	3.7	0.4	7.8	8.4	2.4	7.7	8.6
LnGrp Delay(d), s/veh	28.1	0.0	0.0	41.0	0.0	24.5	87.0	21.3	22.2	66.6	18.5	19.1
LnGrp LOS	C			D		C	F	C	C	E	B	B
Approach Vol, veh/h		15			400			1107			1239	
Approach Delay, s/veh		28.1			34.1			22.1			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.4	56.5		46.8	4.9	61.0		46.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	49.0		45.0	6.0	57.0		45.0
Max Q Clear Time (g_c+I1), s	6.1	18.1		42.7	2.5	17.8		42.3
Green Ext Time (p_c), s	0.1	8.1		0.0	0.0	9.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	185	476	92	391	803	54	242	585	224	100	897	215
Future Volume (vph)	185	476	92	391	803	54	242	585	224	100	897	215
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.94	1.00	1.00	0.98	1.00	1.00	0.94	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	6070	1212	3467	5136	1559	3467	5136	1501	3467	5136	1558
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	6070	1212	3467	5136	1559	3467	5136	1501	3467	5136	1558
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	195	501	97	412	845	57	255	616	236	105	944	226
RTOR Reduction (vph)	0	2	72	0	0	44	0	0	134	0	0	138
Lane Group Flow (vph)	195	509	15	412	845	13	255	616	102	105	944	88
Confl. Peds. (#/hr)	6		26	26		6	7		25	25		7
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	11.3	18.2	18.2	18.0	24.9	24.9	13.2	46.3	46.3	8.4	41.5	41.5
Effective Green, g (s)	11.3	18.2	18.2	18.0	24.9	24.9	13.2	46.3	46.3	8.4	41.5	41.5
Actuated g/C Ratio	0.11	0.17	0.17	0.17	0.23	0.23	0.12	0.43	0.43	0.08	0.39	0.39
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	366	1033	206	583	1196	363	428	2224	650	272	1993	604
v/s Ratio Prot	0.06	0.08		c0.12	c0.16		c0.07	0.12		0.03	c0.18	
v/s Ratio Perm			0.01			0.01			0.07			0.06
v/c Ratio	0.53	0.49	0.07	0.71	0.71	0.04	0.60	0.28	0.16	0.39	0.47	0.15
Uniform Delay, d1	45.3	40.2	37.3	42.0	37.6	31.7	44.3	19.5	18.4	46.8	24.5	21.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.5	0.4	0.1	3.9	1.9	0.0	2.2	0.3	0.5	0.9	0.8	0.5
Delay (s)	46.8	40.5	37.4	45.9	39.6	31.8	46.6	19.8	18.9	47.7	25.3	21.7
Level of Service	D	D	D	D	D	C	D	B	B	D	C	C
Approach Delay (s/veh)		41.7			41.2			25.8			26.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	106.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	0	58	1	1	2	58	971	2	2	1170	227
Future Volume (veh/h)	119	0	58	1	1	2	58	971	2	2	1170	227
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	121	0	59	1	1	2	59	991	2	2	1194	232
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	238	206	183	185	206	183	116	3996	8	8	3115	605
Arrive On Green	0.12	0.00	0.12	0.12	0.12	0.12	0.03	0.75	0.75	0.00	0.72	0.72
Sat Flow, veh/h	1411	1787	1587	1343	1787	1587	3476	5292	11	3476	4304	836
Grp Volume(v), veh/h	121	0	59	1	1	2	59	641	352	2	950	476
Grp Sat Flow(s),veh/h/ln	1411	1787	1587	1343	1787	1587	1738	1712	1879	1738	1712	1716
Q Serve(g_s), s	7.8	0.0	3.2	0.1	0.0	0.1	1.6	5.3	5.3	0.1	10.0	10.0
Cycle Q Clear(g_c), s	7.9	0.0	3.2	3.3	0.0	0.1	1.6	5.3	5.3	0.1	10.0	10.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.01	1.00		0.49
Lane Grp Cap(c), veh/h	238	206	183	185	206	183	116	2585	1419	8	2478	1242
V/C Ratio(X)	0.51	0.00	0.32	0.01	0.00	0.01	0.51	0.25	0.25	0.27	0.38	0.38
Avail Cap(c_a), veh/h	540	589	523	473	589	523	333	2585	1419	222	2478	1242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	38.2	39.7	36.8	36.9	44.7	3.5	3.5	46.8	5.0	5.0
Incr Delay (d2), s/veh	1.7	0.0	1.0	0.0	0.0	0.0	3.4	0.2	0.4	17.8	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	1.5	0.0	0.0	0.0	0.8	2.6	2.9	0.0	4.8	4.9
LnGrp Delay(d), s/veh	42.0	0.0	39.2	39.7	36.8	36.9	48.1	3.7	3.9	64.6	5.4	5.9
LnGrp LOS	D		D	D	D	D	D	A	A	E	A	A
Approach Vol, veh/h		180			4			1052			1428	
Approach Delay, s/veh		41.1			37.6			6.3			5.6	
Approach LOS		D			D			A			A	

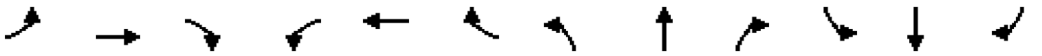
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.2	75.0		14.8	7.1	72.1		14.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	71.0		31.0	9.0	68.0		31.0
Max Q Clear Time (g_c+I1), s	2.1	7.3		9.9	3.6	12.0		5.3
Green Ext Time (p_c), s	0.0	7.5		0.6	0.0	13.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		8.3
HCM 2010 LOS		A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	225	539	72	320	1212	167	90	764	144	136	1110	203
Future Volume (veh/h)	225	539	72	320	1212	167	90	764	144	136	1110	203
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	250	599	80	356	1347	186	100	849	160	151	1233	226
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	320	1528	201	434	1667	230	156	1819	335	215	1920	350
Arrive On Green	0.09	0.33	0.33	0.12	0.37	0.37	0.04	0.33	0.33	0.06	0.35	0.35
Sat Flow, veh/h	3476	4583	604	3476	4552	628	3476	5512	1016	3476	5536	1009
Grp Volume(v), veh/h	250	445	234	356	1013	520	100	745	264	151	1080	379
Grp Sat Flow(s),veh/h/ln	1738	1712	1763	1738	1712	1756	1738	1618	1675	1738	1618	1692
Q Serve(g_s), s	7.5	10.6	10.9	10.7	28.4	28.4	3.0	13.0	13.4	4.5	20.0	20.1
Cycle Q Clear(g_c), s	7.5	10.6	10.9	10.7	28.4	28.4	3.0	13.0	13.4	4.5	20.0	20.1
Prop In Lane	1.00		0.34	1.00		0.36	1.00		0.61	1.00		0.60
Lane Grp Cap(c), veh/h	320	1142	588	434	1254	643	156	1601	552	215	1683	587
V/C Ratio(X)	0.78	0.39	0.40	0.82	0.81	0.81	0.64	0.47	0.48	0.70	0.64	0.65
Avail Cap(c_a), veh/h	456	1316	677	619	1476	757	228	1601	552	326	1683	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	27.2	27.3	45.5	30.4	30.4	50.1	28.3	28.4	49.1	29.3	29.3
Incr Delay (d2), s/veh	5.5	0.2	0.4	5.9	3.0	5.6	4.3	1.0	2.9	4.1	1.9	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	5.0	5.3	5.4	13.9	14.7	1.5	5.9	6.6	2.3	9.2	10.2
LnGrp Delay(d), s/veh	52.9	27.5	27.8	51.4	33.4	36.1	54.4	29.3	31.4	53.2	31.2	34.7
LnGrp LOS	D	C	C	D	C	D	D	C	C	D	C	C
Approach Vol, veh/h		929			1889			1109			1610	
Approach Delay, s/veh		34.4			37.5			32.0			34.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	39.2	17.3	39.6	8.8	41.0	13.8	43.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	34.0	19.0	41.0	7.0	37.0	14.0	46.0
Max Q Clear Time (g_c+I1), s	6.5	15.4	12.7	12.9	5.0	22.1	9.5	30.4
Green Ext Time (p_c), s	0.1	6.3	0.7	4.4	0.0	8.2	0.3	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	16	817	16	131	1219	100	14	0	59	57	0	17
Future Volume (vph)	16	817	16	131	1219	100	14	0	59	57	0	17
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97	0.97	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3467	6451		3467	6384		1787	1475	1475	1787		1557
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3467	6451		3467	6384		1787	1475	1475	1787		1557
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	18	908	18	146	1354	111	16	0	66	63	0	19
RTOR Reduction (vph)	0	3	0	0	12	0	0	22	22	0	0	12
Lane Group Flow (vph)	18	923	0	146	1453	0	16	11	11	63	0	7
Confl. Peds. (#/hr)	10		1	1		10	8		11	11		8
Confl. Bikes (#/hr)						2						4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	2.1	24.7		9.0	31.6		1.2	27.1	27.1	6.9		32.8
Effective Green, g (s)	2.1	24.7		9.0	31.6		1.2	27.1	27.1	6.9		32.8
Actuated g/C Ratio	0.03	0.30		0.11	0.38		0.01	0.32	0.32	0.08		0.39
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	86	1903		372	2410		25	477	477	147		610
v/s Ratio Prot	0.01	0.14		c0.04	c0.23		0.01	c0.01		c0.04		
v/s Ratio Perm									0.01			0.00
v/c Ratio	0.21	0.49		0.39	0.60		0.64	0.02	0.02	0.43		0.01
Uniform Delay, d1	40.0	24.3		34.8	21.0		41.0	19.3	19.3	36.5		15.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	1.2	0.2		0.7	0.4		44.6	0.1	0.1	2.0		0.0
Delay (s)	41.2	24.5		35.5	21.4		85.6	19.4	19.4	38.5		15.6
Level of Service	D	C		D	C		F	B	B	D		B
Approach Delay (s/veh)		24.8			22.7			32.3			33.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	83.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	46.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1088	26	199	1214	481	96	440	259	255	280	176
Future Volume (veh/h)	220	1088	26	199	1214	481	96	440	259	255	280	176
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	232	1145	27	209	1278	506	101	463	273	268	295	185
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	287	2055	48	269	1405	618	360	571	335	327	717	436
Arrive On Green	0.08	0.40	0.40	0.08	0.39	0.39	0.05	0.27	0.27	0.12	0.34	0.34
Sat Flow, veh/h	3476	5160	122	3476	3574	1573	1792	2150	1259	1792	2119	1289
Grp Volume(v), veh/h	232	760	412	209	1278	506	101	384	352	268	247	233
Grp Sat Flow(s),veh/h/ln	1738	1712	1858	1738	1787	1573	1792	1787	1622	1792	1787	1621
Q Serve(g_s), s	7.8	20.3	20.3	7.0	39.9	34.0	4.8	23.8	24.0	12.4	12.6	13.1
Cycle Q Clear(g_c), s	7.8	20.3	20.3	7.0	39.9	34.0	4.8	23.8	24.0	12.4	12.6	13.1
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.78	1.00		0.80
Lane Grp Cap(c), veh/h	287	1364	740	269	1405	618	360	475	431	327	604	548
V/C Ratio(X)	0.81	0.56	0.56	0.78	0.91	0.82	0.28	0.81	0.82	0.82	0.41	0.42
Avail Cap(c_a), veh/h	294	1364	740	353	1451	638	360	475	431	364	604	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	27.5	27.5	53.6	33.9	32.1	29.4	40.6	40.7	28.6	30.1	30.2
Incr Delay (d2), s/veh	15.0	0.5	0.9	7.8	8.6	8.1	0.4	13.8	15.6	12.7	2.0	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	9.7	10.6	3.7	21.4	16.1	2.4	13.6	12.6	7.2	6.5	6.2
LnGrp Delay(d), s/veh	68.3	28.0	28.4	61.3	42.5	40.2	29.8	54.4	56.3	41.4	32.1	32.6
LnGrp LOS	E	C	C	E	D	D	C	D	E	D	C	C
Approach Vol, veh/h		1404			1993			837			748	
Approach Delay, s/veh		34.8			43.9			52.2			35.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	35.4	13.2	51.1	10.0	44.0	13.8	50.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	12.0	46.0	6.0	40.0	10.0	48.0
Max Q Clear Time (g_c+I1), s	14.4	26.0	9.0	22.3	6.8	15.1	9.8	41.9
Green Ext Time (p_c), s	0.2	1.3	0.2	8.0	0.0	3.0	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.5
HCM 2010 LOS	D

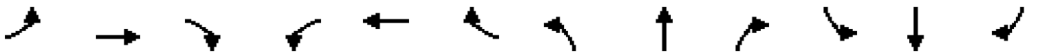
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	172	113	30	7	261	203	30	226	7	54	229	124
Future Volume (veh/h)	172	113	30	7	261	203	30	226	7	54	229	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	207	136	36	8	314	245	36	272	8	65	276	149
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	330	1136	292	542	776	590	493	1799	53	232	936	494
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	864	2845	731	1232	1943	1478	978	3580	105	351	1862	982
Grp Volume(v), veh/h	207	85	87	8	291	268	36	137	143	256	0	234
Grp Sat Flow(s),veh/h/ln	864	1805	1770	1232	1805	1616	978	1805	1880	1654	0	1541
Q Serve(g_s), s	18.5	2.4	2.5	0.3	9.4	9.7	1.8	3.3	3.3	0.6	0.0	7.3
Cycle Q Clear(g_c), s	28.3	2.4	2.5	2.9	9.4	9.7	9.1	3.3	3.3	6.4	0.0	7.3
Prop In Lane	1.00		0.41	1.00		0.91	1.00		0.06	0.25		0.64
Lane Grp Cap(c), veh/h	330	721	707	542	721	645	493	907	945	887	0	774
V/C Ratio(X)	0.63	0.12	0.12	0.01	0.40	0.42	0.07	0.15	0.15	0.29	0.00	0.30
Avail Cap(c_a), veh/h	737	1571	1541	1122	1571	1406	493	907	945	887	0	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	27.8	15.4	15.5	16.4	17.5	17.6	14.6	10.9	10.9	11.7	0.0	11.9
Incr Delay (d2), s/veh	2.0	0.1	0.1	0.0	0.4	0.4	0.3	0.4	0.3	0.8	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	1.2	1.3	0.1	4.8	4.4	0.5	1.7	1.8	3.5	0.0	3.3
LnGrp Delay(d), s/veh	29.8	15.5	15.6	16.4	17.9	18.1	14.9	11.3	11.3	12.5	0.0	12.9
LnGrp LOS	C	B	B	B	B	B	B	B	B	B		B
Approach Vol, veh/h		379			567			316			490	
Approach Delay, s/veh		23.3			18.0			11.7			12.7	
Approach LOS		C			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		45.0		36.6		45.0		36.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		41.0		71.0		41.0		71.0
Max Q Clear Time (g_c+I1), s		11.1		30.3		9.3		11.7
Green Ext Time (p_c), s		1.7		2.3		3.1		3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.5
HCM 2010 LOS	B

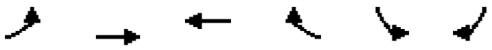
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	73	890	38	72	1114	261	311	12	90	103	60	183
Future Volume (vph)	73	890	38	72	1114	261	311	12	90	103	60	183
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5136	1599	3467	5136	1599	3467	1560	1493	1787	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5136	1599	3467	5136	1599	3467	1560	1493	1787	1881	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	79	967	41	78	1211	284	338	13	98	112	65	199
RTOR Reduction (vph)	0	0	27	0	0	187	0	36	47	0	0	116
Lane Group Flow (vph)	79	967	14	78	1211	97	338	20	8	112	65	83
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	5.8	35.1	35.1	5.8	35.1	35.1	15.8	15.8	15.8	29.9	29.9	29.9
Effective Green, g (s)	5.8	35.1	35.1	5.8	35.1	35.1	15.8	15.8	15.8	29.9	29.9	29.9
Actuated g/C Ratio	0.06	0.34	0.34	0.06	0.34	0.34	0.15	0.15	0.15	0.29	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	195	1757	547	195	1757	547	533	240	229	520	548	465
v/s Ratio Prot	c0.02	0.19		0.02	c0.24		c0.10	0.01		c0.06	0.03	
v/s Ratio Perm			0.01			0.06			0.01			0.05
v/c Ratio	0.41	0.55	0.03	0.40	0.69	0.18	0.63	0.08	0.04	0.22	0.12	0.18
Uniform Delay, d1	46.7	27.4	22.4	46.7	29.1	23.6	40.7	37.2	36.9	27.5	26.7	27.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.4	0.4	0.0	1.3	1.1	0.2	2.5	0.1	0.1	0.9	0.4	0.8
Delay (s)	48.1	27.7	22.4	48.1	30.2	23.8	43.2	37.3	37.0	28.4	27.1	28.0
Level of Service	D	C	C	D	C	C	D	D	D	C	C	C
Approach Delay (s/veh)		29.0			29.9			41.7			28.0	
Approach LOS		C			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	102.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



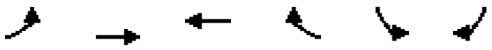
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	870	51	79	1485	0	65	0	126	0	0	0
Future Volume (vph)	0	870	51	79	1485	0	65	0	126	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Frt		0.99		1.00	1.00		1.00	0.86				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3574		1805	3610		1643	2957				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3574		1805	3610		1643	2957				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	978	57	89	1669	0	73	0	142	0	0	0
RTOR Reduction (vph)	0	4	0	0	0	0	0	106	0	0	0	0
Lane Group Flow (vph)	0	1031	0	89	1669	0	66	43	0	0	0	0
Confl. Peds. (#/hr)			5	5								
Confl. Bikes (#/hr)			3									
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		28.2		7.7	39.9		16.3	16.3				
Effective Green, g (s)		28.2		7.7	39.9		16.3	16.3				
Actuated g/C Ratio		0.44		0.12	0.62		0.25	0.25				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1569		216	2243		417	750				
v/s Ratio Prot		0.29		0.05	c0.46		c0.04	0.01				
v/s Ratio Perm												
v/c Ratio		0.66		0.41	0.74		0.16	0.06				
Uniform Delay, d1		14.2		26.2	8.6		18.6	18.1				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		1.0		1.3	1.4		0.8	0.1				
Delay (s)		15.2		27.4	9.9		19.4	18.3				
Level of Service		B		C	A		B	B				
Approach Delay (s/veh)		15.2			10.8			18.6			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	64.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1205	1363	0	304	730
Future Volume (vph)	0	1205	1363	0	304	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.94	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5136	5136		1712	1519
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5136	5136		1712	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1255	1420	0	317	760
RTOR Reduction (vph)	0	0	0	0	3	3
Lane Group Flow (vph)	0	1255	1420	0	550	521
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		40.9	40.9		65.2	65.2
Effective Green, g (s)		40.9	40.9		65.2	65.2
Actuated g/C Ratio		0.36	0.36		0.57	0.57
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1841	1841		978	868
v/s Ratio Prot		0.24	c0.28		0.32	
v/s Ratio Perm						c0.34
v/c Ratio		0.68	0.77		0.56	0.60
Uniform Delay, d1		31.1	32.5		15.4	15.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.1	2.1		2.3	3.1
Delay (s)		32.1	34.5		17.8	19.0
Level of Service		C	C		B	B
Approach Delay (s/veh)		32.1	34.5		18.4	
Approach LOS		C	C		B	

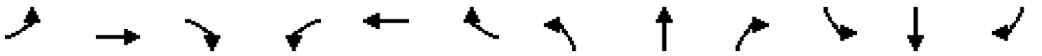
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	64.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	988	1004	0	138	448
Future Volume (vph)	0	988	1004	0	138	448
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.91	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5136	5136		3249	1455
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5136	5136		3249	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1062	1080	0	148	482
RTOR Reduction (vph)	0	0	0	0	21	21
Lane Group Flow (vph)	0	1062	1080	0	368	220
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		26.6	26.6		54.1	54.1
Effective Green, g (s)		26.6	26.6		54.1	54.1
Actuated g/C Ratio		0.30	0.30		0.61	0.61
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1540	1540		1981	887
v/s Ratio Prot		0.21	c0.21		0.11	
v/s Ratio Perm						c0.15
v/c Ratio		0.69	0.70		0.19	0.25
Uniform Delay, d1		27.4	27.5		7.6	7.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.3	1.5		0.2	0.7
Delay (s)		28.7	29.0		7.8	8.6
Level of Service		C	C		A	A
Approach Delay (s/veh)		28.7	29.0		8.1	
Approach LOS		C	C		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	88.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	825	109	449	1073	0	0	0	0	198	26	462
Future Volume (vph)	0	825	109	449	1073	0	0	0	0	198	26	462
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.88	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3416	1437	1787	3574					1698	1495	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3416	1437	1787	3574					1698	1495	1519
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	907	120	493	1179	0	0	0	0	218	29	508
RTOR Reduction (vph)	0	1	75	0	0	0	0	0	0	0	87	87
Lane Group Flow (vph)	0	918	33	493	1179	0	0	0	0	196	198	187
Confl. Bikes (#/hr)			1			14						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		33.5	33.5	34.2	71.7					28.4	28.4	28.4
Effective Green, g (s)		33.5	33.5	34.2	71.7					28.4	28.4	28.4
Actuated g/C Ratio		0.31	0.31	0.32	0.66					0.26	0.26	0.26
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1058	445	565	2370					446	392	399
v/s Ratio Prot		c0.27		c0.28	0.33							
v/s Ratio Perm			0.02							0.12	0.13	0.12
v/c Ratio		0.87	0.08	0.87	0.50					0.44	0.51	0.47
Uniform Delay, d1		35.2	26.4	34.9	9.1					33.2	33.9	33.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		7.7	0.1	13.9	0.2					3.1	4.6	3.9
Delay (s)		42.9	26.4	48.8	9.3					36.3	38.5	37.4
Level of Service		D	C	D	A					D	D	D
Approach Delay (s/veh)		41.2			21.0			0.0			37.5	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	108.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	1411	31	29	1173	0	154	30	100	129	9	247
Future Volume (veh/h)	6	1411	31	29	1173	0	154	30	100	129	9	247
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	6	1455	32	30	1209	0	159	31	103	133	9	255
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	11	2009	44	40	1449	0	382	74	403	303	21	287
Arrive On Green	0.01	0.39	0.39	0.02	0.41	0.00	0.25	0.25	0.25	0.18	0.18	0.18
Sat Flow, veh/h	1792	5163	114	1792	3668	0	1511	295	1595	1683	114	1594
Grp Volume(v), veh/h	6	965	522	30	1209	0	190	0	103	142	0	255
Grp Sat Flow(s),veh/h/ln	1792	1712	1853	1792	1787	0	1806	0	1595	1797	0	1594
Q Serve(g_s), s	0.3	24.7	24.7	1.7	31.3	0.0	9.0	0.0	5.3	7.2	0.0	16.1
Cycle Q Clear(g_c), s	0.3	24.7	24.7	1.7	31.3	0.0	9.0	0.0	5.3	7.2	0.0	16.1
Prop In Lane	1.00		0.06	1.00		0.00	0.84		1.00	0.94		1.00
Lane Grp Cap(c), veh/h	11	1332	721	40	1449	0	456	0	403	324	0	287
V/C Ratio(X)	0.55	0.72	0.72	0.75	0.83	0.00	0.42	0.00	0.26	0.44	0.00	0.89
Avail Cap(c_a), veh/h	70	1698	919	105	1842	0	456	0	403	367	0	325
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.0	26.7	26.7	50.0	27.5	0.0	32.1	0.0	30.7	37.5	0.0	41.1
Incr Delay (d2), s/veh	36.3	1.1	2.1	23.8	2.8	0.0	2.8	0.0	1.5	0.9	0.0	22.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	11.9	13.0	1.1	15.8	0.0	4.8	0.0	2.5	3.7	0.0	8.8
LnGrp Delay(d), s/veh	87.2	27.9	28.8	73.8	30.3	0.0	34.9	0.0	32.2	38.5	0.0	63.8
LnGrp LOS	F	C	C	E	C		C		C	D		E
Approach Vol, veh/h		1493			1239			293			397	
Approach Delay, s/veh		28.4			31.3			33.9			54.7	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.3	44.0		22.5	4.6	45.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	51.0		21.0	4.0	53.0
Max Q Clear Time (g_c+I1), s		11.0	3.7	26.7		18.1	2.3	33.3
Green Ext Time (p_c), s		1.2	0.0	10.9		0.5	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.0
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1049	0	0	1138	607	357
Future Volume (veh/h)	1049	0	0	1138	607	357
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863
Adj Flow Rate, veh/h	1140	0	0	1237	660	388
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1553	0	0	1553	1106	987
Arrive On Green	0.31	0.00	0.00	0.31	0.62	0.62
Sat Flow, veh/h	5421	0	0	5421	1774	1583
Grp Volume(v), veh/h	1140	0	0	1237	660	388
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1774	1583
Q Serve(g_s), s	22.5	0.0	0.0	25.1	25.1	13.7
Cycle Q Clear(g_c), s	22.5	0.0	0.0	25.1	25.1	13.7
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1553	0	0	1553	1106	987
V/C Ratio(X)	0.73	0.00	0.00	0.80	0.60	0.39
Avail Cap(c_a), veh/h	1902	0	0	1902	1106	987
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	0.0	0.0	35.8	12.7	10.6
Incr Delay (d2), s/veh	1.2	0.0	0.0	2.0	2.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	0.0	0.0	12.0	12.8	6.3
LnGrp Delay(d), s/veh	36.1	0.0	0.0	37.8	15.1	11.7
LnGrp LOS	D			D	B	B
Approach Vol, veh/h	1140			1237	1048	
Approach Delay, s/veh	36.1			37.8	13.8	
Approach LOS	D			D	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		38.3				38.3
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		27.1		24.5				27.1
Green Ext Time (p_c), s		3.9		7.2				7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.9
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑↑			↑↑↑↑	↰↰↑	↱
Traffic Volume (vph)	596	0	0	1121	252	273
Future Volume (vph)	596	0	0	1121	252	273
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7544			6408	3336	1441
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7544			6408	3336	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	634	0	0	1193	268	290
RTOR Reduction (vph)	0	0	0	0	27	70
Lane Group Flow (vph)	634	0	0	1193	354	107
Confl. Bikes (#/hr)		1				
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	24.2			24.2	49.1	49.1
Effective Green, g (s)	24.2			24.2	49.1	49.1
Actuated g/C Ratio	0.30			0.30	0.60	0.60
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2245			1907	2014	870
v/s Ratio Prot	0.08			c0.19	c0.11	
v/s Ratio Perm						0.07
v/c Ratio	0.28			0.63	0.18	0.12
Uniform Delay, d1	21.9			24.6	7.1	6.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			0.6	0.2	0.3
Delay (s)	22.0			25.3	7.3	7.2
Level of Service	C			C	A	A
Approach Delay (s/veh)	22.0			25.3	7.3	
Approach LOS	C			C	A	

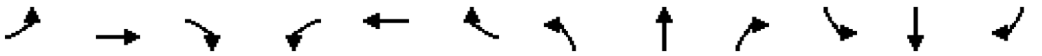
Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	81.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	33.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	735	0	0	1589	221	226
Future Volume (vph)	735	0	0	1589	221	226
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	3574			3574	3375	1455
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	3574			3574	3375	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	790	0	0	1709	238	243
RTOR Reduction (vph)	0	0	0	0	31	108
Lane Group Flow (vph)	790	0	0	1709	299	43
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	48.0			48.0	22.4	22.4
Effective Green, g (s)	48.0			48.0	22.4	22.4
Actuated g/C Ratio	0.61			0.61	0.29	0.29
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2188			2188	964	415
v/s Ratio Prot	0.22			c0.48	c0.09	
v/s Ratio Perm						0.03
v/c Ratio	0.36			0.78	0.31	0.10
Uniform Delay, d1	7.6			11.3	21.9	20.6
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			1.9	0.8	0.5
Delay (s)	7.7			13.2	22.8	21.1
Level of Service	A			B	C	C
Approach Delay (s/veh)	7.7			13.2	22.3	
Approach LOS	A			B	C	

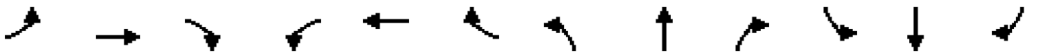
Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	78.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1125	0	0	1368	288	36	0	98	0	0	2
Future Volume (vph)	1	1125	0	0	1368	288	36	0	98	0	0	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Frt	1.00	1.00			0.97		1.00		0.85			0.87
Flt Protected	0.95	1.00			1.00		0.95		1.00			1.00
Satd. Flow (prot)	1787	3574			4978		1787		1599			1627
Flt Permitted	0.12	1.00			1.00		0.95		1.00			1.00
Satd. Flow (perm)	226	3574			4978		1787		1599			1627
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	1	1160	0	0	1410	297	37	0	101	0	0	2
RTOR Reduction (vph)	0	0	0	0	34	0	0	0	72	0	0	2
Lane Group Flow (vph)	1	1160	0	0	1673	0	37	0	29	0	0	0
Confl. Peds. (#/hr)	3		17	17		3						
Confl. Bikes (#/hr)			22			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			6
Actuated Green, G (s)	33.3	33.3			33.3		18.6		18.6			0.8
Effective Green, g (s)	33.3	33.3			33.3		18.6		18.6			0.8
Actuated g/C Ratio	0.51	0.51			0.51		0.29		0.29			0.01
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	116	1839			2562		513		459			20
v/s Ratio Prot		0.32			c0.34		c0.02					
v/s Ratio Perm	0.00								0.02			c0.00
v/c Ratio	0.01	0.63			0.65		0.07		0.06			0.00
Uniform Delay, d1	7.7	11.3			11.5		16.8		16.7			31.6
Progression Factor	1.00	1.00			1.00		1.00		1.00			1.00
Incremental Delay, d2	0.0	0.7			0.6		0.3		0.3			0.0
Delay (s)	7.7	12.0			12.1		17.0		17.0			31.6
Level of Service	A	B			B		B		B			C
Approach Delay (s/veh)		12.0			12.1			17.0			31.6	
Approach LOS		B			B			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	64.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	96	706	73	45	827	166	111	26	46	177	29	358
Future Volume (vph)	96	706	73	45	827	166	111	26	46	177	29	358
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1539	3433	5085	1563	3433	1863	1546	1770	1543	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1539	3433	5085	1563	3433	1863	1546	1770	1543	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	100	735	76	47	861	173	116	27	48	184	30	373
RTOR Reduction (vph)	0	0	50	0	0	123	0	0	35	0	145	143
Lane Group Flow (vph)	100	735	26	47	861	50	116	27	13	184	60	55
Confl. Peds. (#/hr)			9	9					7	7		
Confl. Bikes (#/hr)			3			1			1			
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	8.1	29.0	29.0	3.8	24.7	24.7	22.4	22.4	22.4	14.6	14.6	22.7
Effective Green, g (s)	8.1	29.0	29.0	3.8	24.7	24.7	22.4	22.4	22.4	14.6	14.6	22.7
Actuated g/C Ratio	0.09	0.34	0.34	0.04	0.29	0.29	0.26	0.26	0.26	0.17	0.17	0.26
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	324	1718	520	152	1463	449	896	486	403	301	262	468
v/s Ratio Prot	c0.03	0.14		0.01	c0.17		c0.03	0.01		c0.10	0.04	0.01
v/s Ratio Perm			0.02			0.03			0.01			0.03
v/c Ratio	0.31	0.43	0.05	0.31	0.59	0.11	0.13	0.06	0.03	0.61	0.23	0.12
Uniform Delay, d1	36.2	22.0	19.1	39.7	26.2	22.5	24.2	23.8	23.6	33.0	30.7	23.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	0.2	0.0	1.2	0.6	0.1	0.3	0.2	0.1	3.6	0.4	0.1
Delay (s)	36.8	22.2	19.2	40.9	26.8	22.6	24.5	24.0	23.8	36.6	31.2	24.1
Level of Service	D	C	B	D	C	C	C	C	C	D	C	C
Approach Delay (s/veh)		23.5			26.7			24.3			30.5	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

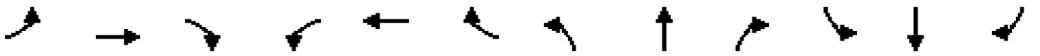
c Critical Lane Group



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	20	0	0	12	0	0
Future Volume (vph)	20	0	0	12	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.97		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3428			1539		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3428			1539		
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	23	0	0	14	0	0
RTOR Reduction (vph)	0	0	0	13	0	0
Lane Group Flow (vph)	23	0	0	1	0	0
Confl. Peds. (#/hr)	5			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	0.7			0.7		
Effective Green, g (s)	0.7			0.7		
Actuated g/C Ratio	0.07			0.07		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	255			114		
v/s Ratio Prot	c0.01					
v/s Ratio Perm				c0.00		
v/c Ratio	0.09			0.01		
Uniform Delay, d1	4.1			4.0		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	4.2			4.1		
Level of Service	A			A		
Approach Delay (s/veh)	4.2		4.1			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-0.03		
Actuated Cycle Length (s)	9.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	14.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	65	997	299	168	1007	6	360	26	181	8	31	142
Future Volume (vph)	65	997	299	168	1007	6	360	26	181	8	31	142
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1555	1770	3539	1547	1681	1696	1561	1770	1614	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1555	1770	3539	1547	1681	1696	1561	1770	1614	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	71	1096	329	185	1107	7	396	29	199	9	34	156
RTOR Reduction (vph)	0	0	151	0	0	4	0	0	153	0	143	0
Lane Group Flow (vph)	71	1096	178	185	1107	3	210	215	46	9	47	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Confl. Bikes (#/hr)			3									1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	7.2	40.5	40.5	15.4	48.7	48.7	24.4	24.4	24.4	8.9	8.9	
Effective Green, g (s)	7.2	40.5	40.5	15.4	48.7	48.7	24.4	24.4	24.4	8.9	8.9	
Actuated g/C Ratio	0.07	0.38	0.38	0.15	0.46	0.46	0.23	0.23	0.23	0.08	0.08	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	121	1362	598	259	1638	716	389	393	362	149	136	
v/s Ratio Prot	0.04	c0.31		c0.10	0.31		0.12	c0.13		0.01	c0.03	
v/s Ratio Perm			0.11			0.00			0.03			
v/c Ratio	0.59	0.80	0.30	0.71	0.68	0.00	0.54	0.55	0.13	0.06	0.35	
Uniform Delay, d1	47.6	28.8	22.5	42.8	22.1	15.2	35.5	35.5	32.0	44.3	45.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.1	3.6	0.3	9.0	1.1	0.0	5.3	5.4	0.7	0.2	1.5	
Delay (s)	54.6	32.4	22.7	51.8	23.2	15.2	40.8	40.9	32.7	44.5	46.9	
Level of Service	D	C	C	D	C	B	D	D	C	D	D	
Approach Delay (s/veh)		31.3			27.2			38.2			46.8	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	56	767	46	223	702	111	166	329	283	75	318	109
Future Volume (veh/h)	56	767	46	223	702	111	166	329	283	75	318	109
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	63	862	52	251	789	125	187	370	318	84	357	122
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	81	1211	365	296	1828	660	270	1238	541	109	1178	512
Arrive On Green	0.05	0.24	0.24	0.17	0.36	0.36	0.08	0.35	0.35	0.06	0.33	0.33
Sat Flow, veh/h	1774	5085	1535	1774	5085	1566	3442	3539	1546	1774	3539	1539
Grp Volume(v), veh/h	63	862	52	251	789	125	187	370	318	84	357	122
Grp Sat Flow(s),veh/h/ln	1774	1695	1535	1774	1695	1566	1721	1770	1546	1774	1770	1539
Q Serve(g_s), s	3.1	13.5	2.3	12.0	10.2	4.4	4.6	6.6	14.7	4.1	6.5	5.0
Cycle Q Clear(g_c), s	3.1	13.5	2.3	12.0	10.2	4.4	4.6	6.6	14.7	4.1	6.5	5.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	1211	365	296	1828	660	270	1238	541	109	1178	512
V/C Ratio(X)	0.78	0.71	0.14	0.85	0.43	0.19	0.69	0.30	0.59	0.77	0.30	0.24
Avail Cap(c_a), veh/h	183	1809	546	631	3094	1050	514	1238	541	285	1178	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	30.4	26.2	35.2	21.2	15.9	39.1	20.6	23.2	40.3	21.6	21.1
Incr Delay (d2), s/veh	14.6	0.8	0.2	6.6	0.2	0.1	3.2	0.6	4.6	10.9	0.7	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	6.4	1.0	6.4	4.8	1.9	2.3	3.3	6.9	2.3	3.3	2.3
LnGrp Delay(d), s/veh	55.7	31.2	26.4	41.8	21.3	16.0	42.3	21.2	27.8	51.2	22.2	22.2
LnGrp LOS	E	C	C	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		977			1165			875			563	
Approach Delay, s/veh		32.6			25.2			28.1			26.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	34.5	18.6	24.7	10.8	33.0	8.0	35.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	28.0	31.0	31.0	13.0	29.0	9.0	53.0
Max Q Clear Time (g_c+I1), s	6.1	16.7	14.0	15.5	6.6	8.5	5.1	12.2
Green Ext Time (p_c), s	0.1	2.7	0.6	5.2	0.3	2.5	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	27	48	197	17	100	35	149	736	7	22	593	42
Future Volume (veh/h)	27	48	197	17	100	35	149	736	7	22	593	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	53	216	19	110	38	164	809	8	24	652	46
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	206	304	254	223	304	254	594	2688	1200	528	2688	1186
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1232	1863	1556	1103	1863	1552	744	3539	1580	666	3539	1561
Grp Volume(v), veh/h	30	53	216	19	110	38	164	809	8	24	652	46
Grp Sat Flow(s),veh/h/ln	1232	1863	1556	1103	1863	1552	744	1770	1580	666	1770	1561
Q Serve(g_s), s	2.3	2.5	14.0	1.6	5.5	2.2	8.7	7.4	0.1	1.2	5.6	0.8
Cycle Q Clear(g_c), s	7.8	2.5	14.0	4.1	5.5	2.2	14.3	7.4	0.1	8.6	5.6	0.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	206	304	254	223	304	254	594	2688	1200	528	2688	1186
V/C Ratio(X)	0.15	0.17	0.85	0.09	0.36	0.15	0.28	0.30	0.01	0.05	0.24	0.04
Avail Cap(c_a), veh/h	395	591	494	392	591	493	594	2688	1200	528	2688	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.1	37.5	42.3	39.2	38.7	37.3	5.8	3.9	3.0	5.2	3.7	3.1
Incr Delay (d2), s/veh	0.3	0.3	7.7	0.2	0.7	0.3	1.2	0.3	0.0	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	1.3	6.5	0.5	2.9	1.0	2.0	3.7	0.1	0.2	2.8	0.3
LnGrp Delay(d), s/veh	42.4	37.7	50.0	39.4	39.4	37.6	6.9	4.2	3.0	5.4	3.9	3.2
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		299			167			981			722	
Approach Delay, s/veh		47.0			39.0			4.6			3.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		21.0		83.0		21.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		16.3		16.0		10.6		7.5
Green Ext Time (p_c), s		8.3		1.0		5.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	214	35	145	173	121	24	607	195	130	638	98
Future Volume (veh/h)	91	214	35	145	173	121	24	607	195	130	638	98
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	99	233	38	158	188	132	26	660	212	141	693	107
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	126	338	148	192	471	207	36	1389	446	174	2148	947
Arrive On Green	0.07	0.10	0.10	0.11	0.13	0.13	0.02	0.53	0.53	0.10	0.61	0.61
Sat Flow, veh/h	1757	3505	1532	1757	3505	1540	1757	2600	834	1757	3505	1545
Grp Volume(v), veh/h	99	233	38	158	188	132	26	445	427	141	693	107
Grp Sat Flow(s),veh/h/ln	1757	1752	1532	1757	1752	1540	1757	1752	1682	1757	1752	1545
Q Serve(g_s), s	5.5	6.4	2.3	8.8	4.9	8.1	1.5	15.8	15.8	7.8	9.5	2.9
Cycle Q Clear(g_c), s	5.5	6.4	2.3	8.8	4.9	8.1	1.5	15.8	15.8	7.8	9.5	2.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	126	338	148	192	471	207	36	937	899	174	2148	947
V/C Ratio(X)	0.79	0.69	0.26	0.82	0.40	0.64	0.72	0.47	0.48	0.81	0.32	0.11
Avail Cap(c_a), veh/h	229	563	246	371	845	371	106	937	899	353	2148	947
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	43.5	41.7	43.4	39.4	40.8	48.5	14.5	14.5	43.9	9.3	8.0
Incr Delay (d2), s/veh	10.4	2.5	0.9	8.5	0.5	3.2	23.2	1.7	1.8	8.7	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	3.2	1.0	4.7	2.4	3.6	0.9	8.0	7.7	4.2	4.6	1.3
LnGrp Delay(d), s/veh	55.9	46.0	42.6	51.8	40.0	44.0	71.6	16.2	16.3	52.6	9.7	8.3
LnGrp LOS	E	D	D	D	D	D	E	B	B	D	A	A
Approach Vol, veh/h		370			478			898			941	
Approach Delay, s/veh		48.3			45.0			17.8			16.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	57.2	14.9	13.6	6.1	65.0	11.1	17.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	47.0	21.0	16.0	6.0	61.0	13.0	24.0
Max Q Clear Time (g_c+I1), s	9.8	17.8	10.8	8.4	3.5	11.5	7.5	10.1
Green Ext Time (p_c), s	0.2	5.9	0.3	0.8	0.0	5.6	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	142	255	235	75	373	13	163	655	73	21	695	173
Future Volume (veh/h)	142	255	235	75	373	13	163	655	73	21	695	173
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	146	263	242	77	385	13	168	675	75	22	716	178
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	304	320	441	431	435	15	201	1498	653	32	1163	510
Arrive On Green	0.17	0.17	0.17	0.24	0.24	0.24	0.11	0.42	0.42	0.02	0.33	0.33
Sat Flow, veh/h	1792	1881	1544	1792	1808	61	1792	3574	1558	1792	3574	1569
Grp Volume(v), veh/h	146	263	242	77	0	398	168	675	75	22	716	178
Grp Sat Flow(s),veh/h/ln	1792	1881	1544	1792	0	1869	1792	1787	1558	1792	1787	1569
Q Serve(g_s), s	7.7	14.2	14.0	3.6	0.0	21.6	9.6	14.2	3.1	1.3	17.7	9.1
Cycle Q Clear(g_c), s	7.7	14.2	14.0	3.6	0.0	21.6	9.6	14.2	3.1	1.3	17.7	9.1
Prop In Lane	1.00		1.00	1.00		0.03	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	304	320	441	431	0	449	201	1498	653	32	1163	510
V/C Ratio(X)	0.48	0.82	0.55	0.18	0.00	0.89	0.84	0.45	0.11	0.68	0.62	0.35
Avail Cap(c_a), veh/h	393	412	517	546	0	570	290	1498	653	85	1163	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	42.0	32.1	31.6	0.0	38.5	45.7	21.8	18.6	51.2	29.9	26.9
Incr Delay (d2), s/veh	1.2	10.1	1.1	0.2	0.0	13.1	13.3	1.0	0.4	22.2	2.4	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	8.3	6.1	1.8	0.0	12.8	5.5	7.1	1.4	0.8	9.1	4.2
LnGrp Delay(d), s/veh	40.5	52.1	33.2	31.8	0.0	51.5	59.0	22.8	19.0	73.4	32.3	28.8
LnGrp LOS	D	D	C	C		D	E	C	B	E	C	C
Approach Vol, veh/h		651			475			918			916	
Approach Delay, s/veh		42.5			48.3			29.1			32.6	
Approach LOS		D			D			C			C	

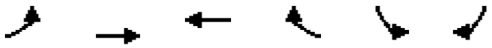
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	48.0		21.8	15.7	38.1		29.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	44.0		23.0	17.0	32.0		32.0
Max Q Clear Time (g_c+I1), s	3.3	16.2		16.2	11.6	19.7		23.6
Green Ext Time (p_c), s	0.0	5.1		1.7	0.2	4.2		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Future Volume (veh/h)	174	852	120	202	1309	202	264	1035	120	94	857	142
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	191	936	132	222	1438	222	290	1137	132	103	942	156
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	218	1301	183	250	1570	461	354	1380	586	146	1676	489
Arrive On Green	0.12	0.29	0.29	0.14	0.31	0.31	0.10	0.39	0.39	0.04	0.33	0.33
Sat Flow, veh/h	1774	4471	628	1774	5085	1494	3442	3539	1502	3442	5085	1485
Grp Volume(v), veh/h	191	709	359	222	1438	222	290	1137	132	103	942	156
Grp Sat Flow(s),veh/h/ln	1774	1695	1708	1774	1695	1494	1721	1770	1502	1721	1695	1485
Q Serve(g_s), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Cycle Q Clear(g_c), s	12.5	22.1	22.3	14.5	32.1	14.2	9.7	34.1	6.9	3.5	18.0	9.3
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	986	497	250	1570	461	354	1380	586	146	1676	489
V/C Ratio(X)	0.87	0.72	0.72	0.89	0.92	0.48	0.82	0.82	0.23	0.71	0.56	0.32
Avail Cap(c_a), veh/h	241	986	497	286	1595	469	467	1380	586	146	1676	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	37.5	37.5	49.7	39.3	33.1	51.8	32.3	24.1	55.7	32.5	29.6
Incr Delay (d2), s/veh	26.4	2.6	5.1	24.8	8.6	0.8	8.5	5.7	0.9	14.4	1.4	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	10.7	11.2	8.8	16.3	6.0	5.0	17.7	3.0	2.0	8.6	4.0
LnGrp Delay(d), s/veh	77.2	40.0	42.7	74.5	47.9	33.9	60.3	38.0	24.9	70.1	33.9	31.3
LnGrp LOS	E	D	D	E	D	C	E	D	C	E	C	C
Approach Vol, veh/h		1259			1882			1559			1201	
Approach Delay, s/veh		46.4			49.4			41.1			36.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	50.0	20.6	38.3	16.1	42.9	18.5	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	46.0	19.0	34.0	16.0	35.0	16.0	37.0
Max Q Clear Time (g_c+I1), s	5.5	36.1	16.5	24.3	11.7	20.0	14.5	34.1
Green Ext Time (p_c), s	0.0	5.5	0.1	4.6	0.4	6.2	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	355	1086	1258	300	285	263
Future Volume (veh/h)	355	1086	1258	300	285	263
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	374	1143	1324	316	300	277
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	417	3479	1668	397	841	387
Arrive On Green	0.23	0.68	0.40	0.40	0.24	0.24
Sat Flow, veh/h	1792	5305	4290	982	3476	1599
Grp Volume(v), veh/h	374	1143	1100	540	300	277
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1679	1738	1599
Q Serve(g_s), s	20.1	9.2	28.0	28.0	7.1	15.8
Cycle Q Clear(g_c), s	20.1	9.2	28.0	28.0	7.1	15.8
Prop In Lane	1.00			0.59	1.00	1.00
Lane Grp Cap(c), veh/h	417	3479	1386	679	841	387
V/C Ratio(X)	0.90	0.33	0.79	0.80	0.36	0.72
Avail Cap(c_a), veh/h	668	4555	1622	795	841	387
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.9	6.6	25.9	25.9	31.2	34.5
Incr Delay (d2), s/veh	9.7	0.1	2.4	4.9	1.2	10.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	4.3	13.6	13.8	3.6	14.6
LnGrp Delay(d), s/veh	46.7	6.7	28.3	30.8	32.4	45.3
LnGrp LOS	D	A	C	C	C	D
Approach Vol, veh/h		1517	1640		577	
Approach Delay, s/veh		16.5	29.1		38.6	
Approach LOS		B	C		D	

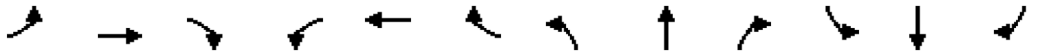
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				71.2		28.0	27.1	44.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				88.0		24.0	37.0	47.0
Max Q Clear Time (g_c+I1), s				11.2		17.8	22.1	30.0
Green Ext Time (p_c), s				10.2		1.2	1.0	10.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	33	1115	41	132	1368	37	107	32	253	67	99	94
Future Volume (veh/h)	33	1115	41	132	1368	37	107	32	253	67	99	94
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	36	1225	45	145	1503	41	118	35	278	74	109	103
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	47	1918	587	220	2109	58	493	815	690	530	383	361
Arrive On Green	0.03	0.37	0.37	0.06	0.41	0.41	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1792	5136	1573	3476	5136	140	1175	1881	1593	1070	883	834
Grp Volume(v), veh/h	36	1225	45	145	1002	542	118	35	278	74	0	212
Grp Sat Flow(s),veh/h/ln	1792	1712	1573	1738	1712	1852	1175	1881	1593	1070	0	1717
Q Serve(g_s), s	1.8	18.1	1.7	3.8	22.5	22.5	6.7	1.0	11.1	4.0	0.0	7.4
Cycle Q Clear(g_c), s	1.8	18.1	1.7	3.8	22.5	22.5	14.0	1.0	11.1	5.0	0.0	7.4
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	47	1918	587	220	1406	760	493	815	690	530	0	744
V/C Ratio(X)	0.77	0.64	0.08	0.66	0.71	0.71	0.24	0.04	0.40	0.14	0.00	0.28
Avail Cap(c_a), veh/h	155	3060	937	489	2225	1204	493	815	690	530	0	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	44.7	23.8	18.7	42.3	22.7	22.7	21.4	15.1	18.0	16.5	0.0	16.9
Incr Delay (d2), s/veh	22.7	0.4	0.1	3.3	0.7	1.3	1.1	0.1	1.7	0.5	0.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.6	0.7	1.9	10.7	11.7	2.3	0.5	5.1	1.3	0.0	3.7
LnGrp Delay(d), s/veh	67.4	24.2	18.7	45.6	23.4	23.9	22.6	15.2	19.7	17.1	0.0	17.9
LnGrp LOS	E	C	B	D	C	C	C	B	B	B		B
Approach Vol, veh/h		1306			1689			431			286	
Approach Delay, s/veh		25.2			25.4			20.1			17.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	9.8	38.5		44.0	6.4	41.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	13.0	55.0		40.0	8.0	60.0
Max Q Clear Time (g_c+I1), s		16.0	5.8	20.1		9.4	3.8	24.5
Green Ext Time (p_c), s		1.5	0.2	10.5		1.7	0.0	13.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	313	42	70	557	46	32	217	1	32	280	49
Future Volume (veh/h)	79	313	42	70	557	46	32	217	1	32	280	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	89	352	47	79	626	52	36	244	1	36	315	55
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1152	503	345	1152	508	50	1703	752	50	1703	752
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.03	0.48	0.48	0.03	0.48	0.48
Sat Flow, veh/h	758	3539	1545	980	3539	1560	1774	3539	1563	1774	3539	1563
Grp Volume(v), veh/h	89	352	47	79	626	52	36	244	1	36	315	55
Grp Sat Flow(s),veh/h/ln	758	1770	1545	980	1770	1560	1774	1770	1563	1774	1770	1563
Q Serve(g_s), s	7.9	5.4	1.5	4.8	10.5	1.7	1.5	2.8	0.0	1.5	3.7	1.4
Cycle Q Clear(g_c), s	18.5	5.4	1.5	10.2	10.5	1.7	1.5	2.8	0.0	1.5	3.7	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	1152	503	345	1152	508	50	1703	752	50	1703	752
V/C Ratio(X)	0.38	0.31	0.09	0.23	0.54	0.10	0.71	0.14	0.00	0.71	0.18	0.07
Avail Cap(c_a), veh/h	615	2919	1274	835	2919	1287	317	1703	752	317	1703	752
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	18.4	17.1	22.2	20.1	17.1	35.0	10.5	9.8	35.0	10.7	10.1
Incr Delay (d2), s/veh	1.0	0.1	0.1	0.3	0.4	0.1	17.0	0.2	0.0	17.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	2.7	0.7	1.3	5.2	0.7	0.9	1.4	0.0	0.9	1.9	0.6
LnGrp Delay(d), s/veh	28.7	18.5	17.1	22.5	20.5	17.2	52.1	10.7	9.8	52.1	11.0	10.3
LnGrp LOS	C	B	B	C	C	B	D	B	A	D	B	B
Approach Vol, veh/h		488			757			281			406	
Approach Delay, s/veh		20.2			20.5			16.0			14.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	39.0		27.7	6.1	39.0		27.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	35.0		60.0	13.0	35.0		60.0
Max Q Clear Time (g_c+I1), s	3.5	4.8		20.5	3.5	5.7		12.5
Green Ext Time (p_c), s	0.0	1.4		3.2	0.0	2.1		5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	619	90	371	878	0	194	0	570	0	0	0
Future Volume (veh/h)	0	619	90	371	878	0	194	0	570	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	0	696	101	417	987	0	218	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	73	2232	324	507	2557	0	357	0	325	0	2	0
Arrive On Green	0.00	0.72	0.72	0.72	0.72	0.00	0.20	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	574	3121	452	685	3668	0	1757	0	1599	0	1881	0
Grp Volume(v), veh/h	0	398	399	417	987	0	218	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	574	1787	1786	685	1787	0	1757	0	1599	0	1881	0
Q Serve(g_s), s	0.0	8.0	8.0	56.1	10.7	0.0	11.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	8.0	8.0	64.1	10.7	0.0	11.1	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.25	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	73	1278	1278	507	2557	0	357	0	325	0	2	0
V/C Ratio(X)	0.00	0.31	0.31	0.82	0.39	0.00	0.61	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	83	1308	1308	519	2617	0	357	0	325	0	306	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	5.1	5.1	16.9	5.5	0.0	35.6	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.1	0.1	10.1	0.1	0.0	7.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.9	3.9	11.8	5.2	0.0	6.1	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	5.3	5.3	27.0	5.6	0.0	43.2	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	C	A		D					
Approach Vol, veh/h		797			1404			218			0	
Approach Delay, s/veh		5.3			12.0			43.2			0.0	
Approach LOS		A			B			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		24.0		74.3		0.0		74.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		20.0		72.0		16.0		72.0
Max Q Clear Time (g_c+I1), s		13.1		10.0		0.0		66.1
Green Ext Time (p_c), s		0.6		5.5		0.0		4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	113	923	115	284	1217	189	199	485	394	87	355	84
Future Volume (veh/h)	113	923	115	284	1217	189	199	485	394	87	355	84
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	116	952	119	293	1255	195	205	500	406	90	366	87
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	143	1336	166	324	1398	593	237	612	507	114	731	172
Arrive On Green	0.08	0.29	0.29	0.18	0.39	0.39	0.13	0.33	0.33	0.06	0.26	0.26
Sat Flow, veh/h	1792	4605	574	1792	3574	1515	1792	1881	1559	1792	2856	670
Grp Volume(v), veh/h	116	707	364	293	1255	195	205	500	406	90	227	226
Grp Sat Flow(s),veh/h/ln	1792	1712	1754	1792	1787	1515	1792	1881	1559	1792	1787	1738
Q Serve(g_s), s	7.3	21.0	21.1	18.2	37.5	10.2	12.8	27.8	27.0	5.6	12.3	12.6
Cycle Q Clear(g_c), s	7.3	21.0	21.1	18.2	37.5	10.2	12.8	27.8	27.0	5.6	12.3	12.6
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.39
Lane Grp Cap(c), veh/h	143	994	509	324	1398	593	237	612	507	114	458	445
V/C Ratio(X)	0.81	0.71	0.71	0.91	0.90	0.33	0.86	0.82	0.80	0.79	0.50	0.51
Avail Cap(c_a), veh/h	173	1023	524	378	1476	626	362	612	507	142	458	445
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	36.1	36.2	45.7	32.5	24.2	48.4	35.3	35.0	52.5	36.1	36.2
Incr Delay (d2), s/veh	21.2	2.3	4.5	22.6	7.4	0.3	12.8	11.5	12.5	21.1	3.8	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	10.2	10.8	11.1	19.9	4.3	7.2	16.4	13.4	3.5	6.5	6.6
LnGrp Delay(d), s/veh	72.8	38.4	40.6	68.3	39.9	24.5	61.1	46.8	47.5	73.7	39.9	40.3
LnGrp LOS	E	D	D	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1187			1743			1111			543	
Approach Delay, s/veh		42.4			43.0			49.7			45.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	41.0	24.5	37.0	19.1	33.1	13.1	48.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	37.0	24.0	34.0	23.0	23.0	11.0	47.0
Max Q Clear Time (g_c+I1), s	7.6	29.8	20.2	23.1	14.8	14.6	9.3	39.5
Green Ext Time (p_c), s	0.0	2.7	0.3	5.1	0.3	1.5	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	888	299	151	1037	0	245	139	201	0	0	0
Future Volume (veh/h)	0	888	299	151	1037	0	245	139	201	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1021	344	174	1192	0	282	160	231			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	1781	545	274	2461	0	1439	1417	662			
Arrive On Green	0.00	0.35	0.35	0.08	0.48	0.00	0.41	0.41	0.41			
Sat Flow, veh/h	0	5305	1571	3476	5305	0	3476	3424	1599			
Grp Volume(v), veh/h	0	1021	344	174	1192	0	282	160	231			
Grp Sat Flow(s),veh/h/ln	0	1712	1571	1738	1712	0	1738	1712	1599			
Q Serve(g_s), s	0.0	12.1	13.7	3.6	11.8	0.0	3.9	2.2	7.4			
Cycle Q Clear(g_c), s	0.0	12.1	13.7	3.6	11.8	0.0	3.9	2.2	7.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	1781	545	274	2461	0	1439	1417	662			
V/C Ratio(X)	0.00	0.57	0.63	0.63	0.48	0.00	0.20	0.11	0.35			
Avail Cap(c_a), veh/h	0	3909	1196	928	5555	0	1439	1417	662			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	19.9	20.5	33.4	13.2	0.0	14.0	13.5	15.0			
Incr Delay (d2), s/veh	0.0	0.3	1.2	2.4	0.1	0.0	0.3	0.2	1.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	5.7	6.1	1.8	5.6	0.0	1.9	1.1	3.5			
LnGrp Delay(d), s/veh	0.0	20.2	21.7	35.9	13.4	0.0	14.3	13.6	16.5			
LnGrp LOS		C	C	D	B		B	B	B			
Approach Vol, veh/h		1365			1366			673				
Approach Delay, s/veh		20.6			16.2			14.9				
Approach LOS		C			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			9.9	30.0		35.0		39.9
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			20.0	57.0		31.0		81.0
Max Q Clear Time (g_c+I1), s			5.6	15.7		9.4		13.8
Green Ext Time (p_c), s			0.4	10.3		3.3		10.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	399	1433	78	252	1114	121	163	1086	749	149	1028	389
Future Volume (veh/h)	399	1433	78	252	1114	121	163	1086	749	149	1028	389
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	434	1558	85	274	1211	132	177	1180	814	162	1117	423
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	515	1839	655	348	1593	472	237	1705	1145	222	1684	720
Arrive On Green	0.15	0.36	0.36	0.10	0.31	0.31	0.07	0.33	0.33	0.06	0.33	0.33
Sat Flow, veh/h	3476	5136	1525	3476	5136	1520	3476	5136	2599	3476	5136	1473
Grp Volume(v), veh/h	434	1558	85	274	1211	132	177	1180	814	162	1117	423
Grp Sat Flow(s),veh/h/ln	1738	1712	1525	1738	1712	1520	1738	1712	1300	1738	1712	1473
Q Serve(g_s), s	13.3	30.7	3.7	8.5	23.4	7.2	5.5	21.9	28.4	5.0	20.5	23.2
Cycle Q Clear(g_c), s	13.3	30.7	3.7	8.5	23.4	7.2	5.5	21.9	28.4	5.0	20.5	23.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	1839	655	348	1593	472	237	1705	1145	222	1684	720
V/C Ratio(X)	0.84	0.85	0.13	0.79	0.76	0.28	0.75	0.69	0.71	0.73	0.66	0.59
Avail Cap(c_a), veh/h	696	1964	692	570	1777	526	253	1705	1145	253	1684	720
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	32.5	19.1	48.3	34.2	28.6	50.2	31.8	25.8	50.5	31.7	21.2
Incr Delay (d2), s/veh	7.0	3.5	0.1	4.0	1.8	0.3	10.8	2.3	3.8	8.8	2.1	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	15.0	1.6	4.3	11.2	3.1	3.0	10.6	10.7	2.7	10.0	10.0
LnGrp Delay(d), s/veh	52.6	36.0	19.2	52.2	35.9	28.9	61.1	34.1	29.5	59.3	33.8	24.7
LnGrp LOS	D	D	B	D	D	C	E	C	C	E	C	C
Approach Vol, veh/h		2077			1617			2171			1702	
Approach Delay, s/veh		38.7			38.1			34.6			33.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	40.5	15.0	43.3	11.5	40.0	20.3	38.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	36.0	18.0	42.0	8.0	36.0	22.0	38.0
Max Q Clear Time (g_c+I1), s	7.0	30.4	10.5	32.7	7.5	25.2	15.3	25.4
Green Ext Time (p_c), s	0.0	4.5	0.5	6.6	0.0	6.4	0.9	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	394	739	0	0	1023	533	0	0	0	189	774	12
Future Volume (veh/h)	394	739	0	0	1023	533	0	0	0	189	774	12
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	453	849	0	0	1176	613				217	890	14
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	524	3248	0	0	2289	703				291	1289	21
Arrive On Green	0.15	0.63	0.00	0.00	0.45	0.45				0.30	0.30	0.30
Sat Flow, veh/h	3476	5305	0	0	5305	1577				984	4357	70
Grp Volume(v), veh/h	453	849	0	0	1176	613				404	343	374
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1577				1832	1712	1868
Q Serve(g_s), s	14.2	8.1	0.0	0.0	18.4	39.3				22.2	19.7	19.7
Cycle Q Clear(g_c), s	14.2	8.1	0.0	0.0	18.4	39.3				22.2	19.7	19.7
Prop In Lane	1.00		0.00	0.00		1.00				0.54		0.04
Lane Grp Cap(c), veh/h	524	3248	0	0	2289	703				542	507	553
V/C Ratio(X)	0.86	0.26	0.00	0.00	0.51	0.87				0.75	0.68	0.68
Avail Cap(c_a), veh/h	623	3638	0	0	2533	778				542	507	553
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	9.0	0.0	0.0	22.2	28.0				35.5	34.6	34.6
Incr Delay (d2), s/veh	10.6	0.0	0.0	0.0	0.2	9.9				9.0	7.1	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	3.8	0.0	0.0	8.6	19.0				12.6	10.3	11.2
LnGrp Delay(d), s/veh	56.8	9.1	0.0	0.0	22.4	38.0				44.5	41.7	41.1
LnGrp LOS	E	A			C	D				D	D	D
Approach Vol, veh/h		1302			1789						1121	
Approach Delay, s/veh		25.7			27.7						42.5	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		37.0		74.5			20.8	53.7
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		33.0		79.0			20.0	55.0
Max Q Clear Time (g_c+I1), s		24.2		10.1			16.2	41.3
Green Ext Time (p_c), s		4.1		6.7			0.6	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	66	1266	63	153	1517	50	141	27	439	151	81	87
Future Volume (veh/h)	66	1266	63	153	1517	50	141	27	439	151	81	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	68	1305	65	158	1564	52	145	28	453	156	84	90
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	88	1978	99	233	2124	636	432	453	839	230	230	195
Arrive On Green	0.05	0.40	0.40	0.07	0.41	0.41	0.24	0.24	0.24	0.13	0.13	0.13
Sat Flow, veh/h	1792	5000	249	3476	5136	1538	1792	1881	2699	1792	1787	1513
Grp Volume(v), veh/h	68	894	476	158	1564	52	145	28	453	156	84	90
Grp Sat Flow(s),veh/h/ln	1792	1712	1825	1738	1712	1538	1792	1881	1350	1792	1787	1513
Q Serve(g_s), s	3.6	20.4	20.4	4.2	24.5	2.0	6.4	1.1	13.3	7.9	4.1	5.3
Cycle Q Clear(g_c), s	3.6	20.4	20.4	4.2	24.5	2.0	6.4	1.1	13.3	7.9	4.1	5.3
Prop In Lane	1.00		0.14	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	88	1355	722	233	2124	636	432	453	839	230	230	195
V/C Ratio(X)	0.77	0.66	0.66	0.68	0.74	0.08	0.34	0.06	0.54	0.68	0.37	0.46
Avail Cap(c_a), veh/h	188	1686	899	510	2744	822	432	453	839	375	374	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	23.6	23.6	43.5	23.6	17.0	29.9	27.9	27.5	39.7	38.0	38.5
Incr Delay (d2), s/veh	13.2	0.7	1.3	3.4	0.8	0.1	2.1	0.3	2.5	3.5	1.0	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	9.7	10.4	2.2	11.7	0.8	3.4	0.6	5.3	4.2	2.1	2.3
LnGrp Delay(d), s/veh	58.1	24.3	24.8	46.9	24.4	17.0	32.0	28.2	29.9	43.2	39.0	40.2
LnGrp LOS	E	C	C	D	C	B	C	C	C	D	D	D
Approach Vol, veh/h		1438			1774			626			330	
Approach Delay, s/veh		26.1			26.2			30.3			41.3	
Approach LOS		C			C			C			D	

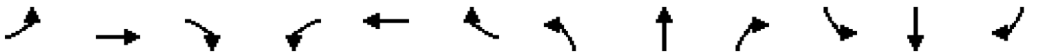
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		27.0	10.4	41.8		16.3	8.7	43.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		23.0	14.0	47.0		20.0	10.0	51.0
Max Q Clear Time (g_c+I1), s		15.3	6.2	22.4		9.9	5.6	26.5
Green Ext Time (p_c), s		1.6	0.3	10.3		1.0	0.0	13.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C



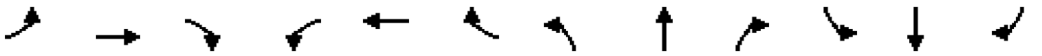
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	52	126	235	0	0	0	0	1603	10	0	1420	0
Future Volume (vph)	52	126	235	0	0	0	0	1603	10	0	1420	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					1.00			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1783	2814					7610			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1783	2814					7610			6471	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	58	140	261	0	0	0	0	1781	11	0	1578	0
RTOR Reduction (vph)	0	0	51	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	52	146	210	0	0	0	0	1792	0	0	1578	0
Confl. Peds. (#/hr)							5		6	6		5
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	13.4	13.4	13.4					74.5			74.5	
Effective Green, g (s)	13.4	13.4	13.4					74.5			74.5	
Actuated g/C Ratio	0.14	0.14	0.14					0.78			0.78	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	237	249	393					5911			5027	
v/s Ratio Prot	0.03	c0.08						0.24			c0.24	
v/s Ratio Perm			0.07									
v/c Ratio	0.22	0.59	0.53					0.30			0.31	
Uniform Delay, d1	36.6	38.7	38.4					3.1			3.2	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.5	3.5	1.4					0.1			0.2	
Delay (s)	37.1	42.2	39.8					3.3			3.3	
Level of Service	D	D	D					A			A	
Approach Delay (s/veh)		40.2			0.0			3.3			3.3	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.36		
Actuated Cycle Length (s)	95.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



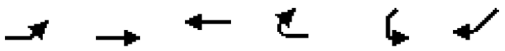
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1398	925	203	1073	0	435	0	60	140	0	6
Future Volume (vph)	0	1398	925	203	1073	0	435	0	60	140	0	6
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.96	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5802	1237	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5802	1237	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1427	944	207	1095	0	444	0	61	143	0	6
RTOR Reduction (vph)	0	51	233	0	0	0	0	0	44	0	0	4
Lane Group Flow (vph)	0	1848	239	207	1095	0	444	0	17	143	0	2
Confl. Peds. (#/hr)	2		16	16		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		55.5	55.5	11.9	71.4		30.3		30.3	30.3		30.3
Effective Green, g (s)		55.5	55.5	11.9	71.4		30.3		30.3	30.3		30.3
Actuated g/C Ratio		0.51	0.51	0.11	0.65		0.28		0.28	0.28		0.28
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2935	625	376	3342		957		441	957		441
v/s Ratio Prot		c0.32		c0.06	0.21							
v/s Ratio Perm			0.19				c0.13		0.01	0.04		0.00
v/c Ratio		0.63	0.38	0.55	0.33		0.46		0.04	0.15		0.00
Uniform Delay, d1		19.6	16.6	46.4	8.5		33.0		29.0	30.0		28.8
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.4	0.4	1.7	0.1		1.6		0.2	0.3		0.0
Delay (s)		20.1	17.0	48.1	8.6		34.6		29.2	30.3		28.8
Level of Service		C	B	D	A		C		C	C		C
Approach Delay (s/veh)		19.5			14.8			33.9			30.2	
Approach LOS		B			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	58	974	244	222	1081	0	15	1670	28
Future Volume (vph)	0	0	0	58	974	244	222	1081	0	15	1670	28
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3423	2814	3467	6471		1787	6471	1566
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3423	2814	3467	6471		1787	6471	1566
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	65	1094	274	249	1215	0	17	1876	31
RTOR Reduction (vph)	0	0	0	0	0	124	0	0	0	0	0	20
Lane Group Flow (vph)	0	0	0	58	1101	150	249	1215	0	17	1876	11
Confl. Peds. (#/hr)							3		5	5		3
Confl. Bikes (#/hr)									4			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				53.0	53.0	53.0	12.2	54.7		2.0	44.5	44.5
Effective Green, g (s)				53.0	53.0	53.0	12.2	54.7		2.0	44.5	44.5
Actuated g/C Ratio				0.44	0.44	0.44	0.10	0.45		0.02	0.37	0.37
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				708	1490	1225	347	2908		29	2366	572
v/s Ratio Prot				0.04	c0.32		c0.07	0.19		0.01	c0.29	
v/s Ratio Perm						0.05						0.01
v/c Ratio				0.08	0.74	0.12	0.72	0.42		0.59	0.79	0.02
Uniform Delay, d1				20.1	28.6	20.5	53.1	22.7		59.4	34.5	24.7
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.0	2.0	0.0	6.9	0.4		26.8	2.8	0.1
Delay (s)				20.2	30.5	20.5	60.0	23.2		86.2	37.3	24.7
Level of Service				C	C	C	E	C		F	D	C
Approach Delay (s/veh)		0.0			28.2			29.4			37.5	
Approach LOS		A			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	121.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	164	1475	1506	355	55	154
Future Volume (veh/h)	164	1475	1506	355	55	154
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	173	1553	1585	374	58	162
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	214	4067	2435	575	504	450
Arrive On Green	0.12	0.63	0.46	0.46	0.28	0.28
Sat Flow, veh/h	1792	6735	5509	1238	1792	1599
Grp Volume(v), veh/h	173	1553	1467	492	58	162
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1629	1792	1599
Q Serve(g_s), s	8.4	10.4	20.6	20.6	2.1	7.2
Cycle Q Clear(g_c), s	8.4	10.4	20.6	20.6	2.1	7.2
Prop In Lane	1.00			0.76	1.00	1.00
Lane Grp Cap(c), veh/h	214	4067	2253	756	504	450
V/C Ratio(X)	0.81	0.38	0.65	0.65	0.12	0.36
Avail Cap(c_a), veh/h	524	6339	3115	1046	504	450
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	8.1	18.3	18.3	23.7	25.5
Incr Delay (d2), s/veh	7.2	0.1	0.3	1.0	0.5	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	4.7	9.2	9.4	1.1	0.3
LnGrp Delay(d), s/veh	45.3	8.1	18.6	19.2	24.2	27.7
LnGrp LOS	D	A	B	B	C	C
Approach Vol, veh/h		1726	1959		220	
Approach Delay, s/veh		11.9	18.8		26.8	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				59.8		29.0	14.6	45.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				87.0		25.0	26.0	57.0
Max Q Clear Time (g_c+I1), s				12.4		9.2	10.4	22.6
Green Ext Time (p_c), s				17.2		0.6	0.4	18.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.2
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	NWL2	NWR
Lane Configurations										
Traffic Volume (vph)	23	0	20	175	101	7	92	20	10	10
Future Volume (vph)	23	0	20	175	101	7	92	20	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00		1.00	0.88	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	0.99		1.00	1.00	1.00	0.85
Flt Protected	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	1671		1671	2632	3305		1671	3343	1671	1495
Flt Permitted	0.95		0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1671		1671	2632	3305		1671	3343	1671	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	25	0	22	190	110	8	100	22	11	11
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	25	0	22	190	118	0	100	22	11	11
Confl. Peds. (#/hr)			12			2				
Confl. Bikes (#/hr)						1				
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA	Prot	Prot
Protected Phases	4	4	8	1	2		1	6	7	7
Permitted Phases				8						
Actuated Green, G (s)	2.6		2.5	13.0	41.4		10.5	55.9	2.2	2.2
Effective Green, g (s)	2.6		2.5	13.0	41.4		10.5	55.9	2.2	2.2
Actuated g/C Ratio	0.03		0.03	0.16	0.52		0.13	0.71	0.03	0.03
Clearance Time (s)	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	54		52	564	1727		221	2359	46	41
v/s Ratio Prot	c0.01		0.01	c0.04	c0.04		c0.06	0.01	0.01	c0.01
v/s Ratio Perm				0.03						
v/c Ratio	0.46		0.42	0.34	0.07		0.45	0.01	0.24	0.27
Uniform Delay, d1	37.6		37.6	29.3	9.4		31.7	3.5	37.7	37.7
Progression Factor	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	6.2		5.5	0.4	0.1		1.5	0.0	2.7	3.5
Delay (s)	43.8		43.1	29.6	9.4		33.2	3.5	40.4	41.2
Level of Service	D		D	C	A		C	A	D	D
Approach Delay (s/veh)					9.4			27.8		
Approach LOS					A			C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.18		
Actuated Cycle Length (s)	79.2	Sum of lost time (s)	20.0
Intersection Capacity Utilization	39.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	4	0	0	0	0	0	0	103	0	15	29	1
Future Volume (veh/h)	4	0	0	0	0	0	0	103	0	15	29	1
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	0	1712				0	1712	0	1712	1712	1900
Adj Flow Rate, veh/h	4	0	0				0	113	0	16	32	1
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	0	11				0	11	0	11	11	11
Cap, veh/h	7	0	6				0	2787	0	24	2939	91
Arrive On Green	0.00	0.00	0.00				0.00	0.86	0.00	0.01	0.91	0.91
Sat Flow, veh/h	1630	0	1455				0	3423	0	1630	3220	100
Grp Volume(v), veh/h	4	0	0				0	113	0	16	16	17
Grp Sat Flow(s),veh/h/ln	1630	0	1455				0	1626	0	1630	1626	1694
Q Serve(g_s), s	0.2	0.0	0.0				0.0	0.5	0.0	0.9	0.1	0.1
Cycle Q Clear(g_c), s	0.2	0.0	0.0				0.0	0.5	0.0	0.9	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.06
Lane Grp Cap(c), veh/h	7	0	6				0	2787	0	24	1484	1546
V/C Ratio(X)	0.58	0.00	0.00				0.00	0.04	0.00	0.68	0.01	0.01
Avail Cap(c_a), veh/h	406	0	362				0	2787	0	592	1484	1546
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	0.0	0.0				0.0	1.0	0.0	47.3	0.4	0.4
Incr Delay (d2), s/veh	59.8	0.0	0.0				0.0	0.0	0.0	29.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0				0.0	0.2	0.0	0.6	0.0	0.0
LnGrp Delay(d), s/veh	107.7	0.0	0.0				0.0	1.0	0.0	76.3	0.4	0.4
LnGrp LOS	F							A		E	A	A
Approach Vol, veh/h		4						113			49	
Approach Delay, s/veh		107.7						1.0			25.2	
Approach LOS		F						A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.4	86.6		4.4		92.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	35.0	49.0		24.0		88.0		
Max Q Clear Time (g_c+I1), s	2.9	2.5		2.2		2.1		
Green Ext Time (p_c), s	0.0	0.8		0.0		0.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	0	36	0	0	28
Future Vol, veh/h	0	0	36	0	0	28
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	40	0	0	31

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	57	20	0	0	40	0
Stage 1	40	-	-	-	-	-
Stage 2	17	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	944	1053	-	-	1568	-
Stage 1	977	-	-	-	-	-
Stage 2	1003	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	943	1053	-	-	1568	-
Mov Cap-2 Maneuver	943	-	-	-	-	-
Stage 1	977	-	-	-	-	-
Stage 2	1002	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	-	1568	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	-
HCM Lane LOS	-	-	A	A	-
HCM 95th %tile Q(veh)	-	-	-	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	931	10	0	1038	0	15
Future Vol, veh/h	931	10	0	1038	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	990	11	0	1104	0	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	495
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	445
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	445
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	13.4
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	445	-	-	-
HCM Lane V/C Ratio	0.036	-	-	-
HCM Control Delay (s/veh)	13.4	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Future Volume (veh/h)	254	613	89	177	783	93	96	1007	50	120	804	272
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	267	645	94	186	824	98	101	1060	53	126	846	286
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	309	1143	486	351	923	110	258	1335	67	229	1414	603
Arrive On Green	0.12	0.32	0.32	0.09	0.29	0.29	0.05	0.39	0.39	0.06	0.40	0.40
Sat Flow, veh/h	1792	3574	1521	1792	3196	380	1792	3455	173	1792	3574	1525
Grp Volume(v), veh/h	267	645	94	186	461	461	101	548	565	126	846	286
Grp Sat Flow(s),veh/h/ln	1792	1787	1521	1792	1787	1789	1792	1787	1841	1792	1787	1525
Q Serve(g_s), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Cycle Q Clear(g_c), s	11.2	16.7	5.0	8.0	27.5	27.5	3.7	30.2	30.2	4.7	20.9	15.5
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.09	1.00		1.00
Lane Grp Cap(c), veh/h	309	1143	486	351	516	517	258	691	711	229	1414	603
V/C Ratio(X)	0.87	0.56	0.19	0.53	0.89	0.89	0.39	0.79	0.79	0.55	0.60	0.47
Avail Cap(c_a), veh/h	380	1253	533	413	562	563	314	691	711	252	1414	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	31.4	27.4	24.9	37.9	37.9	21.0	30.2	30.2	23.9	26.6	25.0
Incr Delay (d2), s/veh	15.8	0.5	0.2	1.2	15.7	15.7	1.0	9.1	8.9	2.1	1.9	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	8.3	2.1	4.0	15.8	15.8	1.9	16.7	17.1	2.4	10.6	7.0
LnGrp Delay(d), s/veh	42.4	31.9	27.6	26.2	53.6	53.6	21.9	39.4	39.1	25.9	28.5	27.7
LnGrp LOS	D	C	C	C	D	D	C	D	D	C	C	C
Approach Vol, veh/h		1006			1108			1214			1258	
Approach Delay, s/veh		34.3			49.0			37.8			28.1	
Approach LOS		C			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	47.0	14.1	39.6	9.5	48.0	17.6	36.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	14.0	39.0	9.0	42.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	6.7	32.2	10.0	18.7	5.7	22.9	13.2	29.5
Green Ext Time (p_c), s	0.0	5.2	0.2	4.6	0.1	6.8	0.3	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Future Volume (veh/h)	167	785	71	150	1095	182	182	887	158	120	726	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.89	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	174	818	74	156	1141	190	190	924	165	125	756	141
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	205	1245	113	187	1323	525	327	1310	233	243	1412	408
Arrive On Green	0.11	0.38	0.38	0.10	0.37	0.37	0.09	0.30	0.30	0.07	0.28	0.28
Sat Flow, veh/h	1792	3275	296	1792	3574	1419	1792	4333	770	1792	5136	1483
Grp Volume(v), veh/h	174	446	446	156	1141	190	190	729	360	125	756	141
Grp Sat Flow(s),veh/h/ln	1792	1787	1785	1792	1787	1419	1792	1712	1679	1792	1712	1483
Q Serve(g_s), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Cycle Q Clear(g_c), s	10.4	22.5	22.5	9.3	32.3	10.6	8.1	20.6	20.8	5.4	13.7	8.3
Prop In Lane	1.00		0.17	1.00		1.00	1.00		0.46	1.00		1.00
Lane Grp Cap(c), veh/h	205	679	678	187	1323	525	327	1035	507	243	1412	408
V/C Ratio(X)	0.85	0.66	0.66	0.83	0.86	0.36	0.58	0.70	0.71	0.51	0.54	0.35
Avail Cap(c_a), veh/h	279	720	719	295	1473	585	406	1035	507	272	1412	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	28.0	28.0	47.9	31.8	25.0	25.1	33.8	33.8	27.4	33.6	31.7
Incr Delay (d2), s/veh	16.2	2.0	2.0	10.8	5.1	0.4	1.6	4.0	8.2	1.7	1.5	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	11.4	11.4	5.2	16.8	4.2	4.1	10.3	10.7	2.8	6.6	3.7
LnGrp Delay(d), s/veh	63.6	30.0	30.0	58.8	36.9	25.4	26.7	37.8	42.0	29.0	35.1	34.0
LnGrp LOS	E	C	C	E	D	C	C	D	D	C	D	C
Approach Vol, veh/h		1066			1487			1279			1022	
Approach Delay, s/veh		35.5			37.7			37.3			34.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	37.0	15.4	45.5	14.2	34.0	16.5	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	33.0	18.0	44.0	15.0	27.0	17.0	45.0
Max Q Clear Time (g_c+I1), s	7.4	22.8	11.3	24.5	10.1	15.7	12.4	34.3
Green Ext Time (p_c), s	0.0	5.0	0.2	5.5	0.2	4.2	0.2	6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	300	776	430	162	1648	75	654	904	302	75	734	309
Future Volume (veh/h)	300	776	430	162	1648	75	654	904	302	75	734	309
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	312	808	448	169	1717	78	681	942	315	78	765	322
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	344	1996	592	226	1781	81	717	1893	572	125	1017	300
Arrive On Green	0.10	0.39	0.39	0.07	0.36	0.36	0.21	0.37	0.37	0.04	0.20	0.20
Sat Flow, veh/h	3442	5085	1507	3442	4973	226	3442	5085	1538	3442	5085	1499
Grp Volume(v), veh/h	312	808	448	169	1170	625	681	942	315	78	765	322
Grp Sat Flow(s),veh/h/ln	1721	1695	1507	1721	1695	1809	1721	1695	1538	1721	1695	1499
Q Serve(g_s), s	10.8	13.8	30.8	5.8	40.6	40.7	23.4	17.1	19.4	2.7	17.0	24.0
Cycle Q Clear(g_c), s	10.8	13.8	30.8	5.8	40.6	40.7	23.4	17.1	19.4	2.7	17.0	24.0
Prop In Lane	1.00		1.00	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	1996	592	226	1214	648	717	1893	572	125	1017	300
V/C Ratio(X)	0.91	0.40	0.76	0.75	0.96	0.97	0.95	0.50	0.55	0.62	0.75	1.07
Avail Cap(c_a), veh/h	344	1996	592	287	1215	648	717	1893	572	172	1017	300
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	26.3	31.5	55.1	37.7	37.8	46.9	29.0	29.7	57.0	45.2	48.0
Incr Delay (d2), s/veh	26.5	0.1	5.6	7.9	17.7	26.8	22.0	0.9	3.8	5.0	5.1	72.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	6.5	13.7	3.0	22.0	25.1	13.4	8.2	8.9	1.4	8.4	16.0
LnGrp Delay(d), s/veh	79.9	26.4	37.1	63.0	55.5	64.6	68.9	30.0	33.5	62.0	50.3	120.9
LnGrp LOS	E	C	D	E	E	E	E	C	C	E	D	F
Approach Vol, veh/h		1568			1964			1938			1165	
Approach Delay, s/veh		40.1			59.0			44.2			70.6	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	48.6	11.9	51.1	29.0	28.0	16.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	10.0	45.0	25.0	24.0	12.0	43.0
Max Q Clear Time (g_c+I1), s	4.7	21.4	7.8	32.8	25.4	26.0	12.8	42.7
Green Ext Time (p_c), s	0.0	8.6	0.1	5.6	0.0	0.0	0.0	0.3

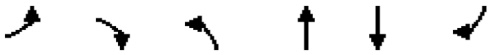
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.3
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	37	684	1181	0	50	1337
Future Volume (vph)	37	684	1181	0	50	1337
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.86	0.85	1.00		1.00	1.00
Flt Protected	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3110	1441	5085		1770	6408
Flt Permitted	1.00	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3110	1441	5085		1770	6408
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	39	712	1230	0	52	1393
RTOR Reduction (vph)	171	171	0	0	0	0
Lane Group Flow (vph)	225	185	1230	0	52	1393
Confl. Peds. (#/hr)				13	13	
Confl. Bikes (#/hr)				4		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	16.9	16.9	59.9		5.3	69.2
Effective Green, g (s)	16.9	16.9	59.9		5.3	69.2
Actuated g/C Ratio	0.18	0.18	0.64		0.06	0.74
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	558	258	3236		99	4712
v/s Ratio Prot	0.07		c0.24		c0.03	0.22
v/s Ratio Perm		c0.13				
v/c Ratio	0.40	0.72	0.38		0.53	0.30
Uniform Delay, d1	34.1	36.4	8.2		43.2	4.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.5	9.2	0.3		5.0	0.2
Delay (s)	34.6	45.6	8.5		48.1	4.4
Level of Service	C	D	A		D	A
Approach Delay (s/veh)	39.8		8.5			5.9
Approach LOS	D		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	94.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.7%	ICU Level of Service	B
Analysis Period (min)	15		

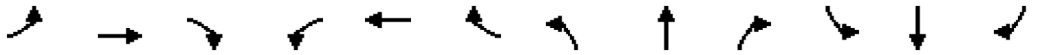
c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	248	261	66	1398	684	0
Future Volume (veh/h)	248	261	66	1398	684	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	267	281	71	1503	735	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	706	325	92	4564	3172	0
Arrive On Green	0.21	0.21	0.05	0.72	0.63	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	267	281	71	1503	735	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	7.3	18.8	4.3	9.5	6.9	0.0
Cycle Q Clear(g_c), s	7.3	18.8	4.3	9.5	6.9	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	706	325	92	4564	3172	0
V/C Ratio(X)	0.38	0.87	0.77	0.33	0.23	0.00
Avail Cap(c_a), veh/h	1068	492	373	4564	3172	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	41.5	50.7	5.6	8.7	0.0
Incr Delay (d2), s/veh	0.3	10.1	12.6	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	16.1	2.4	4.1	3.2	0.0
LnGrp Delay(d), s/veh	37.3	51.6	63.3	5.8	8.9	0.0
LnGrp LOS	D	D	E	A	A	
Approach Vol, veh/h	548			1574	735	
Approach Delay, s/veh	44.6			8.4	8.9	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		82.0		26.5	9.7	72.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		78.0		34.0	23.0	51.0		
Max Q Clear Time (g_c+I1), s		11.5		20.8	6.3	8.9		
Green Ext Time (p_c), s		17.0		1.7	0.1	5.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	176	840	79	223	1289	91	156	772	266	78	730	188
Future Volume (veh/h)	176	840	79	223	1289	91	156	772	266	78	730	188
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.87	1.00		0.85	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	189	903	85	240	1386	98	168	830	286	84	785	202
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	253	1663	448	308	1745	473	232	1968	521	135	1825	484
Arrive On Green	0.07	0.33	0.33	0.09	0.35	0.35	0.07	0.39	0.39	0.04	0.36	0.36
Sat Flow, veh/h	3408	5036	1358	3408	5036	1365	3408	5036	1333	3408	5036	1335
Grp Volume(v), veh/h	189	903	85	240	1386	98	168	830	286	84	785	202
Grp Sat Flow(s),veh/h/ln	1704	1679	1358	1704	1679	1365	1704	1679	1333	1704	1679	1335
Q Serve(g_s), s	5.8	15.7	4.8	7.4	26.7	5.4	5.2	12.9	17.9	2.6	12.7	12.2
Cycle Q Clear(g_c), s	5.8	15.7	4.8	7.4	26.7	5.4	5.2	12.9	17.9	2.6	12.7	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	253	1663	448	308	1745	473	232	1968	521	135	1825	484
V/C Ratio(X)	0.75	0.54	0.19	0.78	0.79	0.21	0.72	0.42	0.55	0.62	0.43	0.42
Avail Cap(c_a), veh/h	349	1921	518	444	2061	559	349	1968	521	222	1825	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	29.4	25.7	47.8	31.7	24.7	49.1	23.9	25.4	50.8	25.9	25.7
Incr Delay (d2), s/veh	5.6	0.3	0.2	5.5	1.9	0.2	4.3	0.7	4.1	4.6	0.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	7.3	1.8	3.7	12.6	2.1	2.6	6.1	7.2	1.3	6.0	4.9
LnGrp Delay(d), s/veh	54.4	29.6	25.9	53.3	33.6	24.9	53.4	24.6	29.5	55.4	26.6	28.4
LnGrp LOS	D	C	C	D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		1177			1724			1284			1071	
Approach Delay, s/veh		33.4			35.8			29.4			29.2	
Approach LOS		C			D			C			C	

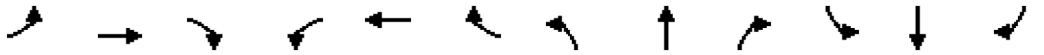
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	46.0	13.7	39.5	11.3	43.0	12.0	41.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	14.0	41.0	11.0	38.0	11.0	44.0
Max Q Clear Time (g_c+I1), s	4.6	19.9	9.4	17.7	7.2	14.7	7.8	28.7
Green Ext Time (p_c), s	0.0	7.0	0.3	6.6	0.2	6.5	0.2	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Future Volume (veh/h)	182	427	191	300	967	330	333	897	109	261	756	129
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	1.00		0.91	1.00		0.89	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	192	449	201	316	1018	347	351	944	115	275	796	136
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	853	340	349	1111	450	380	1184	143	304	938	158
Arrive On Green	0.12	0.24	0.24	0.19	0.31	0.31	0.21	0.26	0.26	0.17	0.22	0.22
Sat Flow, veh/h	1792	3574	1426	1792	3574	1449	1792	4573	554	1792	4331	730
Grp Volume(v), veh/h	192	449	201	316	1018	347	351	705	354	275	627	305
Grp Sat Flow(s),veh/h/ln	1792	1787	1426	1792	1787	1449	1792	1712	1704	1792	1712	1638
Q Serve(g_s), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Cycle Q Clear(g_c), s	12.2	12.7	14.5	20.0	31.8	25.1	22.2	22.3	22.5	17.4	20.4	20.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.33	1.00		0.45
Lane Grp Cap(c), veh/h	220	853	340	349	1111	450	380	886	441	304	741	355
V/C Ratio(X)	0.87	0.53	0.59	0.91	0.92	0.77	0.92	0.80	0.80	0.91	0.85	0.86
Avail Cap(c_a), veh/h	232	853	340	464	1141	463	417	886	441	340	741	355
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	38.4	39.1	45.6	38.5	36.2	44.7	40.1	40.2	47.2	43.5	43.7
Incr Delay (d2), s/veh	27.8	0.6	2.7	17.5	11.4	7.6	25.0	7.3	14.2	24.9	11.4	22.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	6.3	6.0	11.6	17.4	11.0	13.7	11.4	12.3	10.7	10.8	11.7
LnGrp Delay(d), s/veh	77.7	39.0	41.8	63.1	49.8	43.8	69.8	47.4	54.4	72.1	55.0	66.6
LnGrp LOS	E	D	D	E	D	D	E	D	D	E	D	E
Approach Vol, veh/h		842			1681			1410			1207	
Approach Delay, s/veh		48.5			51.1			54.7			61.8	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.7	34.0	26.6	31.7	28.6	29.1	18.2	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	30.0	30.0	22.0	27.0	25.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	19.4	24.5	22.0	16.5	24.2	22.8	14.2	33.8
Green Ext Time (p_c), s	0.2	3.0	0.6	1.7	0.3	1.2	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Future Volume (veh/h)	224	807	86	364	1090	250	330	910	135	314	755	111
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	226	815	87	368	1101	253	333	919	136	317	763	112
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	294	1516	161	447	1315	551	410	1457	425	391	1248	181
Arrive On Green	0.08	0.32	0.32	0.13	0.37	0.37	0.12	0.28	0.28	0.11	0.28	0.28
Sat Flow, veh/h	3476	4682	496	3476	3574	1498	3476	5136	1497	3476	4489	652
Grp Volume(v), veh/h	226	594	308	368	1101	253	333	919	136	317	580	295
Grp Sat Flow(s),veh/h/ln	1738	1712	1754	1738	1787	1498	1738	1712	1497	1738	1712	1717
Q Serve(g_s), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Cycle Q Clear(g_c), s	6.7	15.0	15.2	10.9	29.7	13.6	9.9	16.5	7.6	9.4	15.6	15.8
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	294	1109	568	447	1315	551	410	1457	425	391	952	477
V/C Ratio(X)	0.77	0.54	0.54	0.82	0.84	0.46	0.81	0.63	0.32	0.81	0.61	0.62
Avail Cap(c_a), veh/h	395	1263	647	625	1555	652	592	1457	425	526	952	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	29.2	29.3	44.9	30.5	25.4	45.5	33.0	29.8	45.8	33.2	33.3
Incr Delay (d2), s/veh	6.3	0.4	0.8	6.2	3.6	0.6	5.6	2.1	2.0	6.9	2.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	7.2	7.5	5.6	15.3	5.7	5.1	8.1	3.4	4.9	7.7	8.3
LnGrp Delay(d), s/veh	53.7	29.6	30.1	51.1	34.2	26.0	51.0	35.1	31.8	52.7	36.1	39.2
LnGrp LOS	D	C	C	D	C	C	D	D	C	D	D	D
Approach Vol, veh/h		1128			1722			1388			1192	
Approach Delay, s/veh		34.6			36.6			38.6			41.3	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	34.0	17.6	38.2	16.5	33.4	12.9	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	19.0	39.0	18.0	28.0	12.0	46.0
Max Q Clear Time (g_c+I1), s	11.4	18.5	12.9	17.2	11.9	17.8	8.7	31.7
Green Ext Time (p_c), s	0.5	5.0	0.7	5.8	0.6	3.9	0.2	7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Future Volume (veh/h)	169	18	151	9	21	25	158	1156	12	24	713	127
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	180	19	161	10	22	27	168	1230	13	26	759	135
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	562	41	72	572	201	2705	29	35	1853	326
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.11	0.52	0.52	0.02	0.42	0.42
Sat Flow, veh/h	0	0	1567	0	202	1595	1792	5238	55	1792	4368	769
Grp Volume(v), veh/h	199	0	161	32	0	27	168	804	439	26	593	301
Grp Sat Flow(s),veh/h/ln	0	0	1567	202	0	1595	1792	1712	1869	1792	1712	1714
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Cycle Q Clear(g_c), s	41.0	0.0	8.4	41.0	0.0	1.3	10.5	17.0	17.0	1.6	13.8	14.0
Prop In Lane	0.90		1.00	0.31		1.00	1.00		0.03	1.00		0.45
Lane Grp Cap(c), veh/h	60	0	562	114	0	572	201	1768	965	35	1452	727
V/C Ratio(X)	3.32	0.00	0.29	0.28	0.00	0.05	0.84	0.45	0.45	0.74	0.41	0.41
Avail Cap(c_a), veh/h	60	0	562	114	0	572	439	1768	965	125	1452	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	0.0	26.2	29.8	0.0	23.9	49.7	17.5	17.5	55.7	22.9	23.0
Incr Delay (d2), s/veh	1083.5	0.0	0.3	1.3	0.0	0.0	8.9	0.8	1.5	25.5	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	0.0	3.7	0.7	0.0	0.6	5.7	8.1	9.1	1.1	6.7	7.0
LnGrp Delay(d), s/veh	1140.6	0.0	26.4	31.1	0.0	23.9	58.6	18.3	19.0	81.2	23.8	24.7
LnGrp LOS	F		C	C		C	E	B	B	F	C	C
Approach Vol, veh/h		360			59			1411			920	
Approach Delay, s/veh		642.3			27.8			23.3			25.7	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	63.0		45.0	16.8	52.4		45.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	59.0		41.0	28.0	39.0		41.0
Max Q Clear Time (g_c+I1), s	3.6	19.0		43.0	12.5	16.0		43.0
Green Ext Time (p_c), s	0.0	10.0		0.0	0.4	5.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		105.2
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Future Volume (veh/h)	19	45	79	113	86	53	109	944	81	54	823	31
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.94		0.90	0.94		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	20	47	82	118	90	55	114	983	84	56	857	32
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	296	227	235	296	229	507	2464	1056	434	2391	89
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.04	0.69	0.69	0.03	0.68	0.68
Sat Flow, veh/h	1181	1881	1443	1191	1881	1453	1792	3574	1533	1792	3507	131
Grp Volume(v), veh/h	20	47	82	118	90	55	114	983	84	56	437	452
Grp Sat Flow(s),veh/h/ln	1181	1881	1443	1191	1881	1453	1792	1787	1533	1792	1787	1851
Q Serve(g_s), s	1.5	2.1	5.0	9.4	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Cycle Q Clear(g_c), s	5.7	2.1	5.0	11.5	4.2	3.3	1.9	11.6	1.8	0.9	10.1	10.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	209	296	227	235	296	229	507	2464	1056	434	1219	1262
V/C Ratio(X)	0.10	0.16	0.36	0.50	0.30	0.24	0.22	0.40	0.08	0.13	0.36	0.36
Avail Cap(c_a), veh/h	394	591	454	422	591	457	709	2464	1056	540	1219	1262
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.3	35.9	37.1	40.9	36.8	36.4	4.7	6.6	5.0	4.8	6.6	6.6
Incr Delay (d2), s/veh	0.2	0.2	1.0	1.7	0.6	0.5	0.2	0.5	0.1	0.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.1	2.0	3.2	2.2	1.4	0.9	5.8	0.8	0.5	5.3	5.4
LnGrp Delay(d), s/veh	39.5	36.2	38.1	42.6	37.4	36.9	5.0	7.1	5.2	5.0	7.4	7.4
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		149			263			1181			945	
Approach Delay, s/veh		37.7			39.6			6.7			7.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.1	72.0		19.5	7.9	71.3		19.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	68.0		31.0	15.0	62.0		31.0
Max Q Clear Time (g_c+I1), s	2.9	13.6		7.7	3.9	12.1		13.5
Green Ext Time (p_c), s	0.0	9.1		0.6	0.2	7.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	22	102	454	39	210	57	1152	258	108	1096	29
Future Volume (veh/h)	29	22	102	454	39	210	57	1152	258	108	1096	29
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	30	23	106	473	41	219	59	1200	269	112	1142	30
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	558	131	601	577	842	703	76	1791	543	140	1976	52
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.04	0.35	0.35	0.08	0.39	0.39
Sat Flow, veh/h	1111	289	1330	1252	1863	1554	1774	5085	1541	1774	5088	134
Grp Volume(v), veh/h	30	0	129	473	41	219	59	1200	269	112	761	411
Grp Sat Flow(s),veh/h/ln	1111	0	1619	1252	1863	1554	1774	1695	1541	1774	1695	1832
Q Serve(g_s), s	1.6	0.0	4.9	37.2	1.3	9.3	3.4	20.6	14.1	6.4	18.2	18.2
Cycle Q Clear(g_c), s	2.9	0.0	4.9	42.1	1.3	9.3	3.4	20.6	14.1	6.4	18.2	18.2
Prop In Lane	1.00		0.82	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	558	0	732	577	842	703	76	1791	543	140	1317	711
V/C Ratio(X)	0.05	0.00	0.18	0.82	0.05	0.31	0.78	0.67	0.50	0.80	0.58	0.58
Avail Cap(c_a), veh/h	692	0	927	728	1067	890	155	1791	543	224	1317	711
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.6	0.0	16.8	29.3	15.8	18.0	48.8	28.3	26.2	46.6	24.8	24.8
Incr Delay (d2), s/veh	0.0	0.0	0.1	6.0	0.0	0.3	15.3	2.0	3.2	9.9	1.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	2.2	13.8	0.7	4.0	2.0	10.0	6.5	3.5	8.8	9.8
LnGrp Delay(d), s/veh	16.6	0.0	16.9	35.3	15.8	18.2	64.1	30.3	29.4	56.6	26.7	28.2
LnGrp LOS	B		B	D	B	B	E	C	C	E	C	C
Approach Vol, veh/h		159			733			1528			1284	
Approach Delay, s/veh		16.9			29.1			31.4			29.8	
Approach LOS		B			C			C			C	

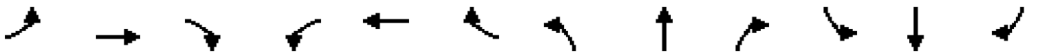
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.1	40.3		50.6	8.4	44.0		50.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	36.0		59.0	9.0	40.0		59.0
Max Q Clear Time (g_c+I1), s	8.4	22.6		6.9	5.4	20.2		44.1
Green Ext Time (p_c), s	0.1	7.5		1.0	0.0	7.7		2.5

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		29.8	
HCM 2010 LOS		C	

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	174	0	0	144	697	40
Future Volume (veh/h)	174	0	0	144	697	40
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	181	0	0	150	726	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2340	0	0	2340	1083	343
Arrive On Green	0.65	0.00	0.00	0.65	0.21	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	181	0	0	150	726	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	1.1	0.0	0.0	0.9	8.1	0.0
Cycle Q Clear(g_c), s	1.1	0.0	0.0	0.9	8.1	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2340	0	0	2340	1083	343
V/C Ratio(X)	0.08	0.00	0.00	0.06	0.67	0.00
Avail Cap(c_a), veh/h	2340	0	0	2340	5954	1884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	3.8	0.0	0.0	3.8	22.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	0.0	0.5	3.8	0.0
LnGrp Delay(d), s/veh	3.9	0.0	0.0	3.9	22.7	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	181			150	726	
Approach Delay, s/veh	3.9			3.9	22.7	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		44.0				44.0		17.1
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		40.0				40.0		72.0
Max Q Clear Time (g_c+I1), s		3.1				2.9		10.1
Green Ext Time (p_c), s		1.1				0.9		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	274	776	111	497	1282	185	198	766	392	215	576	65
Future Volume (vph)	274	776	111	497	1282	185	198	766	392	215	576	65
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.99		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.99	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3467	5136	1496	3467	5003		1626	3207	1455	1537	4745	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.91	
Satd. Flow (perm)	3467	5136	1496	3467	5003		1626	3012	1455	1537	4322	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	291	826	118	529	1364	197	211	815	417	229	613	69
RTOR Reduction (vph)	0	0	90	0	16	0	0	3	32	0	10	0
Lane Group Flow (vph)	291	826	28	529	1546	0	190	875	343	206	695	0
Confl. Peds. (#/hr)	18		23	23		18	23					23
Confl. Bikes (#/hr)			2			6						1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pt+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	2 3	1	6	
Permitted Phases			4									
Actuated Green, G (s)	11.0	28.2	28.2	21.8	39.0		18.5	54.5	61.8	17.6	52.7	
Effective Green, g (s)	11.0	28.2	28.2	21.8	39.0		18.5	54.5	61.8	17.6	52.7	
Actuated g/C Ratio	0.09	0.24	0.24	0.18	0.33		0.15	0.46	0.52	0.15	0.44	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	318	1210	352	631	1631		251	1402	751	226	1966	
v/s Ratio Prot	0.08	0.16		c0.15	c0.31		0.12	0.10	0.24	c0.13	0.05	
v/s Ratio Perm			0.02					c0.19			0.10	
v/c Ratio	0.92	0.68	0.08	0.84	0.95		0.76	0.62	0.46	0.91	0.35	
Uniform Delay, d1	53.8	41.6	35.6	47.2	39.3		48.4	24.8	18.3	50.2	22.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	29.5	1.6	0.1	9.5	12.0		12.3	0.9	0.4	36.6	0.1	
Delay (s)	83.3	43.2	35.7	56.7	51.3		60.7	25.6	18.7	86.8	22.3	
Level of Service	F	D	D	E	D		E	C	B	F	C	
Approach Delay (s/veh)		52.0			52.6			28.4			36.9	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	43.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	119.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	85.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	649	179	187	810	67	349	832	212	134	626	209
Future Volume (veh/h)	168	649	179	187	810	67	349	832	212	134	626	209
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	185	713	197	205	890	74	384	914	233	147	688	230
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	216	982	632	236	1023	595	459	1244	750	177	1124	477
Arrive On Green	0.12	0.27	0.27	0.13	0.29	0.29	0.13	0.35	0.35	0.10	0.31	0.31
Sat Flow, veh/h	1792	3574	1531	1792	3574	1528	3476	3574	1548	1792	3574	1516
Grp Volume(v), veh/h	185	713	197	205	890	74	384	914	233	147	688	230
Grp Sat Flow(s),veh/h/ln	1792	1787	1531	1792	1787	1528	1738	1787	1548	1792	1787	1516
Q Serve(g_s), s	11.1	19.7	9.6	12.2	25.8	3.4	11.8	24.5	10.1	8.8	17.8	13.4
Cycle Q Clear(g_c), s	11.1	19.7	9.6	12.2	25.8	3.4	11.8	24.5	10.1	8.8	17.8	13.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	216	982	632	236	1023	595	459	1244	750	177	1124	477
V/C Ratio(X)	0.86	0.73	0.31	0.87	0.87	0.12	0.84	0.73	0.31	0.83	0.61	0.48
Avail Cap(c_a), veh/h	279	1113	688	295	1146	648	605	1244	750	230	1124	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	35.9	22.0	46.5	37.0	21.7	46.2	31.2	17.4	48.3	31.8	30.2
Incr Delay (d2), s/veh	18.2	2.1	0.3	19.5	6.9	0.1	7.7	3.9	1.1	17.8	2.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	10.0	4.1	7.3	13.7	1.5	6.1	12.7	4.5	5.2	9.2	6.1
LnGrp Delay(d), s/veh	65.3	37.9	22.3	66.0	43.9	21.8	53.9	35.1	18.5	66.1	34.3	33.7
LnGrp LOS	E	D	C	E	D	C	D	D	B	E	C	C
Approach Vol, veh/h		1095			1169			1531			1065	
Approach Delay, s/veh		39.7			46.4			37.3			38.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	42.0	18.4	34.0	18.4	38.3	17.2	35.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	38.0	18.0	34.0	19.0	33.0	17.0	35.0
Max Q Clear Time (g_c+I1), s	10.8	26.5	14.2	21.7	13.8	19.8	13.1	27.8
Green Ext Time (p_c), s	0.1	5.4	0.2	4.2	0.7	4.4	0.2	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.3
HCM 2010 LOS	D

FULLERTON STATION - 2015 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	718	160	163	482	79	124	1007	116	240	1330	25
Future Volume (veh/h)	44	718	160	163	482	79	124	1007	116	240	1330	25
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	45	740	165	168	497	81	128	1038	120	247	1371	26
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	285	818	182	230	1035	168	203	1298	150	294	1581	30
Arrive On Green	0.03	0.28	0.28	0.08	0.34	0.34	0.06	0.40	0.40	0.10	0.44	0.44
Sat Flow, veh/h	1792	2906	648	1792	3080	500	1792	3229	373	1792	3587	68
Grp Volume(v), veh/h	45	455	450	168	287	291	128	574	584	247	683	714
Grp Sat Flow(s),veh/h/ln	1792	1787	1767	1792	1787	1793	1792	1787	1814	1792	1787	1868
Q Serve(g_s), s	2.1	28.4	28.4	7.4	14.7	14.9	4.8	32.8	32.8	8.9	40.0	40.1
Cycle Q Clear(g_c), s	2.1	28.4	28.4	7.4	14.7	14.9	4.8	32.8	32.8	8.9	40.0	40.1
Prop In Lane	1.00		0.37	1.00		0.28	1.00		0.21	1.00		0.04
Lane Grp Cap(c), veh/h	285	503	497	230	600	602	203	719	730	294	788	823
V/C Ratio(X)	0.16	0.90	0.90	0.73	0.48	0.48	0.63	0.80	0.80	0.84	0.87	0.87
Avail Cap(c_a), veh/h	299	541	535	239	633	635	223	719	730	352	788	823
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.7	40.1	40.1	29.4	30.4	30.4	25.9	30.5	30.5	24.3	29.3	29.3
Incr Delay (d2), s/veh	0.3	18.0	18.2	10.4	0.6	0.6	4.9	9.1	9.0	14.4	12.3	11.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	16.5	16.4	4.3	7.4	7.4	2.6	17.9	18.2	5.6	22.4	23.4
LnGrp Delay(d), s/veh	29.0	58.1	58.3	39.8	31.0	31.0	30.8	39.5	39.5	38.6	41.6	41.2
LnGrp LOS	C	E	E	D	C	C	C	D	D	D	D	D
Approach Vol, veh/h		950			746			1286			1644	
Approach Delay, s/veh		56.8			33.0			38.6			41.0	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	50.5	13.4	36.6	10.7	55.0	7.1	42.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	44.0	10.0	35.0	8.0	51.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	10.9	34.8	9.4	30.4	6.8	42.1	4.1	16.9
Green Ext Time (p_c), s	0.3	4.9	0.0	2.2	0.0	5.7	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	640	76	154	310	41	54	1014	215	164	1364	151
Future Volume (veh/h)	170	640	76	154	310	41	54	1014	215	164	1364	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	674	80	162	326	43	57	1067	226	173	1436	159
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	745	88	234	710	93	149	1686	742	286	1650	181
Arrive On Green	0.09	0.23	0.23	0.09	0.23	0.23	0.03	0.48	0.48	0.07	0.51	0.51
Sat Flow, veh/h	1774	3181	377	1774	3139	410	1774	3539	1557	1774	3211	353
Grp Volume(v), veh/h	179	375	379	162	182	187	57	1067	226	173	786	809
Grp Sat Flow(s),veh/h/ln	1774	1770	1788	1774	1770	1780	1774	1770	1557	1774	1770	1794
Q Serve(g_s), s	8.9	24.0	24.1	8.1	10.4	10.6	1.9	26.4	10.4	5.6	45.4	46.6
Cycle Q Clear(g_c), s	8.9	24.0	24.1	8.1	10.4	10.6	1.9	26.4	10.4	5.6	45.4	46.6
Prop In Lane	1.00		0.21	1.00		0.23	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	365	414	419	234	400	403	149	1686	742	286	909	922
V/C Ratio(X)	0.49	0.90	0.91	0.69	0.46	0.46	0.38	0.63	0.30	0.61	0.86	0.88
Avail Cap(c_a), veh/h	396	440	444	249	409	412	159	1686	742	381	909	922
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	43.4	43.5	33.2	39.0	39.0	24.1	22.9	18.7	18.4	24.8	25.1
Incr Delay (d2), s/veh	1.0	21.2	21.3	7.4	0.8	0.8	1.6	1.8	1.1	2.1	10.7	11.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	14.2	14.4	4.4	5.2	5.3	1.0	13.3	4.7	2.9	24.8	25.9
LnGrp Delay(d), s/veh	31.6	64.6	64.8	40.6	39.8	39.9	25.7	24.7	19.8	20.4	35.5	36.7
LnGrp LOS	C	E	E	D	D	D	C	C	B	C	D	D
Approach Vol, veh/h		933			531			1350			1768	
Approach Delay, s/veh		58.3			40.1			23.9			34.6	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	59.6	14.1	31.3	7.4	64.0	15.0	30.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	50.0	11.0	29.0	4.0	60.0	13.0	27.0
Max Q Clear Time (g_c+I1), s	7.6	28.4	10.1	26.1	3.9	48.6	10.9	12.6
Green Ext Time (p_c), s	0.2	8.8	0.0	1.3	0.0	7.8	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	43	1053	91	114	618	4	49	62	78	14	96	20
Future Volume (veh/h)	43	1053	91	114	618	4	49	62	78	14	96	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	0.99		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	46	1132	98	123	665	4	53	67	84	15	103	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	475	1920	166	265	2106	13	435	582	480	93	528	492
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	772	3322	287	456	3642	22	1269	1881	1552	116	1705	1591
Grp Volume(v), veh/h	46	608	622	123	326	343	53	67	84	118	0	22
Grp Sat Flow(s),veh/h/ln	772	1787	1822	456	1787	1877	1269	1881	1552	1821	0	1591
Q Serve(g_s), s	2.3	15.5	15.5	16.8	6.7	6.7	2.3	1.8	2.8	0.0	0.0	0.7
Cycle Q Clear(g_c), s	9.0	15.5	15.5	32.4	6.7	6.7	5.6	1.8	2.8	3.3	0.0	0.7
Prop In Lane	1.00		0.16	1.00		0.01	1.00		1.00	0.13		1.00
Lane Grp Cap(c), veh/h	475	1033	1053	265	1033	1085	435	582	480	620	0	492
V/C Ratio(X)	0.10	0.59	0.59	0.46	0.32	0.32	0.12	0.12	0.17	0.19	0.00	0.04
Avail Cap(c_a), veh/h	1005	2262	2306	578	2262	2376	435	582	480	620	0	492
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.1	9.6	9.6	20.0	7.7	7.7	20.1	17.6	17.9	18.1	0.0	17.2
Incr Delay (d2), s/veh	0.1	0.5	0.5	1.3	0.2	0.2	0.6	0.4	0.8	0.7	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	7.6	7.9	2.2	3.3	3.5	0.9	1.0	1.3	1.8	0.0	0.3
LnGrp Delay(d), s/veh	10.2	10.1	10.1	21.2	7.9	7.9	20.7	18.0	18.7	18.8	0.0	17.4
LnGrp LOS	B	B	B	C	A	A	C	B	B	B		B
Approach Vol, veh/h		1276			792			204			140	
Approach Delay, s/veh		10.1			10.0			19.0			18.5	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		26.0		45.1		26.0		45.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		22.0		90.0		22.0		90.0
Max Q Clear Time (g_c+I1), s		7.6		17.5		5.3		34.4
Green Ext Time (p_c), s		0.7		11.2		0.6		6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	929	72	105	420	16	66	169	131	34	231	33
Future Volume (veh/h)	55	929	72	105	420	16	66	169	131	34	231	33
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	60	1010	78	114	457	17	72	184	142	37	251	36
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	452	1724	746	223	1724	744	454	811	674	468	811	674
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	922	3574	1546	521	3574	1543	1095	1881	1562	1056	1881	1562
Grp Volume(v), veh/h	60	1010	78	114	457	17	72	184	142	37	251	36
Grp Sat Flow(s),veh/h/ln	922	1787	1546	521	1787	1543	1095	1881	1562	1056	1881	1562
Q Serve(g_s), s	3.8	18.9	2.5	18.7	7.0	0.5	4.3	5.7	5.3	2.1	8.1	1.2
Cycle Q Clear(g_c), s	10.9	18.9	2.5	37.6	7.0	0.5	12.4	5.7	5.3	7.8	8.1	1.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	452	1724	746	223	1724	744	454	811	674	468	811	674
V/C Ratio(X)	0.13	0.59	0.10	0.51	0.27	0.02	0.16	0.23	0.21	0.08	0.31	0.05
Avail Cap(c_a), veh/h	724	2775	1201	376	2775	1198	454	811	674	468	811	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	17.3	13.1	30.9	14.2	12.6	21.4	16.6	16.5	19.1	17.3	15.3
Incr Delay (d2), s/veh	0.1	0.3	0.1	1.8	0.1	0.0	0.7	0.6	0.7	0.3	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	9.3	1.1	2.8	3.4	0.2	1.4	3.1	2.4	0.7	4.4	0.6
LnGrp Delay(d), s/veh	17.6	17.6	13.1	32.7	14.3	12.6	22.1	17.3	17.2	19.4	18.3	15.5
LnGrp LOS	B	B	B	C	B	B	C	B	B	B	B	B
Approach Vol, veh/h		1148			588			398			324	
Approach Delay, s/veh		17.3			17.8			18.1			18.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.0		48.7		44.0		48.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s		14.4		20.9		10.1		39.6
Green Ext Time (p_c), s		1.9		10.0		1.9		5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	13	7	370	35	6	379
Future Vol, veh/h	13	7	370	35	6	379
Conflicting Peds, #/hr	0	0	0	22	22	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	15	8	435	41	7	446

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	917	457	0	0	498	0
Stage 1	457	-	-	-	-	-
Stage 2	460	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	303	606	-	-	1071	-
Stage 1	640	-	-	-	-	-
Stage 2	638	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	295	595	-	-	1051	-
Mov Cap-2 Maneuver	295	-	-	-	-	-
Stage 1	628	-	-	-	-	-
Stage 2	634	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	15.5	0	0.1
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	295	595	1051	-
HCM Lane V/C Ratio	-	-	0.052	0.014	0.007	-
HCM Control Delay (s/veh)	-	-	17.9	11.1	8.4	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.2	0	0	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	4	8	14	21	11	9	17	282	16	13	254	6
Future Vol, veh/h	4	8	14	21	11	9	17	282	16	13	254	6
Conflicting Peds, #/hr	3	0	1	1	0	3	22	0	22	22	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	4	9	15	23	12	10	19	310	18	14	279	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	700	717	302	694	706	335	308	0	0	350	0	0
Stage 1	329	329	-	370	370	-	-	-	-	-	-	-
Stage 2	371	388	-	324	336	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	353	354	735	356	359	705	1247	-	-	1203	-	-
Stage 1	682	645	-	648	618	-	-	-	-	-	-	-
Stage 2	647	607	-	686	640	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	324	332	721	328	337	690	1224	-	-	1181	-	-
Mov Cap-2 Maneuver	324	332	-	328	337	-	-	-	-	-	-	-
Stage 1	659	626	-	626	597	-	-	-	-	-	-	-
Stage 2	614	586	-	654	621	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	13	15.7	0.4	0.4
HCM LOS	B	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1224	-	-	329	721	331	690	1181	-	-
HCM Lane V/C Ratio	0.015	-	-	0.04	0.021	0.106	0.014	0.012	-	-
HCM Control Delay (s/veh)	8	-	-	16.4	10.1	17.2	10.3	8.1	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0.1	0.4	0	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	251	0	0	109	39	3	202	25	99	66	157
Future Volume (veh/h)	10	251	0	0	109	39	3	202	25	99	66	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	12	299	0	0	130	46	4	240	30	118	79	187
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	254	375	319	90	375	303	844	1302	1070	808	1302	1070
Arrive On Green	0.20	0.20	0.00	0.00	0.20	0.20	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1164	1863	1583	1076	1863	1505	1100	1863	1531	1098	1863	1531
Grp Volume(v), veh/h	12	299	0	0	130	46	4	240	30	118	79	187
Grp Sat Flow(s),veh/h/ln	1164	1863	1583	1076	1863	1505	1100	1863	1531	1098	1863	1531
Q Serve(g_s), s	0.7	12.2	0.0	0.0	4.8	2.0	0.1	3.6	0.5	3.3	1.1	3.4
Cycle Q Clear(g_c), s	5.5	12.2	0.0	0.0	4.8	2.0	1.2	3.6	0.5	6.9	1.1	3.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	375	319	90	375	303	844	1302	1070	808	1302	1070
V/C Ratio(X)	0.05	0.80	0.00	0.00	0.35	0.15	0.00	0.18	0.03	0.15	0.06	0.17
Avail Cap(c_a), veh/h	834	1302	1107	625	1302	1052	844	1302	1070	808	1302	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.8	30.4	0.0	0.0	27.5	26.4	4.0	4.2	3.7	5.4	3.8	4.1
Incr Delay (d2), s/veh	0.1	3.9	0.0	0.0	0.5	0.2	0.0	0.3	0.0	0.4	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	6.7	0.0	0.0	2.5	0.8	0.0	1.9	0.2	1.1	0.6	1.5
LnGrp Delay(d), s/veh	29.9	34.4	0.0	0.0	28.0	26.6	4.0	4.5	3.8	5.7	3.9	4.5
LnGrp LOS	C	C			C	C	A	A	A	A	A	A
Approach Vol, veh/h		311			176			274			384	
Approach Delay, s/veh		34.2			27.7			4.4			4.8	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		20.1		60.0		20.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s		5.6		14.2		8.9		6.8
Green Ext Time (p_c), s		1.7		1.9		1.7		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	91	1349	23	45	591	50	39	56	128	72	38	62
Future Volume (veh/h)	91	1349	23	45	591	50	39	56	128	72	38	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	1451	25	48	635	54	42	60	138	77	41	67
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	413	2150	37	218	1899	160	575	737	608	530	737	607
Arrive On Green	0.05	0.42	0.42	0.03	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1774	5144	89	1774	4759	401	1264	1863	1537	1167	1863	1534
Grp Volume(v), veh/h	98	956	520	48	451	238	42	60	138	77	41	67
Grp Sat Flow(s),veh/h/ln	1774	1695	1842	1774	1695	1770	1264	1863	1537	1167	1863	1534
Q Serve(g_s), s	2.5	17.9	17.9	1.2	7.2	7.3	1.7	1.6	4.7	3.5	1.1	2.2
Cycle Q Clear(g_c), s	2.5	17.9	17.9	1.2	7.2	7.3	2.7	1.6	4.7	5.0	1.1	2.2
Prop In Lane	1.00		0.05	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	1417	770	218	1353	706	575	737	608	530	737	607
V/C Ratio(X)	0.24	0.67	0.67	0.22	0.33	0.34	0.07	0.08	0.23	0.15	0.06	0.11
Avail Cap(c_a), veh/h	592	2899	1575	386	2813	1468	575	737	608	530	737	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.9	18.5	18.5	15.0	16.3	16.3	15.5	14.8	15.7	16.4	14.6	15.0
Incr Delay (d2), s/veh	0.3	0.6	1.0	0.5	0.1	0.3	0.2	0.2	0.9	0.6	0.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.5	9.3	0.6	3.4	3.6	0.6	0.8	2.1	1.2	0.6	1.0
LnGrp Delay(d), s/veh	13.2	19.0	19.5	15.5	16.5	16.6	15.7	15.0	16.6	16.9	14.8	15.3
LnGrp LOS	B	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1574			737			240			185	
Approach Delay, s/veh		18.8			16.4			16.0			15.9	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	6.6	36.7		35.0	8.1	35.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	12.0	65.0
Max Q Clear Time (g_c+I1), s		6.7	3.2	19.9		7.0	4.5	9.3
Green Ext Time (p_c), s		0.9	0.0	12.8		0.7	0.1	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	2.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	44	989	87	34	684	4	8	5	54	3	15	46
Future Vol, veh/h	44	989	87	34	684	4	8	5	54	3	15	46
Conflicting Peds, #/hr	1	0	5	5	0	1	2	0	3	3	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	45	1020	90	35	705	4	8	5	56	3	15	47

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	710	0	0	1115	0	0	1592	1940	563	1384	1983	358
Stage 1	-	-	-	-	-	-	1160	1160	-	778	778	-
Stage 2	-	-	-	-	-	-	432	780	-	606	1205	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	892	-	-	628	-	-	73	65	472	104	61	641
Stage 1	-	-	-	-	-	-	210	270	-	358	407	-
Stage 2	-	-	-	-	-	-	575	406	-	453	257	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	891	-	-	625	-	-	48	58	469	79	54	639
Mov Cap-2 Maneuver	-	-	-	-	-	-	48	58	-	79	54	-
Stage 1	-	-	-	-	-	-	199	255	-	340	384	-
Stage 2	-	-	-	-	-	-	481	383	-	370	243	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.5	30.3	40.6
HCM LOS			D	E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	51	469	891	-	-	625	-	-	165
HCM Lane V/C Ratio	0.263	0.119	0.051	-	-	0.056	-	-	0.4
HCM Control Delay (s/veh)	99.1	13.7	9.3	-	-	11.1	-	-	40.6
HCM Lane LOS	F	B	A	-	-	B	-	-	E
HCM 95th %tile Q(veh)	0.9	0.4	0.2	-	-	0.2	-	-	1.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	979	55	22	447	19	7	14	16	24	36	27
Future Volume (veh/h)	50	979	55	22	447	19	7	14	16	24	36	27
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	54	1064	60	24	486	21	8	15	17	26	39	29
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	468	1549	687	245	1490	660	249	436	579	285	399	579
Arrive On Green	0.04	0.43	0.43	0.02	0.42	0.42	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1792	3574	1584	1792	3574	1584	484	1200	1595	575	1098	1595
Grp Volume(v), veh/h	54	1064	60	24	486	21	23	0	17	65	0	29
Grp Sat Flow(s),veh/h/ln	1792	1787	1584	1792	1787	1584	1685	0	1595	1673	0	1595
Q Serve(g_s), s	1.1	15.9	1.5	0.5	6.1	0.5	0.0	0.0	0.5	0.0	0.0	0.8
Cycle Q Clear(g_c), s	1.1	15.9	1.5	0.5	6.1	0.5	0.5	0.0	0.5	1.5	0.0	0.8
Prop In Lane	1.00		1.00	1.00		1.00	0.35		1.00	0.40		1.00
Lane Grp Cap(c), veh/h	468	1549	687	245	1490	660	685	0	579	684	0	579
V/C Ratio(X)	0.12	0.69	0.09	0.10	0.33	0.03	0.03	0.00	0.03	0.10	0.00	0.05
Avail Cap(c_a), veh/h	617	4112	1823	423	4112	1822	685	0	579	684	0	579
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.4	15.1	11.0	12.3	13.0	11.4	13.6	0.0	13.5	13.9	0.0	13.6
Incr Delay (d2), s/veh	0.1	0.5	0.1	0.2	0.1	0.0	0.1	0.0	0.1	0.3	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	7.8	0.6	0.3	3.0	0.2	0.3	0.0	0.2	0.8	0.0	0.4
LnGrp Delay(d), s/veh	10.5	15.6	11.1	12.5	13.1	11.4	13.6	0.0	13.6	14.1	0.0	13.8
LnGrp LOS	B	B	B	B	B	B	B		B	B		B
Approach Vol, veh/h		1178			531			40			94	
Approach Delay, s/veh		15.2			13.0			13.6			14.0	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	5.4	32.6		28.0	6.5	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	8.0	76.0		24.0	8.0	76.0
Max Q Clear Time (g_c+I1), s		2.5	2.5	17.9		3.5	3.1	8.1
Green Ext Time (p_c), s		0.1	0.0	10.8		0.4	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	196	1447	479	421	1466	106	251	511	245	166	1037	187
Future Volume (veh/h)	196	1447	479	421	1466	106	251	511	245	166	1037	187
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	204	1507	499	439	1527	110	261	532	255	173	1080	195
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	1512	492	459	2326	722	287	1354	419	231	1271	393
Arrive On Green	0.08	0.40	0.40	0.13	0.46	0.46	0.08	0.27	0.27	0.07	0.25	0.25
Sat Flow, veh/h	3442	3780	1231	3442	5085	1578	3442	5085	1574	3442	5085	1574
Grp Volume(v), veh/h	204	1349	657	439	1527	110	261	532	255	173	1080	195
Grp Sat Flow(s),veh/h/ln	1721	1695	1621	1721	1695	1578	1721	1695	1574	1721	1695	1574
Q Serve(g_s), s	7.0	47.6	48.0	15.2	27.9	4.9	9.0	10.3	17.0	5.9	24.3	12.7
Cycle Q Clear(g_c), s	7.0	47.6	48.0	15.2	27.9	4.9	9.0	10.3	17.0	5.9	24.3	12.7
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	261	1356	648	459	2326	722	287	1354	419	231	1271	393
V/C Ratio(X)	0.78	0.99	1.01	0.96	0.66	0.15	0.91	0.39	0.61	0.75	0.85	0.50
Avail Cap(c_a), veh/h	315	1356	648	459	2326	722	287	1354	419	315	1271	393
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	35.9	36.0	51.7	25.2	19.0	54.6	36.1	38.5	55.0	42.9	38.5
Incr Delay (d2), s/veh	10.0	23.1	38.7	31.1	0.7	0.1	30.9	0.9	6.4	6.5	7.2	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	26.5	28.4	9.2	13.2	2.1	5.5	4.9	8.1	3.0	12.2	6.0
LnGrp Delay(d), s/veh	64.5	59.0	74.7	82.8	25.9	19.1	85.5	36.9	45.0	61.5	50.1	42.9
LnGrp LOS	E	E	F	F	C	B	F	D	D	E	D	D
Approach Vol, veh/h		2210			2076			1048			1448	
Approach Delay, s/veh		64.2			37.6			51.0			50.5	
Approach LOS		E			D			D			D	

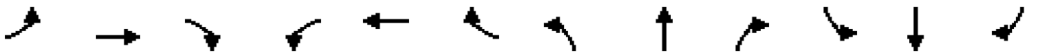
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	36.0	20.0	52.0	14.0	34.0	13.1	58.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	29.0	16.0	48.0	10.0	30.0	11.0	53.0
Max Q Clear Time (g_c+I1), s	7.9	19.0	17.2	50.0	11.0	26.3	9.0	29.9
Green Ext Time (p_c), s	0.1	3.0	0.0	0.0	0.0	2.4	0.1	11.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	316	1196	222	249	1108	168	189	699	88	421	1236	287
Future Volume (veh/h)	316	1196	222	249	1108	168	189	699	88	421	1236	287
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	329	1246	231	259	1154	175	197	728	92	439	1288	299
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	358	1535	285	315	1257	382	238	1400	424	509	1453	337
Arrive On Green	0.20	0.35	0.35	0.09	0.24	0.24	0.07	0.27	0.27	0.15	0.35	0.35
Sat Flow, veh/h	1792	4339	804	3476	5136	1561	3476	5136	1556	3476	4146	962
Grp Volume(v), veh/h	329	983	494	259	1154	175	197	728	92	439	1063	524
Grp Sat Flow(s),veh/h/ln	1792	1712	1719	1738	1712	1561	1738	1712	1556	1738	1712	1684
Q Serve(g_s), s	21.1	30.5	30.5	8.6	25.6	11.2	6.5	14.1	5.3	14.4	34.2	34.3
Cycle Q Clear(g_c), s	21.1	30.5	30.5	8.6	25.6	11.2	6.5	14.1	5.3	14.4	34.2	34.3
Prop In Lane	1.00		0.47	1.00		1.00	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	358	1211	608	315	1257	382	238	1400	424	509	1200	590
V/C Ratio(X)	0.92	0.81	0.81	0.82	0.92	0.46	0.83	0.52	0.22	0.86	0.89	0.89
Avail Cap(c_a), veh/h	398	1288	647	327	1273	387	238	1400	424	624	1200	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	34.3	34.3	52.3	43.0	37.6	53.8	36.1	32.9	48.8	35.8	35.8
Incr Delay (d2), s/veh	24.8	3.9	7.4	15.0	10.7	0.9	21.1	1.4	1.2	10.2	9.8	17.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	15.0	15.6	4.8	13.3	4.9	3.8	6.9	2.4	7.7	17.7	18.8
LnGrp Delay(d), s/veh	70.7	38.1	41.7	67.3	53.7	38.4	74.9	37.5	34.1	59.0	45.6	53.6
LnGrp LOS	E	D	D	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		1806			1588			1017			2026	
Approach Delay, s/veh		45.0			54.2			44.4			50.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	35.9	14.6	45.4	12.0	45.0	27.4	32.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	28.0	11.0	44.0	8.0	41.0	26.0	29.0
Max Q Clear Time (g_c+I1), s	16.4	16.1	10.6	32.5	8.5	36.3	23.1	27.6
Green Ext Time (p_c), s	0.7	3.8	0.0	7.0	0.0	3.5	0.3	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	43	83	29	706	142	128	39	826	355	41	1439	83
Future Volume (vph)	43	83	29	706	142	128	39	826	355	41	1439	83
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1881	1599	1698	1730	1565	1787	5136	1571	1787	5086	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1881	1599	1698	1730	1565	1787	5136	1571	1787	5086	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	45	86	30	735	148	133	41	860	370	43	1499	86
RTOR Reduction (vph)	0	0	28	0	0	92	0	0	222	0	5	0
Lane Group Flow (vph)	45	86	2	441	442	41	41	860	148	43	1580	0
Confl. Peds. (#/hr)	3					3	2		2	2		2
Confl. Bikes (#/hr)						5			3			4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	8.3	8.3	8.3	31.1	31.1	31.1	4.9	40.3	40.3	5.0	40.4	
Effective Green, g (s)	8.3	8.3	8.3	31.1	31.1	31.1	4.9	40.3	40.3	5.0	40.4	
Actuated g/C Ratio	0.08	0.08	0.08	0.31	0.31	0.31	0.05	0.40	0.40	0.05	0.40	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	147	155	131	524	534	483	86	2055	628	88	2040	
v/s Ratio Prot	0.03	c0.05		c0.26	0.26		0.02	0.17		c0.02	c0.31	
v/s Ratio Perm			0.00			0.03			0.09			
v/c Ratio	0.31	0.55	0.02	0.84	0.83	0.09	0.48	0.42	0.24	0.49	0.77	
Uniform Delay, d1	43.5	44.4	42.5	32.5	32.3	24.7	46.7	21.8	20.0	46.6	26.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	4.3	0.1	11.7	10.2	0.1	4.1	0.6	0.9	4.2	1.9	
Delay (s)	44.7	48.7	42.5	44.2	42.5	24.8	50.8	22.4	20.9	50.8	28.1	
Level of Service	D	D	D	D	D	C	D	C	C	D	C	
Approach Delay (s/veh)		46.4			40.9			22.9			28.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	100.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	26	191	78	65	156	262	125	865	98	446	1551	22
Future Volume (veh/h)	26	191	78	65	156	262	125	865	98	446	1551	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	29	212	87	72	173	291	139	961	109	496	1723	24
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	160	352	285	153	352	552	168	1753	199	576	2199	950
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.09	0.54	0.54	0.17	0.62	0.62
Sat Flow, veh/h	927	1881	1523	1080	1881	1532	1792	3228	366	3476	3574	1544
Grp Volume(v), veh/h	29	212	87	72	173	291	139	532	538	496	1723	24
Grp Sat Flow(s),veh/h/ln	927	1881	1523	1080	1881	1532	1792	1787	1807	1738	1787	1544
Q Serve(g_s), s	3.3	11.9	5.7	7.6	9.5	17.5	8.8	22.4	22.4	16.0	41.3	0.7
Cycle Q Clear(g_c), s	12.8	11.9	5.7	19.5	9.5	17.5	8.8	22.4	22.4	16.0	41.3	0.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	160	352	285	153	352	552	168	970	981	576	2199	950
V/C Ratio(X)	0.18	0.60	0.30	0.47	0.49	0.53	0.83	0.55	0.55	0.86	0.78	0.03
Avail Cap(c_a), veh/h	163	359	290	157	359	557	233	970	981	753	2199	950
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	43.0	40.4	51.9	42.0	29.8	51.4	17.2	17.2	46.8	16.5	8.7
Incr Delay (d2), s/veh	0.5	2.7	0.6	2.2	1.1	0.9	16.0	2.2	2.2	8.0	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	6.5	2.4	2.4	5.1	7.5	5.1	11.5	11.7	8.4	21.0	0.3
LnGrp Delay(d), s/veh	48.3	45.7	41.0	54.1	43.0	30.7	67.4	19.4	19.4	54.8	19.4	8.7
LnGrp LOS	D	D	D	D	D	C	E	B	B	D	B	A
Approach Vol, veh/h		328			536			1209			2243	
Approach Delay, s/veh		44.7			37.8			24.9			27.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	23.1	66.7		25.6	14.8	75.0		25.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	61.0		22.0	15.0	71.0		22.0
Max Q Clear Time (g_c+I1), s	18.0	24.4		14.8	10.8	43.3		21.5
Green Ext Time (p_c), s	1.1	8.4		0.9	0.1	16.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	146	835	66	166	590	100	34	817	225	138	1404	83
Future Volume (veh/h)	146	835	66	166	590	100	34	817	225	138	1404	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	154	879	69	175	621	105	36	860	237	145	1478	87
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	295	941	74	213	1001	420	131	1227	338	268	1650	97
Arrive On Green	0.08	0.28	0.28	0.08	0.28	0.28	0.02	0.45	0.45	0.06	0.48	0.48
Sat Flow, veh/h	1792	3340	262	1792	3574	1500	1792	2743	755	1792	3416	200
Grp Volume(v), veh/h	154	470	478	175	621	105	36	560	537	145	769	796
Grp Sat Flow(s),veh/h/ln	1792	1787	1815	1792	1787	1500	1792	1787	1711	1792	1787	1829
Q Serve(g_s), s	7.1	30.3	30.3	8.2	17.9	6.4	1.3	29.8	29.8	5.0	46.1	47.0
Cycle Q Clear(g_c), s	7.1	30.3	30.3	8.2	17.9	6.4	1.3	29.8	29.8	5.0	46.1	47.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.44	1.00		0.11
Lane Grp Cap(c), veh/h	295	503	511	213	1001	420	131	799	765	268	863	883
V/C Ratio(X)	0.52	0.93	0.93	0.82	0.62	0.25	0.27	0.70	0.70	0.54	0.89	0.90
Avail Cap(c_a), veh/h	353	515	523	213	1001	420	150	799	765	313	863	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	41.3	41.3	31.6	37.0	32.9	25.6	26.3	26.3	20.6	27.7	27.9
Incr Delay (d2), s/veh	1.4	24.1	23.9	22.2	1.2	0.3	1.1	5.1	5.3	1.7	13.4	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	18.3	18.5	5.3	9.0	2.7	0.7	15.8	15.2	2.5	25.9	27.1
LnGrp Delay(d), s/veh	29.8	65.5	65.2	53.8	38.2	33.2	26.7	31.3	31.6	22.3	41.1	42.0
LnGrp LOS	C	E	E	D	D	C	C	C	C	C	D	D
Approach Vol, veh/h		1102			901			1133			1710	
Approach Delay, s/veh		60.4			40.7			31.3			39.9	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	56.8	13.0	37.2	6.8	61.0	13.2	37.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	51.0	9.0	34.0	4.0	57.0	13.0	30.0
Max Q Clear Time (g_c+I1), s	7.0	31.8	10.2	32.3	3.3	49.0	9.1	19.9
Green Ext Time (p_c), s	0.1	7.9	0.0	1.0	0.0	5.8	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	143	782	83	246	400	24	43	762	272	54	1279	50
Future Volume (veh/h)	143	782	83	246	400	24	43	762	272	54	1279	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	155	850	90	267	435	26	47	828	296	59	1390	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	389	905	393	296	1075	469	147	1633	706	262	1610	62
Arrive On Green	0.08	0.25	0.25	0.12	0.30	0.30	0.03	0.46	0.46	0.03	0.46	0.46
Sat Flow, veh/h	1792	3574	1552	1792	3574	1558	1792	3574	1546	1792	3503	136
Grp Volume(v), veh/h	155	850	90	267	435	26	47	828	296	59	708	736
Grp Sat Flow(s),veh/h/ln	1792	1787	1552	1792	1787	1558	1792	1787	1546	1792	1787	1852
Q Serve(g_s), s	7.5	27.4	5.4	12.5	11.4	1.4	1.6	19.2	15.1	2.1	41.6	41.9
Cycle Q Clear(g_c), s	7.5	27.4	5.4	12.5	11.4	1.4	1.6	19.2	15.1	2.1	41.6	41.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	389	905	393	296	1075	469	147	1633	706	262	821	851
V/C Ratio(X)	0.40	0.94	0.23	0.90	0.40	0.06	0.32	0.51	0.42	0.23	0.86	0.86
Avail Cap(c_a), veh/h	389	913	396	317	1126	491	161	1633	706	285	821	851
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	43.0	34.8	29.5	32.7	29.2	24.5	22.6	21.4	17.8	28.4	28.5
Incr Delay (d2), s/veh	0.7	16.9	0.3	26.4	0.2	0.0	1.2	1.1	1.8	0.4	11.5	11.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	15.6	2.4	8.3	5.7	0.6	0.9	9.7	6.8	1.0	23.1	24.0
LnGrp Delay(d), s/veh	29.7	59.8	35.1	55.9	32.9	29.2	25.7	23.7	23.3	18.2	39.9	39.9
LnGrp LOS	C	E	D	E	C	C	C	C	C	B	D	D
Approach Vol, veh/h		1095			728			1171			1503	
Approach Delay, s/veh		53.5			41.2			23.7			39.0	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	57.7	18.6	33.8	7.1	58.0	13.0	39.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	16.0	30.0	4.0	54.0	9.0	37.0
Max Q Clear Time (g_c+I1), s	4.1	21.2	14.5	29.4	3.6	43.9	9.5	13.4
Green Ext Time (p_c), s	0.0	7.8	0.1	0.4	0.0	6.8	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	7	14	54	33	15	21	31	1049	39	23	1547	38
Future Volume (veh/h)	7	14	54	33	15	21	31	1049	39	23	1547	38
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	8	15	58	35	16	23	33	1128	42	25	1663	41
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	41	58	243	51	14	243	241	2603	1161	385	2591	1129
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.02	0.73	0.73	0.02	0.72	0.72
Sat Flow, veh/h	0	384	1599	0	96	1599	1792	3574	1594	1792	3574	1558
Grp Volume(v), veh/h	23	0	58	51	0	23	33	1128	42	25	1663	41
Grp Sat Flow(s),veh/h/ln	384	0	1599	96	0	1599	1792	1787	1594	1792	1787	1558
Q Serve(g_s), s	0.0	0.0	3.8	0.0	0.0	1.5	0.6	14.9	0.9	0.4	28.4	0.9
Cycle Q Clear(g_c), s	18.0	0.0	3.8	18.0	0.0	1.5	0.6	14.9	0.9	0.4	28.4	0.9
Prop In Lane	0.35		1.00	0.69		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	99	0	243	66	0	243	241	2603	1161	385	2591	1129
V/C Ratio(X)	0.23	0.00	0.24	0.78	0.00	0.09	0.14	0.43	0.04	0.06	0.64	0.04
Avail Cap(c_a), veh/h	99	0	243	66	0	243	261	2603	1161	412	2591	1129
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	0.0	44.3	54.3	0.0	43.3	7.7	6.4	4.5	4.9	8.4	4.6
Incr Delay (d2), s/veh	1.2	0.0	0.5	43.3	0.0	0.2	0.3	0.5	0.1	0.1	1.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	1.7	2.4	0.0	0.7	0.3	7.4	0.4	0.2	14.3	0.4
LnGrp Delay(d), s/veh	45.3	0.0	44.8	97.6	0.0	43.5	8.0	6.9	4.6	5.0	9.6	4.7
LnGrp LOS	D		D	F		D	A	A	A	A	A	A
Approach Vol, veh/h		81			74			1203			1729	
Approach Delay, s/veh		44.9			80.8			6.9			9.5	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	90.4		22.0	6.7	90.0		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	86.0		18.0	4.0	86.0		18.0
Max Q Clear Time (g_c+I1), s	2.4	16.9		20.0	2.6	30.4		20.0
Green Ext Time (p_c), s	0.0	11.2		0.0	0.0	21.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	29	0	0	27	0	1092	10	0	1627	8
Future Vol, veh/h	0	0	29	0	0	27	0	1092	10	0	1627	8
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	5	5	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	31	0	0	29	0	1174	11	0	1749	9

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	875	-	-	587	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	294	0	0	455	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	294	-	-	455	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	18.7	13.5	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	294	455	-
HCM Lane V/C Ratio	-	0.106	0.064	-
HCM Control Delay (s/veh)	-	18.7	13.5	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.4	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	232	1019	293	117	420	113	91	914	170	203	1648	112
Future Volume (veh/h)	232	1019	293	117	420	113	91	914	170	203	1648	112
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	249	1096	315	126	452	122	98	983	183	218	1772	120
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	315	1350	403	184	805	344	152	1646	716	283	2443	165
Arrive On Green	0.09	0.26	0.26	0.05	0.23	0.23	0.04	0.46	0.46	0.08	0.50	0.50
Sat Flow, veh/h	3476	5136	1532	3476	3574	1528	3476	3574	1554	3476	4904	331
Grp Volume(v), veh/h	249	1096	315	126	452	122	98	983	183	218	1236	656
Grp Sat Flow(s),veh/h/ln	1738	1712	1532	1738	1787	1528	1738	1787	1554	1738	1712	1811
Q Serve(g_s), s	7.9	22.5	21.5	4.0	12.6	7.6	3.1	23.0	8.1	6.9	31.9	32.0
Cycle Q Clear(g_c), s	7.9	22.5	21.5	4.0	12.6	7.6	3.1	23.0	8.1	6.9	31.9	32.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	315	1350	403	184	805	344	152	1646	716	283	1706	902
V/C Ratio(X)	0.79	0.81	0.78	0.69	0.56	0.35	0.64	0.60	0.26	0.77	0.72	0.73
Avail Cap(c_a), veh/h	433	1508	450	247	858	367	216	1646	716	402	1706	902
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	38.8	38.4	52.3	38.6	36.7	52.9	22.6	18.5	50.6	22.2	22.2
Incr Delay (d2), s/veh	6.7	3.2	7.9	4.8	0.7	0.6	4.5	1.6	0.9	5.7	2.7	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	11.1	10.0	2.0	6.3	3.2	1.6	11.7	3.6	3.6	15.6	17.3
LnGrp Delay(d), s/veh	56.8	42.0	46.3	57.1	39.4	37.3	57.4	24.2	19.4	56.3	24.9	27.3
LnGrp LOS	E	D	D	E	D	D	E	C	B	E	C	C
Approach Vol, veh/h		1660			700			1264			2110	
Approach Delay, s/veh		45.0			42.2			26.1			28.9	
Approach LOS		D			D			C			C	

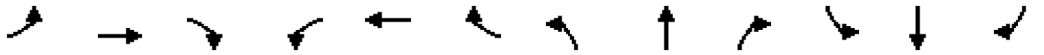
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.2	55.8	9.9	33.6	8.9	60.0	14.2	29.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	50.0	8.0	33.0	7.0	56.0	14.0	27.0
Max Q Clear Time (g_c+I1), s	8.9	25.0	6.0	24.5	5.1	34.0	9.9	14.6
Green Ext Time (p_c), s	0.3	8.0	0.1	5.1	0.0	13.7	0.3	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	151	302	130	79	1072	0	0	1557	552
Future Volume (veh/h)	0	0	0	151	302	130	79	1072	0	0	1557	552
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				159	318	137	83	1128	0	0	1639	581
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				221	440	197	134	4085	0	0	2713	930
Arrive On Green				0.12	0.12	0.12	0.04	0.80	0.00	0.00	0.73	0.73
Sat Flow, veh/h				1774	3539	1583	3442	5253	0	0	3893	1277
Grp Volume(v), veh/h				159	318	137	83	1128	0	0	1486	734
Grp Sat Flow(s),veh/h/ln				1774	1770	1583	1721	1695	0	0	1695	1612
Q Serve(g_s), s				9.5	9.6	9.2	2.6	6.2	0.0	0.0	23.5	25.1
Cycle Q Clear(g_c), s				9.5	9.6	9.2	2.6	6.2	0.0	0.0	23.5	25.1
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.79
Lane Grp Cap(c), veh/h				221	440	197	134	4085	0	0	2469	1174
V/C Ratio(X)				0.72	0.72	0.70	0.62	0.28	0.00	0.00	0.60	0.62
Avail Cap(c_a), veh/h				368	735	329	249	4085	0	0	2469	1174
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.6	46.7	46.5	52.4	2.8	0.0	0.0	7.3	7.5
Incr Delay (d2), s/veh				4.4	2.3	4.4	4.6	0.2	0.0	0.0	1.1	2.5
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.0	4.8	4.3	1.3	2.9	0.0	0.0	11.1	11.8
LnGrp Delay(d), s/veh				51.0	48.9	50.9	57.0	2.9	0.0	0.0	8.4	10.0
LnGrp LOS				D	D	D	E	A			A	B
Approach Vol, veh/h					614			1211			2220	
Approach Delay, s/veh					49.9			6.6			8.9	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		93.0			8.3	84.7		17.8
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		89.0			8.0	77.0		23.0
Max Q Clear Time (g_c+I1), s		8.2			4.6	27.1		11.6
Green Ext Time (p_c), s		10.1			0.1	28.4		2.2

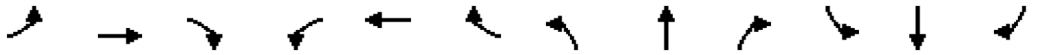
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	368	253	124	0	0	0	0	836	279	366	1297	0
Future Volume (veh/h)	368	253	124	0	0	0	0	836	279	366	1297	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	409	281	138				0	929	310	407	1441	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	671	363	309				0	2751	839	504	3695	0
Arrive On Green	0.19	0.19	0.19				0.00	0.54	0.54	0.15	0.73	0.00
Sat Flow, veh/h	3442	1863	1583				0	5253	1552	3442	5253	0
Grp Volume(v), veh/h	409	281	138				0	929	310	407	1441	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583				0	1695	1552	1721	1695	0
Q Serve(g_s), s	11.1	14.6	7.8				0.0	10.5	11.7	11.7	11.0	0.0
Cycle Q Clear(g_c), s	11.1	14.6	7.8				0.0	10.5	11.7	11.7	11.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	671	363	309				0	2751	839	504	3695	0
V/C Ratio(X)	0.61	0.77	0.45				0.00	0.34	0.37	0.81	0.39	0.00
Avail Cap(c_a), veh/h	1284	695	591				0	2751	839	980	3695	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.5	38.9	36.2				0.0	13.1	13.4	42.1	5.3	0.0
Incr Delay (d2), s/veh	0.9	3.5	1.0				0.0	0.3	1.3	3.1	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	7.9	3.5				0.0	5.0	5.3	5.8	5.2	0.0
LnGrp Delay(d), s/veh	38.4	42.4	37.2				0.0	13.5	14.7	45.2	5.6	0.0
LnGrp LOS	D	D	D					B	B	D	A	
Approach Vol, veh/h		828						1239			1848	
Approach Delay, s/veh		39.5						13.8			14.3	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	18.9	59.1		23.8		78.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	29.0	41.0		38.0		74.0		
Max Q Clear Time (g_c+I1), s	13.7	13.7		16.6		13.0		
Green Ext Time (p_c), s	1.3	8.5		3.3		14.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.5
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	236	1420	156	344	1097	127	134	473	172	276	1036	373
Future Volume (veh/h)	236	1420	156	344	1097	127	134	473	172	276	1036	373
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	265	1596	175	387	1233	143	151	531	193	310	1164	419
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	321	1626	504	406	1751	543	164	1164	696	374	1221	682
Arrive On Green	0.09	0.32	0.32	0.12	0.34	0.34	0.09	0.33	0.33	0.11	0.34	0.34
Sat Flow, veh/h	3476	5136	1591	3476	5136	1592	1792	3574	1566	3476	3574	1564
Grp Volume(v), veh/h	265	1596	175	387	1233	143	151	531	193	310	1164	419
Grp Sat Flow(s),veh/h/ln	1738	1712	1591	1738	1712	1592	1792	1787	1566	1738	1787	1564
Q Serve(g_s), s	9.0	37.0	10.1	13.3	25.0	7.8	10.0	14.1	9.4	10.5	38.2	24.8
Cycle Q Clear(g_c), s	9.0	37.0	10.1	13.3	25.0	7.8	10.0	14.1	9.4	10.5	38.2	24.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	1626	504	406	1751	543	164	1164	696	374	1221	682
V/C Ratio(X)	0.83	0.98	0.35	0.95	0.70	0.26	0.92	0.46	0.28	0.83	0.95	0.61
Avail Cap(c_a), veh/h	348	1626	504	406	1751	543	164	1164	696	492	1221	682
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	40.6	31.5	52.7	34.3	28.6	54.1	32.0	21.3	52.5	38.6	26.3
Incr Delay (d2), s/veh	14.1	18.0	0.4	33.0	1.3	0.3	47.4	1.3	1.0	8.7	16.7	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	20.1	4.5	8.3	12.0	3.5	7.1	7.1	4.3	5.5	21.6	11.5
LnGrp Delay(d), s/veh	67.6	58.6	31.9	85.7	35.6	28.9	101.4	33.3	22.3	61.2	55.3	30.4
LnGrp LOS	E	E	C	F	D	C	F	C	C	E	E	C
Approach Vol, veh/h		2036			1763			875			1893	
Approach Delay, s/veh		57.5			46.1			42.6			50.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	43.1	18.0	42.0	15.0	45.0	15.1	44.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	35.0	14.0	38.0	11.0	41.0	12.0	40.0
Max Q Clear Time (g_c+I1), s	12.5	16.1	15.3	39.0	12.0	40.2	11.0	27.0
Green Ext Time (p_c), s	0.4	3.7	0.0	0.0	0.0	0.7	0.1	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	251	791	119	228	669	141	81	501	141	64	549	83
Future Volume (veh/h)	251	791	119	228	669	141	81	501	141	64	549	83
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.78	1.00		0.84	0.98		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	264	833	125	240	704	148	85	527	148	67	578	87
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	304	1024	154	317	930	323	318	1331	500	337	1104	165
Arrive On Green	0.17	0.34	0.34	0.09	0.26	0.26	0.04	0.37	0.37	0.04	0.36	0.36
Sat Flow, veh/h	1792	3023	454	3476	3574	1243	1792	3574	1342	1792	3031	454
Grp Volume(v), veh/h	264	493	465	240	704	148	85	527	148	67	339	326
Grp Sat Flow(s),veh/h/ln	1792	1787	1689	1738	1787	1243	1792	1787	1342	1792	1787	1698
Q Serve(g_s), s	14.3	25.0	25.0	6.7	18.0	9.9	2.9	10.8	7.7	2.3	14.8	15.0
Cycle Q Clear(g_c), s	14.3	25.0	25.0	6.7	18.0	9.9	2.9	10.8	7.7	2.3	14.8	15.0
Prop In Lane	1.00		0.27	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	304	605	572	317	930	323	318	1331	500	337	651	618
V/C Ratio(X)	0.87	0.81	0.81	0.76	0.76	0.46	0.27	0.40	0.30	0.20	0.52	0.53
Avail Cap(c_a), veh/h	523	864	816	490	1187	413	345	1331	500	361	651	618
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.2	30.0	30.0	44.1	33.9	30.9	19.5	22.9	22.0	19.1	24.8	24.8
Incr Delay (d2), s/veh	7.7	4.0	4.3	3.7	2.1	1.0	0.4	0.9	1.5	0.3	3.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	13.0	12.3	3.4	9.2	3.5	1.5	5.5	3.1	1.1	7.8	7.5
LnGrp Delay(d), s/veh	47.9	34.0	34.3	47.8	36.0	31.9	19.9	23.8	23.5	19.4	27.8	28.0
LnGrp LOS	D	C	C	D	D	C	B	C	C	B	C	C
Approach Vol, veh/h		1222			1092			760			732	
Approach Delay, s/veh		37.1			38.0			23.3			27.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	41.0	13.1	37.6	8.5	40.2	20.9	29.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	37.0	14.0	48.0	6.0	36.0	29.0	33.0
Max Q Clear Time (g_c+I1), s	4.3	12.8	8.7	27.0	4.9	17.0	16.3	20.0
Green Ext Time (p_c), s	0.0	4.2	0.4	6.7	0.0	4.1	0.6	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	71	883	133	141	449	75	160	644	188	66	935	114
Future Volume (veh/h)	71	883	133	141	449	75	160	644	188	66	935	114
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	76	939	141	150	478	80	170	685	200	70	995	121
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	98	1078	469	208	1097	478	275	1657	737	338	1374	167
Arrive On Green	0.05	0.30	0.30	0.06	0.31	0.31	0.07	0.46	0.46	0.04	0.43	0.43
Sat Flow, veh/h	1792	3574	1556	3476	3574	1556	1792	3574	1591	1792	3202	389
Grp Volume(v), veh/h	76	939	141	150	478	80	170	685	200	70	555	561
Grp Sat Flow(s),veh/h/ln	1792	1787	1556	1738	1787	1556	1792	1787	1591	1792	1787	1804
Q Serve(g_s), s	4.8	28.5	8.0	4.8	12.2	4.3	5.8	14.5	8.8	2.5	29.4	29.4
Cycle Q Clear(g_c), s	4.8	28.5	8.0	4.8	12.2	4.3	5.8	14.5	8.8	2.5	29.4	29.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	98	1078	469	208	1097	478	275	1657	737	338	767	774
V/C Ratio(X)	0.78	0.87	0.30	0.72	0.44	0.17	0.62	0.41	0.27	0.21	0.72	0.72
Avail Cap(c_a), veh/h	172	1188	517	243	1097	478	354	1657	737	354	767	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	37.8	30.7	52.8	31.7	28.9	21.3	20.3	18.8	17.6	27.0	27.0
Incr Delay (d2), s/veh	12.5	6.8	0.4	8.4	0.3	0.2	2.3	0.8	0.9	0.3	5.9	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	15.1	3.4	2.6	6.1	1.9	3.0	7.3	4.0	1.2	15.7	15.9
LnGrp Delay(d), s/veh	65.9	44.6	31.0	61.2	32.0	29.1	23.6	21.1	19.7	17.9	32.9	32.9
LnGrp LOS	E	D	C	E	C	C	C	C	B	B	C	C
Approach Vol, veh/h		1156			708			1055			1186	
Approach Delay, s/veh		44.3			37.8			21.2			32.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	57.0	10.8	38.5	12.0	53.1	10.2	39.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	8.0	38.0	13.0	45.0	11.0	35.0
Max Q Clear Time (g_c+I1), s	4.5	16.5	6.8	30.5	7.8	31.4	6.8	14.2
Green Ext Time (p_c), s	0.0	5.7	0.0	4.0	0.2	6.0	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	2	0	42	7	0	8	60	1048	117	4	1261	24
Future Volume (veh/h)	2	0	42	7	0	8	60	1048	117	4	1261	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	2	0	44	7	0	8	63	1103	123	4	1327	25
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	129	0	73	96	0	73	408	2974	1280	8	2882	54
Arrive On Green	0.05	0.00	0.05	0.05	0.00	0.05	0.03	0.83	0.83	0.00	0.80	0.80
Sat Flow, veh/h	1407	0	1582	1360	0	1589	1792	3574	1538	1792	3586	68
Grp Volume(v), veh/h	2	0	44	7	0	8	63	1103	123	4	661	691
Grp Sat Flow(s),veh/h/ln	1407	0	1582	1360	0	1589	1792	1787	1538	1792	1787	1866
Q Serve(g_s), s	0.1	0.0	2.8	0.5	0.0	0.5	0.6	7.6	1.5	0.2	11.8	11.8
Cycle Q Clear(g_c), s	0.6	0.0	2.8	3.3	0.0	0.5	0.6	7.6	1.5	0.2	11.8	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	129	0	73	96	0	73	408	2974	1280	8	1436	1500
V/C Ratio(X)	0.02	0.00	0.60	0.07	0.00	0.11	0.15	0.37	0.10	0.53	0.46	0.46
Avail Cap(c_a), veh/h	312	0	279	273	0	280	490	2974	1280	105	1436	1500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	0.0	47.7	49.4	0.0	46.7	2.2	2.1	1.6	50.7	3.1	3.1
Incr Delay (d2), s/veh	0.0	0.0	7.8	0.3	0.0	0.6	0.2	0.4	0.1	47.8	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	0.0	1.4	0.2	0.0	0.2	0.3	3.8	0.7	0.2	6.1	6.4
LnGrp Delay(d), s/veh	47.0	0.0	55.5	49.7	0.0	47.3	2.4	2.4	1.7	98.5	4.2	4.1
LnGrp LOS	D		E	D		D	A	A	A	F	A	A
Approach Vol, veh/h		46			15			1289			1356	
Approach Delay, s/veh		55.1			48.4			2.4			4.4	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.4	88.9		8.7	7.3	86.0		8.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	84.0		18.0	8.0	82.0		18.0
Max Q Clear Time (g_c+I1), s	2.2	9.6		4.8	2.6	13.8		5.3
Green Ext Time (p_c), s	0.0	10.7		0.1	0.0	12.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	4.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	182	983	164	79	422	192	104	806	112	303	927	87
Future Volume (veh/h)	182	983	164	79	422	192	104	806	112	303	927	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	190	1024	171	82	440	200	108	840	117	316	966	91
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	221	1318	220	133	505	227	303	1407	615	409	1662	729
Arrive On Green	0.12	0.30	0.30	0.04	0.21	0.21	0.05	0.39	0.39	0.12	0.46	0.46
Sat Flow, veh/h	1792	4414	736	3476	2367	1064	1792	3574	1563	1792	3574	1568
Grp Volume(v), veh/h	190	794	401	82	331	309	108	840	117	316	966	91
Grp Sat Flow(s),veh/h/ln	1792	1712	1726	1738	1787	1643	1792	1787	1563	1792	1787	1568
Q Serve(g_s), s	11.4	23.2	23.3	2.5	19.6	20.0	3.9	20.4	5.4	10.9	21.7	3.6
Cycle Q Clear(g_c), s	11.4	23.2	23.3	2.5	19.6	20.0	3.9	20.4	5.4	10.9	21.7	3.6
Prop In Lane	1.00		0.43	1.00		0.65	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	1023	516	133	381	350	303	1407	615	409	1662	729
V/C Ratio(X)	0.86	0.78	0.78	0.62	0.87	0.88	0.36	0.60	0.19	0.77	0.58	0.12
Avail Cap(c_a), veh/h	294	1186	598	190	424	389	356	1407	615	547	1662	729
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	35.1	35.1	52.0	41.7	41.8	19.0	26.4	21.8	19.3	21.5	16.7
Incr Delay (d2), s/veh	17.2	2.9	5.6	4.6	16.1	19.0	0.7	1.9	0.7	4.8	1.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	11.3	12.0	1.3	11.4	11.0	1.9	10.4	2.4	5.8	11.1	1.6
LnGrp Delay(d), s/veh	64.3	38.0	40.8	56.5	57.8	60.8	19.7	28.2	22.5	24.1	23.0	17.0
LnGrp LOS	E	D	D	E	E	E	B	C	C	C	C	B
Approach Vol, veh/h		1385			722			1065			1373	
Approach Delay, s/veh		42.4			59.0			26.7			22.9	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.5	47.2	8.2	36.8	9.7	55.0	17.6	27.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	38.0	6.0	38.0	9.0	51.0	18.0	26.0
Max Q Clear Time (g_c+I1), s	12.9	22.4	4.5	25.3	5.9	23.7	13.4	22.0
Green Ext Time (p_c), s	0.6	5.3	0.0	6.1	0.1	7.6	0.2	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	148	298	457	51	714	0	0	1029	302
Future Volume (veh/h)	0	0	0	148	298	457	51	714	0	0	1029	302
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				157	317	486	54	760	0	0	1095	321
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				393	849	550	70	2945	0	0	1957	574
Arrive On Green				0.35	0.35	0.35	0.04	0.58	0.00	0.00	0.50	0.50
Sat Flow, veh/h				1132	2444	1583	1774	5253	0	0	4058	1140
Grp Volume(v), veh/h				251	223	486	54	760	0	0	954	462
Grp Sat Flow(s),veh/h/ln				1806	1770	1583	1774	1695	0	0	1695	1640
Q Serve(g_s), s				11.4	10.3	31.4	3.3	8.0	0.0	0.0	21.2	21.2
Cycle Q Clear(g_c), s				11.4	10.3	31.4	3.3	8.0	0.0	0.0	21.2	21.2
Prop In Lane				0.63		1.00	1.00		0.00	0.00		0.70
Lane Grp Cap(c), veh/h				627	615	550	70	2945	0	0	1706	825
V/C Ratio(X)				0.40	0.36	0.88	0.78	0.26	0.00	0.00	0.56	0.56
Avail Cap(c_a), veh/h				814	797	713	147	2945	0	0	1706	825
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.9	26.5	33.4	51.8	11.3	0.0	0.0	18.7	18.7
Incr Delay (d2), s/veh				0.4	0.4	10.4	16.6	0.2	0.0	0.0	1.3	2.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.8	5.1	15.4	1.9	3.8	0.0	0.0	10.1	10.1
LnGrp Delay(d), s/veh				27.3	26.9	43.8	68.4	11.5	0.0	0.0	20.0	21.4
LnGrp LOS				C	C	D	E	B			C	C
Approach Vol, veh/h					960			814			1416	
Approach Delay, s/veh					35.6			15.3			20.5	
Approach LOS					D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			8.3	58.7		41.8
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			9.0	50.0		49.0
Max Q Clear Time (g_c+I1), s		10.0			5.3	23.2		33.4
Green Ext Time (p_c), s		5.8			0.0	11.0		4.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		23.7
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	558	126	0	0	0	0	555	278	492	718	0
Future Volume (veh/h)	200	558	126	0	0	0	0	555	278	492	718	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	222	620	140				0	617	309	547	798	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	268	796	470				0	1380	633	643	2231	0
Arrive On Green	0.30	0.30	0.30				0.00	0.41	0.41	0.19	0.63	0.00
Sat Flow, veh/h	904	2683	1583				0	3558	1554	3442	3632	0
Grp Volume(v), veh/h	446	396	140				0	617	309	547	798	0
Grp Sat Flow(s),veh/h/ln	1818	1770	1583				0	1695	1554	1721	1770	0
Q Serve(g_s), s	25.1	22.2	7.5				0.0	14.4	16.1	16.8	11.8	0.0
Cycle Q Clear(g_c), s	25.1	22.2	7.5				0.0	14.4	16.1	16.8	11.8	0.0
Prop In Lane	0.50		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	539	525	470				0	1380	633	643	2231	0
V/C Ratio(X)	0.83	0.75	0.30				0.00	0.45	0.49	0.85	0.36	0.00
Avail Cap(c_a), veh/h	714	695	622				0	1380	633	975	2231	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.9	34.9	29.7				0.0	23.5	24.0	43.0	9.7	0.0
Incr Delay (d2), s/veh	6.2	3.3	0.4				0.0	1.1	2.7	4.7	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	11.2	3.3				0.0	7.0	7.3	8.4	5.8	0.0
LnGrp Delay(d), s/veh	42.1	38.2	30.1				0.0	24.6	26.7	47.7	10.1	0.0
LnGrp LOS	D	D	C					C	C	D	B	
Approach Vol, veh/h		982						926			1345	
Approach Delay, s/veh		38.8						25.3			25.4	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	24.4	48.6		36.5		73.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	31.0	34.0		43.0		69.0		
Max Q Clear Time (g_c+I1), s	18.8	18.1		27.1		13.8		
Green Ext Time (p_c), s	1.6	5.4		5.4		6.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	996	61	130	1244	49	52	132	108	146	262	65
Future Volume (veh/h)	45	996	61	130	1244	49	52	132	108	146	262	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.93	0.94		0.85	0.96		0.87
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	54	1186	73	155	1481	58	62	157	129	174	312	77
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	171	1605	99	267	1761	69	304	410	295	390	754	181
Arrive On Green	0.03	0.47	0.47	0.06	0.50	0.50	0.04	0.22	0.22	0.09	0.27	0.27
Sat Flow, veh/h	1792	3409	210	1792	3495	136	1792	1881	1355	1792	2772	664
Grp Volume(v), veh/h	54	621	638	155	755	784	62	157	129	174	198	191
Grp Sat Flow(s),veh/h/ln	1792	1787	1832	1792	1787	1844	1792	1881	1355	1792	1787	1649
Q Serve(g_s), s	1.6	29.0	29.1	4.4	37.4	37.8	2.7	7.3	8.5	7.4	9.3	9.8
Cycle Q Clear(g_c), s	1.6	29.0	29.1	4.4	37.4	37.8	2.7	7.3	8.5	7.4	9.3	9.8
Prop In Lane	1.00		0.11	1.00		0.07	1.00		1.00	1.00		0.40
Lane Grp Cap(c), veh/h	171	841	862	267	900	929	304	410	295	390	486	448
V/C Ratio(X)	0.32	0.74	0.74	0.58	0.84	0.84	0.20	0.38	0.44	0.45	0.41	0.43
Avail Cap(c_a), veh/h	221	972	996	414	1128	1164	322	410	295	451	486	448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.0	22.1	22.1	18.5	21.9	22.0	29.6	34.4	34.8	26.1	30.7	30.9
Incr Delay (d2), s/veh	1.0	2.6	2.5	2.0	4.7	4.8	0.3	2.7	4.6	0.8	2.5	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	14.9	15.3	2.3	19.4	20.4	1.4	4.1	3.6	3.7	5.0	4.8
LnGrp Delay(d), s/veh	21.1	24.7	24.7	20.5	26.6	26.8	29.9	37.1	39.4	26.9	33.2	33.8
LnGrp LOS	C	C	C	C	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1313			1694			348			563	
Approach Delay, s/veh		24.5			26.2			36.7			31.5	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	26.4	10.6	52.5	7.9	32.0	7.1	55.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	20.0	15.0	56.0	5.0	28.0	6.0	65.0
Max Q Clear Time (g_c+I1), s	9.4	10.5	6.4	31.1	4.7	11.8	3.6	39.8
Green Ext Time (p_c), s	0.1	0.9	0.2	9.0	0.0	2.0	0.0	12.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	147	964	38	18	477	31	41	109	23	131	111	191
Future Volume (veh/h)	147	964	38	18	477	31	41	109	23	131	111	191
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	169	1108	44	21	548	36	47	125	26	151	128	220
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	406	1403	56	177	1146	75	398	914	185	566	637	555
Arrive On Green	0.08	0.40	0.40	0.02	0.34	0.34	0.03	0.31	0.31	0.08	0.36	0.36
Sat Flow, veh/h	1774	3466	138	1774	3369	221	1774	2919	590	1774	1770	1543
Grp Volume(v), veh/h	169	566	586	21	287	297	47	74	77	151	128	220
Grp Sat Flow(s),veh/h/ln	1774	1770	1834	1774	1770	1821	1774	1770	1739	1774	1770	1543
Q Serve(g_s), s	5.0	24.1	24.1	0.7	11.0	11.1	1.5	2.6	2.7	4.7	4.3	9.2
Cycle Q Clear(g_c), s	5.0	24.1	24.1	0.7	11.0	11.1	1.5	2.6	2.7	4.7	4.3	9.2
Prop In Lane	1.00		0.08	1.00		0.12	1.00		0.34	1.00		1.00
Lane Grp Cap(c), veh/h	406	716	743	177	602	619	398	554	544	566	637	555
V/C Ratio(X)	0.42	0.79	0.79	0.12	0.48	0.48	0.12	0.13	0.14	0.27	0.20	0.40
Avail Cap(c_a), veh/h	568	1273	1320	227	1047	1078	487	554	544	736	637	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.8	22.4	22.4	20.0	22.4	22.4	19.2	21.2	21.3	16.3	19.0	20.6
Incr Delay (d2), s/veh	0.7	2.0	1.9	0.3	0.6	0.6	0.1	0.5	0.5	0.3	0.7	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	12.0	12.5	0.3	5.4	5.6	0.8	1.3	1.4	2.3	2.2	4.2
LnGrp Delay(d), s/veh	16.5	24.4	24.4	20.3	23.0	23.0	19.3	21.7	21.8	16.6	19.7	22.7
LnGrp LOS	B	C	C	C	C	C	B	C	C	B	B	C
Approach Vol, veh/h		1321			605			198			499	
Approach Delay, s/veh		23.4			22.9			21.2			20.1	
Approach LOS		C			C			C			C	

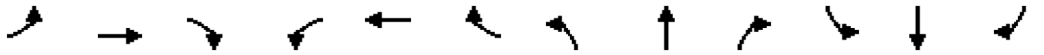
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	31.0	5.6	38.9	6.7	35.0	11.1	33.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	23.0	4.0	62.0	7.0	31.0	15.0	51.0
Max Q Clear Time (g_c+I1), s	6.7	4.7	2.7	26.1	3.5	11.2	7.0	13.1
Green Ext Time (p_c), s	0.2	0.7	0.0	8.8	0.0	2.0	0.3	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	798	247	232	506	42	239	292	242	33	105	52
Future Volume (veh/h)	105	798	247	232	506	42	239	292	242	33	105	52
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	119	907	281	264	575	48	272	332	275	38	119	59
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	149	1180	364	342	1544	128	625	743	603	333	1069	465
Arrive On Green	0.08	0.31	0.31	0.10	0.33	0.33	0.13	0.41	0.41	0.03	0.30	0.30
Sat Flow, veh/h	1757	3798	1172	3408	4732	391	1757	1833	1488	1757	3505	1524
Grp Volume(v), veh/h	119	801	387	264	406	217	272	317	290	38	119	59
Grp Sat Flow(s),veh/h/ln	1757	1679	1613	1704	1679	1766	1757	1752	1569	1757	1752	1524
Q Serve(g_s), s	6.7	21.9	22.0	7.6	9.4	9.5	10.2	13.3	13.7	1.5	2.5	2.8
Cycle Q Clear(g_c), s	6.7	21.9	22.0	7.6	9.4	9.5	10.2	13.3	13.7	1.5	2.5	2.8
Prop In Lane	1.00		0.73	1.00		0.22	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	149	1043	501	342	1095	576	625	710	635	333	1069	465
V/C Ratio(X)	0.80	0.77	0.77	0.77	0.37	0.38	0.44	0.45	0.46	0.11	0.11	0.13
Avail Cap(c_a), veh/h	295	1393	669	572	1393	733	802	710	635	357	1069	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	31.6	31.6	44.4	26.1	26.2	18.2	21.9	22.0	23.2	25.3	25.4
Incr Delay (d2), s/veh	9.4	1.9	3.9	3.7	0.2	0.4	0.5	2.0	2.4	0.2	0.2	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	10.4	10.3	3.8	4.4	4.7	5.0	6.8	6.3	0.7	1.2	1.3
LnGrp Delay(d), s/veh	54.9	33.5	35.6	48.2	26.3	26.6	18.7	23.9	24.3	23.4	25.5	26.0
LnGrp LOS	D	C	D	D	C	C	B	C	C	C	C	C
Approach Vol, veh/h		1307			887			879			216	
Approach Delay, s/veh		36.0			32.9			22.4			25.3	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.6	45.0	14.1	35.5	16.8	34.9	12.6	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	41.0	17.0	42.0	23.0	22.0	17.0	42.0
Max Q Clear Time (g_c+I1), s	3.5	15.7	9.6	24.0	12.2	4.8	8.7	11.5
Green Ext Time (p_c), s	0.0	3.8	0.5	7.5	0.6	0.7	0.2	3.9

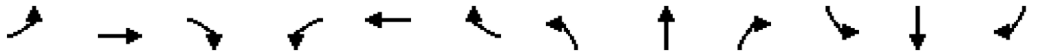
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	393	741	74	89	932	261	45	432	82	245	410	381
Future Volume (veh/h)	393	741	74	89	932	261	45	432	82	245	410	381
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	418	788	79	95	991	278	48	460	87	261	436	405
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	510	1507	660	121	1224	533	62	901	382	337	1125	715
Arrive On Green	0.15	0.42	0.42	0.07	0.34	0.34	0.03	0.25	0.25	0.10	0.31	0.31
Sat Flow, veh/h	3476	3574	1564	1792	3574	1557	1792	3574	1514	3476	3574	1526
Grp Volume(v), veh/h	418	788	79	95	991	278	48	460	87	261	436	405
Grp Sat Flow(s),veh/h/ln	1738	1787	1564	1792	1787	1557	1792	1787	1514	1738	1787	1526
Q Serve(g_s), s	11.6	16.2	3.0	5.2	25.0	14.2	2.6	11.0	4.5	7.3	9.4	19.3
Cycle Q Clear(g_c), s	11.6	16.2	3.0	5.2	25.0	14.2	2.6	11.0	4.5	7.3	9.4	19.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	510	1507	660	121	1224	533	62	901	382	337	1125	715
V/C Ratio(X)	0.82	0.52	0.12	0.78	0.81	0.52	0.78	0.51	0.23	0.77	0.39	0.57
Avail Cap(c_a), veh/h	771	1911	836	217	1550	675	145	901	382	491	1125	715
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	21.3	17.5	45.5	29.6	26.1	47.5	31.8	29.4	43.7	26.5	19.6
Incr Delay (d2), s/veh	4.3	0.3	0.1	10.4	2.6	0.8	18.7	2.1	1.4	4.6	1.0	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	8.0	1.3	2.9	12.7	6.2	1.6	5.7	2.0	3.7	4.8	8.7
LnGrp Delay(d), s/veh	45.3	21.6	17.5	55.9	32.3	26.9	66.1	33.9	30.8	48.3	27.5	22.8
LnGrp LOS	D	C	B	E	C	C	E	C	C	D	C	C
Approach Vol, veh/h		1285			1364			595			1102	
Approach Delay, s/veh		29.0			32.8			36.0			30.7	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	29.0	10.7	45.8	7.4	35.2	18.5	38.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	25.0	12.0	53.0	8.0	31.0	22.0	43.0
Max Q Clear Time (g_c+I1), s	9.3	13.0	7.2	18.2	4.6	21.3	13.6	27.0
Green Ext Time (p_c), s	0.4	2.5	0.1	6.2	0.0	3.0	1.0	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	278	92	112	197	26	104	711	117	19	1004	178
Future Volume (veh/h)	190	278	92	112	197	26	104	711	117	19	1004	178
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.91	0.97		0.90	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	302	100	122	214	28	113	773	127	21	1091	193
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	241	358	115	170	381	49	178	2000	329	424	1194	993
Arrive On Green	0.07	0.14	0.14	0.05	0.12	0.12	0.03	0.66	0.66	0.02	0.64	0.64
Sat Flow, veh/h	1774	2568	824	1774	3111	398	1774	3039	499	1774	1863	1549
Grp Volume(v), veh/h	207	205	197	122	120	122	113	450	450	21	1091	193
Grp Sat Flow(s),veh/h/ln	1774	1770	1622	1774	1770	1740	1774	1770	1769	1774	1863	1549
Q Serve(g_s), s	8.0	13.4	14.1	6.0	7.5	7.9	2.6	13.8	13.8	0.5	60.1	6.1
Cycle Q Clear(g_c), s	8.0	13.4	14.1	6.0	7.5	7.9	2.6	13.8	13.8	0.5	60.1	6.1
Prop In Lane	1.00		0.51	1.00		0.23	1.00		0.28	1.00		1.00
Lane Grp Cap(c), veh/h	241	247	226	170	217	213	178	1165	1164	424	1194	993
V/C Ratio(X)	0.86	0.83	0.87	0.72	0.55	0.57	0.63	0.39	0.39	0.05	0.91	0.19
Avail Cap(c_a), veh/h	241	269	246	170	239	235	178	1165	1164	454	1194	993
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	49.6	50.0	46.2	48.9	49.1	27.0	9.3	9.3	7.6	18.4	8.7
Incr Delay (d2), s/veh	25.2	18.3	25.5	13.5	2.2	2.8	7.2	1.0	1.0	0.0	12.1	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	7.8	7.9	4.1	3.8	3.9	2.7	7.1	7.1	0.2	34.6	2.7
LnGrp Delay(d), s/veh	72.7	67.9	75.4	59.7	51.1	51.9	34.2	10.3	10.3	7.7	30.5	9.2
LnGrp LOS	E	E	E	E	D	D	C	B	B	A	C	A
Approach Vol, veh/h		609			364			1013			1305	
Approach Delay, s/veh		72.0			54.2			12.9			27.0	
Approach LOS		E			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.0	82.0	10.0	20.5	8.0	80.0	12.0	18.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	76.0	6.0	18.0	4.0	76.0	8.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	15.8	8.0	16.1	4.6	62.1	10.0	9.9
Green Ext Time (p_c), s	0.0	6.9	0.0	0.4	0.0	7.7	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	596	316	234	646	31	366	224	153	42	142	20
Future Volume (veh/h)	74	596	316	234	646	31	366	224	153	42	142	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	79	634	336	249	687	33	389	238	163	45	151	21
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	314	871	397	313	1650	79	681	1502	658	388	1254	168
Arrive On Green	0.05	0.26	0.26	0.12	0.34	0.34	0.18	0.43	0.43	0.03	0.28	0.28
Sat Flow, veh/h	1740	3325	1514	1740	4872	233	1740	3471	1520	1740	4436	593
Grp Volume(v), veh/h	79	634	336	249	468	252	389	238	163	45	112	60
Grp Sat Flow(s),veh/h/ln	1740	1663	1514	1740	1663	1780	1740	1736	1520	1740	1663	1704
Q Serve(g_s), s	3.4	18.1	21.9	10.3	11.3	11.4	15.6	4.3	7.1	1.9	2.6	2.7
Cycle Q Clear(g_c), s	3.4	18.1	21.9	10.3	11.3	11.4	15.6	4.3	7.1	1.9	2.6	2.7
Prop In Lane	1.00		1.00	1.00		0.13	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	314	871	397	313	1126	603	681	1502	658	388	940	482
V/C Ratio(X)	0.25	0.73	0.85	0.79	0.42	0.42	0.57	0.16	0.25	0.12	0.12	0.13
Avail Cap(c_a), veh/h	333	991	451	500	1566	838	856	1502	658	406	940	482
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.1	35.0	36.4	25.3	26.5	26.5	18.3	18.0	18.7	25.4	27.7	27.7
Incr Delay (d2), s/veh	0.4	2.4	12.7	4.6	0.2	0.5	0.8	0.2	0.9	0.1	0.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	8.6	10.5	5.3	5.2	5.6	7.5	2.1	3.1	0.9	1.2	1.4
LnGrp Delay(d), s/veh	26.5	37.4	49.1	29.9	26.7	27.0	19.0	18.2	19.6	25.5	27.9	28.3
LnGrp LOS	C	D	D	C	C	C	B	B	B	C	C	C
Approach Vol, veh/h		1049			969			790			217	
Approach Delay, s/veh		40.3			27.6			18.9			27.5	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	49.0	16.9	31.2	22.5	33.4	8.9	39.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	45.0	24.0	31.0	29.0	20.0	6.0	49.0
Max Q Clear Time (g_c+I1), s	3.9	9.1	12.3	23.9	17.6	4.7	5.4	13.4
Green Ext Time (p_c), s	0.0	2.1	0.5	3.4	0.9	0.7	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	132	856	33	143	1328	403	12	216	164	32	74	63
Future Volume (veh/h)	132	856	33	143	1328	403	12	216	164	32	74	63
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.94		0.89	0.98		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	140	911	35	152	1413	429	13	230	174	34	79	67
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	240	1830	70	402	1876	814	374	537	376	249	530	403
Arrive On Green	0.06	0.52	0.52	0.06	0.52	0.52	0.28	0.28	0.28	0.28	0.28	0.28
Sat Flow, veh/h	1792	3507	135	1792	3574	1550	1170	1905	1337	963	1881	1430
Grp Volume(v), veh/h	140	464	482	152	1413	429	13	215	189	34	79	67
Grp Sat Flow(s),veh/h/ln	1792	1787	1855	1792	1787	1550	1170	1787	1455	963	1881	1430
Q Serve(g_s), s	3.2	14.9	14.9	3.4	27.6	16.1	0.7	8.7	9.5	2.7	2.8	3.1
Cycle Q Clear(g_c), s	3.2	14.9	14.9	3.4	27.6	16.1	3.5	8.7	9.5	12.2	2.8	3.1
Prop In Lane	1.00		0.07	1.00		1.00	1.00		0.92	1.00		1.00
Lane Grp Cap(c), veh/h	240	932	968	402	1876	814	374	503	410	249	530	403
V/C Ratio(X)	0.58	0.50	0.50	0.38	0.75	0.53	0.03	0.43	0.46	0.14	0.15	0.17
Avail Cap(c_a), veh/h	398	1449	1504	514	2818	1222	374	503	410	249	530	403
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.9	13.7	13.7	10.1	16.6	13.9	25.2	26.0	26.3	31.4	23.9	24.0
Incr Delay (d2), s/veh	2.2	0.4	0.4	0.6	0.6	0.5	0.2	2.6	3.7	1.1	0.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.5	7.7	1.7	13.7	6.9	0.3	4.7	4.3	0.8	1.5	1.3
LnGrp Delay(d), s/veh	19.1	14.1	14.1	10.7	17.2	14.4	25.4	28.7	30.1	32.5	24.5	24.9
LnGrp LOS	B	B	B	B	B	B	C	C	C	C	C	C
Approach Vol, veh/h		1086			1994			417			180	
Approach Delay, s/veh		14.8			16.1			29.2			26.2	
Approach LOS		B			B			C			C	

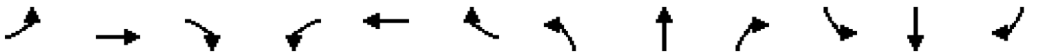
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	9.5	50.3		29.0	9.2	50.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	11.0	72.0		25.0	13.0	70.0
Max Q Clear Time (g_c+I1), s		11.5	5.4	16.9		14.2	5.2	29.6
Green Ext Time (p_c), s		2.0	0.2	6.8		0.5	0.2	17.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	512	553	306	1799	0	0	0	0	61	48	139
Future Volume (veh/h)	0	512	553	306	1799	0	0	0	0	61	48	139
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	522	564	312	1836	0				62	49	142
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1446	661	359	2384	0				250	197	390
Arrive On Green	0.00	0.42	0.42	0.20	0.67	0.00				0.24	0.24	0.24
Sat Flow, veh/h	0	3593	1566	1792	3668	0				1022	808	1599
Grp Volume(v), veh/h	0	522	564	312	1836	0				111	0	142
Grp Sat Flow(s),veh/h/ln	0	1712	1566	1792	1787	0				1830	0	1599
Q Serve(g_s), s	0.0	9.4	29.3	15.2	31.7	0.0				4.4	0.0	6.6
Cycle Q Clear(g_c), s	0.0	9.4	29.3	15.2	31.7	0.0				4.4	0.0	6.6
Prop In Lane	0.00		1.00	1.00		0.00				0.56		1.00
Lane Grp Cap(c), veh/h	0	1446	661	359	2384	0				447	0	390
V/C Ratio(X)	0.00	0.36	0.85	0.87	0.77	0.00				0.25	0.00	0.36
Avail Cap(c_a), veh/h	0	1824	834	756	3571	0				447	0	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	17.7	23.5	34.9	10.3	0.0				27.4	0.0	28.2
Incr Delay (d2), s/veh	0.0	0.2	7.0	6.5	0.6	0.0				1.3	0.0	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.5	13.8	8.2	15.5	0.0				2.4	0.0	3.2
LnGrp Delay(d), s/veh	0.0	17.9	30.5	41.4	10.9	0.0				28.7	0.0	30.8
LnGrp LOS		B	C	D	B					C		C
Approach Vol, veh/h		1086			2148						253	
Approach Delay, s/veh		24.4			15.3						29.9	
Approach LOS		C			B						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.0	42.0		26.0		64.1
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			38.0	48.0		22.0		90.0
Max Q Clear Time (g_c+I1), s			17.2	31.3		8.6		33.7
Green Ext Time (p_c), s			0.9	6.8		0.8		24.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.2
HCM 2010 LOS	B



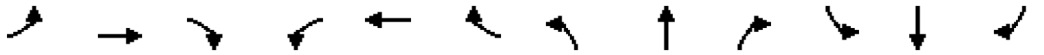
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	468	0	0	1111	124	964	0	244	0	0	0
Future Volume (vph)	106	468	0	0	1111	124	964	0	244	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.95	1.00			
Satd. Flow (prot)	1787	3574			3500		1698	1622	1519			
Flt Permitted	0.95	1.00			1.00		0.95	0.95	1.00			
Satd. Flow (perm)	1787	3574			3500		1698	1622	1519			
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	107	473	0	0	1122	125	974	0	246	0	0	0
RTOR Reduction (vph)	0	0	0	0	7	0	0	26	130	0	0	0
Lane Group Flow (vph)	107	473	0	0	1240	0	497	476	91	0	0	0
Confl. Peds. (#/hr)	8		14	14		8						
Confl. Bikes (#/hr)			10			11						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	10.7	60.2			45.5		48.1	48.1	48.1			
Effective Green, g (s)	10.7	60.2			45.5		48.1	48.1	48.1			
Actuated g/C Ratio	0.09	0.52			0.39		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	164	1849			1369		702	670	628			
v/s Ratio Prot	c0.06	0.13			c0.35		0.29	c0.29	0.06			
v/s Ratio Perm												
v/c Ratio	0.65	0.26			0.91		0.71	0.71	0.15			
Uniform Delay, d1	51.0	15.6			33.4		28.3	28.3	21.3			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	9.0	0.1			8.8		5.9	6.3	0.5			
Delay (s)	60.0	15.7			42.2		34.2	34.6	21.8			
Level of Service	E	B			D		C	C	C			
Approach Delay (s/veh)		23.8			42.2			32.1			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	116.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	97.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	135	428	154	104	687	49	340	415	69	138	643	191
Future Volume (veh/h)	135	428	154	104	687	49	340	415	69	138	643	191
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	150	476	171	116	763	54	378	461	77	153	714	212
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	213	840	571	145	910	391	456	1316	218	185	1089	323
Arrive On Green	0.06	0.24	0.24	0.08	0.25	0.25	0.13	0.43	0.43	0.10	0.40	0.40
Sat Flow, veh/h	3476	3574	1535	1792	3574	1537	3476	3055	507	1792	2702	802
Grp Volume(v), veh/h	150	476	171	116	763	54	378	268	270	153	472	454
Grp Sat Flow(s),veh/h/ln	1738	1787	1535	1792	1787	1537	1738	1787	1775	1792	1787	1717
Q Serve(g_s), s	4.5	12.5	8.5	6.8	21.6	2.9	11.3	10.7	10.9	8.9	22.9	22.9
Cycle Q Clear(g_c), s	4.5	12.5	8.5	6.8	21.6	2.9	11.3	10.7	10.9	8.9	22.9	22.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.29	1.00		0.47
Lane Grp Cap(c), veh/h	213	840	571	145	910	391	456	770	765	185	720	692
V/C Ratio(X)	0.70	0.57	0.30	0.80	0.84	0.14	0.83	0.35	0.35	0.83	0.66	0.66
Avail Cap(c_a), veh/h	293	904	598	252	1105	475	619	770	765	302	720	692
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.1	36.0	24.1	48.2	37.7	30.7	45.2	20.3	20.4	46.9	25.8	25.8
Incr Delay (d2), s/veh	4.6	0.7	0.3	9.7	4.9	0.2	6.9	1.2	1.3	9.4	4.6	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.3	3.6	3.7	11.2	1.2	5.9	5.6	5.6	4.9	12.2	11.8
LnGrp Delay(d), s/veh	53.7	36.7	24.4	57.9	42.6	30.9	52.1	21.6	21.7	56.3	30.5	30.7
LnGrp LOS	D	D	C	E	D	C	D	C	C	E	C	C
Approach Vol, veh/h		797			933			916			1079	
Approach Delay, s/veh		37.3			43.8			34.2			34.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	50.0	12.6	29.1	18.0	47.0	10.5	31.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	44.0	15.0	27.0	19.0	43.0	9.0	33.0
Max Q Clear Time (g_c+I1), s	10.9	12.9	8.8	14.5	13.3	24.9	6.5	23.6
Green Ext Time (p_c), s	0.2	3.2	0.1	2.9	0.7	5.5	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	222	232	72	106	132	79	77	1065	131	116	1302	136
Future Volume (veh/h)	222	232	72	106	132	79	77	1065	131	116	1302	136
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	239	249	77	114	142	85	83	1145	141	125	1400	146
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	340	333	274	229	200	162	211	1798	221	286	1875	194
Arrive On Green	0.13	0.18	0.18	0.06	0.11	0.11	0.03	0.57	0.57	0.05	0.58	0.58
Sat Flow, veh/h	1774	1863	1533	1774	1863	1507	1774	3163	388	1774	3228	334
Grp Volume(v), veh/h	239	249	77	114	142	85	83	639	647	125	763	783
Grp Sat Flow(s),veh/h/ln	1774	1863	1533	1774	1863	1507	1774	1770	1781	1774	1770	1793
Q Serve(g_s), s	12.9	14.2	4.9	6.4	8.2	6.0	2.2	27.3	27.5	3.3	35.5	36.4
Cycle Q Clear(g_c), s	12.9	14.2	4.9	6.4	8.2	6.0	2.2	27.3	27.5	3.3	35.5	36.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.19
Lane Grp Cap(c), veh/h	340	333	274	229	200	162	211	1006	1013	286	1028	1042
V/C Ratio(X)	0.70	0.75	0.28	0.50	0.71	0.53	0.39	0.64	0.64	0.44	0.74	0.75
Avail Cap(c_a), veh/h	356	416	343	229	266	215	261	1006	1013	393	1028	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	43.6	39.7	41.4	48.3	47.2	16.5	16.3	16.4	13.7	17.3	17.4
Incr Delay (d2), s/veh	5.8	5.7	0.6	1.7	5.6	2.6	1.2	3.1	3.1	1.0	4.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.8	2.1	3.2	4.6	2.6	1.1	14.2	14.3	1.6	18.5	19.3
LnGrp Delay(d), s/veh	41.9	49.2	40.3	43.0	53.9	49.9	17.7	19.4	19.4	14.7	22.1	22.5
LnGrp LOS	D	D	D	D	D	D	B	B	B	B	C	C
Approach Vol, veh/h		565			341			1369			1671	
Approach Delay, s/veh		44.9			49.3			19.3			21.7	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	67.6	11.0	24.0	7.9	69.0	19.0	16.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	60.0	7.0	25.0	7.0	65.0	16.0	16.0
Max Q Clear Time (g_c+I1), s	5.3	29.5	8.4	16.2	4.2	38.4	14.9	10.2
Green Ext Time (p_c), s	0.1	10.6	0.0	1.1	0.0	13.1	0.1	0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	16	7	14	12	28	4	270	11	55	292	55
Future Volume (veh/h)	104	16	7	14	12	28	4	270	11	55	292	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.97		0.97	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	124	19	8	17	14	33	5	321	13	65	348	65
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	237	182	77	256	71	168	773	1447	1179	829	1447	1180
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.77	0.77	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1334	1246	525	1356	488	1151	972	1881	1532	1043	1881	1533
Grp Volume(v), veh/h	124	0	27	17	0	47	5	321	13	65	348	65
Grp Sat Flow(s),veh/h/ln	1334	0	1771	1356	0	1640	972	1881	1532	1043	1881	1533
Q Serve(g_s), s	8.5	0.0	1.3	1.0	0.0	2.4	0.1	4.5	0.2	1.8	5.0	1.0
Cycle Q Clear(g_c), s	10.9	0.0	1.3	2.3	0.0	2.4	5.1	4.5	0.2	6.3	5.0	1.0
Prop In Lane	1.00		0.30	1.00		0.70	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	0	259	256	0	240	773	1447	1179	829	1447	1180
V/C Ratio(X)	0.52	0.00	0.10	0.07	0.00	0.20	0.01	0.22	0.01	0.08	0.24	0.06
Avail Cap(c_a), veh/h	591	0	728	616	0	674	773	1447	1179	829	1447	1180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	35.1	36.1	0.0	35.6	3.8	3.0	2.5	3.9	3.1	2.6
Incr Delay (d2), s/veh	1.8	0.0	0.2	0.1	0.0	0.4	0.0	0.4	0.0	0.2	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	0.6	0.4	0.0	1.1	0.0	2.5	0.1	0.5	2.7	0.4
LnGrp Delay(d), s/veh	42.2	0.0	35.3	36.2	0.0	36.0	3.8	3.4	2.6	4.1	3.5	2.7
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		151			64			339			478	
Approach Delay, s/veh		40.9			36.0			3.4			3.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		17.9		77.0		17.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		7.1		12.9		8.3		4.4
Green Ext Time (p_c), s		2.2		0.5		2.9		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.9
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	8.6
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	24	13	18	17	13	3	4	11	56	53	4
Future Vol, veh/h	10	24	13	18	17	13	3	4	11	56	53	4
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	14	33	18	25	23	18	4	5	15	77	73	5
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	8	8.1	7.9	9.1
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	17%	29%	0%	51%	0%	51%	0%
Vol Thru, %	22%	71%	0%	49%	0%	49%	0%
Vol Right, %	61%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	18	34	13	35	13	109	4
LT Vol	3	10	0	18	0	56	0
Through Vol	4	24	0	17	0	53	0
RT Vol	11	0	13	0	13	0	4
Lane Flow Rate	25	47	18	48	18	149	5
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.032	0.067	0.022	0.071	0.022	0.212	0.006
Departure Headway (Hd)	4.704	5.202	4.351	5.31	4.349	5.122	4.163
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	763	691	825	677	826	703	862
Service Time	2.721	2.915	2.064	3.022	2.061	2.836	1.877
HCM Lane V/C Ratio	0.033	0.068	0.022	0.071	0.022	0.212	0.006
HCM Control Delay, s/veh	7.9	8.3	7.2	8.4	7.2	9.2	6.9
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.1	0.2	0.1	0.2	0.1	0.8	0

Intersection	
Int Delay, s/veh	4.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	17	5	3	9	19	16
Future Vol, veh/h	17	5	3	9	19	16
Conflicting Peds, #/hr	0	2	2	0	3	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	26	8	5	14	29	24

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	36	0	59	34
Stage 1	-	-	-	-	32	-
Stage 2	-	-	-	-	27	-
Critical Hdwy	-	-	4.16	-	6.46	6.26
Critical Hdwy Stg 1	-	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.254	-	3.554	3.354
Pot Cap-1 Maneuver	-	-	1549	-	938	1028
Stage 1	-	-	-	-	980	-
Stage 2	-	-	-	-	985	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1546	-	931	1025
Mov Cap-2 Maneuver	-	-	-	-	931	-
Stage 1	-	-	-	-	978	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.8	8.8
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	931	1025	-	-	1546	-
HCM Lane V/C Ratio	0.031	0.024	-	-	0.003	-
HCM Control Delay (s/veh)	9	8.6	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	14	265	96	14	124	7	18	12	40	4	4	4
Future Vol, veh/h	14	265	96	14	124	7	18	12	40	4	4	4
Conflicting Peds, #/hr	4	0	19	19	0	4	5	0	2	2	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	16	298	108	16	139	8	20	13	45	4	4	4

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	151	0	0	425	0	0	587	586	373	594	636	152
Stage 1	-	-	-	-	-	-	403	403	-	179	179	-
Stage 2	-	-	-	-	-	-	184	183	-	415	457	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1430	-	-	1134	-	-	421	422	673	417	395	894
Stage 1	-	-	-	-	-	-	624	600	-	823	751	-
Stage 2	-	-	-	-	-	-	818	748	-	615	568	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1425	-	-	1116	-	-	397	401	661	368	376	887
Mov Cap-2 Maneuver	-	-	-	-	-	-	397	401	-	368	376	-
Stage 1	-	-	-	-	-	-	605	581	-	808	737	-
Stage 2	-	-	-	-	-	-	793	734	-	551	550	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.3	0.8	13.2	13
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	516	1425	-	-	1116	-	-	461
HCM Lane V/C Ratio	0.152	0.011	-	-	0.014	-	-	0.029
HCM Control Delay (s/veh)	13.2	7.6	0	-	8.3	0	-	13
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.5	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	149	59	61	80	21	23	999	37	15	1619	42
Future Volume (veh/h)	96	149	59	61	80	21	23	999	37	15	1619	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.95		0.94	1.00		0.90	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	100	155	61	64	83	22	24	1041	39	16	1686	44
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	169	224	379	147	352	93	171	2382	89	347	2415	63
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	498	887	1504	1172	1396	370	282	3509	131	525	3556	92
Grp Volume(v), veh/h	255	0	61	64	0	105	24	530	550	16	845	885
Grp Sat Flow(s),veh/h/ln	1385	0	1504	1172	0	1766	282	1787	1853	525	1787	1861
Q Serve(g_s), s	15.5	0.0	3.7	6.2	0.0	5.5	6.6	15.8	15.8	1.7	33.5	33.9
Cycle Q Clear(g_c), s	20.9	0.0	3.7	27.1	0.0	5.5	40.5	15.8	15.8	17.4	33.5	33.9
Prop In Lane	0.39		1.00	1.00		0.21	1.00		0.07	1.00		0.05
Lane Grp Cap(c), veh/h	392	0	379	147	0	445	171	1214	1258	347	1214	1264
V/C Ratio(X)	0.65	0.00	0.16	0.44	0.00	0.24	0.14	0.44	0.44	0.05	0.70	0.70
Avail Cap(c_a), veh/h	442	0	427	184	0	501	171	1214	1258	347	1214	1264
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	0.0	33.9	52.9	0.0	34.6	23.8	8.5	8.5	12.5	11.4	11.4
Incr Delay (d2), s/veh	2.8	0.0	0.2	2.0	0.0	0.3	1.7	1.1	1.1	0.2	3.3	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	0.0	1.5	2.1	0.0	2.7	0.6	8.0	8.3	0.3	17.5	18.4
LnGrp Delay(d), s/veh	44.3	0.0	34.1	54.9	0.0	34.9	25.6	9.7	9.6	12.8	14.7	14.7
LnGrp LOS	D		C	D		C	C	A	A	B	B	B
Approach Vol, veh/h		316			169			1104			1746	
Approach Delay, s/veh		42.3			42.5			10.0			14.7	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		33.4		83.0		33.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		42.5		22.9		35.9		29.1
Green Ext Time (p_c), s		8.8		1.2		19.9		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

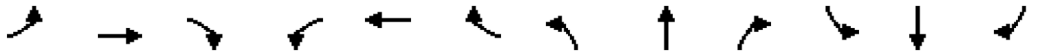
Intersection	
Int Delay, s/veh	1.7

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	21	25	41	1204	1283	28
Future Vol, veh/h	21	25	41	1204	1283	28
Conflicting Peds, #/hr	1	1	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	26	43	1267	1351	29

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2084	689	1392	0	-	0
Stage 1	1363	-	-	-	-	-
Stage 2	721	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	46	390	493	-	-	-
Stage 1	205	-	-	-	-	-
Stage 2	445	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	41	386	488	-	-	-
Mov Cap-2 Maneuver	41	-	-	-	-	-
Stage 1	185	-	-	-	-	-
Stage 2	441	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	84.9	0.4	0
HCM LOS	F		

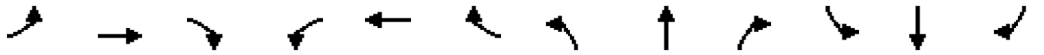
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	488	-	41	386	-	-
HCM Lane V/C Ratio	0.088	-	0.539	0.068	-	-
HCM Control Delay (s/veh)	13.1	-	168.2	15	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	1.9	0.2	-	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	94	44	71	71	57	53	30	1081	12	17	1187	81
Future Volume (veh/h)	94	44	71	71	57	53	30	1081	12	17	1187	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.75	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	100	47	76	76	61	56	32	1150	13	18	1263	86
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	15	384	47	25	339	239	2351	27	296	2198	149
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	0	52	1356	0	89	1196	407	3617	41	486	3382	230
Grp Volume(v), veh/h	147	0	76	137	0	56	32	568	595	18	666	683
Grp Sat Flow(s),veh/h/ln	52	0	1356	89	0	1196	407	1787	1871	486	1787	1825
Q Serve(g_s), s	0.0	0.0	5.1	0.0	0.0	4.2	5.7	19.6	19.6	2.4	24.9	25.1
Cycle Q Clear(g_c), s	34.0	0.0	5.1	34.0	0.0	4.2	30.9	19.6	19.6	21.9	24.9	25.1
Prop In Lane	0.68		1.00	0.55		1.00	1.00		0.02	1.00		0.13
Lane Grp Cap(c), veh/h	65	0	384	72	0	339	239	1162	1216	296	1162	1186
V/C Ratio(X)	2.26	0.00	0.20	1.91	0.00	0.17	0.13	0.49	0.49	0.06	0.57	0.58
Avail Cap(c_a), veh/h	65	0	384	72	0	339	239	1162	1216	296	1162	1186
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	32.6	48.4	0.0	32.3	20.4	10.8	10.8	16.4	11.7	11.7
Incr Delay (d2), s/veh	611.3	0.0	0.2	455.8	0.0	0.2	1.2	1.5	1.4	0.4	2.1	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	0.0	1.9	11.5	0.0	1.4	0.7	10.1	10.6	0.3	12.9	13.2
LnGrp Delay(d), s/veh	663.7	0.0	32.9	504.1	0.0	32.6	21.5	12.2	12.2	16.8	13.8	13.8
LnGrp LOS	F		C	F		C	C	B	B	B	B	B
Approach Vol, veh/h		223			193			1195			1367	
Approach Delay, s/veh		448.7			367.3			12.5			13.8	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		82.0		38.0		82.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		78.0		34.0		78.0		34.0
Max Q Clear Time (g_c+I1), s		32.9		36.0		27.1		36.0
Green Ext Time (p_c), s		10.0		0.0		12.6		0.0

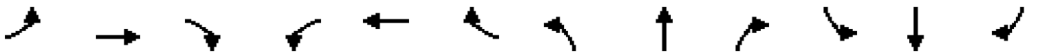
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.8
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	519	25	115	646	171	48	332	78	156	493	331
Future Volume (veh/h)	220	519	25	115	646	171	48	332	78	156	493	331
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	234	552	27	122	687	0	51	353	83	166	524	352
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	272	1218	59	152	905	282	65	1524	668	234	929	623
Arrive On Green	0.15	0.25	0.25	0.09	0.18	0.00	0.04	0.43	0.43	0.07	0.47	0.47
Sat Flow, veh/h	1757	4915	239	1757	5036	1568	1757	3505	1537	3408	1992	1336
Grp Volume(v), veh/h	234	376	203	122	687	0	51	353	83	166	461	415
Grp Sat Flow(s),veh/h/ln	1757	1679	1796	1757	1679	1568	1757	1752	1537	1704	1752	1576
Q Serve(g_s), s	12.8	9.4	9.5	6.7	12.8	0.0	2.8	6.3	3.2	4.7	18.8	18.9
Cycle Q Clear(g_c), s	12.8	9.4	9.5	6.7	12.8	0.0	2.8	6.3	3.2	4.7	18.8	18.9
Prop In Lane	1.00		0.13	1.00		1.00	1.00		1.00	1.00		0.85
Lane Grp Cap(c), veh/h	272	832	445	152	905	282	65	1524	668	234	817	735
V/C Ratio(X)	0.86	0.45	0.46	0.80	0.76	0.00	0.78	0.23	0.12	0.71	0.56	0.56
Avail Cap(c_a), veh/h	480	1189	636	284	1222	381	142	1524	668	345	817	735
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	31.5	31.5	44.3	38.5	0.0	47.2	17.6	16.7	45.1	19.1	19.1
Incr Delay (d2), s/veh	7.8	0.4	0.7	9.3	1.9	0.0	18.2	0.4	0.4	3.9	2.8	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	4.4	4.8	3.6	6.1	0.0	1.7	3.1	1.4	2.3	9.7	8.8
LnGrp Delay(d), s/veh	48.6	31.9	32.3	53.6	40.4	0.0	65.4	17.9	17.1	49.0	21.9	22.2
LnGrp LOS	D	C	C	D	D		E	B	B	D	C	C
Approach Vol, veh/h		813			809			487			1042	
Approach Delay, s/veh		36.8			42.4			22.7			26.3	
Approach LOS		D			D			C			C	

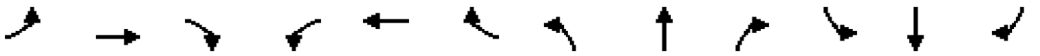
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.8	47.0	12.6	28.5	7.7	50.1	19.3	21.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	43.0	16.0	35.0	8.0	45.0	27.0	24.0
Max Q Clear Time (g_c+I1), s	6.7	8.3	8.7	11.5	4.8	20.9	14.8	14.8
Green Ext Time (p_c), s	0.1	2.6	0.1	3.4	0.0	5.8	0.5	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.6
HCM 2010 LOS	C



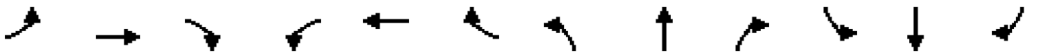
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	264	195	293	1801	0	0	0	0	76	175	387
Future Volume (vph)	0	264	195	293	1801	0	0	0	0	76	175	387
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.99	0.96	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.97	0.85	1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3347	1415	3502	3610					1715	1626	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3347	1415	3502	3610					1715	1626	1534
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	275	203	305	1876	0	0	0	0	79	182	403
RTOR Reduction (vph)	0	14	80	0	0	0	0	0	0	0	5	31
Lane Group Flow (vph)	0	318	66	305	1876	0	0	0	0	71	306	251
Confl. Peds. (#/hr)	182		12	12		182						
Confl. Bikes (#/hr)						77						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		51.7	51.7	14.2	69.9					36.2	36.2	36.2
Effective Green, g (s)		51.7	51.7	14.2	69.9					36.2	36.2	36.2
Actuated g/C Ratio		0.45	0.45	0.12	0.61					0.32	0.32	0.32
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1516	641	435	2211					544	515	486
v/s Ratio Prot		0.09		0.09	c0.52					0.04	c0.19	0.16
v/s Ratio Perm			0.05									
v/c Ratio		0.21	0.10	0.70	0.85					0.13	0.59	0.52
Uniform Delay, d1		18.9	17.9	47.9	17.8					27.7	32.8	31.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.1	3.2					0.5	5.0	3.9
Delay (s)		18.9	18.0	53.0	21.1					28.2	37.7	35.7
Level of Service		B	B	D	C					C	D	D
Approach Delay (s/veh)		18.6			25.5			0.0			35.9	
Approach LOS		B			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	114.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



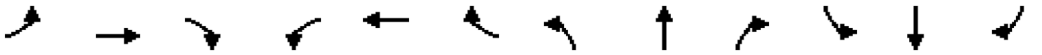
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	117	622	3	7	840	294	5	7	17	265	1	189
Future Volume (vph)	117	622	3	7	840	294	5	7	17	265	1	189
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.99	
Satd. Flow (prot)	3367	4983		1714	4988	1525		1792	1553	1649	1499	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	0.99	
Satd. Flow (perm)	3367	4983		1714	4988	1525		1792	1553	1649	1499	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	126	669	3	8	903	316	5	8	18	285	1	203
RTOR Reduction (vph)	0	1	0	0	0	169	0	0	14	0	160	0
Lane Group Flow (vph)	126	671	0	8	903	147	0	13	4	256	73	0
Confl. Peds. (#/hr)	2		11	11		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	8.7	37.9		0.7	29.9	29.9		21.5	21.5	20.7	20.7	
Effective Green, g (s)	8.7	37.9		0.7	29.9	29.9		21.5	21.5	20.7	20.7	
Actuated g/C Ratio	0.09	0.39		0.01	0.31	0.31		0.22	0.22	0.21	0.21	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	302	1950		12	1540	471		398	344	352	320	
v/s Ratio Prot	c0.04	0.13		0.00	c0.18			c0.01		c0.16	0.05	
v/s Ratio Perm						0.10			0.00			
v/c Ratio	0.42	0.34		0.67	0.59	0.31		0.03	0.01	0.73	0.23	
Uniform Delay, d1	41.7	20.7		47.9	28.2	25.6		29.5	29.4	35.4	31.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.1		89.5	0.6	0.4		0.2	0.1	7.3	0.4	
Delay (s)	42.6	20.8		137.4	28.8	26.0		29.7	29.4	42.7	31.8	
Level of Service	D	C		F	C	C		C	C	D	C	
Approach Delay (s/veh)		24.3			28.8			29.5			37.5	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	96.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	106	220	0	0	829	63	1247	241	77	0	0	0
Future Volume (vph)	106	220	0	0	829	63	1247	241	77	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.98		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3497		1643	3151	1470			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3497		1643	3151	1470			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	112	232	0	0	873	66	1313	254	81	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	28	0	0	0
Lane Group Flow (vph)	112	232	0	0	939	0	656	919	45	0	0	0
Confl. Peds. (#/hr)	124		12	12		124						
Confl. Bikes (#/hr)			3			49						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	6.0	46.3			36.3		63.1	63.1	63.1			
Effective Green, g (s)	6.0	46.3			36.3		63.1	63.1	63.1			
Actuated g/C Ratio	0.05	0.39			0.31		0.54	0.54	0.54			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	178	1423			1081		883	1693	790			
v/s Ratio Prot	c0.03	0.06			c0.27		c0.40	0.29				
v/s Ratio Perm									0.03			
v/c Ratio	0.63	0.16			0.87		0.74	0.54	0.06			
Uniform Delay, d1	54.6	23.0			38.3		20.9	17.7	13.0			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	6.8	0.1			7.6		5.6	1.3	0.1			
Delay (s)	61.4	23.1			45.9		26.5	19.0	13.1			
Level of Service	E	C			D		C	B	B			
Approach Delay (s/veh)		35.5			45.9			21.7			0.0	
Approach LOS		D			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	117.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.0%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	122	785	0	0	825	190	315	0	462	0	0	0
Future Volume (veh/h)	122	785	0	0	825	190	315	0	462	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1827	0	0	1827	1900	1827	0	1827			
Adj Flow Rate, veh/h	131	844	0	0	887	204	339	0	497			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	4	4	4	0	4			
Cap, veh/h	191	1852	0	0	1121	257	1873	0	861			
Arrive On Green	0.06	0.37	0.00	0.00	0.28	0.28	0.55	0.00	0.55			
Sat Flow, veh/h	3375	5152	0	0	4202	924	3375	0	1553			
Grp Volume(v), veh/h	131	844	0	0	730	361	339	0	497			
Grp Sat Flow(s),veh/h/ln	1688	1663	0	0	1663	1636	1688	0	1553			
Q Serve(g_s), s	4.1	13.9	0.0	0.0	22.0	22.1	5.4	0.0	22.7			
Cycle Q Clear(g_c), s	4.1	13.9	0.0	0.0	22.0	22.1	5.4	0.0	22.7			
Prop In Lane	1.00		0.00	0.00		0.56	1.00		1.00			
Lane Grp Cap(c), veh/h	191	1852	0	0	923	454	1873	0	861			
V/C Ratio(X)	0.69	0.46	0.00	0.00	0.79	0.80	0.18	0.00	0.58			
Avail Cap(c_a), veh/h	312	2398	0	0	1168	575	1873	0	861			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.1	25.7	0.0	0.0	36.1	36.2	11.9	0.0	15.8			
Incr Delay (d2), s/veh	4.3	0.2	0.0	0.0	2.9	6.0	0.2	0.0	2.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.0	6.4	0.0	0.0	10.4	10.8	2.6	0.0	10.3			
LnGrp Delay(d), s/veh	54.4	25.9	0.0	0.0	39.1	42.2	12.1	0.0	18.6			
LnGrp LOS	D	C			D	D	B		B			
Approach Vol, veh/h		975			1091			836				
Approach Delay, s/veh		29.7			40.1			16.0				
Approach LOS		C			D			B				

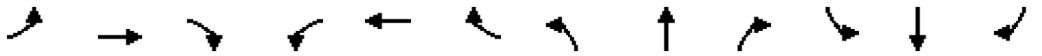
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		64.0		44.2			10.1	34.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		60.0		52.0			10.0	38.0
Max Q Clear Time (g_c+I1), s		24.7		15.9			6.1	24.1
Green Ext Time (p_c), s		3.4		6.4			0.1	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	207	1524	411	231	1422	55	417	484	153	162	936	275
Future Volume (veh/h)	207	1524	411	231	1422	55	417	484	153	162	936	275
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	220	1621	437	246	1513	59	444	515	163	172	996	293
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	275	1694	517	287	1712	529	488	1951	597	229	1092	471
Arrive On Green	0.08	0.33	0.33	0.08	0.34	0.34	0.14	0.38	0.38	0.07	0.31	0.31
Sat Flow, veh/h	3442	5085	1551	3442	5085	1571	3442	5085	1555	3442	3539	1529
Grp Volume(v), veh/h	220	1621	437	246	1513	59	444	515	163	172	996	293
Grp Sat Flow(s),veh/h/ln	1721	1695	1551	1721	1695	1571	1721	1695	1555	1721	1770	1529
Q Serve(g_s), s	7.5	37.4	31.4	8.5	33.7	3.1	15.2	8.3	8.7	5.9	32.5	19.7
Cycle Q Clear(g_c), s	7.5	37.4	31.4	8.5	33.7	3.1	15.2	8.3	8.7	5.9	32.5	19.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	275	1694	517	287	1712	529	488	1951	597	229	1092	471
V/C Ratio(X)	0.80	0.96	0.85	0.86	0.88	0.11	0.91	0.26	0.27	0.75	0.91	0.62
Avail Cap(c_a), veh/h	287	1696	517	287	1712	529	488	1951	597	287	1092	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	39.2	37.1	54.3	37.6	27.4	50.7	25.3	25.4	55.0	39.9	35.5
Incr Delay (d2), s/veh	14.4	13.1	12.3	21.8	5.9	0.1	21.1	0.3	1.1	8.3	12.9	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	19.5	15.1	4.9	16.6	1.4	8.7	4.0	3.9	3.1	17.9	9.1
LnGrp Delay(d), s/veh	68.7	52.3	49.5	76.1	43.4	27.5	71.9	25.7	26.6	63.3	52.8	41.5
LnGrp LOS	E	D	D	E	D	C	E	C	C	E	D	D
Approach Vol, veh/h		2278			1818			1122			1461	
Approach Delay, s/veh		53.3			47.3			44.1			51.8	
Approach LOS		D			D			D			D	

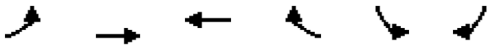
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	50.0	14.0	44.0	21.0	41.0	13.6	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	44.0	10.0	40.0	17.0	37.0	10.0	40.0
Max Q Clear Time (g_c+I1), s	7.9	10.7	10.5	39.4	17.2	34.5	9.5	35.7
Green Ext Time (p_c), s	0.1	4.0	0.0	0.5	0.0	1.7	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	81	222	38	831	296	132	32	292	197	305	1409	165
Future Volume (vph)	81	222	38	831	296	132	32	292	197	305	1409	165
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4922		3253	1679	1575	1787	3574	1573	3467	5035	
Flt Permitted		0.76		0.95	0.70	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3790		3253	1196	1575	1787	3574	1573	3467	5035	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	90	247	42	923	329	147	36	324	219	339	1566	183
RTOR Reduction (vph)	0	13	0	0	0	78	0	0	34	0	12	0
Lane Group Flow (vph)	0	366	0	821	431	69	36	324	185	339	1737	0
Confl. Peds. (#/hr)	1		47	47		1	5		9	9		5
Confl. Bikes (#/hr)			5			2			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		18.2		33.9	56.1	56.1	3.2	35.7	69.6	16.0	48.5	
Effective Green, g (s)		18.2		33.9	56.1	56.1	3.2	35.7	69.6	16.0	48.5	
Actuated g/C Ratio		0.15		0.28	0.47	0.47	0.03	0.30	0.58	0.13	0.40	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		575		920	696	737	47	1065	966	463	2038	
v/s Ratio Prot				c0.25	0.18		0.02	0.09	0.05	c0.10	c0.35	
v/s Ratio Perm		0.10			c0.11	0.04			0.06			
v/c Ratio		0.64		0.89	0.62	0.09	0.77	0.30	0.19	0.73	0.85	
Uniform Delay, d1		47.7		41.2	23.9	17.7	57.9	32.5	11.8	49.8	32.4	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.3		10.9	1.6	0.1	52.3	0.7	0.1	5.9	4.8	
Delay (s)		50.0		52.1	25.5	17.8	110.2	33.2	11.9	55.7	37.2	
Level of Service		D		D	C	B	F	C	B	E	D	
Approach Delay (s/veh)		50.0			40.3			29.9			40.2	
Approach LOS		D			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	431	1546	0	127	260
Future Volume (veh/h)	0	431	1546	0	127	260
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	444	1594	0	131	268
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2258	2258	0	870	777
Arrive On Green	0.00	0.44	0.44	0.00	0.48	0.48
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	444	1594	0	131	268
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	5.1	24.0	0.0	3.9	9.9
Cycle Q Clear(g_c), s	0.0	5.1	24.0	0.0	3.9	9.9
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2258	2258	0	870	777
V/C Ratio(X)	0.00	0.20	0.71	0.00	0.15	0.35
Avail Cap(c_a), veh/h	0	3579	3579	0	870	777
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	16.7	22.0	0.0	13.9	15.4
Incr Delay (d2), s/veh	0.0	0.0	0.4	0.0	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	2.4	11.5	0.0	2.0	4.7
LnGrp Delay(d), s/veh	0.0	16.7	22.4	0.0	14.3	16.7
LnGrp LOS		B	C		B	B
Approach Vol, veh/h		444	1594		399	
Approach Delay, s/veh		16.7	22.4		15.9	
Approach LOS		B	C		B	

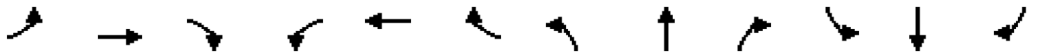
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				45.6		50.0		45.6
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				66.0		46.0		66.0
Max Q Clear Time (g_c+I1), s				7.1		11.9		26.0
Green Ext Time (p_c), s				3.1		1.3		15.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.3
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	461	0	0	1526	629	538
Future Volume (vph)	461	0	0	1526	629	538
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	0.97
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.99	0.85
Flt Protected	1.00			1.00	0.96	1.00
Satd. Flow (prot)	5136			5136	1772	1467
Flt Permitted	1.00			1.00	0.96	1.00
Satd. Flow (perm)	5136			5136	1772	1467
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	496	0	0	1641	676	578
RTOR Reduction (vph)	0	0	0	0	3	99
Lane Group Flow (vph)	496	0	0	1641	731	421
Confl. Peds. (#/hr)						10
Confl. Bikes (#/hr)						2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	45.8			45.8	64.1	64.1
Effective Green, g (s)	45.8			45.8	64.1	64.1
Actuated g/C Ratio	0.39			0.39	0.54	0.54
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1995			1995	963	797
v/s Ratio Prot	0.10			c0.32	c0.41	
v/s Ratio Perm						0.29
v/c Ratio	0.25			0.82	0.76	0.53
Uniform Delay, d1	24.4			32.4	20.9	17.2
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			2.9	5.6	2.5
Delay (s)	24.5			35.3	26.5	19.7
Level of Service	C			D	C	B
Approach Delay (s/veh)	24.5			35.3	23.7	
Approach LOS	C			D	C	

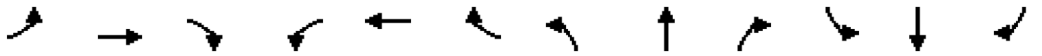
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	117.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	455	0	257	0	0	0	0	681	394	170	275	0
Future Volume (vph)	455	0	257	0	0	0	0	681	394	170	275	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.89						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1645	1534						5036	1539	1752	3505	
Flt Permitted	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1645	1534						5036	1539	1752	3505	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	469	0	265	0	0	0	0	702	406	175	284	0
RTOR Reduction (vph)	0	108	0	0	0	0	0	0	226	0	0	0
Lane Group Flow (vph)	385	241	0	0	0	0	0	702	180	175	284	0
Confl. Peds. (#/hr)							5		3	3		5
Confl. Bikes (#/hr)									1			7
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	3	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA						NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	31.0	31.0						46.8	46.8	15.7	66.5	
Effective Green, g (s)	31.0	31.0						46.8	46.8	15.7	66.5	
Actuated g/C Ratio	0.29	0.29						0.44	0.44	0.15	0.63	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	483	450						2233	682	260	2209	
v/s Ratio Prot								c0.14		c0.10	0.08	
v/s Ratio Perm	c0.23	0.16							0.12			
v/c Ratio	0.80	0.54						0.31	0.26	0.67	0.13	
Uniform Delay, d1	34.3	31.2						19.0	18.5	42.5	7.8	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	8.9	1.2						0.4	0.9	6.7	0.1	
Delay (s)	43.2	32.4						19.3	19.4	49.2	8.0	
Level of Service	D	C						B	B	D	A	
Approach Delay (s/veh)		38.1			0.0			19.4			23.7	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	105.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



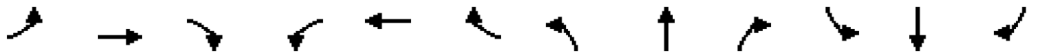
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	107	0	295	369	793	0	0	350	271
Future Volume (vph)	0	0	0	107	0	295	369	793	0	0	350	271
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1752		1568	1752	3505			5036	1521
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1752		1568	1752	3505			5036	1521
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	111	0	307	384	826	0	0	365	282
RTOR Reduction (vph)	0	0	0	0	0	192	0	0	0	0	0	145
Lane Group Flow (vph)	0	0	0	111	0	115	384	826	0	0	365	137
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												5
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm		Perm	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases				8		8						6
Actuated Green, G (s)				13.2		13.2	27.3	81.2			49.9	49.9
Effective Green, g (s)				13.2		13.2	27.3	81.2			49.9	49.9
Actuated g/C Ratio				0.13		0.13	0.27	0.79			0.49	0.49
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				225		202	467	2779			2454	741
v/s Ratio Prot							c0.22	c0.24			0.07	
v/s Ratio Perm				0.06		c0.07						0.09
v/c Ratio				0.49		0.57	0.82	0.30			0.15	0.19
Uniform Delay, d1				41.5		41.9	35.3	2.9			14.5	14.8
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				1.7		3.9	11.1	0.3			0.1	0.6
Delay (s)				43.2		45.8	46.4	3.1			14.6	15.3
Level of Service				D		D	D	A			B	B
Approach Delay (s/veh)		0.0			45.1			16.9			14.9	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	102.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	451	0	196	108	1081	0	0	1429	329
Future Volume (veh/h)	0	0	0	451	0	196	108	1081	0	0	1429	329
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				480	0	209	115	1150	0	0	1520	350
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				92	0	144	189	3024	0	0	3804	1152
Arrive On Green				0.05	0.00	0.05	0.05	0.85	0.00	0.00	0.74	0.74
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1555
Grp Volume(v), veh/h				480	0	209	115	1150	0	0	1520	350
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1555
Q Serve(g_s), s				4.0	0.0	4.0	2.5	5.7	0.0	0.0	8.5	5.9
Cycle Q Clear(g_c), s				4.0	0.0	4.0	2.5	5.7	0.0	0.0	8.5	5.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				92	0	144	189	3024	0	0	3804	1152
V/C Ratio(X)				5.22	0.00	1.45	0.61	0.38	0.00	0.00	0.40	0.30
Avail Cap(c_a), veh/h				92	0	144	356	3024	0	0	3804	1152
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				37.0	0.0	37.0	36.1	1.4	0.0	0.0	3.7	3.4
Incr Delay (d2), s/veh				1924.9	0.0	236.1	3.2	0.4	0.0	0.0	0.3	0.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				51.1	0.0	6.3	1.3	2.9	0.0	0.0	4.1	2.6
LnGrp Delay(d), s/veh				1961.9	0.0	273.1	39.2	1.7	0.0	0.0	4.0	4.1
LnGrp LOS				F		F	D	A			A	A
Approach Vol, veh/h					689			1265			1870	
Approach Delay, s/veh					1449.6			5.1			4.0	
Approach LOS					F			A			A	

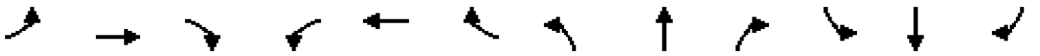
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		70.0			8.2	61.8		8.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		66.0			8.0	54.0		4.0
Max Q Clear Time (g_c+I1), s		7.7			4.5	10.5		6.0
Green Ext Time (p_c), s		11.2			0.1	18.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		264.9
HCM 2010 LOS		F



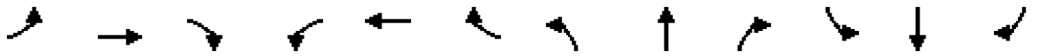
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	158	0	117	0	0	0	0	1028	654	351	1528	0
Future Volume (vph)	158	0	117	0	0	0	0	1028	654	351	1528	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.95	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1575	1519					5136	1557	3467	3574	
Flt Permitted	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1575	1519					5136	1557	3467	3574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	166	0	123	0	0	0	0	1082	688	369	1608	0
RTOR Reduction (vph)	0	40	62	0	0	0	0	0	194	0	0	0
Lane Group Flow (vph)	100	58	29	0	0	0	0	1082	494	369	1608	0
Confl. Peds. (#/hr)							6		6	6		6
Confl. Bikes (#/hr)									5			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	12.2	12.2	12.2					73.1	73.1	17.0	94.1	
Effective Green, g (s)	12.2	12.2	12.2					73.1	73.1	17.0	94.1	
Actuated g/C Ratio	0.11	0.11	0.11					0.64	0.64	0.15	0.82	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	181	168	162					3284	995	515	2942	
v/s Ratio Prot								0.21		c0.11	c0.45	
v/s Ratio Perm	c0.06	0.04	0.02						0.32			
v/c Ratio	0.55	0.34	0.18					0.33	0.50	0.72	0.55	
Uniform Delay, d1	48.5	47.3	46.5					9.4	10.9	46.4	3.2	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	3.6	1.2	0.5					0.3	1.8	4.7	0.7	
Delay (s)	52.1	48.6	47.0					9.7	12.6	51.1	4.0	
Level of Service	D	D	D					A	B	D	A	
Approach Delay (s/veh)		49.3			0.0			10.8			12.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	114.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	292	0	271	0	0	0	0	572	395	208	407	0
Future Volume (vph)	292	0	271	0	0	0	0	572	395	208	407	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.93	0.85					0.94		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1649	1502	1475					4640		3367	4988	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1649	1502	1475					4640		3367	4988	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	314	0	291	0	0	0	0	615	425	224	438	0
RTOR Reduction (vph)	0	36	156	0	0	0	0	75	0	0	0	0
Lane Group Flow (vph)	210	167	36	0	0	0	0	965	0	224	438	0
Confl. Peds. (#/hr)							6		4	4		6
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	19.4	19.4	19.4					59.2		12.1	75.3	
Effective Green, g (s)	19.4	19.4	19.4					59.2		12.1	75.3	
Actuated g/C Ratio	0.19	0.19	0.19					0.58		0.12	0.73	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	311	283	278					2674		396	3657	
v/s Ratio Prot								c0.21		c0.07	0.09	
v/s Ratio Perm	c0.13	0.11	0.02									
v/c Ratio	0.68	0.59	0.13					0.36		0.57	0.12	
Uniform Delay, d1	38.7	38.0	34.6					11.6		42.8	4.0	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	5.7	3.1	0.2					0.4		1.9	0.1	
Delay (s)	44.4	41.1	34.8					12.0		44.7	4.1	
Level of Service	D	D	C					B		D	A	
Approach Delay (s/veh)		40.3			0.0			12.0			17.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	102.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



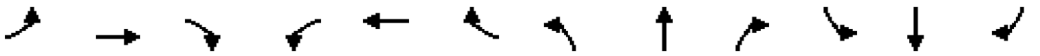
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	152	0	295	271	565	0	0	463	294
Future Volume (vph)	0	0	0	152	0	295	271	565	0	0	463	294
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.86	0.85	1.00	1.00			0.94	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1430	1475	3367	4988			4641	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1649	1430	1475	3367	4988			4641	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	171	0	331	304	635	0	0	520	330
RTOR Reduction (vph)	0	0	0	0	135	146	0	0	0	0	63	0
Lane Group Flow (vph)	0	0	0	154	41	26	304	635	0	0	787	0
Confl. Peds. (#/hr)							3		4	4		3
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm	NA	Perm	Prot	NA			NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				15.5	15.5	15.5	14.3	78.2			59.9	
Effective Green, g (s)				15.5	15.5	15.5	14.3	78.2			59.9	
Actuated g/C Ratio				0.15	0.15	0.15	0.14	0.77			0.59	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				251	217	224	473	3835			2733	
v/s Ratio Prot							c0.09	0.13			c0.17	
v/s Ratio Perm				c0.09	0.03	0.02						
v/c Ratio				0.61	0.19	0.12	0.64	0.17			0.29	
Uniform Delay, d1				40.3	37.6	37.2	41.3	3.1			10.3	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				4.4	0.4	0.2	3.0	0.1			0.3	
Delay (s)				44.7	38.0	37.4	44.3	3.2			10.6	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			39.9			16.5			10.6	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.40		
Actuated Cycle Length (s)	101.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h						
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	1583	-70952	0	1774	5253
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	0	1774	1695
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h						
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h						
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0		0			0
Approach Delay, s/veh	0.0		0.0			0.0
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		0.0				0.0		0.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		55.0				55.0		57.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

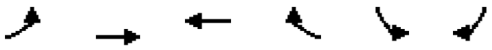
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type							Perm					
Protected Phases		4!			8!			4!			8!	
Permitted Phases	4!			8!			4!					
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	3.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type	Perm			Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

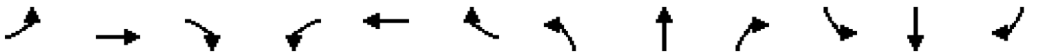
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type			Perm			Perm
Protected Phases	4			8		
Permitted Phases			8			2
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

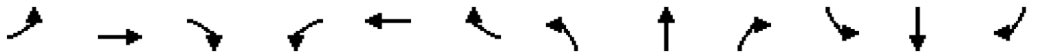
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1710	1676	1676	1676	1676
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	--2147483648	--2147483648	2147483648	2147483648	2147483648	2147483648
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	-65382	0	1597	1676	1597	1425
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1593	0	1597	1676	1597	1425
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	4560	2443	2644	1030	7921	5124
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	2599	3393	3732	1497	4397	3197
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0			0	0	
Approach Delay, s/veh	0.0			0.0	0.0	
Approach LOS						

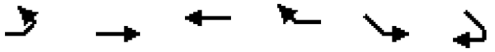
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		0.0		0.0				0.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		55.0		57.0				57.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324	16 0	844525375324	16		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	4748	4748	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	728	3909	3909	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	8445	3784	3784	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

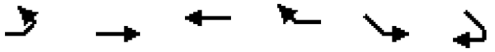
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324	16 0	844525375324	16		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	0	0	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	0	0	0	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	0	0	0	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	400	0	0	0	0	0
Future Volume (veh/h)	400	0	0	0	0	0
Number	4	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1600	0			0	0
Adj No. of Lanes	2	0			0	1
Peak Hour Factor	0.25	0.25			0.25	0.25
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	2977	0			0	0
Arrive On Green	0.84	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1600	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	3.3	0.0				
Cycle Q Clear(g_c), s	3.3	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	2977	0				
V/C Ratio(X)	0.54	0.00				
Avail Cap(c_a), veh/h	6048	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.6	0.0				
Incr Delay (d2), s/veh	0.2	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	1.4	0.0				
LnGrp Delay(d), s/veh	0.7	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1600					
Approach Delay, s/veh	0.7					
Approach LOS	A					

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				25.2				
Change Period (Y+Rc), s				4.0				
Max Green Setting (Gmax), s				43.0				
Max Q Clear Time (g_c+I1), s				5.3				
Green Ext Time (p_c), s				15.9				

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.7
HCM 2010 LOS	A

FULLERTON STATION - 2015 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	44	704	171	160	729	196	215	1344	124	109	918	24
Future Volume (veh/h)	44	704	171	160	729	196	215	1344	124	109	918	24
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	49	782	190	178	810	218	239	1493	138	121	1020	27
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	144	816	198	205	924	249	327	1560	143	145	1499	40
Arrive On Green	0.03	0.28	0.28	0.08	0.33	0.33	0.09	0.47	0.47	0.04	0.42	0.42
Sat Flow, veh/h	1810	2879	700	1810	2804	754	1810	3343	307	1810	3593	95
Grp Volume(v), veh/h	49	490	482	178	521	507	239	801	830	121	512	535
Grp Sat Flow(s),veh/h/ln	1810	1805	1774	1810	1805	1753	1810	1805	1844	1810	1805	1883
Q Serve(g_s), s	2.3	32.1	32.1	8.2	32.7	32.7	8.7	51.1	52.3	4.7	27.7	27.7
Cycle Q Clear(g_c), s	2.3	32.1	32.1	8.2	32.7	32.7	8.7	51.1	52.3	4.7	27.7	27.7
Prop In Lane	1.00		0.39	1.00		0.43	1.00		0.17	1.00		0.05
Lane Grp Cap(c), veh/h	144	511	503	205	595	578	327	842	861	145	753	785
V/C Ratio(X)	0.34	0.96	0.96	0.87	0.88	0.88	0.73	0.95	0.96	0.83	0.68	0.68
Avail Cap(c_a), veh/h	152	511	503	205	595	578	388	842	861	145	753	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.5	42.3	42.3	31.3	37.9	37.9	22.1	30.7	31.0	29.1	28.5	28.5
Incr Delay (d2), s/veh	1.4	29.5	29.8	30.2	13.9	14.3	5.7	21.2	23.1	32.4	4.9	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	20.1	19.8	5.8	18.5	18.0	4.8	30.3	32.0	3.6	14.8	15.4
LnGrp Delay(d), s/veh	33.9	71.8	72.1	61.5	51.8	52.2	27.8	51.9	54.1	61.5	33.4	33.2
LnGrp LOS	C	E	E	E	D	D	C	D	D	E	C	C
Approach Vol, veh/h		1021			1206			1870			1168	
Approach Delay, s/veh		70.1			53.4			49.8			36.2	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	60.0	13.0	38.0	14.9	54.1	7.5	43.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	56.0	9.0	34.0	15.0	46.0	4.0	39.0
Max Q Clear Time (g_c+I1), s	6.7	54.3	10.2	34.1	10.7	29.7	4.3	34.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.3	6.1	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	178	425	79	208	537	129	93	1330	174	82	960	184
Future Volume (veh/h)	178	425	79	208	537	129	93	1330	174	82	960	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	187	447	83	219	565	136	98	1400	183	86	1011	194
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	267	633	117	332	643	154	252	1794	791	192	1486	285
Arrive On Green	0.10	0.21	0.21	0.11	0.22	0.22	0.04	0.50	0.50	0.04	0.49	0.49
Sat Flow, veh/h	1810	3028	558	1810	2870	688	1810	3610	1591	1810	3016	578
Grp Volume(v), veh/h	187	265	265	219	355	346	98	1400	183	86	604	601
Grp Sat Flow(s),veh/h/ln	1810	1805	1781	1810	1805	1753	1810	1805	1591	1810	1805	1788
Q Serve(g_s), s	9.0	15.3	15.6	10.5	21.4	21.5	3.0	35.9	7.4	2.6	28.8	28.9
Cycle Q Clear(g_c), s	9.0	15.3	15.6	10.5	21.4	21.5	3.0	35.9	7.4	2.6	28.8	28.9
Prop In Lane	1.00		0.31	1.00		0.39	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	267	378	373	332	405	393	252	1794	791	192	889	881
V/C Ratio(X)	0.70	0.70	0.71	0.66	0.88	0.88	0.39	0.78	0.23	0.45	0.68	0.68
Avail Cap(c_a), veh/h	314	384	379	416	448	435	304	1794	791	219	889	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	41.3	41.4	30.8	42.2	42.3	17.5	23.3	16.1	20.6	21.8	21.8
Incr Delay (d2), s/veh	5.5	5.5	6.0	2.7	16.4	17.5	1.0	3.4	0.7	1.6	4.2	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	8.2	8.3	5.5	12.5	12.3	1.5	18.6	3.4	1.4	15.3	15.2
LnGrp Delay(d), s/veh	37.9	46.8	47.4	33.5	58.6	59.8	18.5	26.7	16.8	22.2	26.0	26.1
LnGrp LOS	D	D	D	C	E	E	B	C	B	C	C	C
Approach Vol, veh/h		717			920			1681			1291	
Approach Delay, s/veh		44.7			53.1			25.2			25.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	60.0	16.8	27.6	8.8	59.5	15.1	29.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	56.0	18.0	24.0	8.0	54.0	14.0	28.0
Max Q Clear Time (g_c+I1), s	4.6	37.9	12.5	17.6	5.0	30.9	11.0	23.5
Green Ext Time (p_c), s	0.0	10.4	0.3	1.6	0.1	8.7	0.1	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	19	827	60	117	1041	18	103	114	123	15	72	22
Future Volume (veh/h)	19	827	60	117	1041	18	103	114	123	15	72	22
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	20	853	62	121	1073	19	106	118	127	15	74	23
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	237	1677	122	291	1784	32	587	773	635	136	635	653
Arrive On Green	0.49	0.49	0.49	0.49	0.49	0.49	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	525	3411	248	620	3629	64	1312	1900	1561	204	1562	1604
Grp Volume(v), veh/h	20	451	464	121	534	558	106	118	127	89	0	23
Grp Sat Flow(s),veh/h/ln	525	1805	1854	620	1805	1888	1312	1900	1561	1766	0	1604
Q Serve(g_s), s	2.3	13.3	13.3	12.9	16.8	16.8	4.3	3.1	4.1	0.0	0.0	0.7
Cycle Q Clear(g_c), s	19.0	13.3	13.3	26.3	16.8	16.8	6.6	3.1	4.1	2.3	0.0	0.7
Prop In Lane	1.00		0.13	1.00		0.03	1.00		1.00	0.17		1.00
Lane Grp Cap(c), veh/h	237	887	911	291	887	928	587	773	635	772	0	653
V/C Ratio(X)	0.08	0.51	0.51	0.42	0.60	0.60	0.18	0.15	0.20	0.12	0.00	0.04
Avail Cap(c_a), veh/h	513	1836	1886	617	1836	1920	587	773	635	772	0	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	21.3	13.6	13.6	22.5	14.4	14.4	16.6	14.8	15.1	14.5	0.0	14.0
Incr Delay (d2), s/veh	0.2	0.5	0.4	0.9	0.7	0.6	0.7	0.4	0.7	0.3	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	6.8	6.9	2.3	8.5	8.8	1.7	1.7	1.9	1.3	0.0	0.3
LnGrp Delay(d), s/veh	21.5	14.0	14.0	23.4	15.1	15.1	17.2	15.2	15.8	14.8	0.0	14.1
LnGrp LOS	C	B	B	C	B	B	B	B	B	B		B
Approach Vol, veh/h		935			1213			351			112	
Approach Delay, s/veh		14.2			15.9			16.0			14.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		42.7		36.0		42.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		80.0		32.0		80.0
Max Q Clear Time (g_c+I1), s		8.6		21.0		4.3		28.3
Green Ext Time (p_c), s		1.4		6.9		0.6		10.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	51	616	115	137	632	36	128	264	108	38	241	41
Future Volume (veh/h)	51	616	115	137	632	36	128	264	108	38	241	41
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	55	662	124	147	680	39	138	284	116	41	259	44
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	286	1506	638	276	1506	639	533	946	786	485	946	785
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	743	3610	1529	698	3610	1531	1090	1900	1578	998	1900	1576
Grp Volume(v), veh/h	55	662	124	147	680	39	138	284	116	41	259	44
Grp Sat Flow(s),veh/h/ln	743	1805	1529	698	1805	1531	1090	1900	1578	998	1900	1576
Q Serve(g_s), s	5.4	12.4	4.9	18.0	12.8	1.4	7.9	8.3	3.8	2.4	7.5	1.4
Cycle Q Clear(g_c), s	18.2	12.4	4.9	30.3	12.8	1.4	15.4	8.3	3.8	10.7	7.5	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	286	1506	638	276	1506	639	533	946	786	485	946	785
V/C Ratio(X)	0.19	0.44	0.19	0.53	0.45	0.06	0.26	0.30	0.15	0.08	0.27	0.06
Avail Cap(c_a), veh/h	488	2486	1053	466	2486	1054	533	946	786	485	946	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	19.6	17.4	30.4	19.7	16.4	18.3	14.0	12.8	17.1	13.8	12.2
Incr Delay (d2), s/veh	0.3	0.2	0.1	1.6	0.2	0.0	1.2	0.8	0.4	0.3	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	6.2	2.1	3.6	6.4	0.6	2.6	4.6	1.7	0.7	4.1	0.6
LnGrp Delay(d), s/veh	26.6	19.8	17.6	32.0	20.0	16.5	19.4	14.8	13.2	17.5	14.5	12.4
LnGrp LOS	C	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		841			866			538			344	
Approach Delay, s/veh		19.9			21.9			15.6			14.6	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		43.4		51.0		43.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		47.0		65.0		47.0		65.0
Max Q Clear Time (g_c+I1), s		17.4		20.2		12.7		32.3
Green Ext Time (p_c), s		2.8		6.1		2.1		7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.3

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	31	37	464	23	19	474
Future Vol, veh/h	31	37	464	23	19	474
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	35	42	527	26	22	539

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1113	530	0	0	556	0
Stage 1	530	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	233	553	-	-	1025	-
Stage 1	594	-	-	-	-	-
Stage 2	562	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	227	552	-	-	1022	-
Mov Cap-2 Maneuver	227	-	-	-	-	-
Stage 1	593	-	-	-	-	-
Stage 2	550	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	17.4	0	0.3
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	227	552	1022	-
HCM Lane V/C Ratio	-	-	0.155	0.076	0.021	-
HCM Control Delay (s/veh)	-	-	23.8	12.1	8.6	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.5	0.2	0.1	-

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	6	3	7	8	4	25	7	423	14	9	356	6
Future Vol, veh/h	6	3	7	8	4	25	7	423	14	9	356	6
Conflicting Peds, #/hr	5	0	0	0	0	5	4	0	18	18	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	7	3	8	9	5	28	8	481	16	10	405	7

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	956	960	409	949	951	504	416	0	0	515	0	0
Stage 1	429	429	-	515	515	-	-	-	-	-	-	-
Stage 2	527	531	-	434	436	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	240	259	647	242	262	572	1154	-	-	1061	-	-
Stage 1	608	587	-	546	538	-	-	-	-	-	-	-
Stage 2	538	529	-	604	583	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	220	250	645	230	253	561	1150	-	-	1045	-	-
Mov Cap-2 Maneuver	220	250	-	230	253	-	-	-	-	-	-	-
Stage 1	602	579	-	534	526	-	-	-	-	-	-	-
Stage 2	501	517	-	587	575	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.8	14.8	0.1	0.2
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1150	-	-	229	645	237	561	1045	-	-
HCM Lane V/C Ratio	0.007	-	-	0.045	0.012	0.058	0.051	0.01	-	-
HCM Control Delay (s/veh)	8.2	-	-	21.5	10.7	21.1	11.8	8.5	-	-
HCM Lane LOS	A	-	-	C	B	C	B	A	-	-
HCM 95th %tile Q(veh)	0	-	-	0.1	0	0.2	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	131	48	33	149	43	50	284	30	38	303	89
Future Volume (veh/h)	67	131	48	33	149	43	50	284	30	38	303	89
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.94	0.98		0.94	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	71	139	51	35	159	46	53	302	32	40	322	95
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	184	319	254	197	319	254	758	1421	1164	815	1421	1165
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1169	1900	1511	1183	1900	1511	980	1900	1556	1056	1900	1558
Grp Volume(v), veh/h	71	139	51	35	159	46	53	302	32	40	322	95
Grp Sat Flow(s),veh/h/ln	1169	1900	1511	1183	1900	1511	980	1900	1556	1056	1900	1558
Q Serve(g_s), s	5.6	6.2	2.8	2.6	7.2	2.5	1.7	4.5	0.5	1.1	4.9	1.6
Cycle Q Clear(g_c), s	12.8	6.2	2.8	8.8	7.2	2.5	6.5	4.5	0.5	5.7	4.9	1.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	319	254	197	319	254	758	1421	1164	815	1421	1165
V/C Ratio(X)	0.39	0.44	0.20	0.18	0.50	0.18	0.07	0.21	0.03	0.05	0.23	0.08
Avail Cap(c_a), veh/h	492	820	652	509	820	652	758	1421	1164	815	1421	1165
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	35.5	34.0	39.4	35.9	33.9	4.6	3.6	3.1	4.4	3.6	3.2
Incr Delay (d2), s/veh	1.3	0.9	0.4	0.4	1.2	0.3	0.2	0.3	0.0	0.1	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	3.4	1.2	0.9	3.9	1.1	0.5	2.5	0.2	0.3	2.7	0.7
LnGrp Delay(d), s/veh	43.0	36.4	34.4	39.8	37.1	34.2	4.8	3.9	3.1	4.6	4.0	3.4
LnGrp LOS	D	D	C	D	D	C	A	A	A	A	A	A
Approach Vol, veh/h		261			240			387			457	
Approach Delay, s/veh		37.8			36.9			4.0			3.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		20.0		75.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		41.0		71.0		41.0
Max Q Clear Time (g_c+I1), s		8.5		14.8		7.7		10.8
Green Ext Time (p_c), s		2.4		1.2		2.7		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	141	810	49	93	1028	180	108	143	95	120	136	199
Future Volume (veh/h)	141	810	49	93	1028	180	108	143	95	120	136	199
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.93	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	145	835	51	96	1060	186	111	147	98	124	140	205
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	1831	111	331	1516	265	486	818	671	521	818	669
Arrive On Green	0.07	0.37	0.37	0.05	0.35	0.35	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1792	4926	299	1792	4341	760	1031	1881	1542	1128	1881	1539
Grp Volume(v), veh/h	145	579	307	96	836	410	111	147	98	124	140	205
Grp Sat Flow(s),veh/h/ln	1792	1712	1802	1792	1712	1678	1031	1881	1542	1128	1881	1539
Q Serve(g_s), s	4.3	10.9	11.0	2.9	17.9	17.9	6.3	4.1	3.3	6.4	3.9	7.4
Cycle Q Clear(g_c), s	4.3	10.9	11.0	2.9	17.9	17.9	10.1	4.1	3.3	10.5	3.9	7.4
Prop In Lane	1.00		0.17	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1273	670	331	1195	586	486	818	671	521	818	669
V/C Ratio(X)	0.52	0.46	0.46	0.29	0.70	0.70	0.23	0.18	0.15	0.24	0.17	0.31
Avail Cap(c_a), veh/h	568	2414	1270	468	2052	1006	486	818	671	521	818	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.1	20.2	20.2	16.7	23.8	23.9	17.8	14.7	14.5	18.0	14.7	15.7
Incr Delay (d2), s/veh	1.5	0.3	0.5	0.5	0.8	1.5	1.1	0.5	0.5	1.1	0.5	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	5.2	5.5	1.5	8.5	8.6	1.9	2.2	1.5	2.2	2.1	3.4
LnGrp Delay(d), s/veh	19.6	20.5	20.7	17.1	24.6	25.4	18.9	15.2	15.0	19.0	15.1	16.9
LnGrp LOS	B	C	C	B	C	C	B	B	B	B	B	B
Approach Vol, veh/h		1031			1342			356			469	
Approach Delay, s/veh		20.4			24.3			16.3			16.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		41.0	8.5	35.6		41.0	10.4	33.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		37.0	11.0	60.0		37.0	20.0	51.0
Max Q Clear Time (g_c+I1), s		12.1	4.9	13.0		12.5	6.3	19.9
Green Ext Time (p_c), s		1.7	0.1	6.2		2.0	0.3	9.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	10.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	37	880	32	37	1093	26	29	14	104	8	10	76
Future Vol, veh/h	37	880	32	37	1093	26	29	14	104	8	10	76
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	38	907	33	38	1127	27	30	14	107	8	10	78

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1154	0	0	946	0	0	1651	2236	477	1755	2239	577
Stage 1	-	-	-	-	-	-	1006	1006	-	1217	1217	-
Stage 2	-	-	-	-	-	-	645	1230	-	538	1022	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	613	-	-	734	-	-	66	43	540	55	43	465
Stage 1	-	-	-	-	-	-	262	321	-	195	256	-
Stage 2	-	-	-	-	-	-	432	252	-	500	316	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	613	-	-	730	-	-	40	38	537	29	38	465
Mov Cap-2 Maneuver	-	-	-	-	-	-	40	38	-	29	38	-
Stage 1	-	-	-	-	-	-	244	299	-	183	243	-
Stage 2	-	-	-	-	-	-	326	239	-	357	295	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.3	111.1	81.9
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	39	537	613	-	-	730	-	-	134
HCM Lane V/C Ratio	1.137	0.2	0.062	-	-	0.052	-	-	0.723
HCM Control Delay (s/veh)	$ 347.5	13.4	11.3	-	-	10.2	-	-	81.9
HCM Lane LOS	F	B	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	4.4	0.7	0.2	-	-	0.2	-	-	4.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	47	682	24	25	687	35	51	28	47	31	19	55
Future Volume (veh/h)	47	682	24	25	687	35	51	28	47	31	19	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	48	696	24	26	701	36	52	29	48	32	19	56
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	267	1106	472	258	1060	455	290	143	778	279	147	778
Arrive On Green	0.04	0.31	0.31	0.02	0.29	0.29	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1810	3610	1542	1810	3610	1548	408	296	1610	388	303	1610
Grp Volume(v), veh/h	48	696	24	26	701	36	81	0	48	51	0	56
Grp Sat Flow(s),veh/h/ln	1810	1805	1542	1810	1805	1548	704	0	1610	692	0	1610
Q Serve(g_s), s	1.2	10.6	0.7	0.6	10.9	1.1	1.4	0.0	1.0	0.6	0.0	1.2
Cycle Q Clear(g_c), s	1.2	10.6	0.7	0.6	10.9	1.1	19.3	0.0	1.0	18.9	0.0	1.2
Prop In Lane	1.00		1.00	1.00		1.00	0.64		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	267	1106	472	258	1060	455	433	0	778	426	0	778
V/C Ratio(X)	0.18	0.63	0.05	0.10	0.66	0.08	0.19	0.00	0.06	0.12	0.00	0.07
Avail Cap(c_a), veh/h	569	3772	1611	499	3603	1545	433	0	778	426	0	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.8	19.1	15.7	16.0	19.9	16.4	13.5	0.0	8.8	11.1	0.0	8.9
Incr Delay (d2), s/veh	0.3	0.6	0.0	0.2	0.7	0.1	1.0	0.0	0.2	0.6	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	5.3	0.3	0.3	5.5	0.5	1.3	0.0	0.5	0.5	0.0	0.6
LnGrp Delay(d), s/veh	16.1	19.7	15.7	16.1	20.6	16.5	14.4	0.0	9.0	11.7	0.0	9.0
LnGrp LOS	B	B	B	B	C	B	B		A	B		A
Approach Vol, veh/h		768			763			129			107	
Approach Delay, s/veh		19.4			20.2			12.4			10.3	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	5.5	23.6		35.0	6.3	22.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	13.0	64.0
Max Q Clear Time (g_c+I1), s		21.3	2.6	12.6		20.9	3.2	12.9
Green Ext Time (p_c), s		0.3	0.0	5.8		0.2	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	288	1231	319	403	1678	164	479	879	260	221	723	186
Future Volume (veh/h)	288	1231	319	403	1678	164	479	879	260	221	723	186
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	306	1310	339	429	1785	174	510	935	277	235	769	198
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	364	1442	373	491	2017	624	574	1430	435	297	1022	310
Arrive On Green	0.10	0.36	0.36	0.14	0.39	0.39	0.17	0.28	0.28	0.09	0.20	0.20
Sat Flow, veh/h	3476	4047	1046	3476	5136	1588	3476	5136	1563	3476	5136	1557
Grp Volume(v), veh/h	306	1108	541	429	1785	174	510	935	277	235	769	198
Grp Sat Flow(s),veh/h/ln	1738	1712	1669	1738	1712	1588	1738	1712	1563	1738	1712	1557
Q Serve(g_s), s	10.0	35.6	35.7	14.0	37.4	8.6	16.6	18.6	18.0	7.7	16.3	13.5
Cycle Q Clear(g_c), s	10.0	35.6	35.7	14.0	37.4	8.6	16.6	18.6	18.0	7.7	16.3	13.5
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	1220	595	491	2017	624	574	1430	435	297	1022	310
V/C Ratio(X)	0.84	0.91	0.91	0.87	0.88	0.28	0.89	0.65	0.64	0.79	0.75	0.64
Avail Cap(c_a), veh/h	391	1244	606	541	2088	646	631	1430	435	391	1022	310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	35.4	35.4	48.6	32.7	23.9	47.2	36.8	36.6	51.8	43.6	42.5
Incr Delay (d2), s/veh	14.3	9.8	17.7	13.8	4.8	0.2	13.7	2.3	6.9	7.9	5.1	9.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	18.4	19.3	7.7	18.6	3.8	9.1	9.1	8.6	4.0	8.2	6.6
LnGrp Delay(d), s/veh	65.2	45.2	53.1	62.5	37.5	24.2	60.9	39.1	43.5	59.7	48.8	52.2
LnGrp LOS	E	D	D	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1955			2388			1722			1202	
Approach Delay, s/veh		50.5			41.0			46.3			51.5	
Approach LOS		D			D			D			D	

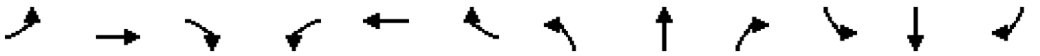
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.9	36.2	20.3	45.2	23.1	27.0	16.1	49.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	31.0	18.0	42.0	21.0	23.0	13.0	47.0
Max Q Clear Time (g_c+I1), s	9.7	20.6	16.0	37.7	18.6	18.3	12.0	39.4
Green Ext Time (p_c), s	0.2	5.0	0.3	3.3	0.5	2.3	0.1	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	267	1320	166	166	1089	247	234	1110	167	331	880	288
Future Volume (veh/h)	267	1320	166	166	1089	247	234	1110	167	331	880	288
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	284	1404	177	177	1159	263	249	1181	178	352	936	306
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	316	1709	215	236	1343	408	309	1589	485	415	1296	422
Arrive On Green	0.17	0.37	0.37	0.07	0.26	0.26	0.09	0.31	0.31	0.12	0.34	0.34
Sat Flow, veh/h	1810	4661	587	3510	5187	1576	3510	5187	1582	3510	3851	1256
Grp Volume(v), veh/h	284	1041	540	177	1159	263	249	1181	178	352	840	402
Grp Sat Flow(s),veh/h/ln	1810	1729	1791	1755	1729	1576	1755	1729	1582	1755	1729	1649
Q Serve(g_s), s	17.4	30.8	30.9	5.6	24.1	16.8	7.9	23.1	9.9	11.1	24.1	24.2
Cycle Q Clear(g_c), s	17.4	30.8	30.9	5.6	24.1	16.8	7.9	23.1	9.9	11.1	24.1	24.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.76
Lane Grp Cap(c), veh/h	316	1268	656	236	1343	408	309	1589	485	415	1163	555
V/C Ratio(X)	0.90	0.82	0.82	0.75	0.86	0.64	0.80	0.74	0.37	0.85	0.72	0.72
Avail Cap(c_a), veh/h	401	1439	745	249	1378	419	342	1589	485	466	1163	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	32.4	32.4	51.8	39.9	37.2	50.5	35.2	30.6	48.8	32.8	32.9
Incr Delay (d2), s/veh	19.1	3.5	6.6	11.4	5.8	3.3	12.1	3.2	2.1	12.6	3.9	8.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	15.4	16.5	3.1	12.2	7.7	4.3	11.5	4.6	6.1	12.1	12.2
LnGrp Delay(d), s/veh	64.7	36.0	39.1	63.2	45.7	40.5	62.6	38.4	32.8	61.4	36.8	40.9
LnGrp LOS	E	D	D	E	D	D	E	D	C	E	D	D
Approach Vol, veh/h		1865			1599			1608			1594	
Approach Delay, s/veh		41.2			46.8			41.5			43.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	38.6	11.6	45.4	14.0	42.0	23.8	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	34.0	8.0	47.0	11.0	38.0	25.0	30.0
Max Q Clear Time (g_c+I1), s	13.1	25.1	7.6	32.9	9.9	26.2	19.4	26.1
Green Ext Time (p_c), s	0.2	5.1	0.0	8.6	0.1	5.8	0.4	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	77	186	28	512	132	87	27	1199	540	84	1177	38
Future Volume (vph)	77	186	28	512	132	87	27	1199	540	84	1177	38
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1900	1615	1715	1753	1564	1805	5187	1595	1805	5155	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1900	1615	1715	1753	1564	1805	5187	1595	1805	5155	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	80	194	29	533	138	91	28	1249	562	88	1226	40
RTOR Reduction (vph)	0	0	25	0	0	69	0	0	351	0	2	0
Lane Group Flow (vph)	80	194	4	330	341	22	28	1249	212	88	1264	0
Confl. Peds. (#/hr)	9					9	6					6
Confl. Bikes (#/hr)						3			1			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	14.8	14.8	14.8	25.3	25.3	25.3	4.5	39.1	39.1	8.8	43.4	
Effective Green, g (s)	14.8	14.8	14.8	25.3	25.3	25.3	4.5	39.1	39.1	8.8	43.4	
Actuated g/C Ratio	0.14	0.14	0.14	0.24	0.24	0.24	0.04	0.38	0.38	0.08	0.42	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	256	270	229	417	426	380	78	1950	599	152	2151	
v/s Ratio Prot	0.04	c0.10		0.19	c0.19		0.02	c0.24		c0.05	0.25	
v/s Ratio Perm			0.00			0.01			0.13			
v/c Ratio	0.31	0.72	0.02	0.79	0.80	0.06	0.36	0.64	0.35	0.58	0.59	
Uniform Delay, d1	40.0	42.6	38.4	36.9	37.0	30.2	48.3	26.7	23.4	45.8	23.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	8.8	0.0	9.9	10.3	0.1	2.8	1.6	1.6	5.3	0.4	
Delay (s)	40.7	51.4	38.4	46.7	47.3	30.3	51.2	28.3	25.0	51.1	23.8	
Level of Service	D	D	D	D	D	C	D	C	C	D	C	
Approach Delay (s/veh)		47.4			45.0			27.6			25.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	104.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	125	57	66	197	354	103	1272	27	335	1089	21
Future Volume (veh/h)	42	125	57	66	197	354	103	1272	27	335	1089	21
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	43	128	58	67	201	361	105	1298	28	342	1111	21
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	144	362	301	223	362	493	131	2079	45	422	2250	977
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.07	0.58	0.58	0.12	0.63	0.63
Sat Flow, veh/h	852	1881	1565	1201	1881	1555	1792	3576	77	3476	3574	1552
Grp Volume(v), veh/h	43	128	58	67	201	361	105	648	678	342	1111	21
Grp Sat Flow(s),veh/h/ln	852	1881	1565	1201	1881	1555	1792	1787	1866	1738	1787	1552
Q Serve(g_s), s	5.5	6.7	3.6	5.9	11.1	22.0	6.6	27.3	27.3	11.0	19.1	0.6
Cycle Q Clear(g_c), s	16.5	6.7	3.6	12.6	11.1	22.0	6.6	27.3	27.3	11.0	19.1	0.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	144	362	301	223	362	493	131	1039	1085	422	2250	977
V/C Ratio(X)	0.30	0.35	0.19	0.30	0.56	0.73	0.80	0.62	0.62	0.81	0.49	0.02
Avail Cap(c_a), veh/h	144	362	301	223	362	493	219	1039	1085	729	2250	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	40.0	38.7	45.5	41.8	35.1	52.2	15.7	15.7	49.0	11.4	8.0
Incr Delay (d2), s/veh	1.1	0.6	0.3	0.7	1.9	5.5	10.6	2.8	2.7	3.8	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	3.6	1.6	2.0	5.9	10.9	3.7	14.1	14.7	5.5	9.7	0.3
LnGrp Delay(d), s/veh	50.4	40.6	39.1	46.2	43.6	40.6	62.7	18.5	18.4	52.8	12.2	8.0
LnGrp LOS	D	D	D	D	D	D	E	B	B	D	B	A
Approach Vol, veh/h		229			629			1431			1474	
Approach Delay, s/veh		42.1			42.2			21.7			21.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.9	70.5		26.0	12.4	76.0		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	62.0		22.0	14.0	72.0		22.0
Max Q Clear Time (g_c+I1), s	13.0	29.3		18.5	8.6	21.1		24.0
Green Ext Time (p_c), s	0.9	11.2		0.3	0.1	10.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	640	108	184	945	119	85	930	115	120	941	149
Future Volume (veh/h)	219	640	108	184	945	119	85	930	115	120	941	149
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	226	660	111	190	974	123	88	959	119	124	970	154
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	274	973	163	318	1093	472	207	1248	155	235	1241	197
Arrive On Green	0.10	0.32	0.32	0.09	0.31	0.31	0.04	0.39	0.39	0.06	0.41	0.41
Sat Flow, veh/h	1792	3045	511	1792	3574	1545	1792	3189	396	1792	3063	486
Grp Volume(v), veh/h	226	387	384	190	974	123	88	537	541	124	566	558
Grp Sat Flow(s),veh/h/ln	1792	1787	1769	1792	1787	1545	1792	1787	1797	1792	1787	1762
Q Serve(g_s), s	9.7	21.4	21.4	8.1	29.5	6.8	3.3	29.7	29.7	4.7	31.3	31.4
Cycle Q Clear(g_c), s	9.7	21.4	21.4	8.1	29.5	6.8	3.3	29.7	29.7	4.7	31.3	31.4
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.22	1.00		0.28
Lane Grp Cap(c), veh/h	274	571	565	318	1093	472	207	699	703	235	724	714
V/C Ratio(X)	0.82	0.68	0.68	0.60	0.89	0.26	0.42	0.77	0.77	0.53	0.78	0.78
Avail Cap(c_a), veh/h	324	598	592	376	1164	503	223	699	703	258	724	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.6	33.6	33.6	25.5	37.6	29.7	23.8	30.1	30.1	23.6	29.4	29.4
Incr Delay (d2), s/veh	13.8	2.9	3.0	1.9	8.5	0.3	1.4	7.9	7.9	1.8	8.2	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	11.0	10.9	4.2	15.9	2.9	1.7	16.2	16.3	2.4	17.0	16.9
LnGrp Delay(d), s/veh	41.5	36.5	36.5	27.4	46.2	30.0	25.2	38.0	38.0	25.5	37.6	37.8
LnGrp LOS	D	D	D	C	D	C	C	D	D	C	D	D
Approach Vol, veh/h		997			1287			1166			1248	
Approach Delay, s/veh		37.6			41.9			37.1			36.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	48.4	14.3	40.3	9.0	50.0	15.9	38.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	14.0	38.0	6.0	46.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	6.7	31.7	10.1	23.4	5.3	33.4	11.7	31.5
Green Ext Time (p_c), s	0.0	5.9	0.2	4.0	0.0	5.9	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	106	546	97	255	574	43	110	957	178	58	986	70
Future Volume (veh/h)	106	546	97	255	574	43	110	957	178	58	986	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.92	1.00		0.94	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	112	575	102	268	604	45	116	1007	187	61	1038	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	274	692	284	342	946	396	277	1752	747	259	1588	113
Arrive On Green	0.07	0.19	0.19	0.14	0.26	0.26	0.05	0.49	0.49	0.03	0.47	0.47
Sat Flow, veh/h	1792	3574	1469	1792	3574	1497	1792	3574	1523	1792	3372	240
Grp Volume(v), veh/h	112	575	102	268	604	45	116	1007	187	61	550	562
Grp Sat Flow(s),veh/h/ln	1792	1787	1469	1792	1787	1497	1792	1787	1523	1792	1787	1825
Q Serve(g_s), s	5.3	16.7	6.5	12.4	16.2	2.5	3.6	21.6	7.7	1.9	25.4	25.5
Cycle Q Clear(g_c), s	5.3	16.7	6.5	12.4	16.2	2.5	3.6	21.6	7.7	1.9	25.4	25.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	274	692	284	342	946	396	277	1752	747	259	841	859
V/C Ratio(X)	0.41	0.83	0.36	0.78	0.64	0.11	0.42	0.57	0.25	0.24	0.65	0.65
Avail Cap(c_a), veh/h	305	827	340	445	1223	512	319	1752	747	286	841	859
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	41.9	37.8	29.1	35.2	30.1	17.1	19.6	16.0	15.9	21.9	21.9
Incr Delay (d2), s/veh	1.0	6.2	0.8	6.7	0.7	0.1	1.0	1.4	0.8	0.5	3.9	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	8.8	2.7	6.7	8.1	1.0	1.8	11.0	3.4	0.9	13.4	13.7
LnGrp Delay(d), s/veh	33.0	48.0	38.5	35.8	35.9	30.2	18.1	20.9	16.8	16.4	25.8	25.7
LnGrp LOS	C	D	D	D	D	C	B	C	B	B	C	C
Approach Vol, veh/h		789			917			1310			1173	
Approach Delay, s/veh		44.7			35.6			20.1			25.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.4	57.0	18.8	24.9	9.5	54.9	11.1	32.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	21.0	25.0	8.0	50.0	9.0	37.0
Max Q Clear Time (g_c+I1), s	3.9	23.6	14.4	18.7	5.6	27.5	7.3	18.2
Green Ext Time (p_c), s	0.0	9.0	0.4	2.2	0.1	8.5	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	22	16	32	52	11	31	33	1161	59	34	1395	18
Future Volume (veh/h)	22	16	32	52	11	31	33	1161	59	34	1395	18
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	23	16	33	54	11	32	34	1197	61	35	1438	19
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	49	22	260	56	7	256	292	2542	1115	354	2543	1097
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.02	0.71	0.71	0.02	0.71	0.71
Sat Flow, veh/h	0	138	1594	0	40	1575	1792	3574	1567	1792	3574	1542
Grp Volume(v), veh/h	39	0	33	65	0	32	34	1197	61	35	1438	19
Grp Sat Flow(s),veh/h/ln	138	0	1594	40	0	1575	1792	1787	1567	1792	1787	1542
Q Serve(g_s), s	0.0	0.0	2.1	0.0	0.0	2.0	0.6	17.0	1.4	0.6	22.7	0.4
Cycle Q Clear(g_c), s	19.0	0.0	2.1	19.0	0.0	2.0	0.6	17.0	1.4	0.6	22.7	0.4
Prop In Lane	0.59		1.00	0.83		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	71	0	260	63	0	256	292	2542	1115	354	2543	1097
V/C Ratio(X)	0.55	0.00	0.13	1.03	0.00	0.12	0.12	0.47	0.05	0.10	0.57	0.02
Avail Cap(c_a), veh/h	71	0	260	63	0	256	344	2542	1115	405	2543	1097
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.8	0.0	41.8	56.4	0.0	41.8	6.6	7.3	5.1	5.5	8.1	4.9
Incr Delay (d2), s/veh	8.4	0.0	0.2	122.3	0.0	0.2	0.2	0.6	0.1	0.1	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	0.9	4.2	0.0	0.9	0.3	8.5	0.6	0.3	11.3	0.2
LnGrp Delay(d), s/veh	56.2	0.0	42.0	179.2	0.0	42.0	6.8	7.9	5.2	5.7	9.0	4.9
LnGrp LOS	E		D	F		D	A	A	A	A	A	A
Approach Vol, veh/h		72			97			1292			1492	
Approach Delay, s/veh		49.7			134.0			7.8			8.9	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.7	87.0		23.0	6.7	87.0		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	83.0		19.0	6.0	83.0		19.0
Max Q Clear Time (g_c+I1), s	2.6	19.0		21.0	2.6	24.7		21.0
Green Ext Time (p_c), s	0.0	12.4		0.0	0.0	16.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	17	0	0	13	0	1240	19	0	1466	13
Future Vol, veh/h	0	0	17	0	0	13	0	1240	19	0	1466	13
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	6	6	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	18	0	0	13	0	1278	20	0	1511	13

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	756	-	-	639	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	353	0	0	421	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	353	-	-	421	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

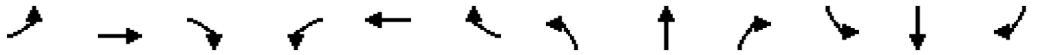
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	15.7	13.8	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	353	421	-
HCM Lane V/C Ratio	-	0.05	0.032	-
HCM Control Delay (s/veh)	-	15.7	13.8	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.2	0.1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	234	626	216	244	799	151	295	1338	374	207	1200	210
Future Volume (veh/h)	234	626	216	244	799	151	295	1338	374	207	1200	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.90	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	236	632	218	246	807	153	298	1352	378	209	1212	212
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	291	1277	357	309	907	366	363	1610	687	264	1840	322
Arrive On Green	0.08	0.25	0.25	0.09	0.25	0.25	0.10	0.45	0.45	0.08	0.42	0.42
Sat Flow, veh/h	3476	5136	1435	3476	3574	1444	3476	3574	1524	3476	4357	762
Grp Volume(v), veh/h	236	632	218	246	807	153	298	1352	378	209	952	472
Grp Sat Flow(s),veh/h/ln	1738	1712	1435	1738	1787	1444	1738	1787	1524	1738	1712	1696
Q Serve(g_s), s	7.9	12.4	15.8	8.2	25.6	10.4	9.9	39.3	21.3	7.0	26.2	26.2
Cycle Q Clear(g_c), s	7.9	12.4	15.8	8.2	25.6	10.4	9.9	39.3	21.3	7.0	26.2	26.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	291	1277	357	309	907	366	363	1610	687	264	1445	716
V/C Ratio(X)	0.81	0.49	0.61	0.80	0.89	0.42	0.82	0.84	0.55	0.79	0.66	0.66
Avail Cap(c_a), veh/h	295	1277	357	414	972	393	473	1610	687	266	1445	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	37.9	39.2	52.6	42.3	36.6	51.6	28.6	23.6	53.4	27.2	27.2
Incr Delay (d2), s/veh	15.3	0.3	3.0	7.7	9.8	0.8	8.7	5.4	3.2	14.8	2.4	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	5.9	6.6	4.3	13.9	4.2	5.2	20.6	9.5	3.9	12.8	13.1
LnGrp Delay(d), s/veh	68.3	38.2	42.2	60.3	52.2	37.4	60.3	34.0	26.8	68.2	29.6	31.9
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1086			1206			2028			1633	
Approach Delay, s/veh		45.5			51.9			36.5			35.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	57.0	14.4	33.3	16.3	53.7	13.9	33.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	53.0	14.0	28.0	16.0	46.0	10.0	32.0
Max Q Clear Time (g_c+I1), s	9.0	41.3	10.2	17.8	11.9	28.2	9.9	27.6
Green Ext Time (p_c), s	0.0	7.8	0.3	3.5	0.4	9.0	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	180	375	217	83	1905	0	0	1348	537
Future Volume (veh/h)	0	0	0	180	375	217	83	1905	0	0	1348	537
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				184	383	221	85	1944	0	0	1376	548
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				320	638	285	138	3844	0	0	2422	950
Arrive On Green				0.18	0.18	0.18	0.04	0.75	0.00	0.00	0.67	0.67
Sat Flow, veh/h				1792	3574	1596	3476	5305	0	0	3772	1413
Grp Volume(v), veh/h				184	383	221	85	1944	0	0	1307	617
Grp Sat Flow(s),veh/h/ln				1792	1787	1596	1738	1712	0	0	1712	1592
Q Serve(g_s), s				10.3	10.8	14.5	2.6	16.8	0.0	0.0	22.2	22.7
Cycle Q Clear(g_c), s				10.3	10.8	14.5	2.6	16.8	0.0	0.0	22.2	22.7
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.89
Lane Grp Cap(c), veh/h				320	638	285	138	3844	0	0	2302	1071
V/C Ratio(X)				0.58	0.60	0.78	0.62	0.51	0.00	0.00	0.57	0.58
Avail Cap(c_a), veh/h				491	979	437	254	3844	0	0	2302	1071
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				41.2	41.4	42.9	51.8	5.6	0.0	0.0	9.5	9.6
Incr Delay (d2), s/veh				1.6	0.9	4.7	4.5	0.5	0.0	0.0	1.0	2.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	5.4	6.8	1.3	7.9	0.0	0.0	10.7	10.4
LnGrp Delay(d), s/veh				42.8	42.3	47.6	56.2	6.1	0.0	0.0	10.5	11.9
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					788			2029			1924	
Approach Delay, s/veh					43.9			8.2			11.0	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		86.0			8.3	77.7		23.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		82.0			8.0	70.0		30.0
Max Q Clear Time (g_c+I1), s		18.8			4.6	24.7		16.5
Green Ext Time (p_c), s		25.7			0.1	21.6		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	795	348	129	0	0	0	0	1272	209	270	1265	0
Future Volume (veh/h)	795	348	129	0	0	0	0	1272	209	270	1265	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881				0	1881	1881	1881	1881	0
Adj Flow Rate, veh/h	811	355	132				0	1298	213	276	1291	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	994	538	457				0	2569	784	351	3281	0
Arrive On Green	0.29	0.29	0.29				0.00	0.50	0.50	0.10	0.64	0.00
Sat Flow, veh/h	3476	1881	1599				0	5305	1567	3476	5305	0
Grp Volume(v), veh/h	811	355	132				0	1298	213	276	1291	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1599				0	1712	1567	1738	1712	0
Q Serve(g_s), s	23.1	17.7	6.8				0.0	18.0	8.4	8.3	12.9	0.0
Cycle Q Clear(g_c), s	23.1	17.7	6.8				0.0	18.0	8.4	8.3	12.9	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	994	538	457				0	2569	784	351	3281	0
V/C Ratio(X)	0.82	0.66	0.29				0.00	0.51	0.27	0.79	0.39	0.00
Avail Cap(c_a), veh/h	1437	778	661				0	2569	784	555	3281	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.4	33.4	29.6				0.0	17.8	15.4	46.7	9.3	0.0
Incr Delay (d2), s/veh	2.5	1.4	0.3				0.0	0.7	0.9	3.9	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	9.4	3.1				0.0	8.6	3.8	4.1	6.2	0.0
LnGrp Delay(d), s/veh	37.9	34.8	29.9				0.0	18.5	16.2	50.6	9.6	0.0
LnGrp LOS	D	C	C					B	B	D	A	
Approach Vol, veh/h		1298						1511			1567	
Approach Delay, s/veh		36.2						18.2			16.8	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	14.8	57.2		34.4		72.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	17.0	47.0		44.0		68.0		
Max Q Clear Time (g_c+I1), s	10.3	20.0		25.1		14.9		
Green Ext Time (p_c), s	0.5	11.7		5.3		12.1		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	530	1311	96	369	1068	201	79	712	306	192	678	290
Future Volume (veh/h)	530	1311	96	369	1068	201	79	712	306	192	678	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	558	1380	101	388	1124	212	83	749	322	202	714	305
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	646	1667	512	464	1398	434	107	1165	727	268	1227	837
Arrive On Green	0.18	0.32	0.32	0.13	0.27	0.27	0.06	0.32	0.32	0.08	0.34	0.34
Sat Flow, veh/h	3510	5187	1592	3510	5187	1611	1810	3610	1590	3510	3610	1587
Grp Volume(v), veh/h	558	1380	101	388	1124	212	83	749	322	202	714	305
Grp Sat Flow(s),veh/h/ln	1755	1729	1592	1755	1729	1611	1810	1805	1590	1755	1805	1587
Q Serve(g_s), s	16.7	26.7	5.0	11.7	21.9	12.0	4.9	19.2	15.0	6.1	17.7	12.3
Cycle Q Clear(g_c), s	16.7	26.7	5.0	11.7	21.9	12.0	4.9	19.2	15.0	6.1	17.7	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	646	1667	512	464	1398	434	107	1165	727	268	1227	837
V/C Ratio(X)	0.86	0.83	0.20	0.84	0.80	0.49	0.78	0.64	0.44	0.76	0.58	0.36
Avail Cap(c_a), veh/h	841	1865	572	615	1530	475	183	1165	727	356	1227	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	34.0	26.7	45.9	36.9	33.3	50.3	31.4	20.2	49.1	29.5	15.2
Incr Delay (d2), s/veh	7.4	3.0	0.2	7.5	3.0	0.9	11.5	2.7	2.0	6.3	2.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	13.2	2.2	6.1	10.8	5.4	2.8	10.0	6.9	3.2	9.2	5.7
LnGrp Delay(d), s/veh	50.3	37.0	26.9	53.5	39.9	34.2	61.9	34.1	22.2	55.4	31.5	16.4
LnGrp LOS	D	D	C	D	D	C	E	C	C	E	C	B
Approach Vol, veh/h		2039			1724			1154			1221	
Approach Delay, s/veh		40.1			42.3			32.8			31.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.3	39.0	18.3	38.9	10.4	40.9	24.0	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	35.0	19.0	39.0	11.0	35.0	26.0	32.0
Max Q Clear Time (g_c+I1), s	8.1	21.2	13.7	28.7	6.9	19.7	18.7	23.9
Green Ext Time (p_c), s	0.2	5.0	0.6	6.2	0.1	4.9	1.2	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	206	682	137	312	806	141	136	746	175	100	458	124
Future Volume (veh/h)	206	682	137	312	806	141	136	746	175	100	458	124
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.82	1.00		0.85	1.00		0.85
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	226	749	151	343	886	155	149	820	192	110	503	136
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	261	919	185	421	1063	392	347	1285	491	263	920	246
Arrive On Green	0.14	0.32	0.32	0.12	0.29	0.29	0.07	0.36	0.36	0.06	0.34	0.34
Sat Flow, veh/h	1810	2886	581	3510	3610	1331	1810	3610	1380	1810	2702	722
Grp Volume(v), veh/h	226	468	432	343	886	155	149	820	192	110	334	305
Grp Sat Flow(s),veh/h/ln	1810	1805	1662	1755	1805	1331	1810	1805	1380	1810	1805	1619
Q Serve(g_s), s	13.0	25.5	25.5	10.2	24.5	9.9	5.6	20.2	11.1	4.2	16.0	16.3
Cycle Q Clear(g_c), s	13.0	25.5	25.5	10.2	24.5	9.9	5.6	20.2	11.1	4.2	16.0	16.3
Prop In Lane	1.00		0.35	1.00		1.00	1.00		1.00	1.00		0.45
Lane Grp Cap(c), veh/h	261	575	530	421	1063	392	347	1285	491	263	615	552
V/C Ratio(X)	0.87	0.81	0.82	0.81	0.83	0.40	0.43	0.64	0.39	0.42	0.54	0.55
Avail Cap(c_a), veh/h	373	693	638	592	1251	461	370	1285	491	280	615	552
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.7	33.5	33.5	45.8	35.2	30.1	21.7	28.7	25.7	22.7	28.5	28.6
Incr Delay (d2), s/veh	14.0	6.3	6.8	6.0	4.3	0.6	0.8	2.4	2.3	1.1	3.4	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	13.6	12.6	5.3	12.8	3.7	2.9	10.5	4.5	2.2	8.6	7.9
LnGrp Delay(d), s/veh	58.7	39.8	40.3	51.8	39.6	30.7	22.5	31.1	28.1	23.8	31.9	32.6
LnGrp LOS	E	D	D	D	D	C	C	C	C	C	C	C
Approach Vol, veh/h		1126			1384			1161			749	
Approach Delay, s/veh		43.8			41.6			29.5			31.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	42.0	16.8	38.0	11.6	40.4	19.4	35.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	38.0	18.0	41.0	9.0	36.0	22.0	37.0
Max Q Clear Time (g_c+I1), s	6.2	22.2	12.2	27.5	7.6	18.3	15.0	26.5
Green Ext Time (p_c), s	0.0	5.8	0.6	5.0	0.0	3.9	0.4	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	117	414	199	316	442	107	285	719	365	102	758	151
Future Volume (veh/h)	117	414	199	316	442	107	285	719	365	102	758	151
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	122	431	207	329	460	111	297	749	380	106	790	157
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	150	574	242	398	684	293	422	1923	841	354	1426	283
Arrive On Green	0.08	0.16	0.16	0.11	0.19	0.19	0.10	0.54	0.54	0.05	0.48	0.48
Sat Flow, veh/h	1792	3574	1505	3476	3574	1529	1792	3574	1563	1792	2966	590
Grp Volume(v), veh/h	122	431	207	329	460	111	297	749	380	106	476	471
Grp Sat Flow(s),veh/h/ln	1792	1787	1505	1738	1787	1529	1792	1787	1563	1792	1787	1769
Q Serve(g_s), s	7.6	13.1	15.2	10.5	13.5	7.2	9.0	13.9	16.8	3.4	21.4	21.4
Cycle Q Clear(g_c), s	7.6	13.1	15.2	10.5	13.5	7.2	9.0	13.9	16.8	3.4	21.4	21.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	150	574	242	398	684	293	422	1923	841	354	859	850
V/C Ratio(X)	0.81	0.75	0.86	0.83	0.67	0.38	0.70	0.39	0.45	0.30	0.55	0.55
Avail Cap(c_a), veh/h	221	630	265	521	725	310	632	1923	841	366	859	850
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	45.4	46.3	49.1	42.5	40.0	15.6	15.3	16.0	13.8	20.8	20.8
Incr Delay (d2), s/veh	13.4	4.6	21.8	8.2	2.3	0.8	2.1	0.6	1.8	0.5	2.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	6.8	7.8	5.5	6.9	3.1	4.6	7.0	7.6	1.7	11.1	11.0
LnGrp Delay(d), s/veh	64.5	50.0	68.2	57.3	44.8	40.8	17.8	15.9	17.7	14.3	23.4	23.4
LnGrp LOS	E	D	E	E	D	D	B	B	B	B	C	C
Approach Vol, veh/h		760			900			1426			1053	
Approach Delay, s/veh		57.3			48.9			16.8			22.5	
Approach LOS		E			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	65.0	17.0	22.2	15.7	58.5	13.5	25.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	61.0	17.0	20.0	25.0	42.0	14.0	23.0
Max Q Clear Time (g_c+I1), s	5.4	18.8	12.5	17.2	11.0	23.4	9.6	15.5
Green Ext Time (p_c), s	0.0	7.5	0.5	1.0	0.7	5.9	0.1	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	6	0	105	16	1	5	46	1403	46	6	1182	46
Future Volume (veh/h)	6	0	105	16	1	5	46	1403	46	6	1182	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	6	0	112	17	1	5	49	1493	49	6	1257	49
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	203	0	159	107	27	136	383	2800	1213	290	2666	104
Arrive On Green	0.10	0.00	0.10	0.10	0.10	0.10	0.03	0.78	0.78	0.01	0.76	0.76
Sat Flow, veh/h	1414	0	1591	1285	273	1363	1792	3574	1548	1792	3502	136
Grp Volume(v), veh/h	6	0	112	17	0	6	49	1493	49	6	641	665
Grp Sat Flow(s),veh/h/ln	1414	0	1591	1285	0	1636	1792	1787	1548	1792	1787	1852
Q Serve(g_s), s	0.4	0.0	7.4	1.4	0.0	0.4	0.6	16.9	0.8	0.1	14.5	14.5
Cycle Q Clear(g_c), s	0.8	0.0	7.4	8.8	0.0	0.4	0.6	16.9	0.8	0.1	14.5	14.5
Prop In Lane	1.00		1.00	1.00		0.83	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	203	0	159	107	0	163	383	2800	1213	290	1360	1409
V/C Ratio(X)	0.03	0.00	0.71	0.16	0.00	0.04	0.13	0.53	0.04	0.02	0.47	0.47
Avail Cap(c_a), veh/h	309	0	279	204	0	286	448	2800	1213	345	1360	1409
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	47.3	51.5	0.0	44.1	3.5	4.4	2.6	3.9	4.8	4.8
Incr Delay (d2), s/veh	0.1	0.0	5.6	0.7	0.0	0.1	0.1	0.7	0.1	0.0	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	3.5	0.5	0.0	0.2	0.3	8.4	0.3	0.0	7.4	7.8
LnGrp Delay(d), s/veh	44.5	0.0	52.9	52.2	0.0	44.2	3.7	5.1	2.7	4.0	6.0	6.0
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		118			23			1591			1312	
Approach Delay, s/veh		52.5			50.1			5.0			6.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.7	89.0		14.8	7.1	86.6		14.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	85.0		19.0	7.0	82.0		19.0
Max Q Clear Time (g_c+I1), s	2.1	18.9		9.4	2.6	16.5		10.8
Green Ext Time (p_c), s	0.0	17.4		0.4	0.0	11.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	216	730	154	250	693	241	239	1067	76	197	981	146
Future Volume (veh/h)	216	730	154	250	693	241	239	1067	76	197	981	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	218	737	156	253	700	243	241	1078	77	199	991	147
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	240	1352	283	314	710	246	296	1317	570	263	1262	546
Arrive On Green	0.13	0.32	0.32	0.09	0.28	0.28	0.10	0.37	0.37	0.09	0.35	0.35
Sat Flow, veh/h	1792	4226	883	3476	2568	891	1792	3574	1546	1792	3574	1547
Grp Volume(v), veh/h	218	595	298	253	487	456	241	1078	77	199	991	147
Grp Sat Flow(s),veh/h/ln	1792	1712	1685	1738	1787	1672	1792	1787	1546	1792	1787	1547
Q Serve(g_s), s	14.3	17.1	17.4	8.5	32.4	32.4	10.1	32.6	4.0	8.4	29.6	8.1
Cycle Q Clear(g_c), s	14.3	17.1	17.4	8.5	32.4	32.4	10.1	32.6	4.0	8.4	29.6	8.1
Prop In Lane	1.00		0.52	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	1096	539	314	494	462	296	1317	570	263	1262	546
V/C Ratio(X)	0.91	0.54	0.55	0.80	0.99	0.99	0.81	0.82	0.14	0.76	0.79	0.27
Avail Cap(c_a), veh/h	240	1096	539	408	494	462	323	1317	570	272	1262	546
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	33.4	33.5	53.3	43.0	43.0	26.5	34.1	25.0	27.1	34.6	27.6
Incr Delay (d2), s/veh	34.5	0.6	1.2	8.7	36.8	38.2	13.8	5.7	0.5	11.2	5.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	8.2	8.3	4.5	21.0	19.8	6.1	17.1	1.8	4.9	15.5	3.7
LnGrp Delay(d), s/veh	85.4	34.0	34.7	62.0	79.8	81.1	40.3	39.8	25.5	38.3	39.5	28.8
LnGrp LOS	F	C	C	E	E	F	D	D	C	D	D	C
Approach Vol, veh/h		1111			1196			1396			1337	
Approach Delay, s/veh		44.3			76.5			39.1			38.2	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	48.0	14.8	42.2	16.2	46.1	20.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	44.0	14.0	35.0	14.0	41.0	16.0	33.0
Max Q Clear Time (g_c+I1), s	10.4	34.6	10.5	19.4	12.1	31.6	16.3	34.4
Green Ext Time (p_c), s	0.0	4.9	0.3	5.0	0.1	4.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	123	348	501	106	1069	0	0	1122	353
Future Volume (veh/h)	0	0	0	123	348	501	106	1069	0	0	1122	353
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				128	362	522	110	1114	0	0	1169	368
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				329	989	581	137	2900	0	0	1743	548
Arrive On Green				0.36	0.36	0.36	0.08	0.56	0.00	0.00	0.45	0.45
Sat Flow, veh/h				904	2719	1599	1792	5305	0	0	4021	1212
Grp Volume(v), veh/h				260	230	522	110	1114	0	0	1039	498
Grp Sat Flow(s),veh/h/ln				1836	1787	1599	1792	1712	0	0	1712	1640
Q Serve(g_s), s				11.7	10.5	34.4	6.7	13.5	0.0	0.0	26.6	26.6
Cycle Q Clear(g_c), s				11.7	10.5	34.4	6.7	13.5	0.0	0.0	26.6	26.6
Prop In Lane				0.49		1.00	1.00		0.00	0.00		0.74
Lane Grp Cap(c), veh/h				668	650	581	137	2900	0	0	1549	742
V/C Ratio(X)				0.39	0.35	0.90	0.80	0.38	0.00	0.00	0.67	0.67
Avail Cap(c_a), veh/h				806	785	702	193	2900	0	0	1549	742
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.3	25.9	33.5	50.7	13.5	0.0	0.0	24.0	24.0
Incr Delay (d2), s/veh				0.4	0.3	12.7	15.1	0.4	0.0	0.0	2.3	4.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.0	5.2	17.1	3.9	6.4	0.0	0.0	13.1	13.0
LnGrp Delay(d), s/veh				26.7	26.3	46.3	65.8	13.9	0.0	0.0	26.3	28.8
LnGrp LOS				C	C	D	E	B			C	C
Approach Vol, veh/h					1012			1224			1537	
Approach Delay, s/veh					36.7			18.6			27.1	
Approach LOS					D			B			C	

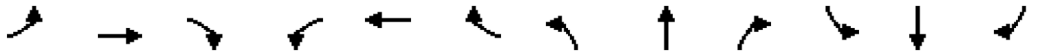
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			12.5	54.5		44.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			12.0	47.0		49.0
Max Q Clear Time (g_c+I1), s		15.5			8.7	28.6		36.4
Green Ext Time (p_c), s		9.5			0.1	10.0		4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	308	414	69	0	0	0	0	878	251	488	775	0
Future Volume (veh/h)	308	414	69	0	0	0	0	878	251	488	775	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	318	427	71				0	905	259	503	799	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	497	496	444				0	1730	493	589	2295	0
Arrive On Green	0.28	0.28	0.28				0.00	0.44	0.44	0.17	0.65	0.00
Sat Flow, veh/h	1774	1770	1583				0	4082	1116	3442	3632	0
Grp Volume(v), veh/h	318	427	71				0	783	381	503	799	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583				0	1695	1640	1721	1770	0
Q Serve(g_s), s	17.7	25.8	3.8				0.0	18.9	19.0	16.0	11.5	0.0
Cycle Q Clear(g_c), s	17.7	25.8	3.8				0.0	18.9	19.0	16.0	11.5	0.0
Prop In Lane	1.00		1.00				0.00		0.68	1.00		0.00
Lane Grp Cap(c), veh/h	497	496	444				0	1498	725	589	2295	0
V/C Ratio(X)	0.64	0.86	0.16				0.00	0.52	0.53	0.85	0.35	0.00
Avail Cap(c_a), veh/h	615	613	549				0	1498	725	826	2295	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	35.5	38.4	30.5				0.0	22.8	22.8	45.3	9.0	0.0
Incr Delay (d2), s/veh	1.5	10.1	0.2				0.0	1.3	2.7	6.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.9	14.0	1.7				0.0	9.1	9.1	8.1	5.7	0.0
LnGrp Delay(d), s/veh	37.1	48.5	30.7				0.0	24.1	25.5	51.6	9.4	0.0
LnGrp LOS	D	D	C					C	C	D	A	
Approach Vol, veh/h		816						1164			1302	
Approach Delay, s/veh		42.5						24.6			25.7	
Approach LOS		D						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	23.3	53.7		35.6		77.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	27.0	42.0		39.0		73.0		
Max Q Clear Time (g_c+I1), s	18.0	21.0		27.8		13.5		
Green Ext Time (p_c), s	1.3	7.8		3.8		6.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	55	983	103	123	1595	85	111	119	82	83	117	65
Future Volume (veh/h)	55	983	103	123	1595	85	111	119	82	83	117	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.98		0.95	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	57	1024	107	128	1661	89	116	124	85	86	122	68
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	169	1797	188	331	1965	105	349	379	306	331	415	213
Arrive On Green	0.03	0.55	0.55	0.05	0.56	0.56	0.07	0.20	0.20	0.05	0.18	0.18
Sat Flow, veh/h	1810	3291	344	1810	3479	185	1810	1900	1533	1810	2258	1160
Grp Volume(v), veh/h	57	561	570	128	856	894	116	124	85	86	95	95
Grp Sat Flow(s),veh/h/ln	1810	1805	1830	1810	1805	1859	1810	1900	1533	1810	1805	1614
Q Serve(g_s), s	1.4	21.5	21.6	3.2	41.3	42.4	5.4	5.9	4.9	4.0	4.8	5.3
Cycle Q Clear(g_c), s	1.4	21.5	21.6	3.2	41.3	42.4	5.4	5.9	4.9	4.0	4.8	5.3
Prop In Lane	1.00		0.19	1.00		0.10	1.00		1.00	1.00		0.72
Lane Grp Cap(c), veh/h	169	985	999	331	1019	1050	349	379	306	331	332	297
V/C Ratio(X)	0.34	0.57	0.57	0.39	0.84	0.85	0.33	0.33	0.28	0.26	0.29	0.32
Avail Cap(c_a), veh/h	217	1150	1166	413	1219	1255	381	379	306	339	332	297
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.5	15.7	15.7	12.2	18.9	19.2	31.6	36.0	35.7	32.3	37.0	37.2
Incr Delay (d2), s/veh	1.2	0.5	0.5	0.7	4.6	5.0	0.6	2.3	2.2	0.4	2.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	10.7	10.9	1.7	21.8	23.1	2.7	3.3	2.3	2.0	2.6	2.6
LnGrp Delay(d), s/veh	20.6	16.3	16.3	13.0	23.6	24.2	32.1	38.3	37.9	32.7	39.1	40.0
LnGrp LOS	C	B	B	B	C	C	C	D	D	C	D	D
Approach Vol, veh/h		1188			1878			325			276	
Approach Delay, s/veh		16.5			23.2			36.0			37.4	
Approach LOS		B			C			D			D	

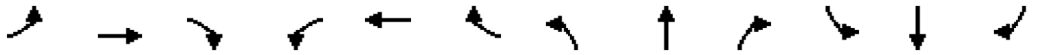
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	25.0	9.2	61.4	11.2	23.3	7.2	63.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	21.0	10.0	67.0	9.0	18.0	6.0	71.0
Max Q Clear Time (g_c+I1), s	6.0	7.9	5.2	23.6	7.4	7.3	3.4	44.4
Green Ext Time (p_c), s	0.0	0.7	0.1	8.9	0.0	0.7	0.0	15.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	179	661	59	22	807	46	67	91	16	81	100	157
Future Volume (veh/h)	179	661	59	22	807	46	67	91	16	81	100	157
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	183	674	60	22	823	47	68	93	16	83	102	160
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	335	1311	117	307	1103	63	461	1002	168	577	598	525
Arrive On Green	0.09	0.39	0.39	0.02	0.32	0.32	0.04	0.32	0.32	0.05	0.33	0.33
Sat Flow, veh/h	1810	3348	298	1810	3470	198	1810	3084	517	1810	1805	1585
Grp Volume(v), veh/h	183	363	371	22	428	442	68	53	56	83	102	160
Grp Sat Flow(s),veh/h/ln	1810	1805	1841	1810	1805	1863	1810	1805	1796	1810	1805	1585
Q Serve(g_s), s	4.7	11.3	11.3	0.6	15.7	15.7	1.8	1.5	1.6	2.2	3.0	5.5
Cycle Q Clear(g_c), s	4.7	11.3	11.3	0.6	15.7	15.7	1.8	1.5	1.6	2.2	3.0	5.5
Prop In Lane	1.00		0.16	1.00		0.11	1.00		0.29	1.00		1.00
Lane Grp Cap(c), veh/h	335	707	721	307	574	592	461	587	584	577	598	525
V/C Ratio(X)	0.55	0.51	0.51	0.07	0.75	0.75	0.15	0.09	0.10	0.14	0.17	0.30
Avail Cap(c_a), veh/h	680	1613	1645	419	1246	1287	584	587	584	687	598	525
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	15.9	17.1	17.1	16.7	22.5	22.5	15.6	17.3	17.4	15.3	17.5	18.4
Incr Delay (d2), s/veh	1.4	0.6	0.6	0.1	2.0	1.9	0.1	0.3	0.3	0.1	0.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	5.8	5.9	0.3	8.0	8.3	0.9	0.8	0.8	1.1	1.6	2.6
LnGrp Delay(d), s/veh	17.3	17.7	17.7	16.8	24.5	24.4	15.8	17.7	17.7	15.4	18.1	19.8
LnGrp LOS	B	B	B	B	C	C	B	B	B	B	B	B
Approach Vol, veh/h		917			892			177			345	
Approach Delay, s/veh		17.6			24.3			16.9			18.3	
Approach LOS		B			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.5	28.0	5.5	32.9	7.0	28.5	10.9	27.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	24.0	6.0	66.0	8.0	24.0	21.0	51.0
Max Q Clear Time (g_c+I1), s	4.2	3.6	2.6	13.3	3.8	7.5	6.7	17.7
Green Ext Time (p_c), s	0.0	0.5	0.0	4.8	0.0	1.3	0.4	5.8

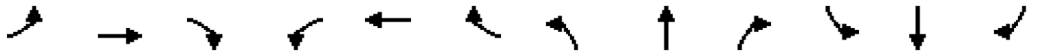
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	69	619	249	360	944	53	272	162	220	67	247	153
Future Volume (veh/h)	69	619	249	360	944	53	272	162	220	67	247	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	73	652	262	379	994	56	286	171	232	71	260	161
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	851	335	467	1584	89	564	743	652	452	1180	517
Arrive On Green	0.05	0.24	0.24	0.14	0.33	0.33	0.13	0.42	0.42	0.04	0.34	0.34
Sat Flow, veh/h	1757	3523	1386	3408	4871	274	1757	1752	1539	1757	3505	1535
Grp Volume(v), veh/h	73	621	293	379	685	365	286	171	232	71	260	161
Grp Sat Flow(s),veh/h/ln	1757	1679	1552	1704	1679	1788	1757	1752	1539	1757	1752	1535
Q Serve(g_s), s	4.2	17.5	17.9	11.0	17.5	17.6	10.2	6.3	10.4	2.7	5.4	7.9
Cycle Q Clear(g_c), s	4.2	17.5	17.9	11.0	17.5	17.6	10.2	6.3	10.4	2.7	5.4	7.9
Prop In Lane	1.00		0.89	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	811	375	467	1092	581	564	743	652	452	1180	517
V/C Ratio(X)	0.78	0.76	0.78	0.81	0.63	0.63	0.51	0.23	0.36	0.16	0.22	0.31
Avail Cap(c_a), veh/h	208	1059	489	773	1423	758	791	743	652	485	1180	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	35.8	36.0	42.5	29.0	29.0	16.6	18.7	19.8	20.6	24.1	24.9
Incr Delay (d2), s/veh	12.8	2.5	6.0	3.4	0.6	1.1	0.7	0.7	1.5	0.2	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	8.4	8.3	5.4	8.2	8.8	5.0	3.2	4.7	1.3	2.7	3.5
LnGrp Delay(d), s/veh	60.2	38.3	42.0	46.0	29.6	30.2	17.3	19.4	21.3	20.7	24.5	26.5
LnGrp LOS	E	D	D	D	C	C	B	B	C	C	C	C
Approach Vol, veh/h		987			1429			689			492	
Approach Delay, s/veh		41.0			34.1			19.2			24.6	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	47.0	17.9	28.5	16.9	38.2	9.4	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	23.0	32.0	26.0	23.0	12.0	43.0
Max Q Clear Time (g_c+I1), s	4.7	12.4	13.0	19.9	12.2	9.9	6.2	19.6
Green Ext Time (p_c), s	0.0	2.5	0.9	4.6	0.7	1.7	0.1	6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	393	890	68	168	1236	148	86	351	67	234	487	383
Future Volume (veh/h)	393	890	68	168	1236	148	86	351	67	234	487	383
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	418	947	72	179	1315	157	91	373	71	249	518	407
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	491	1588	687	211	1505	650	115	720	299	315	814	567
Arrive On Green	0.14	0.44	0.44	0.12	0.42	0.42	0.06	0.20	0.20	0.09	0.23	0.23
Sat Flow, veh/h	3476	3574	1546	1792	3574	1544	1792	3574	1485	3476	3574	1500
Grp Volume(v), veh/h	418	947	72	179	1315	157	91	373	71	249	518	407
Grp Sat Flow(s),veh/h/ln	1738	1787	1546	1792	1787	1544	1792	1787	1485	1738	1787	1500
Q Serve(g_s), s	12.9	22.0	3.0	10.7	37.0	7.2	5.5	10.2	4.4	7.7	14.4	25.0
Cycle Q Clear(g_c), s	12.9	22.0	3.0	10.7	37.0	7.2	5.5	10.2	4.4	7.7	14.4	25.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	491	1588	687	211	1505	650	115	720	299	315	814	567
V/C Ratio(X)	0.85	0.60	0.10	0.85	0.87	0.24	0.79	0.52	0.24	0.79	0.64	0.72
Avail Cap(c_a), veh/h	602	1629	704	327	1661	718	147	720	299	412	814	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	23.1	17.8	47.4	29.1	20.5	50.6	39.1	36.8	48.9	38.3	30.0
Incr Delay (d2), s/veh	9.6	0.6	0.1	11.7	5.1	0.2	19.7	2.7	1.9	7.6	3.8	7.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	10.9	1.3	6.0	19.3	3.1	3.4	5.3	2.0	4.0	7.5	11.9
LnGrp Delay(d), s/veh	55.6	23.6	17.8	59.2	34.2	20.7	70.3	41.7	38.6	56.4	42.0	37.6
LnGrp LOS	E	C	B	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1437			1651			535			1174	
Approach Delay, s/veh		32.6			35.6			46.2			43.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	26.1	16.9	52.7	11.0	29.0	19.5	50.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	21.0	20.0	50.0	9.0	25.0	19.0	51.0
Max Q Clear Time (g_c+I1), s	9.7	12.2	12.7	24.0	7.5	27.0	14.9	39.0
Green Ext Time (p_c), s	0.3	1.6	0.3	7.2	0.0	0.0	0.6	7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	192	313	78	95	258	26	173	938	93	32	805	225
Future Volume (veh/h)	192	313	78	95	258	26	173	938	93	32	805	225
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	206	337	84	102	277	28	186	1009	100	34	866	242
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	264	437	107	192	365	37	295	2075	206	343	1125	938
Arrive On Green	0.10	0.15	0.15	0.05	0.11	0.11	0.06	0.63	0.63	0.02	0.60	0.60
Sat Flow, veh/h	1792	2828	694	1792	3276	328	1792	3283	325	1792	1881	1567
Grp Volume(v), veh/h	206	211	210	102	150	155	186	549	560	34	866	242
Grp Sat Flow(s),veh/h/ln	1792	1787	1734	1792	1787	1817	1792	1787	1821	1792	1881	1567
Q Serve(g_s), s	11.0	13.1	13.5	5.8	9.4	9.6	4.4	18.9	18.9	0.8	39.6	8.5
Cycle Q Clear(g_c), s	11.0	13.1	13.5	5.8	9.4	9.6	4.4	18.9	18.9	0.8	39.6	8.5
Prop In Lane	1.00		0.40	1.00		0.18	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	264	276	268	192	199	202	295	1129	1151	343	1125	938
V/C Ratio(X)	0.78	0.76	0.78	0.53	0.75	0.77	0.63	0.49	0.49	0.10	0.77	0.26
Avail Cap(c_a), veh/h	264	325	315	192	248	252	348	1129	1151	364	1125	938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	46.8	47.0	43.2	49.8	49.9	18.7	11.3	11.3	9.5	17.3	11.0
Incr Delay (d2), s/veh	14.1	8.7	10.4	2.8	9.7	10.5	2.8	1.5	1.5	0.1	5.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	7.1	7.3	3.0	5.2	5.4	3.5	9.8	10.0	0.4	22.0	3.8
LnGrp Delay(d), s/veh	54.7	55.5	57.4	46.0	59.5	60.4	21.4	12.8	12.8	9.6	22.4	11.7
LnGrp LOS	D	E	E	D	E	E	C	B	B	A	C	B
Approach Vol, veh/h		627			407			1295			1142	
Approach Delay, s/veh		55.9			56.5			14.0			19.7	
Approach LOS		E			E			B			B	

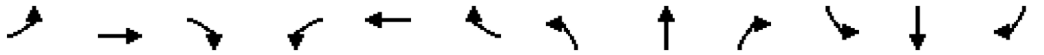
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.7	77.0	10.0	21.9	10.5	73.1	15.0	16.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	73.0	6.0	21.0	10.0	67.0	11.0	16.0
Max Q Clear Time (g_c+I1), s	2.8	20.9	7.8	15.5	6.4	41.6	13.0	11.6
Green Ext Time (p_c), s	0.0	9.3	0.0	1.1	0.2	7.7	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	818	348	282	906	35	369	210	155	86	253	55
Future Volume (veh/h)	60	818	348	282	906	35	369	210	155	86	253	55
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	64	870	370	300	964	37	393	223	165	91	269	59
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	270	1003	425	335	1962	75	579	1288	565	389	973	203
Arrive On Green	0.04	0.29	0.29	0.14	0.39	0.39	0.19	0.37	0.37	0.05	0.23	0.23
Sat Flow, veh/h	1757	3434	1455	1757	4972	191	1757	3505	1537	1757	4155	869
Grp Volume(v), veh/h	64	850	390	300	651	350	393	223	165	91	215	113
Grp Sat Flow(s),veh/h/ln	1757	1679	1532	1757	1679	1805	1757	1752	1537	1757	1679	1666
Q Serve(g_s), s	2.8	26.2	26.3	12.7	15.8	15.9	17.6	4.7	8.3	4.2	5.7	6.1
Cycle Q Clear(g_c), s	2.8	26.2	26.3	12.7	15.8	15.9	17.6	4.7	8.3	4.2	5.7	6.1
Prop In Lane	1.00		0.95	1.00		0.11	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	270	980	447	335	1325	712	579	1288	565	389	786	390
V/C Ratio(X)	0.24	0.87	0.87	0.90	0.49	0.49	0.68	0.17	0.29	0.23	0.27	0.29
Avail Cap(c_a), veh/h	301	1048	478	476	1603	862	686	1288	565	391	786	390
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.5	36.6	36.6	26.0	24.8	24.8	22.5	23.3	24.4	29.1	34.1	34.3
Incr Delay (d2), s/veh	0.4	7.5	15.2	14.9	0.3	0.5	2.1	0.3	1.3	0.3	0.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	13.1	13.0	10.2	7.4	8.0	8.7	2.3	3.7	2.1	2.7	3.0
LnGrp Delay(d), s/veh	26.0	44.1	51.8	40.8	25.0	25.3	24.7	23.6	25.7	29.4	35.0	36.1
LnGrp LOS	C	D	D	D	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1304			1301			781			419	
Approach Delay, s/veh		45.5			28.7			24.6			34.1	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	44.0	19.3	35.8	24.3	29.5	8.1	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	40.0	24.0	34.0	27.0	19.0	6.0	52.0
Max Q Clear Time (g_c+I1), s	6.2	10.3	14.7	28.3	19.6	8.1	4.8	17.9
Green Ext Time (p_c), s	0.0	1.9	0.6	3.5	0.8	1.4	0.0	7.0

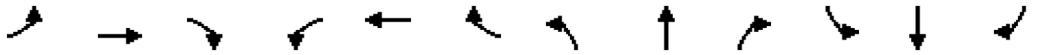
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1153	21	319	1417	113	19	167	187	98	196	158
Future Volume (veh/h)	99	1153	21	319	1417	113	19	167	187	98	196	158
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.98		0.93	0.99		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	102	1189	22	329	1461	116	20	172	193	101	202	163
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	220	1559	29	373	1827	794	308	561	465	288	591	466
Arrive On Green	0.05	0.43	0.43	0.13	0.51	0.51	0.31	0.31	0.31	0.31	0.31	0.31
Sat Flow, veh/h	1792	3588	66	1792	3574	1554	1004	1787	1482	1009	1881	1483
Grp Volume(v), veh/h	102	592	619	329	1461	116	20	172	193	101	202	163
Grp Sat Flow(s),veh/h/ln	1792	1787	1867	1792	1787	1554	1004	1787	1482	1009	1881	1483
Q Serve(g_s), s	3.0	26.8	26.8	9.2	32.3	3.8	1.5	7.0	9.8	8.4	7.9	8.1
Cycle Q Clear(g_c), s	3.0	26.8	26.8	9.2	32.3	3.8	9.4	7.0	9.8	18.2	7.9	8.1
Prop In Lane	1.00		0.04	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	776	811	373	1827	794	308	561	465	288	591	466
V/C Ratio(X)	0.46	0.76	0.76	0.88	0.80	0.15	0.06	0.31	0.41	0.35	0.34	0.35
Avail Cap(c_a), veh/h	301	954	997	653	2581	1122	308	561	465	288	591	466
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.2	22.9	22.9	19.0	19.3	12.3	28.8	24.9	25.9	33.0	25.2	25.3
Incr Delay (d2), s/veh	1.5	2.9	2.8	7.1	1.2	0.1	0.4	1.4	2.7	3.3	1.6	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	13.8	14.4	9.1	16.1	1.6	0.4	3.7	4.4	2.6	4.4	3.6
LnGrp Delay(d), s/veh	19.8	25.8	25.7	26.1	20.6	12.4	29.2	26.3	28.6	36.4	26.8	27.3
LnGrp LOS	B	C	C	C	C	B	C	C	C	D	C	C
Approach Vol, veh/h		1313			1906			385			466	
Approach Delay, s/veh		25.3			21.0			27.6			29.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		34.0	16.0	45.5		34.0	8.7	52.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		30.0	27.0	51.0		30.0	9.0	69.0
Max Q Clear Time (g_c+I1), s		11.8	11.2	28.8		20.2	5.0	34.3
Green Ext Time (p_c), s		2.1	0.8	8.1		1.6	0.1	14.5

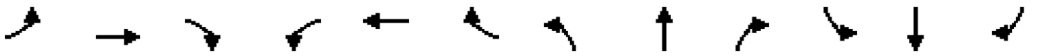
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	884	583	163	1663	0	0	0	0	116	95	204
Future Volume (veh/h)	0	884	583	163	1663	0	0	0	0	116	95	204
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	911	601	168	1714	0				120	98	210
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1592	725	205	2218	0				300	245	476
Arrive On Green	0.00	0.47	0.47	0.11	0.62	0.00				0.30	0.30	0.30
Sat Flow, veh/h	0	3593	1559	1792	3668	0				1008	823	1599
Grp Volume(v), veh/h	0	911	601	168	1714	0				218	0	210
Grp Sat Flow(s),veh/h/ln	0	1712	1559	1792	1787	0				1831	0	1599
Q Serve(g_s), s	0.0	18.9	32.7	8.9	34.1	0.0				9.3	0.0	10.4
Cycle Q Clear(g_c), s	0.0	18.9	32.7	8.9	34.1	0.0				9.3	0.0	10.4
Prop In Lane	0.00		1.00	1.00		0.00				0.55		1.00
Lane Grp Cap(c), veh/h	0	1592	725	205	2218	0				545	0	476
V/C Ratio(X)	0.00	0.57	0.83	0.82	0.77	0.00				0.40	0.00	0.44
Avail Cap(c_a), veh/h	0	1932	880	441	3043	0				545	0	476
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	19.0	22.7	42.2	13.5	0.0				27.3	0.0	27.7
Incr Delay (d2), s/veh	0.0	0.3	5.6	7.9	0.9	0.0				2.2	0.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.9	15.2	4.9	16.9	0.0				5.0	0.0	4.9
LnGrp Delay(d), s/veh	0.0	19.3	28.3	50.1	14.4	0.0				29.5	0.0	30.7
LnGrp LOS		B	C	D	B					C		C
Approach Vol, veh/h		1512			1882						428	
Approach Delay, s/veh		22.9			17.5						30.1	
Approach LOS		C			B						C	

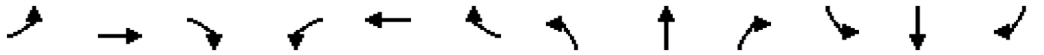
Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			15.1	49.3		33.0		64.5
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			24.0	55.0		29.0		83.0
Max Q Clear Time (g_c+I1), s			10.9	34.7		12.4		36.1
Green Ext Time (p_c), s			0.3	10.6		1.6		20.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	153	830	0	0	1037	213	817	0	407	0	0	0
Future Volume (vph)	153	830	0	0	1037	213	817	0	407	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (prot)	1805	3610			3496		1715	1630	1534			
Flt Permitted	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (perm)	1805	3610			3496		1715	1630	1534			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	158	856	0	0	1069	220	842	0	420	0	0	0
RTOR Reduction (vph)	0	0	0	0	14	0	0	28	92	0	0	0
Lane Group Flow (vph)	158	856	0	0	1275	0	446	410	286	0	0	0
Confl. Peds. (#/hr)	3		10	10		3						
Confl. Bikes (#/hr)			11			6						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	14.0	64.5			46.5		43.1	43.1	43.1			
Effective Green, g (s)	14.0	64.5			46.5		43.1	43.1	43.1			
Actuated g/C Ratio	0.12	0.56			0.40		0.37	0.37	0.37			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	218	2014			1406		639	607	571			
v/s Ratio Prot	c0.09	0.24			c0.36		c0.26	0.25	0.19			
v/s Ratio Perm												
v/c Ratio	0.72	0.43			0.91		0.70	0.68	0.50			
Uniform Delay, d1	48.9	14.8			32.5		30.7	30.4	28.0			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	11.3	0.1			8.7		6.2	5.9	3.1			
Delay (s)	60.3	15.0			41.2		37.0	36.3	31.1			
Level of Service	E	B			D		D	D	C			
Approach Delay (s/veh)		22.0			41.2			35.0			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	108.4%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	801	172	80	534	116	494	669	90	199	437	193
Future Volume (veh/h)	260	801	172	80	534	116	494	669	90	199	437	193
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	274	843	181	84	562	122	520	704	95	209	460	203
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	348	1010	711	108	867	368	610	1187	160	244	808	353
Arrive On Green	0.10	0.28	0.28	0.06	0.24	0.24	0.17	0.37	0.37	0.13	0.33	0.33
Sat Flow, veh/h	3510	3610	1537	1810	3610	1532	3510	3182	429	1810	2419	1058
Grp Volume(v), veh/h	274	843	181	84	562	122	520	399	400	209	342	321
Grp Sat Flow(s),veh/h/ln	1755	1805	1537	1810	1805	1532	1755	1805	1806	1810	1805	1671
Q Serve(g_s), s	8.0	23.0	7.6	4.8	14.7	6.9	15.1	18.6	18.7	11.8	16.3	16.6
Cycle Q Clear(g_c), s	8.0	23.0	7.6	4.8	14.7	6.9	15.1	18.6	18.7	11.8	16.3	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.24	1.00		0.63
Lane Grp Cap(c), veh/h	348	1010	711	108	867	368	610	673	674	244	603	558
V/C Ratio(X)	0.79	0.83	0.25	0.78	0.65	0.33	0.85	0.59	0.59	0.86	0.57	0.57
Avail Cap(c_a), veh/h	503	1206	794	173	1034	439	804	673	674	363	603	558
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.1	35.4	17.7	48.6	35.8	32.8	42.0	26.4	26.4	44.3	28.7	28.7
Incr Delay (d2), s/veh	5.2	4.5	0.2	11.4	1.1	0.5	6.9	3.8	3.8	12.4	3.8	4.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	12.1	3.3	2.7	7.5	3.0	7.9	10.0	10.0	6.8	8.7	8.3
LnGrp Delay(d), s/veh	51.3	39.9	17.9	60.0	36.9	33.4	48.9	30.2	30.3	56.8	32.5	33.0
LnGrp LOS	D	D	B	E	D	C	D	C	C	E	C	C
Approach Vol, veh/h		1298			768			1319			872	
Approach Delay, s/veh		39.2			38.9			37.6			38.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	43.1	10.2	33.3	22.2	39.0	14.4	29.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	38.0	10.0	35.0	24.0	35.0	15.0	30.0
Max Q Clear Time (g_c+I1), s	13.8	20.7	6.8	25.0	17.1	18.6	10.0	16.7
Green Ext Time (p_c), s	0.3	4.4	0.0	4.3	1.1	3.6	0.4	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	153	131	60	127	184	103	88	1329	78	92	1049	115
Future Volume (veh/h)	153	131	60	127	184	103	88	1329	78	92	1049	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.94	0.98		0.95	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	158	135	62	131	190	106	91	1370	80	95	1081	119
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	272	286	229	301	250	201	317	2043	119	254	1939	213
Arrive On Green	0.09	0.15	0.15	0.07	0.13	0.13	0.04	0.59	0.59	0.04	0.59	0.59
Sat Flow, veh/h	1810	1900	1526	1810	1900	1529	1810	3461	202	1810	3278	361
Grp Volume(v), veh/h	158	135	62	131	190	106	91	713	737	95	595	605
Grp Sat Flow(s),veh/h/ln	1810	1900	1526	1810	1900	1529	1810	1805	1858	1810	1805	1834
Q Serve(g_s), s	8.0	7.0	3.9	6.7	10.4	7.0	2.1	28.9	29.2	2.2	21.7	21.8
Cycle Q Clear(g_c), s	8.0	7.0	3.9	6.7	10.4	7.0	2.1	28.9	29.2	2.2	21.7	21.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	272	286	229	301	250	201	317	1066	1097	254	1068	1085
V/C Ratio(X)	0.58	0.47	0.27	0.44	0.76	0.53	0.29	0.67	0.67	0.37	0.56	0.56
Avail Cap(c_a), veh/h	306	421	338	301	351	283	385	1066	1097	337	1068	1085
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.2	42.0	40.7	36.9	45.3	43.8	10.6	15.0	15.1	13.2	13.5	13.5
Incr Delay (d2), s/veh	2.2	1.2	0.6	1.0	6.0	2.1	0.5	3.3	3.3	0.9	2.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	3.8	1.7	3.4	5.9	3.1	1.1	15.2	15.8	1.2	11.4	11.6
LnGrp Delay(d), s/veh	38.4	43.3	41.3	37.9	51.3	45.9	11.1	18.3	18.4	14.1	15.6	15.5
LnGrp LOS	D	D	D	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		355			427			1541			1295	
Approach Delay, s/veh		40.8			45.9			17.9			15.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	67.9	12.0	20.3	7.9	68.0	14.0	18.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	63.0	8.0	24.0	8.0	64.0	12.0	20.0
Max Q Clear Time (g_c+I1), s	4.2	31.2	8.7	9.0	4.1	23.8	10.0	12.4
Green Ext Time (p_c), s	0.1	12.8	0.0	0.7	0.1	10.2	0.1	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	11	8	7	21	44	4	345	7	31	397	81
Future Volume (veh/h)	93	11	8	7	21	44	4	345	7	31	397	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	99	12	9	7	22	47	4	367	7	33	422	86
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	202	134	101	245	72	153	727	1494	1229	822	1494	1226
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1345	1006	754	1403	538	1149	903	1900	1564	1020	1900	1559
Grp Volume(v), veh/h	99	0	21	7	0	69	4	367	7	33	422	86
Grp Sat Flow(s),veh/h/ln	1345	0	1760	1403	0	1687	903	1900	1564	1020	1900	1559
Q Serve(g_s), s	7.1	0.0	1.0	0.4	0.0	3.7	0.1	5.1	0.1	0.9	6.1	1.2
Cycle Q Clear(g_c), s	10.8	0.0	1.0	1.5	0.0	3.7	6.2	5.1	0.1	6.0	6.1	1.2
Prop In Lane	1.00		0.43	1.00		0.68	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	0	235	245	0	225	727	1494	1229	822	1494	1226
V/C Ratio(X)	0.49	0.00	0.09	0.03	0.00	0.31	0.01	0.25	0.01	0.04	0.28	0.07
Avail Cap(c_a), veh/h	484	0	603	539	0	578	727	1494	1229	822	1494	1226
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	37.7	38.4	0.0	38.9	3.8	2.8	2.3	3.6	2.9	2.4
Incr Delay (d2), s/veh	1.8	0.0	0.2	0.0	0.0	0.8	0.0	0.4	0.0	0.1	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	0.5	0.2	0.0	1.8	0.0	2.8	0.0	0.3	3.4	0.6
LnGrp Delay(d), s/veh	45.6	0.0	37.9	38.4	0.0	39.6	3.8	3.2	2.3	3.7	3.4	2.5
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		120			76			378			541	
Approach Delay, s/veh		44.2			39.5			3.2			3.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		82.0		17.2		82.0		17.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		78.0		34.0		78.0		34.0
Max Q Clear Time (g_c+I1), s		8.2		12.8		8.1		5.7
Green Ext Time (p_c), s		2.6		0.3		3.5		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.1
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	8.8
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	17	6	12	40	52	19	110	32	35	7	12
Future Vol, veh/h	10	17	6	12	40	52	19	110	32	35	7	12
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	12	20	7	14	47	60	22	128	37	41	8	14
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	8.2	8.1	9.5	8.3
HCM LOS	A	A	A	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	12%	37%	0%	23%	0%	83%	0%
Vol Thru, %	68%	63%	0%	77%	0%	17%	0%
Vol Right, %	20%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	161	27	6	52	52	42	12
LT Vol	19	10	0	12	0	35	0
Through Vol	110	17	0	40	0	7	0
RT Vol	32	0	6	0	52	0	12
Lane Flow Rate	187	31	7	60	60	49	14
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.253	0.047	0.009	0.089	0.075	0.074	0.017
Departure Headway (Hd)	4.87	5.445	4.554	5.293	4.473	5.476	4.354
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	739	658	786	678	802	655	822
Service Time	2.893	3.173	2.282	3.017	2.196	3.203	2.081
HCM Lane V/C Ratio	0.253	0.047	0.009	0.088	0.075	0.075	0.017
HCM Control Delay, s/veh	9.5	8.4	7.3	8.5	7.6	8.6	7.2
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	1	0.1	0	0.3	0.2	0.2	0.1

Intersection	
Int Delay, s/veh	4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	8	4	6	12	12	4
Future Vol, veh/h	8	4	6	12	12	4
Conflicting Peds, #/hr	0	10	10	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	7	10	20	20	7

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	31	0	69	29
Stage 1	-	-	-	-	28	-
Stage 2	-	-	-	-	41	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1595	-	941	1052
Stage 1	-	-	-	-	1000	-
Stage 2	-	-	-	-	987	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1582	-	927	1042
Mov Cap-2 Maneuver	-	-	-	-	927	-
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	980	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.4	8.9
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	927	1042	-	-	1582	-
HCM Lane V/C Ratio	0.022	0.007	-	-	0.006	-
HCM Control Delay (s/veh)	9	8.5	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0	-	-	0	-

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	9	169	19	17	212	8	7	4	24	5	6	6
Future Vol, veh/h	9	169	19	17	212	8	7	4	24	5	6	6
Conflicting Peds, #/hr	6	0	4	4	0	6	3	0	3	3	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	10	182	20	18	228	9	8	4	26	5	6	6

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	243	0	0	206	0	0	494	495	199	505	501	242
Stage 1	-	-	-	-	-	-	216	216	-	275	275	-
Stage 2	-	-	-	-	-	-	278	279	-	230	226	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1335	-	-	1377	-	-	489	479	847	481	475	802
Stage 1	-	-	-	-	-	-	791	728	-	736	686	-
Stage 2	-	-	-	-	-	-	733	683	-	777	721	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1328	-	-	1372	-	-	468	464	842	451	460	796
Mov Cap-2 Maneuver	-	-	-	-	-	-	468	464	-	451	460	-
Stage 1	-	-	-	-	-	-	782	719	-	726	672	-
Stage 2	-	-	-	-	-	-	708	669	-	740	712	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.5	10.7	11.9
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	672	1328	-	-	1372	-	-	537
HCM Lane V/C Ratio	0.056	0.007	-	-	0.013	-	-	0.034
HCM Control Delay (s/veh)	10.7	7.7	0	-	7.7	0	-	11.9
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.2	0	-	-	0	-	-	0.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	42	104	78	75	134	19	64	1212	43	28	1317	50
Future Volume (veh/h)	42	104	78	75	134	19	64	1212	43	28	1317	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.95	0.99		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	43	106	80	77	137	19	65	1237	44	29	1344	51
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	96	217	298	163	312	43	285	2587	92	319	2580	98
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	287	1111	1526	1197	1598	222	389	3517	125	434	3507	133
Grp Volume(v), veh/h	149	0	80	77	0	156	65	628	653	29	684	711
Grp Sat Flow(s),veh/h/ln	1398	0	1526	1197	0	1820	389	1787	1855	434	1787	1853
Q Serve(g_s), s	4.1	0.0	5.1	7.3	0.0	8.7	9.9	16.6	16.6	3.4	18.9	19.0
Cycle Q Clear(g_c), s	12.8	0.0	5.1	20.1	0.0	8.7	29.0	16.6	16.6	20.0	18.9	19.0
Prop In Lane	0.29		1.00	1.00		0.12	1.00		0.07	1.00		0.07
Lane Grp Cap(c), veh/h	313	0	298	163	0	355	285	1315	1364	319	1315	1363
V/C Ratio(X)	0.48	0.00	0.27	0.47	0.00	0.44	0.23	0.48	0.48	0.09	0.52	0.52
Avail Cap(c_a), veh/h	375	0	357	209	0	425	285	1315	1364	319	1315	1363
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.2	0.0	39.5	51.8	0.0	40.9	12.8	6.2	6.2	10.3	6.5	6.6
Incr Delay (d2), s/veh	1.1	0.0	0.5	2.1	0.0	0.9	1.9	1.2	1.2	0.6	1.5	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	2.2	2.5	0.0	4.5	1.2	8.5	8.8	0.5	9.7	10.2
LnGrp Delay(d), s/veh	43.3	0.0	40.0	53.9	0.0	41.8	14.6	7.5	7.4	10.9	8.0	8.0
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		229			233			1346			1424	
Approach Delay, s/veh		42.1			45.8			7.8			8.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		26.5		89.0		26.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		31.0		14.8		22.0		22.1
Green Ext Time (p_c), s		13.2		0.8		15.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	13	56	52	1482	1286	20
Future Vol, veh/h	13	56	52	1482	1286	20
Conflicting Peds, #/hr	2	2	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	14	60	56	1594	1383	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2303	703	1414	0	-	0
Stage 1	1392	-	-	-	-	-
Stage 2	911	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	33	382	483	-	-	-
Stage 1	197	-	-	-	-	-
Stage 2	355	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	29	379	479	-	-	-
Mov Cap-2 Maneuver	29	-	-	-	-	-
Stage 1	173	-	-	-	-	-
Stage 2	353	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	53.5	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	479	-	29	379	-	-
HCM Lane V/C Ratio	0.117	-	0.482	0.159	-	-
HCM Control Delay (s/veh)	13.5	-	213.9	16.3	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	0.4	-	1.5	0.6	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	89	39	64	81	41	45	103	1380	46	56	1147	78
Future Volume (veh/h)	89	39	64	81	41	45	103	1380	46	56	1147	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	92	40	66	84	42	46	106	1423	47	58	1182	80
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	51	14	336	50	16	330	310	2527	83	250	2429	164
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	63	1549	0	72	1521	442	3527	116	362	3390	229
Grp Volume(v), veh/h	132	0	66	126	0	46	106	720	750	58	623	639
Grp Sat Flow(s),veh/h/ln	63	0	1549	72	0	1521	442	1787	1856	362	1787	1832
Q Serve(g_s), s	0.0	0.0	4.2	0.0	0.0	2.9	16.5	22.9	23.1	10.9	18.2	18.2
Cycle Q Clear(g_c), s	26.0	0.0	4.2	26.0	0.0	2.9	34.7	22.9	23.1	33.9	18.2	18.2
Prop In Lane	0.70		1.00	0.67		1.00	1.00		0.06	1.00		0.13
Lane Grp Cap(c), veh/h	65	0	336	66	0	330	310	1281	1330	250	1281	1313
V/C Ratio(X)	2.05	0.00	0.20	1.92	0.00	0.14	0.34	0.56	0.56	0.23	0.49	0.49
Avail Cap(c_a), veh/h	65	0	336	66	0	330	310	1281	1330	250	1281	1313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.6	0.0	38.5	53.9	0.0	38.0	15.0	8.1	8.1	16.2	7.4	7.4
Incr Delay (d2), s/veh	519.7	0.0	0.3	464.3	0.0	0.2	3.0	1.8	1.7	2.2	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	0.0	1.8	10.6	0.0	1.2	2.3	11.8	12.3	1.2	9.3	9.5
LnGrp Delay(d), s/veh	574.3	0.0	38.7	518.2	0.0	38.2	18.0	9.9	9.8	18.3	8.7	8.7
LnGrp LOS	F		D	F		D	B	A	A	B	A	A
Approach Vol, veh/h		198			172			1576			1320	
Approach Delay, s/veh		395.8			389.8			10.4			9.1	
Approach LOS		F			F			B			A	

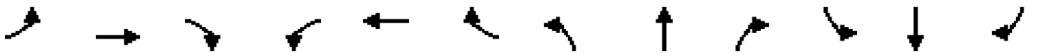
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		90.0		30.0		90.0		30.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		86.0		26.0		86.0		26.0
Max Q Clear Time (g_c+I1), s		36.7		28.0		35.9		28.0
Green Ext Time (p_c), s		17.3		0.0		12.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	256	618	52	142	774	107	45	355	84	238	397	339
Future Volume (veh/h)	256	618	52	142	774	107	45	355	84	238	397	339
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	269	651	55	149	815	0	47	374	88	251	418	357
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	312	1377	115	184	1101	343	60	1195	517	333	718	609
Arrive On Green	0.18	0.29	0.29	0.10	0.22	0.00	0.03	0.34	0.34	0.10	0.40	0.40
Sat Flow, veh/h	1774	4774	400	1774	5085	1583	1774	3539	1531	3442	1791	1519
Grp Volume(v), veh/h	269	461	245	149	815	0	47	374	88	251	413	362
Grp Sat Flow(s),veh/h/ln	1774	1695	1783	1774	1695	1583	1774	1770	1531	1721	1770	1541
Q Serve(g_s), s	13.6	10.3	10.5	7.6	13.8	0.0	2.4	7.2	3.7	6.6	16.8	17.0
Cycle Q Clear(g_c), s	13.6	10.3	10.5	7.6	13.8	0.0	2.4	7.2	3.7	6.6	16.8	17.0
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00	1.00		0.99
Lane Grp Cap(c), veh/h	312	978	514	184	1101	343	60	1195	517	333	709	617
V/C Ratio(X)	0.86	0.47	0.48	0.81	0.74	0.00	0.79	0.31	0.17	0.75	0.58	0.59
Avail Cap(c_a), veh/h	596	1505	792	346	1542	480	154	1195	517	522	709	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	27.1	27.1	40.5	33.7	0.0	44.3	22.6	21.5	40.6	21.6	21.7
Incr Delay (d2), s/veh	7.0	0.4	0.7	8.1	1.2	0.0	19.8	0.7	0.7	3.5	3.5	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	4.8	5.3	4.1	6.6	0.0	1.5	3.6	1.7	3.3	8.8	7.9
LnGrp Delay(d), s/veh	44.0	27.4	27.8	48.6	35.0	0.0	64.0	23.3	22.2	44.1	25.1	25.7
LnGrp LOS	D	C	C	D	C		E	C	C	D	C	C
Approach Vol, veh/h		975			964			509			1026	
Approach Delay, s/veh		32.1			37.1			26.9			30.0	
Approach LOS		C			D			C			C	

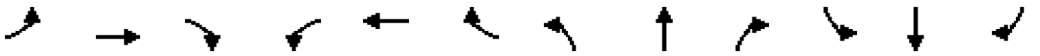
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	35.2	13.6	30.6	7.1	41.0	20.2	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	18.0	41.0	8.0	37.0	31.0	28.0
Max Q Clear Time (g_c+I1), s	8.6	9.2	9.6	12.5	4.4	19.0	15.6	15.8
Green Ext Time (p_c), s	0.4	2.5	0.2	4.4	0.0	4.6	0.6	4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.1
HCM 2010 LOS	C



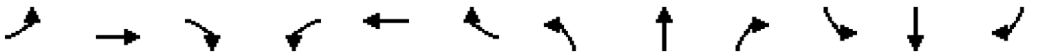
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	570	621	160	1163	0	0	0	0	141	235	312
Future Volume (vph)	0	570	621	160	1163	0	0	0	0	141	235	312
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.98	0.94	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.95	0.85	1.00	1.00					1.00	0.98	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3235	1380	3502	3610					1715	1682	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3235	1380	3502	3610					1715	1682	1534
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	655	714	184	1337	0	0	0	0	162	270	359
RTOR Reduction (vph)	0	42	213	0	0	0	0	0	0	0	5	27
Lane Group Flow (vph)	0	906	208	184	1337	0	0	0	0	146	338	275
Confl. Peds. (#/hr)	174		24	24		174						
Confl. Bikes (#/hr)			4			31						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		40.6	40.6	10.7	55.3					43.5	43.5	43.5
Effective Green, g (s)		40.6	40.6	10.7	55.3					43.5	43.5	43.5
Actuated g/C Ratio		0.38	0.38	0.10	0.52					0.41	0.41	0.41
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1229	524	350	1869					698	685	624
v/s Ratio Prot		0.28		0.05	c0.37					0.09	c0.20	0.18
v/s Ratio Perm			0.15									
v/c Ratio		0.74	0.40	0.53	0.72					0.21	0.49	0.44
Uniform Delay, d1		28.5	24.2	45.6	19.7					20.5	23.5	22.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		2.3	0.5	1.4	1.3					0.7	2.5	2.3
Delay (s)		30.8	24.7	47.1	21.0					21.2	26.0	25.1
Level of Service		C	C	D	C					C	C	C
Approach Delay (s/veh)		28.9			24.2			0.0			24.8	
Approach LOS		C			C			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	106.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



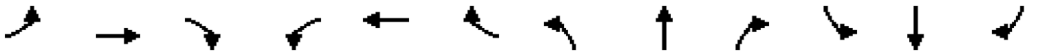
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	231	760	0	15	833	301	7	5	10	151	1	257
Future Volume (vph)	231	760	0	15	833	301	7	5	10	151	1	257
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.97	1.00	0.95	1.00	
Satd. Flow (prot)	3400	5036		1752	5036	1544		1792	1568	1665	1501	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.97	1.00	0.95	1.00	
Satd. Flow (perm)	3400	5036		1752	5036	1544		1792	1568	1665	1501	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	246	809	0	16	886	320	7	5	11	161	1	273
RTOR Reduction (vph)	0	0	0	0	0	203	0	0	9	0	231	0
Lane Group Flow (vph)	246	809	0	16	886	117	0	12	2	145	59	0
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			4			2						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	12.0	37.2		2.4	27.6	27.6		19.5	19.5	13.8	13.8	
Effective Green, g (s)	12.0	37.2		2.4	27.6	27.6		19.5	19.5	13.8	13.8	
Actuated g/C Ratio	0.13	0.42		0.03	0.31	0.31		0.22	0.22	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	458	2107		47	1563	479		393	343	258	233	
v/s Ratio Prot	c0.07	0.16		0.01	c0.18			c0.01		c0.09	0.04	
v/s Ratio Perm						0.08			0.00			
v/c Ratio	0.54	0.38		0.34	0.57	0.24		0.03	0.01	0.56	0.25	
Uniform Delay, d1	35.9	17.9		42.5	25.6	22.9		27.3	27.1	34.8	33.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	0.1		4.3	0.5	0.3		0.1	0.0	2.8	0.6	
Delay (s)	37.1	18.0		46.8	26.1	23.1		27.4	27.2	37.5	33.6	
Level of Service	D	B		D	C	C		C	C	D	C	
Approach Delay (s/veh)		22.5			25.6			27.3			34.9	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	88.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	51.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	209	501	0	0	600	73	723	280	247	0	0	0
Future Volume (vph)	209	501	0	0	600	73	723	280	247	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.96		1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3424		1643	3162	1443			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3424		1643	3162	1443			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	235	563	0	0	674	82	812	315	278	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	2	112	0	0	0
Lane Group Flow (vph)	235	563	0	0	756	0	406	747	138	0	0	0
Confl. Peds. (#/hr)	162		26	26		162			3	3		
Confl. Bikes (#/hr)			9			51			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	12.2	46.6			30.4		52.4	52.4	52.4			
Effective Green, g (s)	12.2	46.6			30.4		52.4	52.4	52.4			
Actuated g/C Ratio	0.11	0.44			0.28		0.49	0.49	0.49			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	399	1572			972		804	1548	706			
v/s Ratio Prot	c0.07	0.16			c0.22		c0.25	0.24				
v/s Ratio Perm									0.10			
v/c Ratio	0.59	0.36			0.78		0.50	0.48	0.20			
Uniform Delay, d1	45.0	20.2			35.2		18.5	18.2	15.4			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	2.2	0.1			4.0		2.3	1.1	0.6			
Delay (s)	47.2	20.3			39.2		20.8	19.3	16.0			
Level of Service	D	C			D		C	B	B			
Approach Delay (s/veh)		28.3			39.2			19.2			0.0	
Approach LOS		C			D			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	224	701	0	0	956	541	194	0	347	0	0	0
Future Volume (veh/h)	224	701	0	0	956	541	194	0	347	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1900	1845	0	1845			
Adj Flow Rate, veh/h	241	754	0	0	1028	582	209	0	373			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	305	2772	0	0	1429	652	1292	0	594			
Arrive On Green	0.09	0.55	0.00	0.00	0.43	0.43	0.38	0.00	0.38			
Sat Flow, veh/h	3408	5202	0	0	3523	1532	3408	0	1568			
Grp Volume(v), veh/h	241	754	0	0	1028	582	209	0	373			
Grp Sat Flow(s),veh/h/ln	1704	1679	0	0	1679	1532	1704	0	1568			
Q Serve(g_s), s	7.9	9.0	0.0	0.0	28.8	39.9	4.6	0.0	22.0			
Cycle Q Clear(g_c), s	7.9	9.0	0.0	0.0	28.8	39.9	4.6	0.0	22.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	305	2772	0	0	1429	652	1292	0	594			
V/C Ratio(X)	0.79	0.27	0.00	0.00	0.72	0.89	0.16	0.00	0.63			
Avail Cap(c_a), veh/h	421	3063	0	0	1509	689	1292	0	594			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.6	13.5	0.0	0.0	27.0	30.2	23.3	0.0	28.7			
Incr Delay (d2), s/veh	6.9	0.1	0.0	0.0	1.6	13.5	0.3	0.0	5.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.0	4.1	0.0	0.0	13.6	19.3	2.2	0.0	10.4			
LnGrp Delay(d), s/veh	57.5	13.5	0.0	0.0	28.6	43.7	23.6	0.0	33.7			
LnGrp LOS	E	B			C	D	C		C			
Approach Vol, veh/h		995			1610			582				
Approach Delay, s/veh		24.2			34.0			30.0				
Approach LOS		C			C			C				

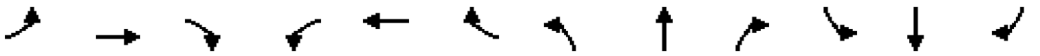
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		47.0		66.4			14.2	52.3
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		43.0		69.0			14.0	51.0
Max Q Clear Time (g_c+I1), s		24.0		11.0			9.9	41.9
Green Ext Time (p_c), s		2.0		5.8			0.3	6.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	223	1460	437	303	1593	158	416	736	186	163	576	200
Future Volume (veh/h)	223	1460	437	303	1593	158	416	736	186	163	576	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	251	1640	491	340	1790	178	467	827	209	183	647	225
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	308	1848	560	396	1978	600	526	1644	497	243	853	369
Arrive On Green	0.09	0.36	0.36	0.11	0.39	0.39	0.15	0.32	0.32	0.07	0.24	0.24
Sat Flow, veh/h	3476	5136	1556	3476	5136	1558	3476	5136	1553	3476	3574	1545
Grp Volume(v), veh/h	251	1640	491	340	1790	178	467	827	209	183	647	225
Grp Sat Flow(s),veh/h/ln	1738	1712	1556	1738	1712	1558	1738	1712	1553	1738	1787	1545
Q Serve(g_s), s	8.3	35.2	34.6	11.3	38.6	9.3	15.5	15.3	12.4	6.1	19.7	15.2
Cycle Q Clear(g_c), s	8.3	35.2	34.6	11.3	38.6	9.3	15.5	15.3	12.4	6.1	19.7	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	1848	560	396	1978	600	526	1644	497	243	853	369
V/C Ratio(X)	0.82	0.89	0.88	0.86	0.90	0.30	0.89	0.50	0.42	0.75	0.76	0.61
Avail Cap(c_a), veh/h	326	1882	570	415	2013	611	563	1644	497	326	853	369
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	35.3	35.1	51.1	34.0	25.0	48.8	32.3	31.3	53.6	41.5	39.8
Incr Delay (d2), s/veh	14.2	5.5	14.2	15.8	6.2	0.3	15.2	1.1	2.6	6.7	6.3	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	17.7	17.1	6.3	19.4	4.1	8.5	7.4	5.7	3.1	10.4	7.3
LnGrp Delay(d), s/veh	66.7	40.9	49.4	66.9	40.3	25.3	64.1	33.4	33.9	60.3	47.8	47.1
LnGrp LOS	E	D	D	E	D	C	E	C	C	E	D	D
Approach Vol, veh/h		2382			2308			1503			1055	
Approach Delay, s/veh		45.4			43.0			43.0			49.8	
Approach LOS		D			D			D			D	

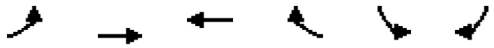
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	41.6	17.4	46.2	21.8	32.0	14.4	49.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	36.0	14.0	43.0	19.0	28.0	11.0	46.0
Max Q Clear Time (g_c+I1), s	8.1	17.3	13.3	37.2	17.5	21.7	10.3	40.6
Green Ext Time (p_c), s	0.2	5.8	0.1	5.0	0.3	2.6	0.1	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	69	151	19	674	180	329	22	788	644	216	522	66
Future Volume (vph)	69	151	19	674	180	329	22	788	644	216	522	66
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	0.99	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.98	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		5023		3285	1683	1594	1805	3610	1578	3502	5086	
Flt Permitted		0.77		0.95	0.69	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3923		3285	1179	1594	1805	3610	1578	3502	5086	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	75	164	21	733	196	358	24	857	700	235	567	72
RTOR Reduction (vph)	0	8	0	0	0	128	0	0	41	0	13	0
Lane Group Flow (vph)	0	252	0	616	313	230	24	857	659	235	626	0
Confl. Peds. (#/hr)			25	25			1		11	11		1
Confl. Bikes (#/hr)			1			2			2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		19.0		28.0	51.0	51.0	3.0	45.6	73.6	12.1	54.7	
Effective Green, g (s)		19.0		28.0	51.0	51.0	3.0	45.6	73.6	12.1	54.7	
Actuated g/C Ratio		0.16		0.23	0.42	0.42	0.02	0.38	0.61	0.10	0.45	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		617		762	615	673	44	1363	1014	351	2304	
v/s Ratio Prot				c0.19	0.12		0.01	0.24	c0.15	c0.07	0.12	
v/s Ratio Perm		0.06			c0.10	0.14			0.27			
v/c Ratio		0.41		0.81	0.51	0.34	0.55	0.63	0.65	0.67	0.27	
Uniform Delay, d1		45.8		43.8	25.6	23.5	58.2	30.6	15.2	52.4	20.6	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		0.4		6.3	0.7	0.3	13.1	2.2	1.4	4.8	0.3	
Delay (s)		46.2		50.1	26.3	23.8	71.3	32.9	16.7	57.2	20.9	
Level of Service		D		D	C	C	E	C	B	E	C	
Approach Delay (s/veh)		46.2			37.0			26.3			30.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	120.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	958	1367	0	409	189
Future Volume (veh/h)	0	958	1367	0	409	189
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	1041	1486	0	445	205
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	1998	1998	0	974	869
Arrive On Green	0.00	0.39	0.39	0.00	0.54	0.54
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	1041	1486	0	445	205
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	16.1	25.7	0.0	15.7	7.0
Cycle Q Clear(g_c), s	0.0	16.1	25.7	0.0	15.7	7.0
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1998	1998	0	974	869
V/C Ratio(X)	0.00	0.52	0.74	0.00	0.46	0.24
Avail Cap(c_a), veh/h	0	2791	2791	0	974	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.6	27.6	0.0	14.7	12.7
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	1.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	12.4	0.0	8.2	3.2
LnGrp Delay(d), s/veh	0.0	24.8	28.3	0.0	16.3	13.4
LnGrp LOS		C	C		B	B
Approach Vol, veh/h		1041	1486		650	
Approach Delay, s/veh		24.8	28.3		15.4	
Approach LOS		C	C		B	

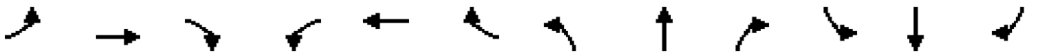
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.1		60.0		44.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s				18.1		17.7		27.7
Green Ext Time (p_c), s				8.4		2.2		12.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1255	0	0	1258	546	860
Future Volume (vph)	1255	0	0	1258	546	860
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.96	1.00
Satd. Flow (prot)	5187			5187	1761	1534
Flt Permitted	1.00			1.00	0.96	1.00
Satd. Flow (perm)	5187			5187	1761	1534
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1321	0	0	1324	575	905
RTOR Reduction (vph)	0	0	0	0	2	2
Lane Group Flow (vph)	1321	0	0	1324	772	704
Confl. Peds. (#/hr)		7	7		5	
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	36.8			36.8	73.1	73.1
Effective Green, g (s)	36.8			36.8	73.1	73.1
Actuated g/C Ratio	0.31			0.31	0.62	0.62
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1619			1619	1091	951
v/s Ratio Prot	0.25			c0.26	0.44	
v/s Ratio Perm						c0.46
v/c Ratio	0.82			0.82	0.71	0.74
Uniform Delay, d1	37.4			37.5	15.2	15.7
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	3.3			3.3	3.9	5.2
Delay (s)	40.7			40.8	19.1	20.9
Level of Service	D			D	B	C
Approach Delay (s/veh)	40.7			40.8	19.9	
Approach LOS	D			D	B	

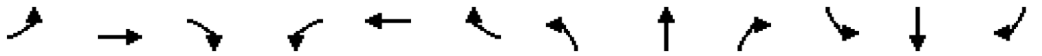
Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	117.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	85.4%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	265	0	407	0	0	0	0	619	239	314	479	0
Future Volume (vph)	265	0	407	0	0	0	0	619	239	314	479	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.86						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1516						5085	1564	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.39	1.00	
Satd. Flow (perm)	1681	1516						5085	1564	726	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	279	0	428	0	0	0	0	652	252	331	504	0
RTOR Reduction (vph)	0	340	0	0	0	0	0	0	67	0	0	0
Lane Group Flow (vph)	251	116	0	0	0	0	0	652	185	331	504	0
Confl. Peds. (#/hr)							5					5
Confl. Bikes (#/hr)									1			10
Turn Type	Perm	NA						NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4								2	6		
Actuated Green, G (s)	22.5	22.5						84.2	84.2	84.2	84.2	
Effective Green, g (s)	22.5	22.5						84.2	84.2	84.2	84.2	
Actuated g/C Ratio	0.20	0.20						0.73	0.73	0.73	0.73	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	329	297						3732	1148	532	2597	
v/s Ratio Prot								0.13			0.14	
v/s Ratio Perm	c0.15	0.08							0.12	c0.46		
v/c Ratio	0.76	0.39						0.17	0.16	0.62	0.19	
Uniform Delay, d1	43.6	40.1						4.7	4.6	7.5	4.7	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.0	0.9						0.1	0.3	5.4	0.2	
Delay (s)	53.6	41.0						4.8	4.9	12.9	4.9	
Level of Service	D	D						A	A	B	A	
Approach Delay (s/veh)		45.5			0.0			4.8			8.1	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



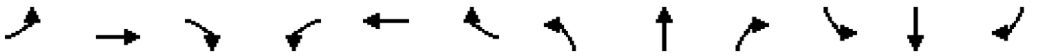
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	179	0	168	360	538	0	0	621	542
Future Volume (vph)	0	0	0	179	0	168	360	538	0	0	621	542
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.95
Flpb, ped/bikes				1.00		1.00	0.99	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1736		1553	1720	3471			4988	1479
Flt Permitted				0.95		1.00	0.39	1.00			1.00	1.00
Satd. Flow (perm)				1736		1553	705	3471			4988	1479
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	190	0	179	383	572	0	0	661	577
RTOR Reduction (vph)	0	0	0	0	0	154	0	0	0	0	0	120
Lane Group Flow (vph)	0	0	0	190	0	25	383	572	0	0	661	457
Confl. Peds. (#/hr)							6		2	2		6
Confl. Bikes (#/hr)									1			12
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				16.7		16.7	93.9	93.9			93.9	93.9
Effective Green, g (s)				16.7		16.7	93.9	93.9			93.9	93.9
Actuated g/C Ratio				0.14		0.14	0.79	0.79			0.79	0.79
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				244		218	558	2748			3949	1170
v/s Ratio Prot								0.16			0.13	
v/s Ratio Perm				c0.11		0.02	c0.54					0.31
v/c Ratio				0.78		0.12	0.69	0.21			0.17	0.39
Uniform Delay, d1				49.2		44.5	5.6	3.1			3.0	3.7
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				14.5		0.2	6.7	0.2			0.1	1.0
Delay (s)				63.6		44.7	12.4	3.3			3.1	4.7
Level of Service				E		D	B	A			A	A
Approach Delay (s/veh)		0.0			54.5			6.9			3.8	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	118.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	458	0	305	188	1531	0	0	1197	310
Future Volume (veh/h)	0	0	0	458	0	305	188	1531	0	0	1197	310
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				482	0	321	198	1612	0	0	1260	326
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				541	0	849	266	2226	0	0	2611	789
Arrive On Green				0.30	0.00	0.30	0.08	0.62	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1552
Grp Volume(v), veh/h				482	0	321	198	1612	0	0	1260	326
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1552
Q Serve(g_s), s				27.2	0.0	9.5	5.9	32.9	0.0	0.0	16.9	13.8
Cycle Q Clear(g_c), s				27.2	0.0	9.5	5.9	32.9	0.0	0.0	16.9	13.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				541	0	849	266	2226	0	0	2611	789
V/C Ratio(X)				0.89	0.00	0.38	0.74	0.72	0.00	0.00	0.48	0.41
Avail Cap(c_a), veh/h				778	0	1221	394	2226	0	0	2611	789
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				35.3	0.0	29.2	47.9	13.7	0.0	0.0	17.0	16.2
Incr Delay (d2), s/veh				9.3	0.0	0.3	4.2	2.1	0.0	0.0	0.6	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.8	0.0	3.7	3.0	16.8	0.0	0.0	8.1	6.2
LnGrp Delay(d), s/veh				44.6	0.0	29.4	52.1	15.8	0.0	0.0	17.6	17.8
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					803			1810			1586	
Approach Delay, s/veh					38.5			19.8			17.7	
Approach LOS					D			B			B	

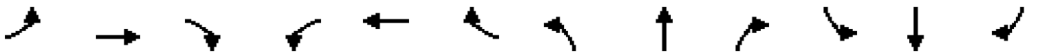
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		70.0			12.1	57.9		36.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		66.0			12.0	50.0		46.0
Max Q Clear Time (g_c+I1), s		34.9			7.9	18.9		29.2
Green Ext Time (p_c), s		15.9			0.2	12.6		2.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	374	0	210	0	0	0	0	1342	567	245	1406	0
Future Volume (vph)	374	0	210	0	0	0	0	1342	567	245	1406	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.98	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1607	1519					5136	1534	3467	3574	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1607	1519					5136	1534	3467	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	382	0	214	0	0	0	0	1369	579	250	1435	0
RTOR Reduction (vph)	0	34	48	0	0	0	0	0	270	0	0	0
Lane Group Flow (vph)	206	170	138	0	0	0	0	1369	309	250	1435	0
Confl. Peds. (#/hr)							6		12	12		6
Confl. Bikes (#/hr)									6			6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	30.0	30.0	30.0					64.1	64.1	13.9	82.0	
Effective Green, g (s)	30.0	30.0	30.0					64.1	64.1	13.9	82.0	
Actuated g/C Ratio	0.25	0.25	0.25					0.53	0.53	0.12	0.68	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	424	401	379					2743	819	401	2442	
v/s Ratio Prot	c0.12	0.11						0.27		0.07	c0.40	
v/s Ratio Perm			0.09						0.20			
v/c Ratio	0.49	0.42	0.36					0.50	0.38	0.62	0.59	
Uniform Delay, d1	38.4	37.8	37.1					17.8	16.3	50.6	10.1	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.9	0.7	0.6					0.7	1.3	3.0	1.0	
Delay (s)	39.3	38.5	37.7					18.4	17.6	53.6	11.1	
Level of Service	D	D	D					B	B	D	B	
Approach Delay (s/veh)		38.5			0.0			18.2			17.4	
Approach LOS		D			A			B			B	

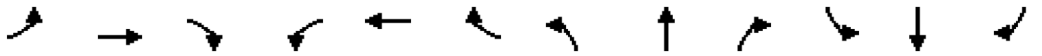
Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	127	0	292	0	0	0	0	780	257	343	513	0
Future Volume (vph)	127	0	292	0	0	0	0	780	257	343	513	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.86	0.85					0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1456	1504					4852		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1456	1504					4852		3433	5085	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	140	0	321	0	0	0	0	857	282	377	564	0
RTOR Reduction (vph)	0	128	139	0	0	0	0	37	0	0	0	0
Lane Group Flow (vph)	126	40	28	0	0	0	0	1102	0	377	564	0
Confl. Peds. (#/hr)							1		11	11		1
Confl. Bikes (#/hr)									4			3
Turn Type	Prot	NA	Perm					NA		Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	19.0	19.0	19.0					64.7		17.7	86.4	
Effective Green, g (s)	19.0	19.0	19.0					64.7		17.7	86.4	
Actuated g/C Ratio	0.17	0.17	0.17					0.57		0.16	0.76	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	281	243	251					2768		535	3874	
v/s Ratio Prot	c0.07	0.03						c0.23		c0.11	0.11	
v/s Ratio Perm			0.02									
v/c Ratio	0.45	0.16	0.11					0.40		0.70	0.15	
Uniform Delay, d1	42.5	40.4	40.0					13.5		45.4	3.6	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.3	0.2					0.4		4.2	0.1	
Delay (s)	43.6	40.7	40.2					14.0		49.6	3.7	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		41.3			0.0			14.0			22.1	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	181	0	203	322	579	0	0	675	530
Future Volume (vph)	0	0	0	181	0	203	322	579	0	0	675	530
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.91	0.85	1.00	1.00			0.93	
Flt Protected				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1665	1492	1490	3400	5036			4702	
Flt Permitted				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1665	1492	1490	3400	5036			4702	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	195	0	218	346	623	0	0	726	570
RTOR Reduction (vph)	0	0	0	0	53	106	0	0	0	0	97	0
Lane Group Flow (vph)	0	0	0	144	85	25	346	623	0	0	1199	0
Confl. Peds. (#/hr)							2		12	12		2
Confl. Bikes (#/hr)									4			4
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	0%
Turn Type				Prot	NA	Perm	Prot	NA			NA	
Protected Phases				3	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				22.3	22.3	22.3	17.1	86.3			65.2	
Effective Green, g (s)				22.3	22.3	22.3	17.1	86.3			65.2	
Actuated g/C Ratio				0.19	0.19	0.19	0.15	0.74			0.56	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				318	285	284	498	3727			2629	
v/s Ratio Prot				c0.09	0.06		c0.10	0.12			c0.25	
v/s Ratio Perm						0.02						
v/c Ratio				0.45	0.30	0.09	0.69	0.17			0.46	
Uniform Delay, d1				41.7	40.5	38.8	47.3	4.5			15.2	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.0	0.6	0.1	4.2	0.1			0.6	
Delay (s)				42.8	41.0	38.9	51.5	4.6			15.8	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			41.0			21.3			15.8	
Approach LOS		A			D			C			B	

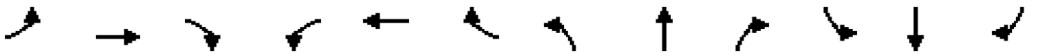
Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	116.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	1	1	3	0	1	3
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h						
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	1583	-70952	0	1774	5253
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1583	1695	0	1774	1695
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h						
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h						
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0		0			0
Approach Delay, s/veh	0.0		0.0			0.0
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		0.0				0.0		0.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		55.0				55.0		57.0
Max Q Clear Time (g_c+I1), s		0.0				0.0		0.0
Green Ext Time (p_c), s		0.0				0.0		0.0

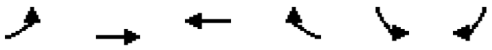
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type							Perm					
Protected Phases		4!			8!			4!			8!	
Permitted Phases	4!			8!			4!					
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	3.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type	Perm			Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)		0.0	0.0		0.0	
Approach LOS		A	A		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

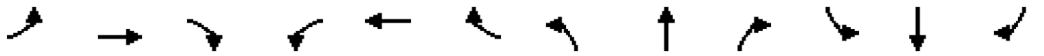
c Critical Lane Group



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Turn Type			Perm			Perm
Protected Phases	4			8		
Permitted Phases			8			2
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)	0.0			0.0	0.0	
Approach LOS	A			A	A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

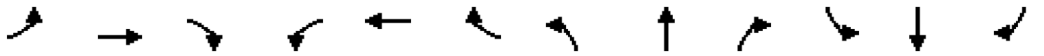
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm		Perm	Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4		4	8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm			Perm			Perm		Perm	Perm		
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	74.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1676	1710	1676	1676	1676	1676
Adj Flow Rate, veh/h	0	0	0	0	0	0
Adj No. of Lanes	2	0	1	1	1	1
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	--2147483648	--2147483648	2147483648	2147483648	2147483648	2147483648
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	-65382	0	1597	1676	1597	1425
Grp Volume(v), veh/h	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1593	0	1597	1676	1597	1425
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane		0.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	45602443264	1030792151244001288228583692024010926 08				
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	25993393733632	1497439				1012224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS						
Approach Vol, veh/h	0			0	0	
Approach Delay, s/veh	0.0			0.0	0.0	
Approach LOS						

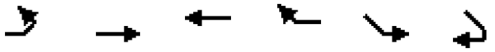
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		0.0		0.0				0.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		55.0		57.0				57.0
Max Q Clear Time (g_c+I1), s		0.0		0.0				0.0
Green Ext Time (p_c), s		0.0		0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324 16	0	844525375324 16			
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	4748	4748	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	728	3909	3909	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	8445	3784	3784	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

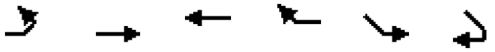
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	4	14	3	8		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)		1.00	1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1900	0	1863		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	3	0	0	3		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	0	2		
Cap, veh/h	--2147483648	0	--2147483648			
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	-70952	0	0	-70952		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane		0.00	0.00			
Lane Grp Cap(c), veh/h	72803909632	0	72803909632			
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	844525375324	16 0	844525375324	16		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h	0			0		
Approach Delay, s/veh	0.0			0.0		
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A



Movement	EBL	EBT	WBT	WBR	SEL	SER
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	0	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	0	3	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	0	2	2	2		
Cap, veh/h	--	0	0	0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	0	-70952	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	0	1695	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	0.00			0.00		
Lane Grp Cap(c), veh/h	0	0	0	0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h	0	0	0	0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				116.0				116.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Volume (veh/h)	400	0	0	0	0	0
Future Volume (veh/h)	400	0	0	0	0	0
Number	4	14			5	12
Initial Q (Qb), veh	0	0			0	0
Ped-Bike Adj(A_pbT)		1.00			1.00	1.00
Parking Bus, Adj	1.00	1.00			1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0			0	1863
Adj Flow Rate, veh/h	1600	0			0	0
Adj No. of Lanes	2	0			0	1
Peak Hour Factor	0.25	0.25			0.25	0.25
Percent Heavy Veh, %	2	0			0	2
Cap, veh/h	3043	0			0	0
Arrive On Green	0.86	0.00			0.00	0.00
Sat Flow, veh/h	3725	0			0	
Grp Volume(v), veh/h	1600	0			0.0	
Grp Sat Flow(s),veh/h/ln	1770	0				
Q Serve(g_s), s	3.3	0.0				
Cycle Q Clear(g_c), s	3.3	0.0				
Prop In Lane		0.00				
Lane Grp Cap(c), veh/h	3043	0				
V/C Ratio(X)	0.53	0.00				
Avail Cap(c_a), veh/h	11908	0				
HCM Platoon Ratio	1.00	1.00				
Upstream Filter(I)	1.00	0.00				
Uniform Delay (d), s/veh	0.5	0.0				
Incr Delay (d2), s/veh	0.1	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0				
%ile BackOfQ(50%),veh/ln	1.4	0.0				
LnGrp Delay(d), s/veh	0.7	0.0				
LnGrp LOS	A					
Approach Vol, veh/h	1600					
Approach Delay, s/veh	0.7					
Approach LOS	A					

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				
Phs Duration (G+Y+Rc), s				28.5				
Change Period (Y+Rc), s				4.0				
Max Green Setting (Gmax), s				96.0				
Max Q Clear Time (g_c+I1), s				5.3				
Green Ext Time (p_c), s				19.2				

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.7
HCM 2010 LOS	A

NORWALK STATION - 2015 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1126	268	3	1332	404	270	418	0	277	762	1
Future Volume (vph)	0	1126	268	3	1332	404	270	418	0	277	762	1
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.97		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (prot)		4924		1770	5085	1551	1522	4759		1522	4797	1560
Flt Permitted		1.00		0.11	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (perm)		4924		204	5085	1551	1522	4759		1522	4797	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1251	298	3	1480	449	300	464	0	308	847	1
RTOR Reduction (vph)	0	26	0	0	0	92	0	0	0	0	0	1
Lane Group Flow (vph)	0	1523	0	3	1480	357	186	578	0	277	878	0
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Effective Green, g (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2855		118	2949	899	294	920		223	703	228
v/s Ratio Prot		c0.31			0.29		c0.12	0.12		0.18	c0.18	
v/s Ratio Perm				0.01		0.23						0.00
v/c Ratio		0.53		0.03	0.50	0.40	0.63	0.63		1.24	1.25	0.00
Uniform Delay, d1		19.2		13.4	18.7	17.2	55.6	55.6		64.0	64.0	54.6
Progression Factor		0.92		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		0.1	0.1	0.3	9.9	3.2		141.0	123.7	0.0
Delay (s)		17.6		13.5	18.8	17.5	65.6	58.8		205.0	187.7	54.6
Level of Service		B		B	B	B	E	E		F	F	D
Approach Delay (s/veh)		17.6			18.5			60.4			191.7	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.3%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	149	907	167	69	1148	122	355	603	139	159	457	96
Future Volume (veh/h)	149	907	167	69	1148	122	355	603	139	159	457	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	160	975	180	74	1234	131	382	648	149	171	491	103
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	212	1545	670	230	1437	631	447	1081	431	311	926	367
Arrive On Green	0.07	0.44	0.44	0.04	0.41	0.41	0.13	0.31	0.31	0.09	0.26	0.26
Sat Flow, veh/h	1757	3505	1520	1757	3505	1538	3408	3505	1397	1757	3505	1390
Grp Volume(v), veh/h	160	975	180	74	1234	131	382	648	149	171	491	103
Grp Sat Flow(s),veh/h/ln	1757	1752	1520	1757	1752	1538	1704	1752	1397	1757	1752	1390
Q Serve(g_s), s	6.4	27.3	9.5	3.1	40.6	6.9	13.9	19.8	10.4	8.8	15.2	7.4
Cycle Q Clear(g_c), s	6.4	27.3	9.5	3.1	40.6	6.9	13.9	19.8	10.4	8.8	15.2	7.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	212	1545	670	230	1437	631	447	1081	431	311	926	367
V/C Ratio(X)	0.76	0.63	0.27	0.32	0.86	0.21	0.85	0.60	0.35	0.55	0.53	0.28
Avail Cap(c_a), veh/h	314	2023	877	248	1746	766	593	1081	431	381	926	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.1	27.4	22.4	22.7	34.0	24.1	53.8	37.1	33.9	30.6	39.8	37.0
Incr Delay (d2), s/veh	5.8	0.4	0.2	0.8	3.9	0.2	9.2	2.5	2.2	1.5	2.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	13.2	4.0	1.5	20.3	3.0	7.1	10.0	4.3	4.4	7.6	3.1
LnGrp Delay(d), s/veh	33.8	27.8	22.6	23.5	37.9	24.2	62.9	39.6	36.1	32.1	42.0	38.9
LnGrp LOS	C	C	C	C	D	C	E	D	D	C	D	D
Approach Vol, veh/h		1315			1439			1179			765	
Approach Delay, s/veh		27.8			35.9			46.7			39.4	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	43.0	8.7	59.8	20.6	37.4	12.6	55.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	39.0	6.0	73.0	22.0	33.0	16.0	63.0
Max Q Clear Time (g_c+I1), s	10.8	21.8	5.1	29.3	15.9	17.2	8.4	42.6
Green Ext Time (p_c), s	0.2	4.4	0.0	9.0	0.7	3.1	0.2	9.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	286	1022	111	137	1071	59	41	516	149	71	425	362
Future Volume (veh/h)	286	1022	111	137	1071	59	41	516	149	71	425	362
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	295	1054	114	141	1104	61	42	532	154	73	438	373
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	331	1898	578	171	1439	443	54	1262	560	120	1278	567
Arrive On Green	0.19	0.37	0.37	0.10	0.28	0.28	0.03	0.36	0.36	0.03	0.36	0.36
Sat Flow, veh/h	1774	5085	1550	1774	5085	1565	1774	3539	1571	3442	3539	1571
Grp Volume(v), veh/h	295	1054	114	141	1104	61	42	532	154	73	438	373
Grp Sat Flow(s),veh/h/ln	1774	1695	1550	1774	1695	1565	1774	1770	1571	1721	1770	1571
Q Serve(g_s), s	18.7	18.9	5.7	9.0	22.9	3.3	2.7	13.1	8.0	2.4	10.4	22.9
Cycle Q Clear(g_c), s	18.7	18.9	5.7	9.0	22.9	3.3	2.7	13.1	8.0	2.4	10.4	22.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	1898	578	171	1439	443	54	1262	560	120	1278	567
V/C Ratio(X)	0.89	0.56	0.20	0.82	0.77	0.14	0.78	0.42	0.27	0.61	0.34	0.66
Avail Cap(c_a), veh/h	632	2830	862	339	1990	612	139	1262	560	209	1278	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	28.5	24.4	51.0	37.8	30.8	55.4	28.0	26.4	54.7	26.8	30.8
Incr Delay (d2), s/veh	8.2	0.3	0.2	9.5	1.2	0.1	21.2	1.0	1.2	4.9	0.7	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	8.8	2.5	4.8	10.9	1.5	1.6	6.6	3.7	1.2	5.2	10.8
LnGrp Delay(d), s/veh	53.9	28.8	24.6	60.5	39.0	30.9	76.6	29.1	27.6	59.6	27.5	36.7
LnGrp LOS	D	C	C	E	D	C	E	C	C	E	C	D
Approach Vol, veh/h		1463			1306			728			884	
Approach Delay, s/veh		33.5			40.9			31.5			34.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	45.0	15.1	46.9	7.5	45.5	25.5	36.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	22.0	64.0	9.0	39.0	41.0	45.0
Max Q Clear Time (g_c+I1), s	4.4	15.1	11.0	20.9	4.7	24.9	20.7	24.9
Green Ext Time (p_c), s	0.0	4.0	0.2	9.3	0.0	3.5	0.8	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	219	1061	205	95	1421	113	184	612	89	70	503	168
Future Volume (veh/h)	219	1061	205	95	1421	113	184	612	89	70	503	168
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	231	1117	216	100	1496	119	194	644	94	74	529	177
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	258	2220	680	123	1728	137	221	1075	472	93	821	596
Arrive On Green	0.15	0.45	0.45	0.07	0.37	0.37	0.13	0.31	0.31	0.05	0.24	0.24
Sat Flow, veh/h	1740	4988	1527	1740	4704	374	1740	3471	1525	1740	3471	1545
Grp Volume(v), veh/h	231	1117	216	100	1057	558	194	644	94	74	529	177
Grp Sat Flow(s),veh/h/ln	1740	1663	1527	1740	1663	1753	1740	1736	1525	1740	1736	1545
Q Serve(g_s), s	17.3	21.2	12.1	7.5	39.1	39.1	14.5	20.8	6.0	5.6	18.2	10.5
Cycle Q Clear(g_c), s	17.3	21.2	12.1	7.5	39.1	39.1	14.5	20.8	6.0	5.6	18.2	10.5
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	2220	680	123	1221	644	221	1075	472	93	821	596
V/C Ratio(X)	0.89	0.50	0.32	0.81	0.87	0.87	0.88	0.60	0.20	0.79	0.64	0.30
Avail Cap(c_a), veh/h	368	2486	761	197	1331	702	315	1075	472	158	821	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	26.3	23.7	60.7	38.9	38.9	56.8	38.7	33.6	61.9	45.5	28.3
Incr Delay (d2), s/veh	17.8	0.2	0.3	12.7	5.9	10.5	17.8	2.5	0.9	13.8	3.9	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	9.8	5.1	4.0	18.9	20.8	8.1	10.3	2.6	3.0	9.2	4.7
LnGrp Delay(d), s/veh	73.2	26.4	24.0	73.3	44.7	49.3	74.6	41.2	34.6	75.7	49.4	29.5
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		1564			1715			932			780	
Approach Delay, s/veh		33.0			47.9			47.5			47.4	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	45.0	13.3	62.9	20.8	35.3	23.7	52.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	41.0	15.0	66.0	24.0	29.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	7.6	22.8	9.5	23.2	16.5	20.2	19.3	41.1
Green Ext Time (p_c), s	0.0	4.1	0.1	10.3	0.3	2.5	0.4	7.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	168	798	161	153	1106	58	179	597	114	70	519	92
Future Volume (veh/h)	168	798	161	153	1106	58	179	597	114	70	519	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	191	907	183	174	1257	66	203	678	130	80	590	105
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	229	1460	641	294	1438	632	325	1164	519	250	984	433
Arrive On Green	0.08	0.42	0.42	0.07	0.41	0.41	0.10	0.34	0.34	0.05	0.28	0.28
Sat Flow, veh/h	1740	3471	1523	1740	3471	1526	1740	3471	1547	1740	3471	1527
Grp Volume(v), veh/h	191	907	183	174	1257	66	203	678	130	80	590	105
Grp Sat Flow(s),veh/h/ln	1740	1736	1523	1740	1736	1526	1740	1736	1547	1740	1736	1527
Q Serve(g_s), s	8.0	26.3	10.1	7.3	42.7	3.4	10.2	20.7	7.8	4.1	18.8	6.8
Cycle Q Clear(g_c), s	8.0	26.3	10.1	7.3	42.7	3.4	10.2	20.7	7.8	4.1	18.8	6.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	229	1460	641	294	1438	632	325	1164	519	250	984	433
V/C Ratio(X)	0.83	0.62	0.29	0.59	0.87	0.10	0.62	0.58	0.25	0.32	0.60	0.24
Avail Cap(c_a), veh/h	347	1813	796	369	1705	749	400	1164	519	293	984	433
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.5	29.1	24.5	22.5	34.5	23.0	28.8	35.2	30.9	31.2	39.7	35.4
Incr Delay (d2), s/veh	10.3	0.4	0.2	1.9	4.7	0.1	2.1	2.1	1.2	0.7	2.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	12.7	4.3	3.6	21.4	1.4	5.0	10.2	3.5	2.0	9.4	3.0
LnGrp Delay(d), s/veh	38.7	29.6	24.7	24.4	39.2	23.1	30.9	37.4	32.1	31.9	42.4	36.7
LnGrp LOS	D	C	C	C	D	C	C	D	C	C	D	D
Approach Vol, veh/h		1281			1497			1011			775	
Approach Delay, s/veh		30.2			36.8			35.4			40.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	47.0	13.5	58.0	16.5	40.3	14.3	57.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	15.0	67.0	18.0	34.0	19.0	63.0
Max Q Clear Time (g_c+I1), s	6.1	22.7	9.3	28.3	12.2	20.8	10.0	44.7
Green Ext Time (p_c), s	0.0	4.7	0.2	8.0	0.3	3.3	0.3	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	849	185	166	1171	52	99	820	161	137	799	153
Future Volume (veh/h)	194	849	185	166	1171	52	99	820	161	137	799	153
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	204	894	195	175	1233	55	104	863	169	144	841	161
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	232	1558	471	202	1472	445	128	1245	724	170	1909	580
Arrive On Green	0.13	0.31	0.31	0.12	0.29	0.29	0.07	0.36	0.36	0.10	0.38	0.38
Sat Flow, veh/h	1757	5036	1523	1757	5036	1521	1757	3505	1531	1757	5036	1531
Grp Volume(v), veh/h	204	894	195	175	1233	55	104	863	169	144	841	161
Grp Sat Flow(s),veh/h/ln	1757	1679	1523	1757	1679	1521	1757	1752	1531	1757	1679	1531
Q Serve(g_s), s	14.8	19.3	13.1	12.7	29.7	3.4	7.6	27.3	8.5	10.4	16.1	9.5
Cycle Q Clear(g_c), s	14.8	19.3	13.1	12.7	29.7	3.4	7.6	27.3	8.5	10.4	16.1	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	232	1558	471	202	1472	445	128	1245	724	170	1909	580
V/C Ratio(X)	0.88	0.57	0.41	0.86	0.84	0.12	0.81	0.69	0.23	0.85	0.44	0.28
Avail Cap(c_a), veh/h	353	1788	541	312	1672	505	217	1245	724	258	1909	580
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	37.6	35.4	56.3	42.9	33.6	59.2	35.7	20.4	57.5	30.0	27.9
Incr Delay (d2), s/veh	15.0	0.3	0.6	14.3	3.5	0.1	11.6	3.2	0.8	14.8	0.7	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	9.0	5.6	7.0	14.3	1.5	4.1	13.7	3.7	5.8	7.6	4.2
LnGrp Delay(d), s/veh	70.2	37.9	36.0	70.6	46.5	33.8	70.8	38.9	21.2	72.3	30.7	29.1
LnGrp LOS	E	D	D	E	D	C	E	D	C	E	C	C
Approach Vol, veh/h		1293			1463			1136			1146	
Approach Delay, s/veh		42.7			48.9			39.2			35.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	50.0	18.9	44.1	13.4	53.1	21.1	41.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	23.0	46.0	16.0	49.0	26.0	43.0
Max Q Clear Time (g_c+I1), s	12.4	29.3	14.7	21.3	9.6	18.1	16.8	31.7
Green Ext Time (p_c), s	0.2	6.0	0.3	7.1	0.1	6.9	0.4	6.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	175	776	137	33	1252	170	82	580	80	53	607	231
Future Volume (veh/h)	175	776	137	33	1252	170	82	580	80	53	607	231
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	184	817	144	35	1318	179	86	611	84	56	639	243
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	214	2158	661	44	1672	512	261	1577	696	305	1577	695
Arrive On Green	0.12	0.43	0.43	0.03	0.33	0.33	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1757	5036	1543	1757	5036	1542	621	3505	1546	739	3505	1546
Grp Volume(v), veh/h	184	817	144	35	1318	179	86	611	84	56	639	243
Grp Sat Flow(s),veh/h/ln	1757	1679	1543	1757	1679	1542	621	1752	1546	739	1752	1546
Q Serve(g_s), s	12.8	13.8	7.3	2.5	29.5	10.9	13.5	14.5	3.9	6.8	15.3	12.8
Cycle Q Clear(g_c), s	12.8	13.8	7.3	2.5	29.5	10.9	28.7	14.5	3.9	21.3	15.3	12.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	214	2158	661	44	1672	512	261	1577	696	305	1577	695
V/C Ratio(X)	0.86	0.38	0.22	0.79	0.79	0.35	0.33	0.39	0.12	0.18	0.41	0.35
Avail Cap(c_a), veh/h	409	3034	930	99	2144	656	261	1577	696	305	1577	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	24.3	22.4	60.3	37.6	31.4	32.7	22.8	19.9	29.9	23.0	22.4
Incr Delay (d2), s/veh	9.7	0.1	0.2	25.9	1.6	0.4	3.4	0.7	0.4	1.3	0.8	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	6.4	3.2	1.5	13.9	4.7	2.6	7.1	1.7	1.5	7.5	5.7
LnGrp Delay(d), s/veh	63.3	24.4	22.6	86.2	39.2	31.8	36.1	23.5	20.3	31.2	23.8	23.7
LnGrp LOS	E	C	C	F	D	C	D	C	C	C	C	C
Approach Vol, veh/h		1145			1532			781			938	
Approach Delay, s/veh		30.4			39.4			24.6			24.2	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	7.1	57.3		60.0	19.2	45.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	7.0	75.0		56.0	29.0	53.0
Max Q Clear Time (g_c+I1), s		30.7	4.5	15.8		23.3	14.8	31.5
Green Ext Time (p_c), s		5.1	0.0	6.7		5.8	0.4	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	139	752	121	191	1138	60	78	650	95	52	600	99
Future Volume (veh/h)	139	752	121	191	1138	60	78	650	95	52	600	99
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	148	800	129	203	1211	64	83	691	101	55	638	105
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	175	1300	574	232	1414	624	247	1410	622	229	1410	621
Arrive On Green	0.10	0.37	0.37	0.13	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1757	3505	1546	1757	3505	1547	707	3505	1545	675	3505	1544
Grp Volume(v), veh/h	148	800	129	203	1211	64	83	691	101	55	638	105
Grp Sat Flow(s),veh/h/ln	1757	1752	1546	1757	1752	1547	707	1752	1545	675	1752	1544
Q Serve(g_s), s	10.5	23.6	7.3	14.4	39.9	3.3	12.3	18.6	5.3	8.4	16.9	5.5
Cycle Q Clear(g_c), s	10.5	23.6	7.3	14.4	39.9	3.3	29.2	18.6	5.3	27.0	16.9	5.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	1300	574	232	1414	624	247	1410	622	229	1410	621
V/C Ratio(X)	0.84	0.62	0.22	0.87	0.86	0.10	0.34	0.49	0.16	0.24	0.45	0.17
Avail Cap(c_a), veh/h	291	1659	732	374	1825	805	247	1410	622	229	1410	621
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	32.5	27.4	54.0	34.5	23.5	38.4	28.2	24.2	38.2	27.7	24.3
Incr Delay (d2), s/veh	11.1	0.5	0.2	12.6	3.4	0.1	3.6	1.2	0.6	2.5	1.1	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	11.5	3.1	7.8	20.0	1.4	2.6	9.3	2.4	1.7	8.4	2.5
LnGrp Delay(d), s/veh	67.2	33.0	27.6	66.5	37.9	23.6	42.0	29.4	24.8	40.7	28.7	24.9
LnGrp LOS	E	C	C	E	D	C	D	C	C	D	C	C
Approach Vol, veh/h		1077			1478			875			798	
Approach Delay, s/veh		37.0			41.2			30.1			29.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.0	20.7	51.0		55.0	16.6	55.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		51.0	27.0	60.0		51.0	21.0	66.0
Max Q Clear Time (g_c+I1), s		31.2	16.4	25.6		29.0	12.5	41.9
Green Ext Time (p_c), s		5.2	0.4	6.2		4.8	0.2	9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	95	151	109	85	372	29	67	708	50	86	714	87
Future Volume (veh/h)	95	151	109	85	372	29	67	708	50	86	714	87
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	104	166	120	93	409	32	74	778	55	95	785	96
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	187	608	509	341	608	516	364	2127	928	379	2127	928
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	935	1845	1547	1078	1845	1567	621	3505	1529	650	3505	1530
Grp Volume(v), veh/h	104	166	120	93	409	32	74	778	55	95	785	96
Grp Sat Flow(s),veh/h/ln	935	1845	1547	1078	1845	1567	621	1752	1529	650	1752	1530
Q Serve(g_s), s	13.5	8.3	7.1	8.7	23.9	1.8	8.6	14.1	1.8	10.8	14.2	3.3
Cycle Q Clear(g_c), s	37.4	8.3	7.1	17.0	23.9	1.8	22.8	14.1	1.8	24.9	14.2	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	608	509	341	608	516	364	2127	928	379	2127	928
V/C Ratio(X)	0.56	0.27	0.24	0.27	0.67	0.06	0.20	0.37	0.06	0.25	0.37	0.10
Avail Cap(c_a), veh/h	372	972	815	554	972	825	364	2127	928	379	2127	928
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	31.0	30.5	37.2	36.2	28.8	18.3	12.4	10.0	18.7	12.5	10.3
Incr Delay (d2), s/veh	2.6	0.2	0.2	0.4	1.3	0.0	1.3	0.5	0.1	1.6	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	4.3	3.0	2.6	12.4	0.8	1.6	7.0	0.8	2.1	7.0	1.4
LnGrp Delay(d), s/veh	54.9	31.2	30.8	37.7	37.5	28.8	19.5	12.9	10.2	20.3	13.0	10.6
LnGrp LOS	D	C	C	D	D	C	B	B	B	C	B	B
Approach Vol, veh/h		390			534			907			976	
Approach Delay, s/veh		37.4			37.0			13.3			13.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		45.2		80.0		45.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		66.0		76.0		66.0
Max Q Clear Time (g_c+I1), s		24.8		39.4		26.9		25.9
Green Ext Time (p_c), s		6.9		1.8		7.4		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	131	835	55	220	1341	103	81	783	278	72	448	184
Future Volume (veh/h)	131	835	55	220	1341	103	81	783	278	72	448	184
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	147	938	62	247	1507	116	91	880	312	81	503	207
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	172	1541	457	274	1732	133	113	1275	557	101	1252	554
Arrive On Green	0.10	0.31	0.31	0.16	0.36	0.36	0.06	0.36	0.36	0.06	0.36	0.36
Sat Flow, veh/h	1757	5036	1494	1757	4752	366	1757	3505	1532	1757	3505	1551
Grp Volume(v), veh/h	147	938	62	247	1064	559	91	880	312	81	503	207
Grp Sat Flow(s),veh/h/ln	1757	1679	1494	1757	1679	1761	1757	1752	1532	1757	1752	1551
Q Serve(g_s), s	11.3	21.8	4.1	19.0	40.6	40.6	7.0	29.3	22.4	6.3	14.8	13.6
Cycle Q Clear(g_c), s	11.3	21.8	4.1	19.0	40.6	40.6	7.0	29.3	22.4	6.3	14.8	13.6
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	1541	457	274	1224	642	113	1275	557	101	1252	554
V/C Ratio(X)	0.86	0.61	0.14	0.90	0.87	0.87	0.81	0.69	0.56	0.80	0.40	0.37
Avail Cap(c_a), veh/h	243	1541	457	396	1319	692	192	1275	557	141	1252	554
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	40.7	34.5	56.9	40.6	40.7	63.5	37.1	34.9	64.0	33.2	32.8
Incr Delay (d2), s/veh	18.5	0.7	0.1	17.5	6.2	11.1	12.6	3.1	4.0	19.6	1.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	10.3	1.7	10.5	19.8	21.7	3.8	14.7	10.1	3.6	7.4	6.1
LnGrp Delay(d), s/veh	79.5	41.4	34.7	74.4	46.9	51.7	76.0	40.2	39.0	83.6	34.1	34.7
LnGrp LOS	E	D	C	E	D	D	E	D	D	F	C	C
Approach Vol, veh/h		1147			1870			1283			791	
Approach Delay, s/veh		45.9			51.9			42.5			39.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	54.0	25.5	46.1	12.8	53.1	17.4	54.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	50.0	31.0	42.0	15.0	46.0	19.0	54.0
Max Q Clear Time (g_c+I1), s	8.3	31.3	21.0	23.8	9.0	16.8	13.3	42.6
Green Ext Time (p_c), s	0.0	6.8	0.5	6.2	0.1	3.9	0.2	7.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1	1124	109	110	1618	1	65	0	23	0	0	0
Future Volume (veh/h)	1	1124	109	110	1618	1	65	0	23	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	1	1249	121	122	1798	1	72	0	26	0	0	0
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	182	2060	200	294	2887	2	669	0	509	0	602	0
Arrive On Green	0.45	0.45	0.45	0.06	0.56	0.56	0.33	0.00	0.33	0.00	0.00	0.00
Sat Flow, veh/h	256	4603	446	1740	5148	3	1732	0	1546	0	1827	0
Grp Volume(v), veh/h	1	902	468	122	1161	638	72	0	26	0	0	0
Grp Sat Flow(s),veh/h/ln	256	1663	1724	1740	1663	1826	1732	0	1546	0	1827	0
Q Serve(g_s), s	0.2	15.0	15.0	2.6	17.2	17.2	2.1	0.0	0.8	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.1	15.0	15.0	2.6	17.2	17.2	2.1	0.0	0.8	0.0	0.0	0.0
Prop In Lane	1.00		0.26	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	182	1488	771	294	1865	1024	669	0	509	0	602	0
V/C Ratio(X)	0.01	0.61	0.61	0.42	0.62	0.62	0.11	0.00	0.05	0.00	0.00	0.00
Avail Cap(c_a), veh/h	440	4838	2508	383	5385	2958	669	0	509	0	602	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	16.7	15.3	15.3	11.4	10.8	10.8	17.1	0.0	16.7	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.4	0.8	0.9	0.3	0.6	0.3	0.0	0.2	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.8	7.2	1.3	7.8	8.7	1.1	0.0	0.4	0.0	0.0	0.0
LnGrp Delay(d), s/veh	16.7	15.7	16.0	12.4	11.1	11.4	17.4	0.0	16.9	0.0	0.0	0.0
LnGrp LOS	B	B	B	B	B	B	B		B			
Approach Vol, veh/h		1371			1921			98			0	
Approach Delay, s/veh		15.8			11.3			17.3			0.0	
Approach LOS		B			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		28.0	8.3	36.6		28.0		44.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		24.0	8.0	106.0		24.0		118.0
Max Q Clear Time (g_c+I1), s		4.1	4.6	17.0		0.0		19.2
Green Ext Time (p_c), s		0.3	0.1	12.9		0.0		21.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	119	614	120	68	1261	70	153	496	60	19	447	49
Future Volume (veh/h)	119	614	120	68	1261	70	153	496	60	19	447	49
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	128	660	129	73	1356	75	165	533	65	20	481	53
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	2161	954	406	2161	953	237	1184	522	226	1074	118
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	372	3539	1562	684	3539	1561	867	3539	1559	817	3211	352
Grp Volume(v), veh/h	128	660	129	73	1356	75	165	533	65	20	264	270
Grp Sat Flow(s),veh/h/ln	372	1770	1562	684	1770	1561	867	1770	1559	817	1770	1794
Q Serve(g_s), s	48.4	13.1	5.1	8.4	35.4	2.9	27.0	17.3	4.2	2.9	17.1	17.3
Cycle Q Clear(g_c), s	83.8	13.1	5.1	21.4	35.4	2.9	44.2	17.3	4.2	20.2	17.1	17.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	187	2161	954	406	2161	953	237	1184	522	226	592	600
V/C Ratio(X)	0.69	0.31	0.14	0.18	0.63	0.08	0.70	0.45	0.12	0.09	0.45	0.45
Avail Cap(c_a), veh/h	196	2248	992	423	2248	992	237	1184	522	226	592	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	13.6	12.1	18.8	18.0	11.7	55.5	38.2	33.8	46.0	38.1	38.1
Incr Delay (d2), s/veh	9.1	0.1	0.1	0.2	0.5	0.0	15.6	1.2	0.5	0.8	2.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	6.3	2.2	1.6	17.3	1.2	7.5	8.6	1.9	0.7	8.8	8.9
LnGrp Delay(d), s/veh	53.5	13.7	12.2	19.0	18.5	11.7	71.1	39.4	34.3	46.8	40.5	40.6
LnGrp LOS	D	B	B	B	B	B	E	D	C	D	D	D
Approach Vol, veh/h		917			1504			763			554	
Approach Delay, s/veh		19.1			18.2			45.8			40.8	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		93.4		53.0		93.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		46.2		85.8		22.2		37.4
Green Ext Time (p_c), s		1.2		3.6		3.2		15.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	948	57	16	1498	148	54	39	14	210	57	135
Future Volume (veh/h)	110	948	57	16	1498	148	54	39	14	210	57	135
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	115	988	59	17	1560	154	56	41	15	219	59	141
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	141	2417	144	25	2006	198	394	437	364	543	576	481
Arrive On Green	0.08	0.50	0.50	0.01	0.44	0.44	0.03	0.24	0.24	0.11	0.32	0.32
Sat Flow, veh/h	1740	4809	287	1740	4602	454	1740	1827	1519	1740	1827	1523
Grp Volume(v), veh/h	115	683	364	17	1127	587	56	41	15	219	59	141
Grp Sat Flow(s),veh/h/ln	1740	1663	1770	1740	1663	1731	1740	1827	1519	1740	1827	1523
Q Serve(g_s), s	7.8	15.5	15.5	1.2	34.8	34.9	2.9	2.1	0.9	11.0	2.8	8.4
Cycle Q Clear(g_c), s	7.8	15.5	15.5	1.2	34.8	34.9	2.9	2.1	0.9	11.0	2.8	8.4
Prop In Lane	1.00		0.16	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	1672	890	25	1449	754	394	437	364	543	576	481
V/C Ratio(X)	0.81	0.41	0.41	0.68	0.78	0.78	0.14	0.09	0.04	0.40	0.10	0.29
Avail Cap(c_a), veh/h	289	2374	1264	72	1960	1021	407	437	364	653	576	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	18.7	18.8	59.1	29.0	29.0	32.8	35.6	35.2	27.7	29.2	31.1
Incr Delay (d2), s/veh	10.6	0.2	0.3	27.5	1.4	2.7	0.2	0.4	0.2	0.5	0.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	7.1	7.7	0.8	16.2	17.2	1.4	1.1	0.4	5.3	1.5	3.7
LnGrp Delay(d), s/veh	65.0	18.9	19.1	86.6	30.4	31.7	33.0	36.1	35.4	28.2	29.5	32.6
LnGrp LOS	E	B	B	F	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1162			1731			112			419	
Approach Delay, s/veh		23.5			31.4			34.4			29.9	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	32.8	5.7	64.5	8.2	42.0	13.8	56.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	22.0	5.0	86.0	5.0	38.0	20.0	71.0
Max Q Clear Time (g_c+I1), s	13.0	4.1	3.2	17.5	4.9	10.4	9.8	36.9
Green Ext Time (p_c), s	0.4	0.2	0.0	8.3	0.0	0.7	0.2	15.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	184	949	115	44	1100	10	110	19	15	16	59	566
Future Volume (veh/h)	184	949	115	44	1100	10	110	19	15	16	59	566
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	190	978	119	45	1134	10	113	20	15	16	61	584
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	264	1565	190	57	1546	14	442	921	781	736	921	1374
Arrive On Green	0.08	0.35	0.35	0.03	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	3375	4491	545	1740	5099	45	766	1827	1548	1338	1827	2725
Grp Volume(v), veh/h	190	723	374	45	739	405	113	20	15	16	61	584
Grp Sat Flow(s),veh/h/ln	1688	1663	1711	1740	1663	1819	766	1827	1548	1338	1827	1362
Q Serve(g_s), s	5.8	19.0	19.1	2.7	20.9	20.9	9.3	0.6	0.5	0.6	1.8	14.2
Cycle Q Clear(g_c), s	5.8	19.0	19.1	2.7	20.9	20.9	11.1	0.6	0.5	1.2	1.8	14.2
Prop In Lane	1.00		0.32	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	264	1159	596	57	1008	551	442	921	781	736	921	1374
V/C Ratio(X)	0.72	0.62	0.63	0.78	0.73	0.73	0.26	0.02	0.02	0.02	0.07	0.42
Avail Cap(c_a), veh/h	707	2215	1140	248	1993	1090	442	921	781	736	921	1374
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	28.5	28.5	50.4	32.8	32.8	16.2	13.1	13.0	13.4	13.4	16.4
Incr Delay (d2), s/veh	3.7	0.6	1.1	20.4	1.1	1.9	1.4	0.0	0.0	0.1	0.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	8.8	9.2	1.6	9.7	10.7	2.1	0.3	0.2	0.2	0.9	5.5
LnGrp Delay(d), s/veh	51.0	29.1	29.6	70.8	33.9	34.7	17.6	13.1	13.1	13.4	13.5	17.4
LnGrp LOS	D	C	C	E	C	C	B	B	B	B	B	B
Approach Vol, veh/h		1287			1189			148			661	
Approach Delay, s/veh		32.5			35.6			16.5			16.9	
Approach LOS		C			D			B			B	

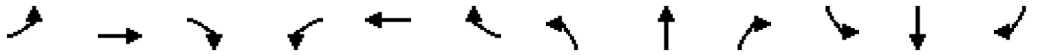
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	7.5	40.6		57.0	12.2	35.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	15.0	70.0		53.0	22.0	63.0
Max Q Clear Time (g_c+I1), s		13.1	4.7	21.1		16.2	7.8	22.9
Green Ext Time (p_c), s		1.0	0.0	8.8		2.9	0.5	8.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	224	558	19	189	646	104	82	542	99	76	1383	183
Future Volume (veh/h)	224	558	19	189	646	104	82	542	99	76	1383	183
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	233	581	20	197	673	108	85	565	103	79	1441	191
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	262	1110	491	225	1036	452	107	1646	294	100	1705	226
Arrive On Green	0.15	0.31	0.31	0.13	0.29	0.29	0.06	0.38	0.38	0.06	0.38	0.38
Sat Flow, veh/h	1774	3539	1565	1774	3539	1544	1774	4322	772	1774	4521	599
Grp Volume(v), veh/h	233	581	20	197	673	108	85	441	227	79	1080	552
Grp Sat Flow(s),veh/h/ln	1774	1770	1565	1774	1770	1544	1774	1695	1704	1774	1695	1729
Q Serve(g_s), s	16.9	17.6	1.2	14.3	21.7	7.0	6.2	12.1	12.5	5.8	38.1	38.2
Cycle Q Clear(g_c), s	16.9	17.6	1.2	14.3	21.7	7.0	6.2	12.1	12.5	5.8	38.1	38.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.35
Lane Grp Cap(c), veh/h	262	1110	491	225	1036	452	107	1291	649	100	1278	652
V/C Ratio(X)	0.89	0.52	0.04	0.87	0.65	0.24	0.80	0.34	0.35	0.79	0.85	0.85
Avail Cap(c_a), veh/h	393	1110	491	353	1036	452	163	1400	703	176	1426	727
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	36.9	31.2	56.1	40.4	35.2	60.7	28.8	28.9	60.9	37.2	37.3
Incr Delay (d2), s/veh	15.3	1.8	0.2	13.8	3.2	1.2	14.4	0.2	0.3	12.9	4.5	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	8.9	0.5	7.9	11.0	3.1	3.5	5.7	5.9	3.2	18.7	19.8
LnGrp Delay(d), s/veh	70.0	38.6	31.4	69.8	43.5	36.4	75.1	29.0	29.2	73.9	41.7	45.7
LnGrp LOS	E	D	C	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		834			978			753			1711	
Approach Delay, s/veh		47.2			48.0			34.3			44.5	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.6	45.0	11.4	53.8	23.3	42.3	11.9	53.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	41.0	13.0	54.0	29.0	38.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	16.3	19.6	7.8	14.5	18.9	23.7	8.2	40.2
Green Ext Time (p_c), s	0.4	3.9	0.1	4.6	0.5	4.2	0.0	9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	104	445	75	105	1296	24	200	623	91	37	692	105
Future Volume (veh/h)	104	445	75	105	1296	24	200	623	91	37	692	105
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	108	464	78	109	1350	25	208	649	95	39	721	109
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	130	1477	648	132	1481	658	298	1319	579	256	1068	460
Arrive On Green	0.07	0.42	0.42	0.07	0.42	0.42	0.09	0.37	0.37	0.02	0.30	0.30
Sat Flow, veh/h	1774	3539	1553	1774	3539	1573	1774	3539	1553	1774	3539	1525
Grp Volume(v), veh/h	108	464	78	109	1350	25	208	649	95	39	721	109
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1573	1774	1770	1553	1774	1770	1525
Q Serve(g_s), s	8.5	12.5	4.4	8.6	51.0	1.3	11.1	20.0	5.8	2.2	25.4	7.6
Cycle Q Clear(g_c), s	8.5	12.5	4.4	8.6	51.0	1.3	11.1	20.0	5.8	2.2	25.4	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	130	1477	648	132	1481	658	298	1319	579	256	1068	460
V/C Ratio(X)	0.83	0.31	0.12	0.83	0.91	0.04	0.70	0.49	0.16	0.15	0.67	0.24
Avail Cap(c_a), veh/h	162	1493	655	212	1593	708	344	1319	579	265	1068	460
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	27.8	25.4	64.9	38.9	24.4	31.9	34.3	29.8	33.5	43.5	37.3
Incr Delay (d2), s/veh	24.3	0.1	0.1	13.2	8.0	0.0	5.1	1.3	0.6	0.3	3.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	6.1	1.9	4.7	26.6	0.6	5.8	10.1	2.6	1.1	12.9	3.4
LnGrp Delay(d), s/veh	89.3	27.9	25.5	78.1	46.8	24.5	37.0	35.6	30.4	33.8	46.9	38.5
LnGrp LOS	F	C	C	E	D	C	D	D	C	C	D	D
Approach Vol, veh/h		650			1484			952			869	
Approach Delay, s/veh		37.8			48.8			35.4			45.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.3	57.0	14.6	63.4	17.3	46.9	14.4	63.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	53.0	17.0	60.0	17.0	40.0	13.0	64.0
Max Q Clear Time (g_c+I1), s	4.2	22.0	10.6	14.5	13.1	27.4	10.5	53.0
Green Ext Time (p_c), s	0.0	5.1	0.1	3.4	0.2	4.2	0.0	6.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	25	184	13	288	570	46	23	628	126	107	700	42
Future Volume (veh/h)	25	184	13	288	570	46	23	628	126	107	700	42
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	27	196	14	306	606	49	24	668	134	114	745	45
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	1239	547	425	1239	547	383	2062	909	389	2062	908
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	775	3539	1562	1166	3539	1562	683	3539	1560	676	3539	1559
Grp Volume(v), veh/h	27	196	14	306	606	49	24	668	134	114	745	45
Grp Sat Flow(s),veh/h/ln	775	1770	1562	1166	1770	1562	683	1770	1560	676	1770	1559
Q Serve(g_s), s	3.4	4.5	0.7	29.0	15.9	2.5	2.3	11.5	4.6	12.4	13.2	1.5
Cycle Q Clear(g_c), s	19.3	4.5	0.7	33.5	15.9	2.5	15.5	11.5	4.6	23.9	13.2	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	1239	547	425	1239	547	383	2062	909	389	2062	908
V/C Ratio(X)	0.12	0.16	0.03	0.72	0.49	0.09	0.06	0.32	0.15	0.29	0.36	0.05
Avail Cap(c_a), veh/h	434	2181	963	735	2181	963	383	2062	909	389	2062	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.8	26.5	25.3	38.0	30.2	25.8	17.2	12.7	11.3	18.9	13.1	10.6
Incr Delay (d2), s/veh	0.2	0.1	0.0	2.3	0.3	0.1	0.3	0.4	0.3	1.9	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.2	0.3	9.6	7.8	1.1	0.5	5.7	2.1	2.5	6.6	0.7
LnGrp Delay(d), s/veh	38.0	26.6	25.3	40.3	30.5	25.9	17.5	13.1	11.6	20.8	13.6	10.7
LnGrp LOS	D	C	C	D	C	C	B	B	B	C	B	B
Approach Vol, veh/h		237			961			826			904	
Approach Delay, s/veh		27.8			33.4			13.0			14.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		45.5		73.0		45.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		17.5		21.3		25.9		35.5
Green Ext Time (p_c), s		6.0		1.5		7.4		6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	61	775	138	147	987	50	177	664	67	90	869	26
Future Volume (veh/h)	61	775	138	147	987	50	177	664	67	90	869	26
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	66	842	150	160	1073	54	192	722	73	98	945	28
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	84	1004	178	186	1434	72	336	1753	773	377	1651	728
Arrive On Green	0.05	0.23	0.23	0.11	0.29	0.29	0.07	0.50	0.50	0.04	0.47	0.47
Sat Flow, veh/h	1757	4291	759	1757	4910	247	1757	3505	1547	1757	3505	1546
Grp Volume(v), veh/h	66	658	334	160	733	394	192	722	73	98	945	28
Grp Sat Flow(s),veh/h/ln	1757	1679	1693	1757	1679	1800	1757	1752	1547	1757	1752	1546
Q Serve(g_s), s	5.1	25.4	25.6	12.2	26.9	27.0	7.4	17.6	3.4	3.9	26.6	1.3
Cycle Q Clear(g_c), s	5.1	25.4	25.6	12.2	26.9	27.0	7.4	17.6	3.4	3.9	26.6	1.3
Prop In Lane	1.00		0.45	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	84	786	396	186	980	525	336	1753	773	377	1651	728
V/C Ratio(X)	0.78	0.84	0.84	0.86	0.75	0.75	0.57	0.41	0.09	0.26	0.57	0.04
Avail Cap(c_a), veh/h	155	914	461	297	1185	635	456	1753	773	380	1651	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	49.6	49.7	59.8	43.6	43.6	19.5	21.4	17.8	17.9	26.0	19.4
Incr Delay (d2), s/veh	14.6	6.1	12.0	13.5	2.2	4.0	1.5	0.7	0.2	0.4	1.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	12.4	13.3	6.6	12.7	13.9	3.7	8.7	1.5	1.9	13.2	0.6
LnGrp Delay(d), s/veh	78.7	55.7	61.7	73.3	45.8	47.6	21.0	22.1	18.1	18.2	27.5	19.5
LnGrp LOS	E	E	E	E	D	D	C	C	B	B	C	B
Approach Vol, veh/h		1058			1287			987			1071	
Approach Delay, s/veh		59.0			49.8			21.6			26.4	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	72.0	18.4	35.8	13.7	68.0	10.5	43.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	68.0	23.0	37.0	19.0	55.0	12.0	48.0
Max Q Clear Time (g_c+I1), s	5.9	19.6	14.2	27.6	9.4	28.6	7.1	29.0
Green Ext Time (p_c), s	0.0	5.4	0.2	4.2	0.3	7.4	0.0	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	21	414	162	136	1095	128	76	596	22	354	1142	47
Future Volume (veh/h)	21	414	162	136	1095	128	76	596	22	354	1142	47
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	22	436	171	143	1153	135	80	627	0	373	1202	49
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1279	569	387	1305	152	101	1201	0	404	2038	83
Arrive On Green	0.02	0.36	0.36	0.06	0.40	0.40	0.06	0.23	0.00	0.23	0.40	0.40
Sat Flow, veh/h	1792	3574	1591	1792	3223	377	1792	5305	0	1792	5061	206
Grp Volume(v), veh/h	22	436	171	143	638	650	80	627	0	373	813	438
Grp Sat Flow(s),veh/h/ln	1792	1787	1591	1792	1787	1813	1792	1712	0	1792	1712	1843
Q Serve(g_s), s	1.0	12.0	10.4	6.6	44.3	44.6	5.9	14.3	0.0	27.3	24.9	24.9
Cycle Q Clear(g_c), s	1.0	12.0	10.4	6.6	44.3	44.6	5.9	14.3	0.0	27.3	24.9	24.9
Prop In Lane	1.00		1.00	1.00		0.21	1.00		0.00	1.00		0.11
Lane Grp Cap(c), veh/h	115	1279	569	387	723	734	101	1201	0	404	1379	742
V/C Ratio(X)	0.19	0.34	0.30	0.37	0.88	0.89	0.79	0.52	0.00	0.92	0.59	0.59
Avail Cap(c_a), veh/h	138	1546	688	394	840	852	174	1201	0	561	1379	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.3	31.5	31.0	24.0	36.9	37.0	62.5	44.8	0.0	50.8	31.3	31.4
Incr Delay (d2), s/veh	0.8	0.2	0.3	0.6	9.8	10.0	12.8	1.6	0.0	17.1	1.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	5.9	4.6	3.3	23.8	24.2	3.3	6.9	0.0	15.4	12.1	13.4
LnGrp Delay(d), s/veh	33.1	31.6	31.3	24.6	46.8	47.0	75.3	46.4	0.0	67.9	33.2	34.8
LnGrp LOS	C	C	C	C	D	D	E	D		E	C	C
Approach Vol, veh/h		629			1431			707			1624	
Approach Delay, s/veh		31.6			44.7			49.7			41.6	
Approach LOS		C			D			D			D	

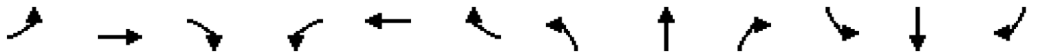
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	58.0	12.5	52.0	34.2	35.4	6.2	58.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	9.0	58.0	42.0	25.0	4.0	63.0
Max Q Clear Time (g_c+I1), s	7.9	26.9	8.6	14.0	29.3	16.3	3.0	46.6
Green Ext Time (p_c), s	0.1	8.8	0.0	3.5	0.9	2.5	0.0	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1220	100	50	1100	610	610	190	20	0	0	0
Future Volume (veh/h)	120	1220	100	50	1100	610	610	190	20	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	130	1326	109	54	1196	663	663	207	22			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	176	2400	197	69	2486	774	670	668	598			
Arrive On Green	0.05	0.50	0.50	0.04	0.49	0.49	0.38	0.38	0.38			
Sat Flow, veh/h	3442	4790	394	1774	5085	1583	1774	1770	1583			
Grp Volume(v), veh/h	130	939	496	54	1196	663	663	207	22			
Grp Sat Flow(s),veh/h/ln	1721	1695	1793	1774	1695	1583	1774	1770	1583			
Q Serve(g_s), s	5.4	27.8	27.8	4.4	22.9	53.6	54.1	12.0	1.3			
Cycle Q Clear(g_c), s	5.4	27.8	27.8	4.4	22.9	53.6	54.1	12.0	1.3			
Prop In Lane	1.00		0.22	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	176	1699	898	69	2486	774	670	668	598			
V/C Ratio(X)	0.74	0.55	0.55	0.78	0.48	0.86	0.99	0.31	0.04			
Avail Cap(c_a), veh/h	236	1699	898	122	2548	793	670	668	598			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	68.1	25.1	25.1	69.4	24.9	32.7	45.1	32.0	28.6			
Incr Delay (d2), s/veh	7.9	1.3	2.4	16.9	0.1	9.0	32.2	0.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.8	13.3	14.4	2.5	10.8	25.3	32.5	5.9	0.6			
LnGrp Delay(d), s/veh	76.1	26.4	27.5	86.2	25.0	41.8	77.2	32.2	28.7			
LnGrp LOS	E	C	C	F	C	D	E	C	C			
Approach Vol, veh/h		1565			1913			892				
Approach Delay, s/veh		30.9			32.6			65.6				
Approach LOS		C			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.7	77.0			11.5	75.2		59.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	73.0			10.0	73.0		55.0
Max Q Clear Time (g_c+I1), s	6.4	29.8			7.4	55.6		56.1
Green Ext Time (p_c), s	0.0	12.8			0.1	10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	970	90	130	1710	0	0	0	0	350	10	10
Future Volume (vph)	0	970	90	130	1710	0	0	0	0	350	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3237	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.95	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3237	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1054	98	141	1859	0	0	0	0	380	11	11
RTOR Reduction (vph)	0	0	31	0	0	0	0	0	0	0	0	9
Lane Group Flow (vph)	0	1054	67	141	1859	0	0	0	0	190	201	2
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		84.7	84.7	10.5	99.2					20.3	20.3	20.3
Effective Green, g (s)		84.7	84.7	10.5	99.2					20.3	20.3	20.3
Actuated g/C Ratio		0.66	0.66	0.08	0.78					0.16	0.16	0.16
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		3378	1051	282	3956					256	515	252
v/s Ratio Prot		0.21		0.04	c0.37					c0.12	0.06	
v/s Ratio Perm			0.04									0.00
v/c Ratio		0.31	0.06	0.50	0.47					0.74	0.39	0.01
Uniform Delay, d1		9.1	7.5	56.0	5.0					51.1	48.1	45.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.0	1.4	0.4					11.0	0.5	0.0
Delay (s)		9.1	7.5	57.4	5.4					62.1	48.5	45.1
Level of Service		A	A	E	A					E	D	D
Approach Delay (s/veh)		9.0			9.0			0.0			54.9	
Approach LOS		A			A			A			D	

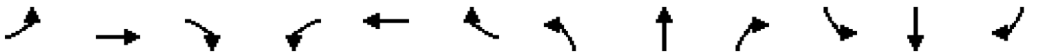
Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	127.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	30	20	650	560	180	600	0	0	940	20
Future Volume (veh/h)	40	0	30	20	650	560	180	600	0	0	940	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	33	22	707	609	196	652	0	0	1022	22
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	45	1526	686	257	2543	0	0	2008	43
Arrive On Green	0.00	0.00	0.00	0.43	0.43	0.43	0.07	0.50	0.00	0.00	0.39	0.39
Sat Flow, veh/h		0		105	3522	1583	3442	5253	0	0	5291	110
Grp Volume(v), veh/h		0.0		391	338	609	196	652	0	0	676	368
Grp Sat Flow(s),veh/h/ln				1858	1770	1583	1721	1695	0	0	1695	1843
Q Serve(g_s), s				18.1	16.1	42.5	6.7	8.8	0.0	0.0	18.2	18.2
Cycle Q Clear(g_c), s				18.1	16.1	42.5	6.7	8.8	0.0	0.0	18.2	18.2
Prop In Lane				0.06		1.00	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h				805	767	686	257	2543	0	0	1329	722
V/C Ratio(X)				0.49	0.44	0.89	0.76	0.26	0.00	0.00	0.51	0.51
Avail Cap(c_a), veh/h				1068	1017	910	402	2543	0	0	1329	722
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				24.4	23.8	31.3	54.5	17.2	0.0	0.0	27.7	27.7
Incr Delay (d2), s/veh				0.5	0.4	8.5	4.6	0.2	0.0	0.0	1.4	2.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				9.3	7.9	20.1	3.4	4.2	0.0	0.0	8.7	9.7
LnGrp Delay(d), s/veh				24.8	24.2	39.8	59.1	17.5	0.0	0.0	29.1	30.3
LnGrp LOS				C	C	D	E	B			C	C
Approach Vol, veh/h					1338			848			1044	
Approach Delay, s/veh					31.5			27.1			29.5	
Approach LOS					C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		64.0			13.0	51.0		56.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		60.0			14.0	42.0		69.0
Max Q Clear Time (g_c+I1), s		10.8			8.7	20.2		44.5
Green Ext Time (p_c), s		5.0			0.3	7.0		7.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	90	0	0	0	0	690	170	380	600	0
Future Volume (vph)	20	10	90	0	0	0	0	690	170	380	600	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.88	0.85					0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2975	1441					4934		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2975	1441					4934		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	11	98	0	0	0	0	750	185	413	652	0
RTOR Reduction (vph)	0	47	47	0	0	0	0	16	0	0	0	0
Lane Group Flow (vph)	22	13	2	0	0	0	0	919	0	413	652	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	6.2	6.2	6.2					100.0		22.2	126.2	
Effective Green, g (s)	6.2	6.2	6.2					100.0		22.2	126.2	
Actuated g/C Ratio	0.04	0.04	0.04					0.71		0.16	0.90	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	78	131	63					3514		542	4570	
v/s Ratio Prot	c0.01	0.00						c0.19		c0.12	0.13	
v/s Ratio Perm			0.00									
v/c Ratio	0.28	0.10	0.03					0.26		0.76	0.14	
Uniform Delay, d1	64.9	64.4	64.2					7.1		56.6	0.8	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	2.0	0.3	0.2					0.2		6.3	0.1	
Delay (s)	66.9	64.8	64.5					7.3		62.8	0.9	
Level of Service	E	E	E					A		E	A	
Approach Delay (s/veh)		65.0			0.0			7.3			24.9	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.35		
Actuated Cycle Length (s)	140.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	41.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	107	614	167	59	1369	36	185	395	35	29	360	46
Future Volume (veh/h)	107	614	167	59	1369	36	185	395	35	29	360	46
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	111	640	174	61	1426	38	193	411	36	30	375	48
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	189	2159	576	360	2760	74	347	1268	111	337	1217	155
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	357	3945	1053	662	5042	134	951	3258	284	930	3128	398
Grp Volume(v), veh/h	111	543	271	61	950	514	193	220	227	30	209	214
Grp Sat Flow(s),veh/h/ln	357	1679	1641	662	1679	1819	951	1752	1790	930	1752	1774
Q Serve(g_s), s	35.8	11.0	11.3	6.9	22.5	22.5	22.3	11.1	11.2	2.9	10.4	10.6
Cycle Q Clear(g_c), s	58.3	11.0	11.3	18.2	22.5	22.5	32.8	11.1	11.2	14.1	10.4	10.6
Prop In Lane	1.00		0.64	1.00		0.07	1.00		0.16	1.00		0.22
Lane Grp Cap(c), veh/h	189	1838	898	360	1838	996	347	682	696	337	682	690
V/C Ratio(X)	0.59	0.30	0.30	0.17	0.52	0.52	0.56	0.32	0.33	0.09	0.31	0.31
Avail Cap(c_a), veh/h	257	2479	1212	486	2479	1343	347	682	696	337	682	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.4	15.4	15.5	20.4	18.0	18.0	38.1	26.9	26.9	31.8	26.7	26.7
Incr Delay (d2), s/veh	2.9	0.1	0.2	0.2	0.2	0.4	6.3	1.3	1.2	0.5	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	5.1	5.2	1.3	10.5	11.4	6.4	5.6	5.8	0.8	5.3	5.4
LnGrp Delay(d), s/veh	39.3	15.5	15.6	20.6	18.2	18.4	44.4	28.1	28.1	32.4	27.8	27.9
LnGrp LOS	D	B	B	C	B	B	D	C	C	C	C	C
Approach Vol, veh/h		925			1525			640			453	
Approach Delay, s/veh		18.4			18.4			33.0			28.2	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		72.9		53.0		72.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		34.8		60.3		16.1		24.5
Green Ext Time (p_c), s		3.0		8.6		2.6		15.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	61	35	186	48	238	18	557	137	130	361	92
Future Volume (veh/h)	121	61	35	186	48	238	18	557	137	130	361	92
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	130	66	38	200	52	256	19	599	147	140	388	99
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	128	66	255	60	278	509	1551	380	366	1964	863
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	560	335	174	563	157	731	901	2796	684	712	3539	1556
Grp Volume(v), veh/h	234	0	0	508	0	0	19	379	367	140	388	99
Grp Sat Flow(s),veh/h/ln	1069	0	0	1451	0	0	901	1770	1710	712	1770	1556
Q Serve(g_s), s	0.0	0.0	0.0	19.9	0.0	0.0	1.3	15.1	15.1	17.3	6.8	3.8
Cycle Q Clear(g_c), s	21.7	0.0	0.0	41.6	0.0	0.0	8.2	15.1	15.1	32.4	6.8	3.8
Prop In Lane	0.56		0.16	0.39		0.50	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	452	0	0	593	0	0	509	982	949	366	1964	863
V/C Ratio(X)	0.52	0.00	0.00	0.86	0.00	0.00	0.04	0.39	0.39	0.38	0.20	0.11
Avail Cap(c_a), veh/h	718	0	0	896	0	0	509	982	949	366	1964	863
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	0.0	0.0	36.8	0.0	0.0	15.9	15.7	15.7	24.9	13.8	13.2
Incr Delay (d2), s/veh	0.9	0.0	0.0	5.4	0.0	0.0	0.1	1.1	1.2	3.0	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	0.0	0.0	17.5	0.0	0.0	0.4	7.7	7.5	3.7	3.4	1.7
LnGrp Delay(d), s/veh	31.0	0.0	0.0	42.2	0.0	0.0	16.0	16.8	16.9	27.9	14.1	13.4
LnGrp LOS	C			D			B	B	B	C	B	B
Approach Vol, veh/h		234			508			765			627	
Approach Delay, s/veh		31.0			42.2			16.8			17.1	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		51.4		73.0		51.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		17.1		23.7		34.4		43.6
Green Ext Time (p_c), s		5.2		1.9		4.2		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	29	180	16	73	275	130	44	935	160	90	960	43
Future Volume (veh/h)	29	180	16	73	275	130	44	935	160	90	960	43
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	32	196	17	79	299	141	48	1016	174	98	1043	47
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	50	251	20	169	442	374	347	2452	1071	323	2452	1072
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	81	1047	84	1152	1845	1560	510	3505	1531	464	3505	1531
Grp Volume(v), veh/h	245	0	0	79	299	141	48	1016	174	98	1043	47
Grp Sat Flow(s),veh/h/ln	1212	0	0	1152	1845	1560	510	1752	1531	464	1752	1531
Q Serve(g_s), s	7.8	0.0	0.0	0.0	19.3	9.9	5.8	16.1	5.1	14.9	16.7	1.3
Cycle Q Clear(g_c), s	27.1	0.0	0.0	27.2	19.3	9.9	22.6	16.1	5.1	31.0	16.7	1.3
Prop In Lane	0.13		0.07	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	321	0	0	169	442	374	347	2452	1071	323	2452	1072
V/C Ratio(X)	0.76	0.00	0.00	0.47	0.68	0.38	0.14	0.41	0.16	0.30	0.43	0.04
Avail Cap(c_a), veh/h	549	0	0	331	701	593	347	2452	1071	323	2452	1072
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	0.0	0.0	48.4	45.4	41.8	13.3	8.3	6.7	14.9	8.4	6.1
Incr Delay (d2), s/veh	3.8	0.0	0.0	2.0	1.8	0.6	0.8	0.5	0.3	2.4	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	0.0	0.0	2.9	10.1	4.3	0.9	7.9	2.2	2.1	8.2	0.5
LnGrp Delay(d), s/veh	51.0	0.0	0.0	50.4	47.2	42.4	14.1	8.9	7.0	17.3	9.0	6.2
LnGrp LOS	D			D	D	D	B	A	A	B	A	A
Approach Vol, veh/h		245			519			1238			1188	
Approach Delay, s/veh		51.0			46.4			8.8			9.6	
Approach LOS		D			D			A			A	

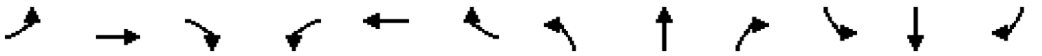
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		35.5		96.0		35.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		24.6		29.1		33.0		29.2
Green Ext Time (p_c), s		10.9		1.4		11.9		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	870	330	1010	580	0	0	0	0	250	0	510
Future Volume (veh/h)	0	870	330	1010	580	0	0	0	0	250	0	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	946	359	1098	630	0	0	0	0	272	0	554
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	689	261	1159	1958	0	0	731	0	1449	0	622
Arrive On Green	0.00	0.19	0.19	0.34	0.55	0.00	0.00	0.00	0.00	0.39	0.00	0.39
Sat Flow, veh/h	0	3801	1377	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	883	422	1098	630	0	0	0	0	272	0	554
Grp Sat Flow(s),veh/h/ln	0	1695	1620	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	28.0	28.0	45.9	14.3	0.0	0.0	0.0	0.0	7.7	0.0	48.3
Cycle Q Clear(g_c), s	0.0	28.0	28.0	45.9	14.3	0.0	0.0	0.0	0.0	7.7	0.0	48.3
Prop In Lane	0.00		0.85	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	642	307	1159	1958	0	0	731	0	1449	0	622
V/C Ratio(X)	0.00	1.37	1.38	0.95	0.32	0.00	0.00	0.00	0.00	0.19	0.00	0.89
Avail Cap(c_a), veh/h	0	642	307	1211	2012	0	0	731	0	1449	0	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	59.9	59.9	47.7	17.9	0.0	0.0	0.0	0.0	29.6	0.0	41.9
Incr Delay (d2), s/veh	0.0	178.0	188.4	14.7	0.1	0.0	0.0	0.0	0.0	0.3	0.0	17.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	28.9	28.5	24.2	7.0	0.0	0.0	0.0	0.0	3.7	0.0	24.1
LnGrp Delay(d), s/veh	0.0	237.8	248.3	62.5	18.0	0.0	0.0	0.0	0.0	29.9	0.0	59.4
LnGrp LOS		F	F	E	B					C		E
Approach Vol, veh/h		1305			1728			0			826	
Approach Delay, s/veh		241.2			46.3			0.0			49.7	
Approach LOS		F			D						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		62.0	53.7	32.0		62.0		85.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0	52.0	28.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		0.0	47.9	30.0		50.3		16.3
Green Ext Time (p_c), s		0.0	1.8	0.0		2.9		4.6

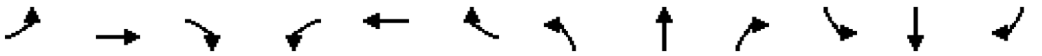
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	112.9
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	880	230	220	1360	10	230	10	210	10	10	10
Future Volume (vph)	10	880	230	220	1360	10	230	10	210	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3377	1441	3433	3535		1681	1692	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.69	1.00	0.67	1.00	
Satd. Flow (perm)	1770	3377	1441	3433	3535		1681	1223	2787	1246	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	957	250	239	1478	11	250	11	228	11	11	11
RTOR Reduction (vph)	0	1	135	0	0	0	0	0	142	0	9	0
Lane Group Flow (vph)	11	981	90	239	1489	0	130	131	86	11	13	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	0.7	44.4	44.4	13.0	56.7		13.7	41.7	41.7	24.0	24.0	
Effective Green, g (s)	0.7	44.4	44.4	13.0	56.7		13.7	41.7	41.7	24.0	24.0	
Actuated g/C Ratio	0.01	0.40	0.40	0.12	0.51		0.12	0.38	0.38	0.22	0.22	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	11	1349	575	401	1804		207	516	1046	269	372	
v/s Ratio Prot	0.01	0.29		c0.07	c0.42		c0.08	0.03			0.01	
v/s Ratio Perm			0.06					c0.06	0.03	0.01		
v/c Ratio	1.00	0.73	0.16	0.60	0.83		0.63	0.25	0.08	0.04	0.04	
Uniform Delay, d1	55.2	28.2	21.4	46.6	23.0		46.3	24.0	22.4	34.4	34.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	271.4	2.0	0.1	2.4	3.2		5.8	0.3	0.2	0.3	0.2	
Delay (s)	326.6	30.2	21.5	48.9	26.2		52.1	24.2	22.5	34.7	34.6	
Level of Service	F	C	C	D	C		D	C	C	C	C	
Approach Delay (s/veh)		31.3			29.4			30.8			34.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	10	10	10	10	10	590	380	10	10	230	220
Future Volume (vph)	70	10	10	10	10	10	590	380	10	10	230	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.97			0.98		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1664			1750		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.88			0.91		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1506			1610		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	76	11	11	11	11	11	641	413	11	11	250	239
RTOR Reduction (vph)	0	7	0	0	10	0	0	0	3	0	0	157
Lane Group Flow (vph)	49	42	0	0	23	0	641	413	8	11	250	82
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	7.8	23.9			12.1		53.9	99.7	99.7	1.5	47.3	47.3
Effective Green, g (s)	7.8	23.9			12.1		53.9	99.7	99.7	1.5	47.3	47.3
Actuated g/C Ratio	0.06	0.17			0.09		0.39	0.73	0.73	0.01	0.35	0.35
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	95	271			142		695	2573	1151	19	1220	546
v/s Ratio Prot	c0.03	0.01					c0.36	0.12		0.01	c0.07	
v/s Ratio Perm		c0.02			0.01				0.01			0.05
v/c Ratio	0.52	0.16			0.16		0.92	0.16	0.01	0.58	0.20	0.15
Uniform Delay, d1	62.8	48.0			57.8		39.6	5.8	5.1	67.5	31.6	31.0
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.7	0.3			0.5		17.8	0.1	0.0	36.3	0.4	0.6
Delay (s)	67.5	48.3			58.3		57.4	5.9	5.1	103.8	32.0	31.6
Level of Service	E	D			E		E	A	A	F	C	C
Approach Delay (s/veh)		57.9			58.3			36.9			33.4	
Approach LOS		E			E			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	137.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1050	40	120	1460	170	110	10	240	0	0	0
Future Volume (veh/h)	110	1050	40	120	1460	170	110	10	240	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	120	1141	43	130	1587	185	120	11	261			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	170	2217	84	155	2391	1070	304	28	295			
Arrive On Green	0.05	0.64	0.64	0.09	0.68	0.68	0.19	0.19	0.19			
Sat Flow, veh/h	3442	3478	131	1774	3539	1583	1632	150	1583			
Grp Volume(v), veh/h	120	580	604	130	1587	185	131	0	261			
Grp Sat Flow(s),veh/h/ln	1721	1770	1840	1774	1770	1583	1781	0	1583			
Q Serve(g_s), s	4.6	23.8	23.9	9.7	35.5	5.8	8.7	0.0	21.6			
Cycle Q Clear(g_c), s	4.6	23.8	23.9	9.7	35.5	5.8	8.7	0.0	21.6			
Prop In Lane	1.00		0.07	1.00		1.00	0.92		1.00			
Lane Grp Cap(c), veh/h	170	1128	1172	155	2391	1070	331	0	295			
V/C Ratio(X)	0.71	0.51	0.51	0.84	0.66	0.17	0.40	0.00	0.89			
Avail Cap(c_a), veh/h	255	1128	1172	250	2391	1070	489	0	435			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.1	13.2	13.2	60.5	12.9	8.0	48.2	0.0	53.4			
Incr Delay (d2), s/veh	5.3	1.7	1.6	12.6	1.5	0.4	0.8	0.0	13.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.3	12.1	12.6	5.3	17.7	2.6	4.4	0.0	10.6			
LnGrp Delay(d), s/veh	68.4	14.9	14.8	73.1	14.3	8.4	48.9	0.0	67.4			
LnGrp LOS	E	B	B	E	B	A	D		E			
Approach Vol, veh/h		1304			1902			392				
Approach Delay, s/veh		19.8			17.8			61.2				
Approach LOS		B			B			E				

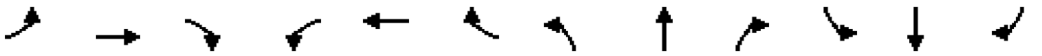
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	15.8	89.9			10.6	95.0		29.1
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	19.0	82.0			10.0	91.0		37.0
Max Q Clear Time (g_c+I1), s	11.7	25.9			6.6	37.5		23.6
Green Ext Time (p_c), s	0.2	9.7			0.1	19.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1280	0	0	1470	720	280	10	160	0	0	0
Future Volume (veh/h)	10	1280	0	0	1470	720	280	10	160	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	11	1391	0	0	1598	783	304	11	174			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	35	3792	0	0	3586	1117	343	360	306			
Arrive On Green	0.01	0.75	0.00	0.00	0.71	0.71	0.19	0.19	0.19			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	11	1391	0	0	1598	783	304	11	174			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	0.4	12.6	0.0	0.0	17.7	37.9	21.9	0.6	13.1			
Cycle Q Clear(g_c), s	0.4	12.6	0.0	0.0	17.7	37.9	21.9	0.6	13.1			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	35	3792	0	0	3586	1117	343	360	306			
V/C Ratio(X)	0.32	0.37	0.00	0.00	0.45	0.70	0.89	0.03	0.57			
Avail Cap(c_a), veh/h	105	3792	0	0	3586	1117	594	624	530			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	64.6	5.8	0.0	0.0	8.3	11.3	51.6	43.0	48.0			
Incr Delay (d2), s/veh	5.1	0.3	0.0	0.0	0.4	3.7	8.2	0.0	1.7			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	5.9	0.0	0.0	8.4	17.5	11.5	0.3	5.8			
LnGrp Delay(d), s/veh	69.7	6.1	0.0	0.0	8.7	15.0	59.8	43.0	49.7			
LnGrp LOS	E	A			A	B	E	D	D			
Approach Vol, veh/h		1402			2381			489				
Approach Delay, s/veh		6.6			10.8			55.9				
Approach LOS		A			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		102.0			5.3	96.7		29.4
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		98.0			4.0	90.0		44.0
Max Q Clear Time (g_c+I1), s		14.6			2.4	39.9		23.9
Green Ext Time (p_c), s		14.2			0.0	25.2		1.5

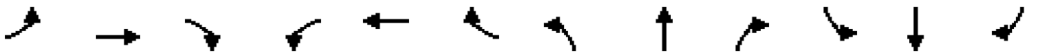
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1020	90	10	1830	210	20	10	300	10	10	360
Future Volume (vph)	340	1020	90	10	1830	210	20	10	300	10	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5023		1770	5007		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5023		1770	5007		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	1109	98	11	1989	228	22	11	326	11	11	391
RTOR Reduction (vph)	0	4	0	0	7	0	0	0	258	0	0	323
Lane Group Flow (vph)	370	1203	0	11	2210	0	22	11	68	11	11	68
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	16.9	81.6		0.7	65.4		10.4	10.4	10.4	2.5	2.5	19.4
Effective Green, g (s)	16.9	81.6		0.7	65.4		10.4	10.4	10.4	2.5	2.5	19.4
Actuated g/C Ratio	0.15	0.73		0.01	0.59		0.09	0.09	0.09	0.02	0.02	0.17
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	521	3685		11	2944		165	174	148	39	41	486
v/s Ratio Prot	c0.11	0.24		0.01	c0.44		0.01	0.01		c0.01	0.01	0.02
v/s Ratio Perm									c0.04			0.00
v/c Ratio	0.71	0.33		1.00	0.75		0.13	0.06	0.46	0.28	0.27	0.14
Uniform Delay, d1	44.8	5.2		55.3	16.9		46.3	46.0	47.7	53.5	53.5	38.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.5	0.2		271.4	1.8		0.4	0.2	2.2	3.9	3.5	0.1
Delay (s)	49.4	5.4		326.6	18.7		46.6	46.1	50.0	57.4	57.0	39.0
Level of Service	D	A		F	B		D	D	D	E	E	D
Approach Delay (s/veh)		15.7			20.2			49.6			39.9	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	111.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



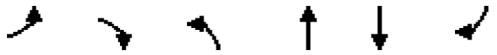
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	204	1187	0	8	1179	616	8	13	9	64	4	252
Future Volume (vph)	204	1187	0	8	1179	616	8	13	9	64	4	252
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.98	0.85		0.96			0.91	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1764	4682	1333		1767			1583	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1764	4682	1333		1767			1583	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	212	1236	0	8	1228	642	8	14	9	67	4	262
RTOR Reduction (vph)	0	0	0	0	14	225	0	8	0	0	36	141
Lane Group Flow (vph)	213	1236	0	8	1432	199	0	23	0	0	135	22
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	20.2	73.3		0.6	53.7	53.7		13.6			15.8	15.8
Effective Green, g (s)	20.2	73.3		0.6	53.7	53.7		13.6			15.8	15.8
Actuated g/C Ratio	0.17	0.61		0.01	0.45	0.45		0.11			0.13	0.13
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	299	3124		8	2107	600		201			209	199
v/s Ratio Prot	c0.12	0.24		0.00	c0.31			c0.01			c0.09	
v/s Ratio Perm						0.15						0.01
v/c Ratio	0.71	0.40		1.00	0.68	0.33		0.11			0.65	0.11
Uniform Delay, d1	46.8	11.7		59.4	26.0	21.2		47.4			49.1	45.6
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	7.8	0.1		318.2	0.9	0.3		1.2			6.8	0.2
Delay (s)	54.6	11.8		377.5	26.9	21.5		48.6			55.9	45.8
Level of Service	D	B		F	C	C		D			E	D
Approach Delay (s/veh)		18.1			27.2			48.6			50.9	
Approach LOS		B			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	119.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	991	228	179	1432	33	310	133	270	19	30	33
Future Volume (vph)	90	991	228	179	1432	33	310	133	270	19	30	33
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.99	0.95	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00		1.00	0.97	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	4877		1752	5015		1665	1591	1408	1665	1747	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	4877		1752	5015		1665	1591	1408	1665	1747	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1043	240	188	1507	35	326	140	284	20	32	35
RTOR Reduction (vph)	0	25	0	0	2	0	0	5	154	0	0	33
Lane Group Flow (vph)	95	1258	0	188	1540	0	258	254	79	18	34	2
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.4	44.4		19.7	51.7		45.4	45.4	45.4	8.1	8.1	8.1
Effective Green, g (s)	12.4	44.4		19.7	51.7		45.4	45.4	45.4	8.1	8.1	8.1
Actuated g/C Ratio	0.09	0.33		0.15	0.39		0.34	0.34	0.34	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	162	1620		258	1940		565	540	478	100	105	95
v/s Ratio Prot	0.05	0.26		c0.11	c0.31		0.15	c0.16		0.01	c0.02	
v/s Ratio Perm									0.06			0.00
v/c Ratio	0.59	0.78		0.73	0.79		0.46	0.47	0.17	0.18	0.32	0.02
Uniform Delay, d1	58.1	40.1		54.4	36.2		34.5	34.6	30.9	59.6	60.1	59.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.3	2.4		9.8	2.3		2.6	2.9	0.7	3.9	8.0	0.4
Delay (s)	63.5	42.5		64.2	38.6		37.1	37.6	31.6	63.5	68.1	59.5
Level of Service	E	D		E	D		D	D	C	E	E	E
Approach Delay (s/veh)		44.0			41.3			35.6			63.7	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	133.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	373	384	191	148	443	256
Future Volume (veh/h)	373	384	191	148	443	256
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	424	0	217	168	503	291
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	523	241	253	2709	2075	908
Arrive On Green	0.15	0.00	0.14	0.77	0.59	0.59
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	424	0	217	168	503	291
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	13.1	0.0	13.1	1.2	7.4	10.4
Cycle Q Clear(g_c), s	13.1	0.0	13.1	1.2	7.4	10.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	523	241	253	2709	2075	908
V/C Ratio(X)	0.81	0.00	0.86	0.06	0.24	0.32
Avail Cap(c_a), veh/h	1819	837	614	2709	2075	908
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	0.0	45.4	2.9	10.6	11.2
Incr Delay (d2), s/veh	3.1	0.0	8.1	0.0	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	0.0	7.0	0.6	3.6	4.6
LnGrp Delay(d), s/veh	47.6	0.0	53.6	3.0	10.8	12.1
LnGrp LOS	D		D	A	B	B
Approach Vol, veh/h	424			385	794	
Approach Delay, s/veh	47.6			31.5	11.3	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		88.0		20.7	19.7	68.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		84.0		58.0	38.0	42.0		
Max Q Clear Time (g_c+I1), s		3.2		15.1	15.1	12.4		
Green Ext Time (p_c), s		1.1		1.6	0.6	4.6		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.7
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	772	564	310	834	470	233
Future Volume (veh/h)	772	564	310	834	470	233
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	848	0	341	916	516	256
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	975	448	376	2324	1451	628
Arrive On Green	0.28	0.00	0.21	0.65	0.41	0.41
Sat Flow, veh/h	3476	1599	1792	3668	3668	1548
Grp Volume(v), veh/h	848	0	341	916	516	256
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1548
Q Serve(g_s), s	26.8	0.0	21.4	13.9	11.6	13.6
Cycle Q Clear(g_c), s	26.8	0.0	21.4	13.9	11.6	13.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	975	448	376	2324	1451	628
V/C Ratio(X)	0.87	0.00	0.91	0.39	0.36	0.41
Avail Cap(c_a), veh/h	2019	929	528	2324	1451	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	0.0	44.5	9.5	23.8	24.4
Incr Delay (d2), s/veh	2.6	0.0	15.3	0.5	0.7	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	0.0	12.2	6.9	5.9	6.1
LnGrp Delay(d), s/veh	42.1	0.0	59.8	10.0	24.5	26.4
LnGrp LOS	D		E	A	C	C
Approach Vol, veh/h	848			1257	772	
Approach Delay, s/veh	42.1			23.5	25.1	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		79.0		36.4	28.2	50.8		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		75.0		67.0	34.0	37.0		
Max Q Clear Time (g_c+I1), s		15.9		28.8	23.4	15.6		
Green Ext Time (p_c), s		7.5		3.6	0.8	4.1		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	114	910	188	173	1511	26	169	806	576	52	293	139
Future Volume (veh/h)	114	910	188	173	1511	26	169	806	576	52	293	139
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	130	1034	214	197	1717	30	192	916	655	59	333	158
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	152	1660	490	222	1881	33	217	1404	611	75	1121	486
Arrive On Green	0.09	0.33	0.33	0.13	0.37	0.37	0.12	0.40	0.40	0.04	0.32	0.32
Sat Flow, veh/h	1774	5085	1502	1774	5142	90	1774	3539	1541	1774	3539	1534
Grp Volume(v), veh/h	130	1034	214	197	1132	615	192	916	655	59	333	158
Grp Sat Flow(s),veh/h/ln	1774	1695	1502	1774	1695	1842	1774	1770	1541	1774	1770	1534
Q Serve(g_s), s	10.6	25.1	16.4	16.0	46.5	46.5	15.6	30.8	58.0	4.8	10.4	11.5
Cycle Q Clear(g_c), s	10.6	25.1	16.4	16.0	46.5	46.5	15.6	30.8	58.0	4.8	10.4	11.5
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1660	490	222	1240	674	217	1404	611	75	1121	486
V/C Ratio(X)	0.85	0.62	0.44	0.89	0.91	0.91	0.89	0.65	1.07	0.78	0.30	0.33
Avail Cap(c_a), veh/h	170	1660	490	315	1275	693	315	1404	611	85	1121	486
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.9	41.6	38.7	63.0	44.2	44.2	63.2	35.9	44.1	69.4	37.7	38.1
Incr Delay (d2), s/veh	30.0	0.7	0.6	19.2	10.0	16.3	18.3	2.4	57.0	33.7	0.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	11.9	6.9	9.0	23.4	26.6	8.7	15.5	34.3	3.1	5.2	5.1
LnGrp Delay(d), s/veh	96.0	42.4	39.3	82.1	54.1	60.5	81.4	38.3	101.1	103.1	38.4	39.8
LnGrp LOS	F	D	D	F	D	E	F	D	F	F	D	D
Approach Vol, veh/h		1378			1944			1763			550	
Approach Delay, s/veh		46.9			59.0			66.3			45.7	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	62.0	22.3	51.7	21.9	50.3	16.5	57.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	58.0	26.0	43.0	26.0	39.0	14.0	55.0
Max Q Clear Time (g_c+I1), s	6.8	60.0	18.0	27.1	17.6	13.5	12.6	48.5
Green Ext Time (p_c), s	0.0	0.0	0.3	6.9	0.3	2.6	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	20	780	0	0	570
Future Volume (veh/h)	20	20	780	0	0	570
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	22	22	848	0	0	620
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	85	28	3156	0	1	3156
Arrive On Green	0.05	0.05	0.89	0.00	0.00	0.89
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	22	22	848	0	0	620
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	1.6	5.8	4.5	0.0	0.0	3.0
Cycle Q Clear(g_c), s	1.6	5.8	4.5	0.0	0.0	3.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	85	28	3156	0	1	3156
V/C Ratio(X)	0.26	0.79	0.27	0.00	0.00	0.20
Avail Cap(c_a), veh/h	322	239	3156	0	54	3156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	60.7	351.9	1.0	0.0	0.0	0.9
Incr Delay (d2), s/veh	1.6	37.6	0.2	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	2.2	0.0	0.0	1.5
LnGrp Delay(d), s/veh	62.3	389.5	1.2	0.0	0.0	1.1
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	44		848			620
Approach Delay, s/veh	225.9		1.2			1.1
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	122.0				122.0		10.3
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	110.0				118.0		24.0
Max Q Clear Time (g_c+I1), s	0.0	6.5				5.0		7.8
Green Ext Time (p_c), s	0.0	6.8				4.5		0.1

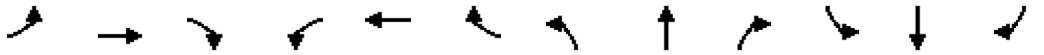
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.7
HCM 2010 LOS	A



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	390	400	660	470	110
Future Volume (veh/h)	120	390	400	660	470	110
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	424	435	717	511	120
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	308	274	621	2737	2203	515
Arrive On Green	0.17	0.17	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1774	1583	792	3632	2942	666
Grp Volume(v), veh/h	130	424	435	717	316	315
Grp Sat Flow(s),veh/h/ln	1774	1583	792	1770	1770	1745
Q Serve(g_s), s	9.8	26.0	50.5	8.6	7.4	7.5
Cycle Q Clear(g_c), s	9.8	26.0	58.0	8.6	7.4	7.5
Prop In Lane	1.00	1.00	1.00			0.38
Lane Grp Cap(c), veh/h	308	274	621	2737	1368	1350
V/C Ratio(X)	0.42	1.54	0.70	0.26	0.23	0.23
Avail Cap(c_a), veh/h	308	274	621	2737	1368	1350
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	62.0	12.7	4.8	4.7	4.7
Incr Delay (d2), s/veh	0.9	262.6	6.5	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	31.4	12.0	4.3	3.8	3.7
LnGrp Delay(d), s/veh	56.2	324.6	19.2	5.1	5.1	5.1
LnGrp LOS	E	F	B	A	A	A
Approach Vol, veh/h	554			1152	631	
Approach Delay, s/veh	261.6			10.4	5.1	
Approach LOS	F			B	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		30.0		120.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		116.0		26.0		116.0		
Max Q Clear Time (g_c+I1), s		60.0		28.0		9.5		
Green Ext Time (p_c), s		10.5		0.0		4.1		

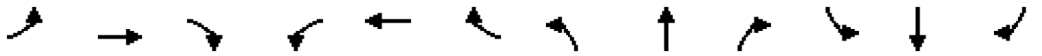
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.5
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	750	130	670	800	240	190	310	430	480	290	90
Future Volume (veh/h)	90	750	130	670	800	240	190	310	430	480	290	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	815	141	728	870	261	207	337	467	522	315	98
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1159	519	800	1742	1844	233	554	616	583	688	308
Arrive On Green	0.07	0.33	0.33	0.23	0.49	0.49	0.13	0.16	0.16	0.17	0.19	0.19
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	98	815	141	728	870	261	207	337	467	522	315	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.7	28.3	9.2	28.9	23.2	4.9	16.1	12.5	22.0	20.9	11.1	7.5
Cycle Q Clear(g_c), s	7.7	28.3	9.2	28.9	23.2	4.9	16.1	12.5	22.0	20.9	11.1	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1159	519	800	1742	1844	233	554	616	583	688	308
V/C Ratio(X)	0.81	0.70	0.27	0.91	0.50	0.14	0.89	0.61	0.76	0.90	0.46	0.32
Avail Cap(c_a), veh/h	189	1159	519	931	1742	1844	354	554	616	686	688	308
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.6	41.3	34.9	52.5	24.0	8.9	59.9	55.2	37.2	57.1	50.0	48.6
Incr Delay (d2), s/veh	13.7	3.6	1.3	11.6	1.0	0.2	16.0	4.9	8.5	12.9	2.2	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	14.4	4.2	15.0	11.6	1.9	8.9	6.5	17.1	11.0	5.6	3.5
LnGrp Delay(d), s/veh	78.3	44.8	36.1	64.1	25.0	9.0	76.0	60.1	45.7	70.0	52.2	51.3
LnGrp LOS	E	D	D	E	C	A	E	E	D	E	D	D
Approach Vol, veh/h		1054			1859			1011			935	
Approach Delay, s/veh		46.8			38.1			56.7			62.0	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.6	50.0	22.5	31.3	13.5	73.1	27.8	26.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	38.0	46.0	28.0	22.0	15.0	69.0	28.0	22.0
Max Q Clear Time (g_c+I1), s	30.9	30.3	18.1	13.1	9.7	25.2	22.9	24.0
Green Ext Time (p_c), s	1.7	5.2	0.4	1.4	0.1	8.3	0.9	0.0

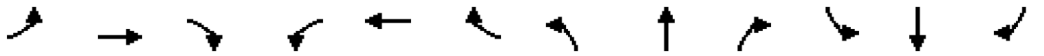
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1140	0	0	1310	100	340	10	60	0	0	0
Future Volume (vph)	110	1140	0	0	1310	100	340	10	60	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1690	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1690	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1239	0	0	1424	109	370	11	65	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	55	0	0	0
Lane Group Flow (vph)	120	1239	0	0	1424	109	189	192	10	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	15.1	115.2			96.1	96.1	21.2	21.2	21.2			
Effective Green, g (s)	15.1	115.2			96.1	96.1	21.2	21.2	21.2			
Actuated g/C Ratio	0.10	0.80			0.67	0.67	0.15	0.15	0.15			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	185	2823			3384	1053	246	248	232			
v/s Ratio Prot	c0.07	c0.35			0.28		0.11	c0.11				
v/s Ratio Perm						0.07			0.01			
v/c Ratio	0.65	0.44			0.42	0.10	0.77	0.77	0.04			
Uniform Delay, d1	62.1	4.5			11.2	8.7	59.2	59.3	52.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	7.6	0.5			0.4	0.2	13.4	14.0	0.1			
Delay (s)	69.7	5.0			11.6	8.9	72.7	73.3	52.9			
Level of Service	E	A			B	A	E	E	D			
Approach Delay (s/veh)		10.8			11.4			70.0			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	144.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1150	510	100	1630	0	0	0	0	90	10	80
Future Volume (vph)	0	1150	510	100	1630	0	0	0	0	90	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1702	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1702	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1250	554	109	1772	0	0	0	0	98	11	87
RTOR Reduction (vph)	0	0	274	0	0	0	0	0	0	0	0	41
Lane Group Flow (vph)	0	1250	280	109	1772	0	0	0	0	54	55	46
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		48.5	48.5	11.6	64.1					23.7	23.7	23.7
Effective Green, g (s)		48.5	48.5	11.6	64.1					23.7	23.7	23.7
Actuated g/C Ratio		0.51	0.51	0.12	0.67					0.25	0.25	0.25
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1791	801	214	3402					415	421	391
v/s Ratio Prot		c0.35		0.06	c0.35					0.03	c0.03	0.03
v/s Ratio Perm			0.18									
v/c Ratio		0.70	0.35	0.51	0.52					0.13	0.13	0.12
Uniform Delay, d1		18.1	14.2	39.4	8.1					28.0	28.0	27.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.2	0.3	1.9	0.1					0.6	0.6	0.6
Delay (s)		19.3	14.5	41.3	8.2					28.7	28.7	28.5
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		17.8			10.1			0.0			28.6	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	95.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	933	138	216	1117	130	109	349	157	142	331	113
Future Volume (veh/h)	194	933	138	216	1117	130	109	349	157	142	331	113
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.90	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	206	993	147	230	1188	138	116	371	167	151	352	120
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	237	1179	499	261	1594	185	142	643	282	179	759	253
Arrive On Green	0.13	0.34	0.34	0.15	0.35	0.35	0.08	0.28	0.28	0.10	0.30	0.30
Sat Flow, veh/h	1757	3505	1483	1757	4551	528	1757	2290	1005	1757	2517	837
Grp Volume(v), veh/h	206	993	147	230	876	450	116	282	256	151	242	230
Grp Sat Flow(s),veh/h/ln	1757	1752	1483	1757	1679	1722	1757	1752	1543	1757	1752	1602
Q Serve(g_s), s	13.9	31.8	8.8	15.5	27.8	27.8	7.9	16.7	17.4	10.2	13.6	14.1
Cycle Q Clear(g_c), s	13.9	31.8	8.8	15.5	27.8	27.8	7.9	16.7	17.4	10.2	13.6	14.1
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.65	1.00		0.52
Lane Grp Cap(c), veh/h	237	1179	499	261	1176	603	142	492	433	179	529	483
V/C Ratio(X)	0.87	0.84	0.29	0.88	0.75	0.75	0.81	0.57	0.59	0.84	0.46	0.48
Avail Cap(c_a), veh/h	406	1505	637	421	1470	754	261	492	433	276	529	483
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	37.2	29.6	50.5	34.6	34.6	54.7	37.3	37.6	53.4	34.3	34.5
Incr Delay (d2), s/veh	9.9	3.6	0.3	12.0	1.6	3.1	10.6	4.8	5.8	13.2	2.8	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	15.9	3.7	8.4	13.2	13.8	4.3	8.7	8.1	5.6	7.0	6.7
LnGrp Delay(d), s/veh	61.2	40.8	29.9	62.5	36.2	37.7	65.4	42.1	43.4	66.6	37.1	37.8
LnGrp LOS	E	D	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1346			1556			654			623	
Approach Delay, s/veh		42.7			40.5			46.7			44.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	38.0	22.0	44.7	13.8	40.5	20.3	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	34.0	29.0	52.0	18.0	35.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	12.2	19.4	17.5	33.8	9.9	16.1	15.9	29.8
Green Ext Time (p_c), s	0.2	2.9	0.5	7.0	0.2	2.8	0.4	9.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.8
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	7.3

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	120	160	190	120	150	60
Future Vol, veh/h	120	160	190	120	150	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	130	174	207	130	163	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	707	163	228	0	-	0
Stage 1	163	-	-	-	-	-
Stage 2	544	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	402	882	1340	-	-	-
Stage 1	866	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	340	882	1340	-	-	-
Mov Cap-2 Maneuver	340	-	-	-	-	-
Stage 1	733	-	-	-	-	-
Stage 2	582	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	15.2	5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1340	-	340	882	-	-
HCM Lane V/C Ratio	0.154	-	0.384	0.197	-	-
HCM Control Delay (s/veh)	8.2	-	22	10.1	-	-
HCM Lane LOS	A	-	C	B	-	-
HCM 95th %tile Q(veh)	0.5	-	1.8	0.7	-	-

Intersection	
Int Delay, s/veh	5.4

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	220	30	20	200	20	10
Future Vol, veh/h	220	30	20	200	20	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	239	33	22	217	22	11

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	77	22	0	0	239	0
Stage 1	22	-	-	-	-	-
Stage 2	55	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	926	1055	-	-	1328	-
Stage 1	1001	-	-	-	-	-
Stage 2	968	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	910	1055	-	-	1328	-
Mov Cap-2 Maneuver	910	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10.2	0	5.2
HCM LOS	B		

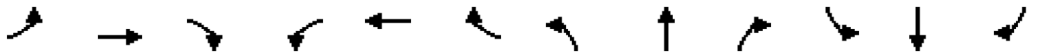
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	910	1055	1328	-	-	-
HCM Lane V/C Ratio	0.263	0.031	0.016	-	-	-
HCM Control Delay (s/veh)	10.4	8.5	7.8	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	1.1	0.1	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	352	840	61	51	888	76	101	734	58	148	684	446
Future Volume (veh/h)	352	840	61	51	888	76	101	734	58	148	684	446
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	378	903	66	55	955	82	109	789	62	159	735	480
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	444	1113	81	70	1161	99	133	1349	603	186	1454	846
Arrive On Green	0.13	0.34	0.34	0.04	0.25	0.25	0.08	0.39	0.39	0.11	0.42	0.42
Sat Flow, veh/h	3375	3274	239	1740	4668	400	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	378	479	490	55	680	357	109	789	62	159	735	480
Grp Sat Flow(s),veh/h/ln	1688	1736	1777	1740	1663	1742	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	14.1	32.4	32.4	4.0	24.9	25.0	8.0	23.2	3.3	11.6	20.1	26.4
Cycle Q Clear(g_c), s	14.1	32.4	32.4	4.0	24.9	25.0	8.0	23.2	3.3	11.6	20.1	26.4
Prop In Lane	1.00		0.13	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	590	604	70	827	433	133	1349	603	186	1454	846
V/C Ratio(X)	0.85	0.81	0.81	0.78	0.82	0.82	0.82	0.58	0.10	0.85	0.51	0.57
Avail Cap(c_a), veh/h	628	714	731	135	1006	527	229	1349	603	310	1454	846
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	38.8	38.8	61.3	45.7	45.8	58.6	31.2	25.1	56.6	27.6	19.0
Incr Delay (d2), s/veh	7.8	5.9	5.8	16.8	4.6	8.7	11.5	1.9	0.3	11.4	1.3	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	16.5	16.9	2.3	12.0	13.1	4.2	11.4	1.5	6.2	9.8	11.7
LnGrp Delay(d), s/veh	62.5	44.7	44.6	78.1	50.4	54.5	70.1	33.0	25.4	67.9	28.9	21.7
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1347			1092			960			1374	
Approach Delay, s/veh		49.7			53.1			36.8			30.9	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	54.1	9.2	47.8	13.9	58.0	21.0	36.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	48.0	10.0	53.0	17.0	54.0	24.0	39.0
Max Q Clear Time (g_c+I1), s	13.6	25.2	6.0	34.4	10.0	28.4	16.1	27.0
Green Ext Time (p_c), s	0.3	5.4	0.0	5.7	0.1	7.0	0.8	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

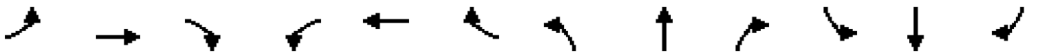
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	140	0	110	90	510	0	0	630	220
Future Volume (vph)	0	0	0	140	0	110	90	510	0	0	630	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.36	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1318	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	152	0	120	98	554	0	0	685	239
RTOR Reduction (vph)	0	0	0	0	0	104	0	0	0	0	0	51
Lane Group Flow (vph)	0	0	0	152	0	16	98	554	0	0	685	188
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				14.2		14.2	82.5	82.5			82.5	82.5
Effective Green, g (s)				14.2		14.2	82.5	82.5			82.5	82.5
Actuated g/C Ratio				0.14		0.14	0.79	0.79			0.79	0.79
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				240		214	1038	4006			5049	1247
v/s Ratio Prot								0.11			0.11	
v/s Ratio Perm				c0.09		0.01	0.07					c0.12
v/c Ratio				0.63		0.08	0.09	0.14			0.14	0.15
Uniform Delay, d1				42.8		39.5	2.5	2.6			2.6	2.7
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				5.4		0.2	0.2	0.1			0.1	0.3
Delay (s)				48.2		39.7	2.7	2.7			2.7	2.9
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			44.4			2.7			2.8	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.22		
Actuated Cycle Length (s)	104.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	130	0	90	0	0	0	0	480	90	120	640	0
Future Volume (vph)	130	0	90	0	0	0	0	480	90	120	640	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.43	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1572	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	141	0	98	0	0	0	0	522	98	130	696	0
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	141	0	13	0	0	0	0	522	78	130	696	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	13.7		13.7					84.9	84.9	84.9	84.9	
Effective Green, g (s)	13.7		13.7					84.9	84.9	84.9	84.9	
Actuated g/C Ratio	0.13		0.13					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	227		358					5103	1260	1251	4049	
v/s Ratio Prot								0.08			c0.14	
v/s Ratio Perm	c0.08		0.00						0.05	0.08		
v/c Ratio	0.62		0.04					0.10	0.06	0.10	0.17	
Uniform Delay, d1	44.0		40.7					2.4	2.3	2.4	2.6	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.2		0.0					0.0	0.1	0.2	0.1	
Delay (s)	49.2		40.7					2.4	2.4	2.6	2.7	
Level of Service	D		D					A	A	A	A	
Approach Delay (s/veh)		45.7			0.0			2.4			2.6	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	8.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	106.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	34.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	1	1	3	446	1	86	0	958	568	150	968	10
Future Volume (vph)	1	1	3	446	1	86	0	958	568	150	968	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.92		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.99		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1668		1665	1669	1474		5036	1515	1752	5027	
Flt Permitted		1.00		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1685		1665	1669	1474		5036	1515	1752	5027	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	1	1	3	496	1	96	0	1064	631	167	1076	11
RTOR Reduction (vph)	0	3	0	0	0	75	0	0	160	0	1	0
Lane Group Flow (vph)	0	2	0	248	249	21	0	1064	471	167	1086	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		1.3		28.7	28.7	28.7		66.3	95.0	17.2	87.5	
Effective Green, g (s)		1.3		28.7	28.7	28.7		66.3	95.0	17.2	87.5	
Actuated g/C Ratio		0.01		0.22	0.22	0.22		0.51	0.73	0.13	0.68	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		16		369	369	326		2578	1111	232	3396	
v/s Ratio Prot				0.15	c0.15			0.21	c0.09	c0.10	0.22	
v/s Ratio Perm		c0.00				0.01			0.22			
v/c Ratio		0.13		0.67	0.67	0.07		0.41	0.42	0.72	0.32	
Uniform Delay, d1		63.5		46.1	46.1	39.8		19.6	6.7	53.8	8.7	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.6		4.8	4.8	0.1		0.5	0.3	10.2	0.2	
Delay (s)		67.1		50.9	50.9	39.9		20.0	6.9	64.1	8.9	
Level of Service		E		D	D	D		C	A	E	A	
Approach Delay (s/veh)		67.1			49.1			15.2			16.3	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	129.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	299	17	113	23	57	20	182	788	3	11	345	293
Future Volume (veh/h)	299	17	113	23	57	20	182	788	3	11	345	293
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	356	20	135	27	68	24	217	938	4	13	411	349
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	466	23	538	0	644	539	288	1917	8	21	1623	713
Arrive On Green	0.35	0.35	0.35	0.00	0.35	0.35	0.08	0.53	0.53	0.01	0.46	0.46
Sat Flow, veh/h	1158	65	1556	0	1863	1558	3442	3614	15	1774	3539	1554
Grp Volume(v), veh/h	376	0	135	0	68	24	217	459	483	13	411	349
Grp Sat Flow(s),veh/h/ln	1223	0	1556	0	1863	1558	1721	1770	1859	1774	1770	1554
Q Serve(g_s), s	29.1	0.0	6.7	0.0	2.7	1.1	6.6	17.7	17.7	0.8	7.6	16.8
Cycle Q Clear(g_c), s	31.8	0.0	6.7	0.0	2.7	1.1	6.6	17.7	17.7	0.8	7.6	16.8
Prop In Lane	0.95		1.00	0.00		1.00	1.00		0.01	1.00		1.00
Lane Grp Cap(c), veh/h	488	0	538	0	644	539	288	939	986	21	1623	713
V/C Ratio(X)	0.77	0.00	0.25	0.00	0.11	0.04	0.75	0.49	0.49	0.61	0.25	0.49
Avail Cap(c_a), veh/h	867	0	985	0	1318	1102	513	939	986	83	1623	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.7	0.0	25.2	0.0	23.9	23.3	48.1	16.0	16.0	52.8	17.8	20.3
Incr Delay (d2), s/veh	2.6	0.0	0.2	0.0	0.1	0.0	4.0	1.8	1.7	25.2	0.4	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	2.9	0.0	1.4	0.5	3.3	9.0	9.5	0.5	3.8	7.6
LnGrp Delay(d), s/veh	37.3	0.0	25.4	0.0	23.9	23.4	52.1	17.8	17.7	78.1	18.2	22.7
LnGrp LOS	D		C		C	C	D	B	B	E	B	C
Approach Vol, veh/h		511			92			1159			773	
Approach Delay, s/veh		34.1			23.8			24.2			21.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	61.0	0.0	41.2	13.0	53.3		41.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	57.0	4.0	68.0	16.0	46.0		76.0
Max Q Clear Time (g_c+I1), s	2.8	19.7	0.0	33.8	8.6	18.8		4.7
Green Ext Time (p_c), s	0.0	6.5	0.0	3.4	0.4	4.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	24	72	31	48	55	231	14	659	14	171	262	17
Future Volume (veh/h)	24	72	31	48	55	231	14	659	14	171	262	17
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.86	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	29	87	37	58	66	278	17	794	17	206	316	20
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	61	169	64	145	153	298	781	2602	1148	489	2602	1124
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	146	775	294	500	703	1369	1044	3574	1577	676	3574	1545
Grp Volume(v), veh/h	153	0	0	124	0	278	17	794	17	206	316	20
Grp Sat Flow(s),veh/h/ln	1215	0	0	1203	0	1369	1044	1787	1577	676	1787	1545
Q Serve(g_s), s	4.2	0.0	0.0	0.0	0.0	29.3	0.7	11.4	0.4	22.5	3.9	0.5
Cycle Q Clear(g_c), s	20.0	0.0	0.0	15.7	0.0	29.3	4.6	11.4	0.4	34.0	3.9	0.5
Prop In Lane	0.19		0.24	0.47		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	294	0	0	298	0	298	781	2602	1148	489	2602	1124
V/C Ratio(X)	0.52	0.00	0.00	0.42	0.00	0.93	0.02	0.31	0.01	0.42	0.12	0.02
Avail Cap(c_a), veh/h	324	0	0	329	0	326	781	2602	1148	489	2602	1124
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	0.0	0.0	50.3	0.0	56.4	6.7	7.0	5.5	12.9	6.0	5.5
Incr Delay (d2), s/veh	1.4	0.0	0.0	0.9	0.0	31.6	0.1	0.3	0.0	2.7	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	0.0	4.6	0.0	13.7	0.2	5.7	0.2	4.5	1.9	0.2
LnGrp Delay(d), s/veh	52.8	0.0	0.0	51.2	0.0	88.0	6.7	7.3	5.5	15.6	6.1	5.5
LnGrp LOS	D			D		F	A	A	A	B	A	A
Approach Vol, veh/h		153			402			828			542	
Approach Delay, s/veh		52.8			76.7			7.3			9.7	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		111.0		36.0		111.0		36.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		107.0		35.0		107.0		35.0
Max Q Clear Time (g_c+I1), s		13.4		22.0		36.0		31.3
Green Ext Time (p_c), s		6.4		0.7		4.4		0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.0
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	14.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	219	22	33	0	20	7	45	51	1	7	46	230
Future Vol, veh/h	219	22	33	0	20	7	45	51	1	7	46	230
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	304	31	46	0	28	10	63	71	1	10	64	319
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	16.4	9.5	11.5	14.4
HCM LOS	C	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	47%	0%	80%	0%	2%
Vol Thru, %	53%	0%	8%	74%	16%
Vol Right, %	0%	100%	12%	26%	81%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	96	1	274	27	283
LT Vol	45	0	219	0	7
Through Vol	51	0	22	20	46
RT Vol	0	1	33	7	230
Lane Flow Rate	133	1	381	38	393
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.244	0.002	0.59	0.063	0.557
Departure Headway (Hd)	6.599	5.648	5.582	6.01	5.097
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	543	631	647	593	707
Service Time	4.358	3.407	3.623	4.076	3.142
HCM Lane V/C Ratio	0.245	0.002	0.589	0.064	0.556
HCM Control Delay, s/veh	11.5	8.4	16.4	9.5	14.4
HCM Lane LOS	B	A	C	A	B
HCM 95th-tile Q	1	0	3.9	0.2	3.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	5	12	89	12	6	18	131	917	97	27	1071	12
Future Volume (veh/h)	5	12	89	12	6	18	131	917	97	27	1071	12
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	6	13	99	13	7	20	146	1019	108	30	1190	13
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	62	108	123	108	49	112	173	2812	1230	38	2543	1123
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.10	0.81	0.81	0.02	0.73	0.73
Sat Flow, veh/h	336	1373	1553	802	616	1413	1740	3471	1518	1740	3471	1533
Grp Volume(v), veh/h	19	0	99	20	0	20	146	1019	108	30	1190	13
Grp Sat Flow(s),veh/h/ln	1709	0	1553	1418	0	1413	1740	1736	1518	1740	1736	1533
Q Serve(g_s), s	0.0	0.0	8.4	0.4	0.0	1.8	11.1	10.6	2.0	2.3	18.8	0.3
Cycle Q Clear(g_c), s	1.3	0.0	8.4	1.7	0.0	1.8	11.1	10.6	2.0	2.3	18.8	0.3
Prop In Lane	0.32		1.00	0.65		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	0	123	156	0	112	173	2812	1230	38	2543	1123
V/C Ratio(X)	0.11	0.00	0.81	0.13	0.00	0.18	0.84	0.36	0.09	0.80	0.47	0.01
Avail Cap(c_a), veh/h	285	0	231	254	0	210	375	2812	1230	116	2543	1123
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	60.9	57.7	0.0	57.9	59.6	3.4	2.6	65.5	7.3	4.9
Incr Delay (d2), s/veh	0.3	0.0	11.7	0.4	0.0	0.8	10.6	0.4	0.1	30.3	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	4.0	0.7	0.0	0.7	5.9	5.1	0.9	1.4	9.1	0.1
LnGrp Delay(d), s/veh	57.9	0.0	72.6	58.1	0.0	58.6	70.2	3.8	2.8	95.9	7.9	4.9
LnGrp LOS	E		E	E		E	E	A	A	F	A	A
Approach Vol, veh/h		118			40			1273			1233	
Approach Delay, s/veh		70.3			58.4			11.3			10.1	
Approach LOS		E			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.9	113.0		14.6	17.4	102.5		14.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	109.0		20.0	29.0	89.0		20.0
Max Q Clear Time (g_c+I1), s	4.3	12.6		10.4	13.1	20.8		3.8
Green Ext Time (p_c), s	0.0	10.6		0.2	0.3	12.1		0.1

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		14.1	
HCM 2010 LOS		B	

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1092	29	325	1621	307	360
Future Volume (veh/h)	1092	29	325	1621	307	360
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1138	30	339	1689	320	375
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1373	1213	415	2758	692	617
Arrive On Green	0.39	0.39	0.12	0.54	0.39	0.39
Sat Flow, veh/h	3632	1535	3442	5253	1774	1583
Grp Volume(v), veh/h	1138	30	339	1689	320	375
Grp Sat Flow(s),veh/h/ln	1770	1535	1721	1695	1774	1583
Q Serve(g_s), s	34.2	0.5	11.3	26.9	15.8	22.3
Cycle Q Clear(g_c), s	34.2	0.5	11.3	26.9	15.8	22.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1373	1213	415	2758	692	617
V/C Ratio(X)	0.83	0.02	0.82	0.61	0.46	0.61
Avail Cap(c_a), veh/h	2040	1502	700	4137	692	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.6	3.0	50.6	18.5	26.8	28.8
Incr Delay (d2), s/veh	1.9	0.0	4.0	0.2	2.2	4.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	0.6	5.6	12.6	8.2	10.5
LnGrp Delay(d), s/veh	34.5	3.0	54.6	18.7	29.0	33.2
LnGrp LOS	C	A	D	B	C	C
Approach Vol, veh/h	1168			2028	695	
Approach Delay, s/veh	33.7			24.7	31.3	
Approach LOS	C			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		50.0	18.2	49.8				68.0
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		46.0	24.0	68.0				96.0
Max Q Clear Time (g_c+I1), s		24.3	13.3	36.2				28.9
Green Ext Time (p_c), s		2.4	0.9	9.5				22.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	17	663	472	19	1098	33	9	5	16	441	22	279
Future Volume (vph)	17	663	472	19	1098	33	9	5	16	441	22	279
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.97	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1547	1787	3574	1551		1705		1698	1603	1519
Flt Permitted	0.12	1.00	1.00	0.95	1.00	1.00		0.91		0.95	0.76	1.00
Satd. Flow (perm)	225	3574	1547	1787	3574	1551		1570		1698	1261	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	18	684	487	20	1132	34	9	5	16	455	23	288
RTOR Reduction (vph)	0	0	162	0	0	20	0	12	0	0	3	50
Lane Group Flow (vph)	18	684	325	20	1132	14	0	18	0	264	260	189
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	36.6	36.6	36.6	2.2	42.8	42.8		27.2		20.2	51.4	51.4
Effective Green, g (s)	36.6	36.6	36.6	2.2	42.8	42.8		27.2		20.2	51.4	51.4
Actuated g/C Ratio	0.36	0.36	0.36	0.02	0.42	0.42		0.27		0.20	0.50	0.50
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	80	1279	554	38	1496	649		417		335	701	763
v/s Ratio Prot		0.19		0.01	c0.32					c0.16	0.07	
v/s Ratio Perm	0.08		0.21			0.01		0.01			c0.11	0.12
v/c Ratio	0.23	0.53	0.59	0.53	0.76	0.02		0.04		0.79	0.37	0.25
Uniform Delay, d1	22.9	26.0	26.6	49.5	25.3	17.4		27.8		39.0	15.5	14.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.4	0.4	1.6	12.5	2.2	0.0		0.0		11.6	0.3	0.8
Delay (s)	24.3	26.5	28.2	62.0	27.5	17.4		27.9		50.6	15.8	15.2
Level of Service	C	C	C	E	C	B		C		D	B	B
Approach Delay (s/veh)		27.2			27.8			27.9			27.6	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	102.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	164	971	301	164	1270	122	319	706	167	151	498	254
Future Volume (veh/h)	164	971	301	164	1270	122	319	706	167	151	498	254
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	176	1044	324	176	1366	131	343	759	180	162	535	273
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	201	1185	515	201	1573	151	371	1198	517	187	831	358
Arrive On Green	0.11	0.33	0.33	0.11	0.33	0.33	0.21	0.34	0.34	0.10	0.23	0.23
Sat Flow, veh/h	1792	3574	1555	1792	4751	456	1792	3574	1542	1792	3574	1540
Grp Volume(v), veh/h	176	1044	324	176	984	513	343	759	180	162	535	273
Grp Sat Flow(s),veh/h/ln	1792	1787	1555	1792	1712	1783	1792	1787	1542	1792	1787	1540
Q Serve(g_s), s	13.3	37.9	24.2	13.3	37.0	37.0	25.8	24.6	12.1	12.2	18.5	22.7
Cycle Q Clear(g_c), s	13.3	37.9	24.2	13.3	37.0	37.0	25.8	24.6	12.1	12.2	18.5	22.7
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	1185	515	201	1134	590	371	1198	517	187	831	358
V/C Ratio(X)	0.87	0.88	0.63	0.88	0.87	0.87	0.92	0.63	0.35	0.86	0.64	0.76
Avail Cap(c_a), veh/h	261	1302	566	248	1223	636	470	1198	517	248	831	358
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.9	43.3	38.7	60.0	43.1	43.1	53.3	38.5	34.3	60.5	47.5	49.1
Incr Delay (d2), s/veh	21.8	6.9	1.9	24.0	6.5	11.7	21.1	2.6	1.8	20.9	3.8	14.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.8	19.8	10.6	7.9	18.5	20.1	14.9	12.5	5.4	7.2	9.6	11.1
LnGrp Delay(d), s/veh	81.8	50.2	40.7	83.9	49.6	54.7	74.4	41.1	36.2	81.4	51.3	63.3
LnGrp LOS	F	D	D	F	D	D	E	D	D	F	D	E
Approach Vol, veh/h		1544			1673			1282			970	
Approach Delay, s/veh		51.8			54.8			49.3			59.7	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	50.0	19.4	49.5	32.4	35.9	19.4	49.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	19.0	50.0	36.0	29.0	20.0	49.0
Max Q Clear Time (g_c+I1), s	14.2	26.6	15.3	39.9	27.8	24.7	15.3	39.0
Green Ext Time (p_c), s	0.2	5.5	0.1	5.6	0.7	1.7	0.2	6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.5
HCM 2010 LOS	D

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	20	228	589	74	31	695	60	33	94	458	365	5
Future Volume (vph)	20	228	589	74	31	695	60	33	94	458	365	5
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.97	1.00	1.00			1.00	0.98	0.92	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.98			1.00	0.97	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	3539	1536	1770	4976			1770	3231	1319	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	3539	1536	1770	4976			1770	3231	1319	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	21	243	627	79	33	739	64	35	100	487	388	5
RTOR Reduction (vph)	0	0	0	54	0	3	0	0	0	0	118	0
Lane Group Flow (vph)	0	264	627	25	33	835	0	0	100	611	151	0
Confl. Peds. (#/hr)		7		7	7		7		2		27	
Confl. Bikes (#/hr)							2				4	
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		21.3	43.5	43.5	5.1	27.3			10.6	31.5	31.5	
Effective Green, g (s)		21.3	43.5	43.5	5.1	27.3			10.6	31.5	31.5	
Actuated g/C Ratio		0.15	0.31	0.31	0.04	0.20			0.08	0.23	0.23	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		270	1103	478	64	973			134	729	297	
v/s Ratio Prot		c0.15	0.18		0.02	c0.17			c0.06	c0.19		
v/s Ratio Perm				0.02							0.11	
v/c Ratio		0.98	0.57	0.05	0.52	0.86			0.75	0.84	0.51	
Uniform Delay, d1		58.9	40.1	33.6	66.0	54.2			63.1	51.6	47.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		48.1	0.7	0.0	6.9	7.6			20.0	11.1	6.1	
Delay (s)		106.9	40.8	33.6	72.8	61.8			83.2	62.7	53.3	
Level of Service		F	D	C	E	E			F	E	D	
Approach Delay (s/veh)			58.2			62.2				62.2		
Approach LOS			E			E				E		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	60.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	139.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	83.5%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	74	72	45	196	60	263	629	36	25	507	81
Future Volume (veh/h)	50	74	72	45	196	60	263	629	36	25	507	81
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	57	84	82	51	223	68	299	715	41	28	576	92
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	126	336	283	222	336	283	585	2637	1154	533	2637	1153
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1063	1827	1540	1186	1827	1540	751	3471	1518	692	3471	1518
Grp Volume(v), veh/h	57	84	82	51	223	68	299	715	41	28	576	92
Grp Sat Flow(s),veh/h/ln	1063	1827	1540	1186	1827	1540	751	1736	1518	692	1736	1518
Q Serve(g_s), s	7.5	5.6	6.5	5.5	16.1	5.4	27.1	8.9	0.9	1.8	6.8	2.2
Cycle Q Clear(g_c), s	23.6	5.6	6.5	11.1	16.1	5.4	33.9	8.9	0.9	10.7	6.8	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	126	336	283	222	336	283	585	2637	1154	533	2637	1153
V/C Ratio(X)	0.45	0.25	0.29	0.23	0.66	0.24	0.51	0.27	0.04	0.05	0.22	0.08
Avail Cap(c_a), veh/h	184	437	368	288	437	368	585	2637	1154	533	2637	1153
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	49.6	50.0	54.3	53.9	49.5	9.8	5.2	4.2	6.8	4.9	4.4
Incr Delay (d2), s/veh	2.5	0.4	0.6	0.5	2.4	0.4	3.2	0.3	0.1	0.2	0.2	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	2.9	2.8	1.8	8.3	2.3	6.1	4.3	0.4	0.4	3.3	1.0
LnGrp Delay(d), s/veh	67.4	50.0	50.6	54.9	56.3	49.9	13.0	5.4	4.3	7.0	5.1	4.5
LnGrp LOS	E	D	D	D	E	D	B	A	A	A	A	A
Approach Vol, veh/h		223			342			1055			696	
Approach Delay, s/veh		54.7			54.8			7.5			5.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		30.1		112.0		30.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		35.9		25.6		12.7		18.1
Green Ext Time (p_c), s		9.2		0.5		4.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	48	37	88	31	102	36	160	823	14	32	808	64
Future Volume (veh/h)	48	37	88	31	102	36	160	823	14	32	808	64
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	53	41	97	34	112	40	176	904	15	35	888	70
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	38	19	333	30	80	333	409	2523	1081	421	2523	1104
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	84	1468	0	354	1467	578	3505	1502	599	3505	1533
Grp Volume(v), veh/h	94	0	97	146	0	40	176	904	15	35	888	70
Grp Sat Flow(s),veh/h/ln	84	0	1468	354	0	1467	578	1752	1502	599	1752	1533
Q Serve(g_s), s	0.0	0.0	8.2	0.0	0.0	3.3	24.6	14.6	0.4	3.5	14.3	2.0
Cycle Q Clear(g_c), s	34.0	0.0	8.2	34.0	0.0	3.3	38.9	14.6	0.4	18.1	14.3	2.0
Prop In Lane	0.56		1.00	0.23		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	57	0	333	110	0	333	409	2523	1081	421	2523	1104
V/C Ratio(X)	1.66	0.00	0.29	1.33	0.00	0.12	0.43	0.36	0.01	0.08	0.35	0.06
Avail Cap(c_a), veh/h	57	0	333	110	0	333	409	2523	1081	421	2523	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.8	0.0	48.0	52.5	0.0	46.1	15.2	7.9	5.9	11.3	7.9	6.2
Incr Delay (d2), s/veh	363.4	0.0	0.5	198.3	0.0	0.2	3.3	0.4	0.0	0.4	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	0.0	3.4	10.6	0.0	1.3	4.3	7.2	0.2	0.6	6.9	0.9
LnGrp Delay(d), s/veh	427.2	0.0	48.5	250.9	0.0	46.3	18.4	8.3	6.0	11.7	8.3	6.3
LnGrp LOS	F		D	F		D	B	A	A	B	A	A
Approach Vol, veh/h		191			186			1095			993	
Approach Delay, s/veh		234.9			206.9			9.9			8.2	
Approach LOS		F			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		40.9		36.0		20.1		36.0
Green Ext Time (p_c), s		11.3		0.0		8.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.5
HCM 2010 LOS	D

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	106	0	0	107	0	0
Future Volume (veh/h)	106	0	0	107	0	0
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	115	0	0	116	0	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1805	1535	55	1805	1	1
Arrive On Green	0.97	0.00	0.00	0.97	0.00	0.00
Sat Flow, veh/h	1863	1583	1272	1863	1774	1583
Grp Volume(v), veh/h	115	0	0	116	0	0
Grp Sat Flow(s),veh/h/ln	1863	1583	1272	1863	1774	1583
Q Serve(g_s), s	0.3	0.0	0.0	0.3	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	0.3	0.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1805	1535	55	1805	1	1
V/C Ratio(X)	0.06	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	1805	1535	55	1805	218	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.1	0.0	0.0	0.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.1	0.0	0.0
LnGrp Delay(d), s/veh	0.1	0.0	0.0	0.1	0.0	0.0
LnGrp LOS	A			A		
Approach Vol, veh/h	115			116	0	
Approach Delay, s/veh	0.1			0.1	0.0	
Approach LOS	A			A		

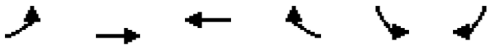
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		130.0		0.0		130.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		126.0		16.0		126.0		
Max Q Clear Time (g_c+I1), s		2.3		0.0		2.3		
Green Ext Time (p_c), s		0.7		0.0		0.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.1
HCM 2010 LOS	A

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1000	50	0	1000	100	100
Future Volume (vph)	1000	50	0	1000	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	5049			5085	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	5049			5085	1770	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	4000	200	0	4000	400	400
RTOR Reduction (vph)	4	0	0	0	0	72
Lane Group Flow (vph)	4196	0	0	4000	400	328
Turn Type	NA			NA	Prot	Prot
Protected Phases	4			8 5	6	6
Permitted Phases						
Actuated Green, G (s)	87.0			113.0	29.0	29.0
Effective Green, g (s)	87.0			113.0	29.0	29.0
Actuated g/C Ratio	0.58			0.75	0.19	0.19
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	2928			3830	342	306
v/s Ratio Prot	c0.83			c0.79	c0.23	0.21
v/s Ratio Perm						
v/c Ratio	1.43			1.04	1.17	1.07
Uniform Delay, d1	31.5			18.5	60.5	60.5
Progression Factor	1.00			0.84	1.00	1.00
Incremental Delay, d2	196.9			27.7	103.2	72.1
Delay (s)	228.4			43.2	163.7	132.6
Level of Service	F			D	F	F
Approach Delay (s/veh)	228.4			43.2	148.1	
Approach LOS	F			D	F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	139.0	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	1	2	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h				0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	1774	3632	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1774	1770	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	1.00			0.00		
Lane Grp Cap(c), veh/h				0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h				0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Number	7	4	14	3	8	18				
Initial Q (Qb), veh	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	0	1863	1900	0	1863	1900				
Adj Flow Rate, veh/h	0	0	0	0	0	0				
Adj No. of Lanes	0	2	0	0	3	0				
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25				
Percent Heavy Veh, %	0	2	2	0	2	2				
Cap, veh/h	--2104	7483648	0	--2104	7483648	0				
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00				
Sat Flow, veh/h	0	-72647	0	0	-70952	0				
Grp Volume(v), veh/h	0	0	0	0	0	0				
Grp Sat Flow(s),veh/h/ln	0	1770	0	0	1695	0				
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				
Prop In Lane	0.00		0.00	0.00		0.00				
Lane Grp Cap(c), veh/h	4053	35506944	0	5824	43129344	0				
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00				
Avail Cap(c_a), veh/h	591818	39155200	0	850349	66974464	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00				
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp LOS										
Approach Vol, veh/h		0			0					
Approach Delay, s/veh		0.0			0.0					
Approach LOS										

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

NORWALK STATION - 2015 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1140	377	15	1377	379	365	531	0	367	704	2
Future Volume (vph)	0	1140	377	15	1377	379	365	531	0	367	704	2
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.97	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)		4921		1787	5136	1556	1537	4802		1537	4822	1569
Flt Permitted		1.00		0.10	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)		4921		192	5136	1556	1537	4802		1537	4822	1569
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1200	397	16	1449	399	384	559	0	386	741	2
RTOR Reduction (vph)	0	40	0	0	0	83	0	0	0	0	0	2
Lane Group Flow (vph)	0	1557	0	16	1449	316	230	713	0	274	853	0
Confl. Peds. (#/hr)	5		2	2		5	2		10	10		2
Confl. Bikes (#/hr)			3			3			1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Effective Green, g (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2854		111	2978	902	297	928		225	707	230
v/s Ratio Prot		c0.32			0.28		c0.15	0.15		c0.18	0.18	
v/s Ratio Perm				0.08		0.20						0.00
v/c Ratio		0.55		0.14	0.49	0.35	0.77	0.77		1.22	1.21	0.00
Uniform Delay, d1		19.4		14.4	18.4	16.6	57.4	57.3		64.0	64.0	54.6
Progression Factor		0.92		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		0.6	0.1	0.2	17.7	6.1		131.4	106.0	0.0
Delay (s)		17.7		15.0	18.6	16.8	75.1	63.4		195.4	170.0	54.6
Level of Service		B		B	B	B	E	E		F	F	D
Approach Delay (s/veh)		17.7			18.2			66.3			175.9	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	58.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	67	1216	223	146	1197	79	213	358	112	84	414	96
Future Volume (veh/h)	67	1216	223	146	1197	79	213	358	112	84	414	96
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	69	1254	230	151	1234	81	220	369	115	87	427	99
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	187	1532	676	195	1588	701	290	1173	520	377	1048	458
Arrive On Green	0.04	0.43	0.43	0.05	0.45	0.45	0.08	0.33	0.33	0.05	0.30	0.30
Sat Flow, veh/h	1774	3539	1563	1774	3539	1564	3442	3539	1569	1774	3539	1546
Grp Volume(v), veh/h	69	1254	230	151	1234	81	220	369	115	87	427	99
Grp Sat Flow(s),veh/h/ln	1774	1770	1563	1774	1770	1564	1721	1770	1569	1774	1770	1546
Q Serve(g_s), s	2.5	36.6	11.5	5.7	34.7	3.5	7.4	9.2	6.2	4.0	11.4	5.7
Cycle Q Clear(g_c), s	2.5	36.6	11.5	5.7	34.7	3.5	7.4	9.2	6.2	4.0	11.4	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	1532	676	195	1588	701	290	1173	520	377	1048	458
V/C Ratio(X)	0.37	0.82	0.34	0.78	0.78	0.12	0.76	0.31	0.22	0.23	0.41	0.22
Avail Cap(c_a), veh/h	366	2196	970	195	1895	837	644	1173	520	532	1048	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.8	29.3	22.2	26.1	27.5	18.9	52.7	29.4	28.4	26.7	33.2	31.1
Incr Delay (d2), s/veh	1.2	1.7	0.3	17.6	1.8	0.1	4.1	0.7	1.0	0.3	1.2	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	18.1	5.0	3.6	17.4	1.5	3.7	4.6	2.8	2.0	5.7	2.6
LnGrp Delay(d), s/veh	24.0	31.0	22.5	43.8	29.2	18.9	56.8	30.1	29.4	27.0	34.3	32.2
LnGrp LOS	C	C	C	D	C	B	E	C	C	C	C	C
Approach Vol, veh/h		1553			1466			704			613	
Approach Delay, s/veh		29.4			30.1			38.3			32.9	
Approach LOS		C			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.7	43.0	10.0	54.9	13.9	38.8	8.1	56.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	39.0	6.0	73.0	22.0	33.0	16.0	63.0
Max Q Clear Time (g_c+I1), s	6.0	11.2	7.7	38.6	9.4	13.4	4.5	36.7
Green Ext Time (p_c), s	0.1	2.7	0.0	12.3	0.6	2.8	0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.6
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	307	1010	97	162	1213	68	64	581	115	88	503	274
Future Volume (veh/h)	307	1010	97	162	1213	68	64	581	115	88	503	274
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	330	1086	104	174	1304	73	69	625	124	95	541	295
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	362	2029	620	202	1569	478	88	1134	497	143	1106	477
Arrive On Green	0.20	0.40	0.40	0.11	0.31	0.31	0.05	0.32	0.32	0.04	0.31	0.31
Sat Flow, veh/h	1774	5085	1553	1774	5085	1549	1774	3539	1551	3442	3539	1525
Grp Volume(v), veh/h	330	1086	104	174	1304	73	69	625	124	95	541	295
Grp Sat Flow(s),veh/h/ln	1774	1695	1553	1774	1695	1549	1774	1770	1551	1721	1770	1525
Q Serve(g_s), s	23.3	20.9	5.5	12.3	30.5	4.4	4.9	18.6	7.6	3.5	15.9	21.1
Cycle Q Clear(g_c), s	23.3	20.9	5.5	12.3	30.5	4.4	4.9	18.6	7.6	3.5	15.9	21.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	362	2029	620	202	1569	478	88	1134	497	143	1106	477
V/C Ratio(X)	0.91	0.54	0.17	0.86	0.83	0.15	0.78	0.55	0.25	0.66	0.49	0.62
Avail Cap(c_a), veh/h	569	2544	777	305	1789	545	125	1134	497	188	1106	477
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	29.4	24.8	55.7	41.1	32.1	60.1	35.9	32.1	60.4	35.7	37.5
Incr Delay (d2), s/veh	13.1	0.2	0.1	14.7	3.1	0.1	18.7	1.9	1.2	5.3	1.5	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	9.8	2.4	6.9	14.7	1.9	2.9	9.4	3.4	1.8	8.0	9.6
LnGrp Delay(d), s/veh	62.9	29.6	24.9	70.4	44.2	32.2	78.8	37.8	33.3	65.8	37.2	43.4
LnGrp LOS	E	C	C	E	D	C	E	D	C	E	D	D
Approach Vol, veh/h		1520			1551			818			931	
Approach Delay, s/veh		36.5			46.6			40.6			42.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	45.0	18.6	55.0	10.3	44.0	30.1	43.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	22.0	64.0	9.0	39.0	41.0	45.0
Max Q Clear Time (g_c+I1), s	5.5	20.6	14.3	22.9	6.9	23.1	25.3	32.5
Green Ext Time (p_c), s	0.0	4.3	0.3	9.6	0.0	4.1	0.9	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	99	1235	171	98	1130	91	147	494	90	135	716	228
Future Volume (veh/h)	99	1235	171	98	1130	91	147	494	90	135	716	228
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	109	1357	188	108	1242	100	162	543	99	148	787	251
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	1806	553	134	1694	136	192	1201	526	174	1165	639
Arrive On Green	0.08	0.36	0.36	0.08	0.35	0.35	0.11	0.34	0.34	0.10	0.33	0.33
Sat Flow, veh/h	1774	5085	1558	1774	4792	386	1774	3539	1552	1774	3539	1573
Grp Volume(v), veh/h	109	1357	188	108	879	463	162	543	99	148	787	251
Grp Sat Flow(s),veh/h/ln	1774	1695	1558	1774	1695	1787	1774	1770	1552	1774	1770	1573
Q Serve(g_s), s	7.3	28.4	10.7	7.2	27.3	27.3	10.8	14.5	5.4	9.9	23.2	13.6
Cycle Q Clear(g_c), s	7.3	28.4	10.7	7.2	27.3	27.3	10.8	14.5	5.4	9.9	23.2	13.6
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	136	1806	553	134	1199	632	192	1201	526	174	1165	639
V/C Ratio(X)	0.80	0.75	0.34	0.81	0.73	0.73	0.84	0.45	0.19	0.85	0.68	0.39
Avail Cap(c_a), veh/h	411	2777	851	220	1487	784	352	1201	526	176	1165	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.9	34.3	28.6	55.0	34.1	34.1	52.9	31.2	28.2	53.6	35.0	25.4
Incr Delay (d2), s/veh	10.3	0.6	0.4	10.9	1.5	2.7	9.7	1.2	0.8	30.5	3.2	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	13.4	4.6	3.9	13.1	14.0	5.8	7.3	2.4	6.3	11.9	6.2
LnGrp Delay(d), s/veh	65.1	34.9	28.9	66.0	35.5	36.8	62.6	32.4	29.0	84.2	38.1	27.2
LnGrp LOS	E	C	C	E	D	D	E	C	C	F	D	C
Approach Vol, veh/h		1654			1450			804			1186	
Approach Delay, s/veh		36.2			38.2			38.1			41.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	45.0	13.1	46.9	17.1	43.8	13.3	46.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	41.0	15.0	66.0	24.0	29.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	11.9	16.5	9.2	30.4	12.8	25.2	9.3	29.3
Green Ext Time (p_c), s	0.0	3.7	0.1	12.5	0.3	2.0	0.2	9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	121	1150	109	136	989	32	153	491	118	115	688	108
Future Volume (veh/h)	121	1150	109	136	989	32	153	491	118	115	688	108
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	126	1198	114	142	1030	33	159	511	123	120	717	112
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	246	1419	624	209	1437	633	293	1204	527	344	1146	501
Arrive On Green	0.06	0.40	0.40	0.06	0.41	0.41	0.08	0.34	0.34	0.06	0.33	0.33
Sat Flow, veh/h	1757	3505	1542	1757	3505	1544	1757	3505	1535	1757	3505	1533
Grp Volume(v), veh/h	126	1198	114	142	1030	33	159	511	123	120	717	112
Grp Sat Flow(s),veh/h/ln	1757	1752	1542	1757	1752	1544	1757	1752	1535	1757	1752	1533
Q Serve(g_s), s	5.2	38.7	5.9	5.9	30.7	1.6	7.4	14.0	7.2	5.6	21.7	6.6
Cycle Q Clear(g_c), s	5.2	38.7	5.9	5.9	30.7	1.6	7.4	14.0	7.2	5.6	21.7	6.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	246	1419	624	209	1437	633	293	1204	527	344	1146	501
V/C Ratio(X)	0.51	0.84	0.18	0.68	0.72	0.05	0.54	0.42	0.23	0.35	0.63	0.22
Avail Cap(c_a), veh/h	410	1876	825	308	1764	777	410	1204	527	365	1146	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.2	33.7	23.9	27.8	30.9	22.3	26.9	31.6	29.3	25.9	35.7	30.6
Incr Delay (d2), s/veh	1.6	2.9	0.1	3.8	1.1	0.0	1.6	1.1	1.0	0.6	2.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	19.2	2.5	3.1	15.1	0.7	3.7	7.0	3.2	2.8	10.9	3.0
LnGrp Delay(d), s/veh	25.8	36.6	24.1	31.7	31.9	22.3	28.5	32.7	30.4	26.5	38.2	31.6
LnGrp LOS	C	D	C	C	C	C	C	C	C	C	D	C
Approach Vol, veh/h		1438			1205			793			949	
Approach Delay, s/veh		34.6			31.6			31.5			36.0	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	47.0	12.0	54.7	13.6	44.9	11.3	55.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	43.0	15.0	67.0	18.0	34.0	19.0	63.0
Max Q Clear Time (g_c+I1), s	7.6	16.0	7.9	40.7	9.4	23.7	7.2	32.7
Green Ext Time (p_c), s	0.0	3.8	0.2	10.0	0.2	3.5	0.2	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	158	913	185	203	1357	70	184	672	94	96	919	144
Future Volume (veh/h)	158	913	185	203	1357	70	184	672	94	96	919	144
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	165	951	193	211	1414	73	192	700	98	100	957	150
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1419	425	236	1547	464	206	1423	823	123	1808	537
Arrive On Green	0.11	0.28	0.28	0.13	0.30	0.30	0.12	0.40	0.40	0.07	0.36	0.36
Sat Flow, veh/h	1774	5085	1523	1774	5085	1526	1774	3539	1523	1774	5085	1512
Grp Volume(v), veh/h	165	951	193	211	1414	73	192	700	98	100	957	150
Grp Sat Flow(s),veh/h/ln	1774	1695	1523	1774	1695	1526	1774	1770	1523	1774	1695	1512
Q Serve(g_s), s	12.6	22.9	14.4	16.1	36.9	4.8	14.8	20.3	4.4	7.7	20.6	9.8
Cycle Q Clear(g_c), s	12.6	22.9	14.4	16.1	36.9	4.8	14.8	20.3	4.4	7.7	20.6	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	1419	425	236	1547	464	206	1423	823	123	1808	537
V/C Ratio(X)	0.86	0.67	0.45	0.89	0.91	0.16	0.93	0.49	0.12	0.81	0.53	0.28
Avail Cap(c_a), veh/h	335	1697	508	296	1587	476	206	1423	823	245	1808	537
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.5	44.1	41.0	58.8	46.2	35.0	60.4	30.7	15.9	63.2	35.3	31.8
Incr Delay (d2), s/veh	10.7	0.8	0.8	23.4	8.4	0.2	44.0	1.2	0.3	11.9	1.1	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	10.8	6.2	9.5	18.5	2.0	9.8	10.2	1.9	4.2	9.8	4.3
LnGrp Delay(d), s/veh	71.2	44.9	41.8	82.2	54.6	35.2	104.4	31.9	16.2	75.1	36.4	33.1
LnGrp LOS	E	D	D	F	D	D	F	C	B	E	D	C
Approach Vol, veh/h		1309			1698			990			1207	
Approach Delay, s/veh		47.7			57.2			44.4			39.2	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.6	59.4	22.4	42.5	20.0	53.0	18.9	45.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	23.0	46.0	16.0	49.0	26.0	43.0
Max Q Clear Time (g_c+I1), s	9.7	22.3	18.1	24.9	16.8	22.6	14.6	38.9
Green Ext Time (p_c), s	0.1	5.2	0.2	7.2	0.0	7.6	0.3	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	148	1122	91	50	760	55	91	607	68	109	581	219
Future Volume (veh/h)	148	1122	91	50	760	55	91	607	68	109	581	219
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	156	1181	96	53	800	58	96	639	72	115	612	231
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	190	1641	511	68	1292	397	345	1862	822	378	1862	822
Arrive On Green	0.11	0.32	0.32	0.04	0.25	0.25	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	1774	5085	1583	1774	5085	1562	650	3539	1563	735	3539	1563
Grp Volume(v), veh/h	156	1181	96	53	800	58	96	639	72	115	612	231
Grp Sat Flow(s),veh/h/ln	1774	1695	1583	1774	1695	1562	650	1770	1563	735	1770	1563
Q Serve(g_s), s	9.2	21.8	4.7	3.2	14.8	3.1	10.6	11.1	2.4	11.4	10.5	8.7
Cycle Q Clear(g_c), s	9.2	21.8	4.7	3.2	14.8	3.1	21.1	11.1	2.4	22.5	10.5	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	1641	511	68	1292	397	345	1862	822	378	1862	822
V/C Ratio(X)	0.82	0.72	0.19	0.78	0.62	0.15	0.28	0.34	0.09	0.30	0.33	0.28
Avail Cap(c_a), veh/h	483	3583	1116	117	2532	778	345	1862	822	378	1862	822
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	31.8	26.0	50.7	35.1	30.8	20.5	14.6	12.5	21.1	14.4	14.0
Incr Delay (d2), s/veh	8.5	0.6	0.2	17.1	0.5	0.2	2.0	0.5	0.2	2.1	0.5	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	10.3	2.1	1.9	7.0	1.3	2.1	5.5	1.1	2.5	5.2	3.9
LnGrp Delay(d), s/veh	55.0	32.4	26.2	67.8	35.6	30.9	22.5	15.1	12.7	23.2	14.9	14.9
LnGrp LOS	E	C	C	E	D	C	C	B	B	C	B	B
Approach Vol, veh/h		1433			911			807			958	
Approach Delay, s/veh		34.4			37.2			15.8			15.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	8.1	38.3		60.0	15.4	31.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	7.0	75.0		56.0	29.0	53.0
Max Q Clear Time (g_c+I1), s		23.1	5.2	23.8		24.5	11.2	16.8
Green Ext Time (p_c), s		5.6	0.0	10.5		6.0	0.3	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	85	1192	79	84	933	40	98	659	185	74	600	130
Future Volume (veh/h)	85	1192	79	84	933	40	98	659	185	74	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	91	1282	85	90	1003	43	105	709	199	80	645	140
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1478	661	115	1476	652	258	1484	663	227	1484	655
Arrive On Green	0.07	0.42	0.42	0.06	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1774	3539	1583	1774	3539	1563	686	3539	1582	612	3539	1562
Grp Volume(v), veh/h	91	1282	85	90	1003	43	105	709	199	80	645	140
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1774	1770	1563	686	1770	1582	612	1770	1562
Q Serve(g_s), s	6.2	40.2	4.0	6.1	28.0	2.0	15.6	17.7	10.2	13.3	15.7	7.0
Cycle Q Clear(g_c), s	6.2	40.2	4.0	6.1	28.0	2.0	31.3	17.7	10.2	31.0	15.7	7.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	115	1478	661	115	1476	652	258	1484	663	227	1484	655
V/C Ratio(X)	0.79	0.87	0.13	0.79	0.68	0.07	0.41	0.48	0.30	0.35	0.43	0.21
Avail Cap(c_a), veh/h	306	1746	781	394	1920	848	258	1484	663	227	1484	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	32.4	21.8	56.1	28.8	21.2	36.2	25.7	23.5	36.9	25.1	22.5
Incr Delay (d2), s/veh	11.3	4.3	0.1	11.1	0.6	0.0	4.7	1.1	1.2	4.3	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	20.5	1.8	3.3	13.8	0.9	3.3	8.9	4.7	2.5	7.9	3.1
LnGrp Delay(d), s/veh	67.3	36.7	21.9	67.2	29.5	21.3	40.9	26.8	24.6	41.2	26.0	23.3
LnGrp LOS	E	D	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1458			1136			1013			865	
Approach Delay, s/veh		37.7			32.2			27.8			27.0	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		55.0	11.9	54.8		55.0	11.9	54.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		51.0	27.0	60.0		51.0	21.0	66.0
Max Q Clear Time (g_c+I1), s		33.3	8.1	42.2		33.0	8.2	30.0
Green Ext Time (p_c), s		5.7	0.2	8.5		5.0	0.1	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	76	289	35	75	293	39	134	748	65	58	641	73
Future Volume (veh/h)	76	289	35	75	293	39	134	748	65	58	641	73
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	84	321	39	83	326	43	149	831	72	64	712	81
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	508	430	186	508	430	452	2329	1040	402	2329	1019
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1009	1863	1578	1017	1863	1578	681	3539	1581	615	3539	1548
Grp Volume(v), veh/h	84	321	39	83	326	43	149	831	72	64	712	81
Grp Sat Flow(s),veh/h/ln	1009	1863	1578	1017	1863	1578	681	1770	1581	615	1770	1548
Q Serve(g_s), s	9.2	17.5	2.1	9.0	17.8	2.4	13.8	12.1	1.9	6.0	9.9	2.2
Cycle Q Clear(g_c), s	27.1	17.5	2.1	26.5	17.8	2.4	23.8	12.1	1.9	18.1	9.9	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	508	430	186	508	430	452	2329	1040	402	2329	1019
V/C Ratio(X)	0.46	0.63	0.09	0.45	0.64	0.10	0.33	0.36	0.07	0.16	0.31	0.08
Avail Cap(c_a), veh/h	483	1064	902	490	1064	902	452	2329	1040	402	2329	1019
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	36.9	31.3	48.5	37.0	31.4	13.5	8.8	7.1	12.9	8.5	7.1
Incr Delay (d2), s/veh	1.8	1.3	0.1	1.7	1.4	0.1	1.9	0.4	0.1	0.8	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	9.2	0.9	2.6	9.3	1.0	2.9	6.0	0.9	1.1	5.0	1.0
LnGrp Delay(d), s/veh	50.8	38.2	31.4	50.2	38.4	31.5	15.5	9.3	7.2	13.7	8.8	7.3
LnGrp LOS	D	D	C	D	D	C	B	A	A	B	A	A
Approach Vol, veh/h		444			452			1052			857	
Approach Delay, s/veh		40.0			39.9			10.0			9.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		35.5		80.0		35.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		66.0		76.0		66.0
Max Q Clear Time (g_c+I1), s		25.8		29.1		20.1		28.5
Green Ext Time (p_c), s		8.4		2.4		6.3		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	86	975	84	213	1147	92	112	551	428	157	674	174
Future Volume (veh/h)	86	975	84	213	1147	92	112	551	428	157	674	174
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	88	995	86	217	1170	94	114	562	437	160	688	178
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	111	1263	371	247	1554	125	139	1385	604	153	1413	617
Arrive On Green	0.06	0.25	0.25	0.14	0.33	0.33	0.08	0.40	0.40	0.09	0.40	0.40
Sat Flow, veh/h	1757	5036	1478	1757	4733	380	1757	3505	1530	1757	3505	1530
Grp Volume(v), veh/h	88	995	86	217	830	434	114	562	437	160	688	178
Grp Sat Flow(s),veh/h/ln	1757	1679	1478	1757	1679	1756	1757	1752	1530	1757	1752	1530
Q Serve(g_s), s	6.3	23.3	5.9	15.3	27.9	27.9	8.1	14.6	30.6	11.0	18.4	9.9
Cycle Q Clear(g_c), s	6.3	23.3	5.9	15.3	27.9	27.9	8.1	14.6	30.6	11.0	18.4	9.9
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	1263	371	247	1102	576	139	1385	604	153	1413	617
V/C Ratio(X)	0.79	0.79	0.23	0.88	0.75	0.75	0.82	0.41	0.72	1.05	0.49	0.29
Avail Cap(c_a), veh/h	264	1672	491	430	1433	749	208	1385	604	153	1413	617
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	44.3	37.7	53.3	37.9	37.9	57.4	27.6	32.4	57.8	28.0	25.5
Incr Delay (d2), s/veh	11.9	1.9	0.3	9.9	1.7	3.2	14.6	0.9	7.3	86.0	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	11.0	2.4	8.1	13.2	14.0	4.5	7.3	14.2	9.0	9.1	4.4
LnGrp Delay(d), s/veh	70.4	46.1	38.0	63.2	39.6	41.1	72.0	28.4	39.7	143.9	29.2	26.7
LnGrp LOS	E	D	D	E	D	D	E	C	D	F	C	C
Approach Vol, veh/h		1169			1481			1113			1026	
Approach Delay, s/veh		47.4			43.5			37.3			46.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	54.0	21.8	35.7	14.0	55.0	12.0	45.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	50.0	31.0	42.0	15.0	46.0	19.0	54.0
Max Q Clear Time (g_c+I1), s	13.0	32.6	17.3	25.3	10.1	20.4	8.3	29.9
Green Ext Time (p_c), s	0.0	4.9	0.5	6.4	0.1	5.2	0.1	9.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	8	1507	58	22	1386	1	92	0	101	0	0	1
Future Volume (veh/h)	8	1507	58	22	1386	1	92	0	101	0	0	1
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	8	1538	59	22	1414	1	94	0	103	0	0	1
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	247	2423	93	213	2914	2	546	0	504	0	0	497
Arrive On Green	0.49	0.49	0.49	0.02	0.57	0.57	0.33	0.00	0.33	0.00	0.00	0.33
Sat Flow, veh/h	371	4922	189	1740	5148	4	1380	0	1549	0	0	1527
Grp Volume(v), veh/h	8	1039	558	22	913	502	94	0	103	0	0	1
Grp Sat Flow(s),veh/h/ln	371	1663	1785	1740	1663	1826	1380	0	1549	0	0	1527
Q Serve(g_s), s	1.0	17.0	17.0	0.4	12.1	12.1	3.6	0.0	3.5	0.0	0.0	0.0
Cycle Q Clear(g_c), s	7.6	17.0	17.0	0.4	12.1	12.1	3.7	0.0	3.5	0.0	0.0	0.0
Prop In Lane	1.00		0.11	1.00		0.00	1.00		1.00	0.00		1.00
Lane Grp Cap(c), veh/h	247	1637	879	213	1883	1034	546	0	504	0	0	497
V/C Ratio(X)	0.03	0.63	0.63	0.10	0.49	0.49	0.17	0.00	0.20	0.00	0.00	0.00
Avail Cap(c_a), veh/h	597	4778	2566	368	5319	2922	546	0	504	0	0	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	13.5	13.8	13.8	10.6	9.6	9.6	18.0	0.0	18.0	0.0	0.0	16.8
Incr Delay (d2), s/veh	0.1	0.4	0.8	0.2	0.2	0.4	0.7	0.0	0.9	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.1	7.9	8.6	0.2	5.5	6.1	1.5	0.0	1.6	0.0	0.0	0.0
LnGrp Delay(d), s/veh	13.5	14.2	14.6	10.8	9.8	9.9	18.7	0.0	18.9	0.0	0.0	16.8
LnGrp LOS	B	B	B	B	A	A	B		B			B
Approach Vol, veh/h		1605			1437			197			1	
Approach Delay, s/veh		14.4			9.8			18.8			16.8	
Approach LOS		B			A			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		28.0	5.5	40.3		28.0		45.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		24.0	8.0	106.0		24.0		118.0
Max Q Clear Time (g_c+I1), s		5.7	2.4	19.0		2.0		14.1
Green Ext Time (p_c), s		0.8	0.0	17.3		0.0		13.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	52	1196	187	45	787	41	106	370	72	60	471	132
Future Volume (veh/h)	52	1196	187	45	787	41	106	370	72	60	471	132
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	57	1314	205	49	865	45	116	407	79	66	518	145
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	274	1793	802	136	1793	791	276	1471	649	370	1134	316
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	605	3505	1567	339	3505	1547	762	3505	1546	897	2700	752
Grp Volume(v), veh/h	57	1314	205	49	865	45	116	407	79	66	335	328
Grp Sat Flow(s),veh/h/ln	605	1752	1567	339	1752	1547	762	1752	1546	897	1752	1700
Q Serve(g_s), s	7.9	34.2	8.6	15.4	18.7	1.7	15.1	8.9	3.6	6.1	16.0	16.2
Cycle Q Clear(g_c), s	26.6	34.2	8.6	49.6	18.7	1.7	31.3	8.9	3.6	15.0	16.0	16.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	274	1793	802	136	1793	791	276	1471	649	370	736	714
V/C Ratio(X)	0.21	0.73	0.26	0.36	0.48	0.06	0.42	0.28	0.12	0.18	0.46	0.46
Avail Cap(c_a), veh/h	447	2793	1249	232	2793	1233	276	1471	649	370	736	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.1	22.3	16.0	41.6	18.5	14.3	35.6	22.2	20.7	27.1	24.3	24.3
Incr Delay (d2), s/veh	0.4	0.6	0.2	1.6	0.2	0.0	4.7	0.5	0.4	1.1	2.0	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	16.6	3.7	1.5	9.1	0.7	3.5	4.4	1.6	1.6	8.1	8.0
LnGrp Delay(d), s/veh	27.5	22.9	16.2	43.2	18.7	14.4	40.2	22.7	21.1	28.2	26.3	26.5
LnGrp LOS	C	C	B	D	B	B	D	C	C	C	C	C
Approach Vol, veh/h		1576			959			602			729	
Approach Delay, s/veh		22.2			19.7			25.9			26.6	
Approach LOS		C			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		63.7		53.0		63.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		33.3		36.2		18.2		51.6
Green Ext Time (p_c), s		3.2		15.2		4.6		8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	115	1365	41	22	1200	131	88	54	15	226	43	86
Future Volume (veh/h)	115	1365	41	22	1200	131	88	54	15	226	43	86
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	128	1517	46	24	1333	146	98	60	17	251	48	96
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	157	2286	69	33	1768	194	452	470	398	577	614	514
Arrive On Green	0.09	0.46	0.46	0.02	0.39	0.39	0.04	0.26	0.26	0.12	0.34	0.34
Sat Flow, veh/h	1740	4972	151	1740	4549	498	1740	1827	1549	1740	1827	1529
Grp Volume(v), veh/h	128	1015	548	24	974	505	98	60	17	251	48	96
Grp Sat Flow(s),veh/h/ln	1740	1663	1797	1740	1663	1723	1740	1827	1549	1740	1827	1529
Q Serve(g_s), s	8.2	26.8	26.8	1.6	28.7	28.7	4.7	2.9	0.9	11.5	2.0	5.0
Cycle Q Clear(g_c), s	8.2	26.8	26.8	1.6	28.7	28.7	4.7	2.9	0.9	11.5	2.0	5.0
Prop In Lane	1.00		0.08	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	1529	827	33	1292	669	452	470	398	577	614	514
V/C Ratio(X)	0.82	0.66	0.66	0.74	0.75	0.75	0.22	0.13	0.04	0.44	0.08	0.19
Avail Cap(c_a), veh/h	308	2527	1366	77	2086	1081	452	470	398	686	614	514
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	23.8	23.8	55.2	29.9	29.9	29.3	32.3	31.6	24.1	25.6	26.6
Incr Delay (d2), s/veh	9.9	0.5	0.9	27.2	0.9	1.8	0.2	0.6	0.2	0.5	0.2	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	12.4	13.5	1.0	13.3	13.9	2.3	1.5	0.4	5.5	1.1	2.2
LnGrp Delay(d), s/veh	60.5	24.3	24.7	82.4	30.8	31.7	29.5	32.8	31.8	24.6	25.9	27.4
LnGrp LOS	E	C	C	F	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1691			1503			175			395	
Approach Delay, s/veh		27.1			31.9			30.9			25.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	33.1	6.1	56.0	9.0	42.0	14.2	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	22.0	5.0	86.0	5.0	38.0	20.0	71.0
Max Q Clear Time (g_c+I1), s	13.5	4.9	3.6	28.8	6.7	7.0	10.2	30.7
Green Ext Time (p_c), s	0.4	0.2	0.0	15.5	0.0	0.5	0.2	13.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	496	1034	113	58	887	32	121	59	31	8	33	284
Future Volume (veh/h)	496	1034	113	58	887	32	121	59	31	8	33	284
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	551	1149	126	64	986	36	134	66	34	9	37	316
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	609	1824	200	83	1318	48	510	838	701	614	838	1249
Arrive On Green	0.18	0.40	0.40	0.05	0.26	0.26	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	3408	4604	505	1757	4984	182	1012	1845	1543	1274	1845	2750
Grp Volume(v), veh/h	551	838	437	64	664	358	134	66	34	9	37	316
Grp Sat Flow(s),veh/h/ln	1704	1679	1751	1757	1679	1808	1012	1845	1543	1274	1845	1375
Q Serve(g_s), s	18.5	23.4	23.5	4.2	21.2	21.2	9.9	2.4	1.4	0.5	1.3	8.3
Cycle Q Clear(g_c), s	18.5	23.4	23.5	4.2	21.2	21.2	11.2	2.4	1.4	2.8	1.3	8.3
Prop In Lane	1.00		0.29	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	609	1330	694	83	888	478	510	838	701	614	838	1249
V/C Ratio(X)	0.90	0.63	0.63	0.78	0.75	0.75	0.26	0.08	0.05	0.01	0.04	0.25
Avail Cap(c_a), veh/h	642	2014	1050	226	1812	976	510	838	701	614	838	1249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	28.4	28.4	55.0	39.4	39.4	20.9	18.0	17.8	18.8	17.7	19.6
Incr Delay (d2), s/veh	15.9	0.5	1.0	14.3	1.3	2.4	1.3	0.2	0.1	0.0	0.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.9	11.5	2.4	9.9	10.9	2.9	1.3	0.6	0.2	0.7	3.2
LnGrp Delay(d), s/veh	62.9	28.9	29.3	69.3	40.6	41.8	22.1	18.2	17.9	18.9	17.8	20.1
LnGrp LOS	E	C	C	E	D	D	C	B	B	B	B	C
Approach Vol, veh/h		1826			1086			234			362	
Approach Delay, s/veh		39.2			42.7			20.4			19.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	9.5	50.2		57.0	24.9	34.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	15.0	70.0		53.0	22.0	63.0
Max Q Clear Time (g_c+I1), s		13.2	6.2	25.5		10.3	20.5	23.2
Green Ext Time (p_c), s		1.2	0.1	10.8		1.5	0.4	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.0
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	188	727	115	209	562	87	178	969	126	180	820	232
Future Volume (veh/h)	188	727	115	209	562	87	178	969	126	180	820	232
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	192	742	117	213	573	89	182	989	129	184	837	237
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	224	1216	531	244	1257	547	178	1293	168	193	1152	324
Arrive On Green	0.12	0.34	0.34	0.14	0.35	0.35	0.10	0.28	0.28	0.11	0.29	0.29
Sat Flow, veh/h	1792	3574	1559	1792	3574	1556	1792	4576	595	1792	3960	1113
Grp Volume(v), veh/h	192	742	117	213	573	89	182	739	379	184	723	351
Grp Sat Flow(s),veh/h/ln	1792	1787	1559	1792	1787	1556	1792	1712	1747	1792	1712	1649
Q Serve(g_s), s	12.7	20.8	6.4	14.0	14.9	4.7	12.0	23.8	23.9	12.3	22.9	23.1
Cycle Q Clear(g_c), s	12.7	20.8	6.4	14.0	14.9	4.7	12.0	23.8	23.9	12.3	22.9	23.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.34	1.00		0.67
Lane Grp Cap(c), veh/h	224	1216	531	244	1257	547	178	968	494	193	996	480
V/C Ratio(X)	0.86	0.61	0.22	0.87	0.46	0.16	1.02	0.76	0.77	0.95	0.73	0.73
Avail Cap(c_a), veh/h	431	1216	531	387	1257	547	178	1535	783	193	1563	753
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	33.1	28.3	51.0	30.1	26.9	54.2	39.5	39.6	53.4	38.4	38.5
Incr Delay (d2), s/veh	9.2	2.3	1.0	12.2	1.2	0.6	72.7	1.3	2.5	50.8	1.0	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	10.7	2.9	7.8	7.5	2.1	9.5	11.5	11.9	8.8	11.0	10.8
LnGrp Delay(d), s/veh	60.8	35.4	29.3	63.2	31.3	27.5	127.1	40.8	42.1	104.2	39.4	40.7
LnGrp LOS	E	D	C	E	C	C	F	D	D	F	D	D
Approach Vol, veh/h		1051			875			1300			1258	
Approach Delay, s/veh		39.3			38.7			53.3			49.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	45.0	17.0	38.0	19.1	46.4	16.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	41.0	13.0	54.0	29.0	38.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	16.0	22.8	14.3	25.9	14.7	16.9	14.0	25.1
Green Ext Time (p_c), s	0.4	5.2	0.0	8.1	0.4	4.0	0.0	8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	186	1071	119	124	557	36	100	796	206	90	636	115
Future Volume (veh/h)	186	1071	119	124	557	36	100	796	206	90	636	115
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	192	1104	123	128	574	37	103	821	212	93	656	119
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	176	1293	573	153	1247	546	313	1434	636	231	1365	597
Arrive On Green	0.10	0.36	0.36	0.09	0.35	0.35	0.05	0.40	0.40	0.03	0.38	0.38
Sat Flow, veh/h	1792	3574	1584	1792	3574	1564	1792	3574	1585	1792	3574	1563
Grp Volume(v), veh/h	192	1104	123	128	574	37	103	821	212	93	656	119
Grp Sat Flow(s),veh/h/ln	1792	1787	1584	1792	1787	1564	1792	1787	1585	1792	1787	1563
Q Serve(g_s), s	13.0	37.7	7.1	9.3	16.5	2.1	4.5	23.6	12.2	4.0	18.4	6.7
Cycle Q Clear(g_c), s	13.0	37.7	7.1	9.3	16.5	2.1	4.5	23.6	12.2	4.0	18.4	6.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	176	1293	573	153	1247	546	313	1434	636	231	1365	597
V/C Ratio(X)	1.09	0.85	0.21	0.83	0.46	0.07	0.33	0.57	0.33	0.40	0.48	0.20
Avail Cap(c_a), veh/h	176	1623	720	231	1732	758	455	1434	636	231	1365	597
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	59.6	38.9	29.2	59.5	33.3	28.7	23.9	30.7	27.3	27.0	30.9	27.3
Incr Delay (d2), s/veh	93.5	3.8	0.2	14.9	0.3	0.1	0.6	1.7	1.4	1.1	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	19.2	3.1	5.3	8.2	0.9	2.3	12.0	5.6	2.1	9.3	3.0
LnGrp Delay(d), s/veh	153.1	42.8	29.4	74.3	33.6	28.7	24.5	32.4	28.8	28.1	32.1	28.1
LnGrp LOS	F	D	C	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1419			739			1136			868	
Approach Delay, s/veh		56.5			40.4			31.0			31.1	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	57.0	15.3	51.8	10.5	54.5	17.0	50.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	53.0	17.0	60.0	17.0	40.0	13.0	64.0
Max Q Clear Time (g_c+I1), s	6.0	25.6	11.3	39.7	6.5	20.4	15.0	18.5
Green Ext Time (p_c), s	0.0	7.0	0.1	8.1	0.2	4.7	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	79	451	21	203	289	89	32	1006	339	105	649	65
Future Volume (veh/h)	79	451	21	203	289	89	32	1006	339	105	649	65
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	87	496	23	223	318	98	35	1105	373	115	713	71
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	374	1376	606	311	1376	614	362	1970	867	183	1970	867
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	976	3574	1576	887	3574	1597	694	3574	1573	359	3574	1573
Grp Volume(v), veh/h	87	496	23	223	318	98	35	1105	373	115	713	71
Grp Sat Flow(s),veh/h/ln	976	1787	1576	887	1787	1597	694	1787	1573	359	1787	1573
Q Serve(g_s), s	8.3	12.4	1.1	30.0	7.5	5.0	3.7	25.1	17.5	38.2	14.0	2.7
Cycle Q Clear(g_c), s	15.8	12.4	1.1	42.4	7.5	5.0	17.7	25.1	17.5	63.4	14.0	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	374	1376	606	311	1376	614	362	1970	867	183	1970	867
V/C Ratio(X)	0.23	0.36	0.04	0.72	0.23	0.16	0.10	0.56	0.43	0.63	0.36	0.08
Avail Cap(c_a), veh/h	568	2084	919	487	2084	931	362	1970	867	183	1970	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	27.5	24.0	42.6	26.0	25.2	20.7	18.2	16.5	38.8	15.7	13.2
Incr Delay (d2), s/veh	0.3	0.2	0.0	3.1	0.1	0.1	0.5	1.2	1.6	15.1	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.2	0.5	7.6	3.7	2.2	0.8	12.6	7.9	4.6	7.0	1.2
LnGrp Delay(d), s/veh	31.6	27.7	24.1	45.7	26.1	25.4	21.2	19.4	18.1	53.9	16.3	13.4
LnGrp LOS	C	C	C	D	C	C	C	B	B	D	B	B
Approach Vol, veh/h		606			639			1513			899	
Approach Delay, s/veh		28.1			32.8			19.1			20.9	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		52.2		73.0		52.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		27.1		17.8		65.4		44.4
Green Ext Time (p_c), s		12.9		4.0		2.1		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	96	866	138	122	721	119	188	1150	106	106	729	61
Future Volume (veh/h)	96	866	138	122	721	119	188	1150	106	106	729	61
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	104	941	150	133	784	129	204	1250	115	115	792	66
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	127	1092	173	159	1167	190	389	1772	780	222	1665	742
Arrive On Green	0.07	0.25	0.25	0.09	0.27	0.27	0.07	0.50	0.50	0.04	0.47	0.47
Sat Flow, veh/h	1774	4408	700	1774	4391	716	1774	3539	1557	1774	3539	1577
Grp Volume(v), veh/h	104	723	368	133	604	309	204	1250	115	115	792	66
Grp Sat Flow(s),veh/h/ln	1774	1695	1718	1774	1695	1717	1774	1770	1557	1774	1770	1577
Q Serve(g_s), s	7.9	27.7	27.9	10.0	21.6	21.9	7.8	37.0	5.4	4.6	20.7	3.1
Cycle Q Clear(g_c), s	7.9	27.7	27.9	10.0	21.6	21.9	7.8	37.0	5.4	4.6	20.7	3.1
Prop In Lane	1.00		0.41	1.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	127	839	425	159	901	456	389	1772	780	222	1665	742
V/C Ratio(X)	0.82	0.86	0.87	0.84	0.67	0.68	0.52	0.71	0.15	0.52	0.48	0.09
Avail Cap(c_a), veh/h	157	924	468	301	1198	607	505	1772	780	222	1665	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	48.8	48.9	60.8	44.5	44.6	17.7	26.2	18.3	22.7	24.5	19.9
Incr Delay (d2), s/veh	23.7	7.8	14.6	10.9	0.9	1.9	1.1	2.4	0.4	2.1	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	13.9	14.9	5.4	10.3	10.6	3.9	18.6	2.4	2.4	10.3	1.4
LnGrp Delay(d), s/veh	85.9	56.6	63.5	71.8	45.4	46.5	18.8	28.5	18.7	24.8	25.5	20.1
LnGrp LOS	F	E	E	E	D	D	B	C	B	C	C	C
Approach Vol, veh/h		1195			1046			1569			973	
Approach Delay, s/veh		61.3			49.1			26.5			25.1	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	72.0	16.2	37.6	14.1	67.9	13.7	40.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	68.0	23.0	37.0	19.0	55.0	12.0	48.0
Max Q Clear Time (g_c+I1), s	6.6	39.0	12.0	29.9	9.8	22.7	9.9	23.9
Green Ext Time (p_c), s	0.0	10.5	0.2	3.8	0.4	6.3	0.0	6.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	68	1003	370	150	520	100	187	1136	39	227	985	110
Future Volume (veh/h)	68	1003	370	150	520	100	187	1136	39	227	985	110
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	70	1034	381	155	536	103	193	1171	0	234	1015	113
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	294	1220	544	195	1126	215	167	1710	0	263	1812	201
Arrive On Green	0.03	0.34	0.34	0.06	0.38	0.38	0.09	0.33	0.00	0.15	0.39	0.39
Sat Flow, veh/h	1792	3574	1595	1792	2986	571	1792	5305	0	1792	4687	521
Grp Volume(v), veh/h	70	1034	381	155	320	319	193	1171	0	234	741	387
Grp Sat Flow(s),veh/h/ln	1792	1787	1595	1792	1787	1770	1792	1712	0	1792	1712	1784
Q Serve(g_s), s	3.6	37.4	28.9	7.7	19.0	19.1	13.0	27.5	0.0	17.9	23.7	23.7
Cycle Q Clear(g_c), s	3.6	37.4	28.9	7.7	19.0	19.1	13.0	27.5	0.0	17.9	23.7	23.7
Prop In Lane	1.00		1.00	1.00		0.32	1.00		0.00	1.00		0.29
Lane Grp Cap(c), veh/h	294	1220	544	195	674	668	167	1710	0	263	1324	690
V/C Ratio(X)	0.24	0.85	0.70	0.80	0.47	0.48	1.16	0.68	0.00	0.89	0.56	0.56
Avail Cap(c_a), veh/h	294	1484	662	195	806	798	167	1710	0	539	1324	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.6	42.6	39.8	33.6	33.0	33.1	63.3	40.3	0.0	58.5	33.5	33.6
Incr Delay (d2), s/veh	0.4	4.1	2.5	20.0	0.5	0.5	118.3	2.3	0.0	9.9	1.7	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	19.2	13.1	4.9	9.4	9.4	11.9	13.4	0.0	9.6	11.5	12.4
LnGrp Delay(d), s/veh	30.0	46.7	42.3	53.6	33.5	33.6	181.7	42.5	0.0	68.4	35.2	36.8
LnGrp LOS	C	D	D	D	C	C	F	D		E	D	D
Approach Vol, veh/h		1485			794			1364			1362	
Approach Delay, s/veh		44.8			37.5			62.2			41.4	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	58.0	13.0	51.7	24.5	50.5	8.0	56.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	9.0	58.0	42.0	25.0	4.0	63.0
Max Q Clear Time (g_c+I1), s	15.0	25.7	9.7	39.4	19.9	29.5	5.6	21.1
Green Ext Time (p_c), s	0.0	7.9	0.0	8.2	0.6	0.0	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1460	60	20	1040	420	100	210	40	0	0	0
Future Volume (veh/h)	260	1460	60	20	1040	420	100	210	40	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	283	1587	65	22	1130	457	109	228	43			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	343	3642	149	32	3282	1022	149	336	215			
Arrive On Green	0.10	0.73	0.73	0.02	0.65	0.65	0.14	0.14	0.14			
Sat Flow, veh/h	3442	5012	205	1774	5085	1583	1100	2478	1583			
Grp Volume(v), veh/h	283	1073	579	22	1130	457	179	158	43			
Grp Sat Flow(s),veh/h/ln	1721	1695	1827	1774	1695	1583	1808	1770	1583			
Q Serve(g_s), s	8.1	12.7	12.7	1.2	10.2	14.5	9.6	8.5	2.4			
Cycle Q Clear(g_c), s	8.1	12.7	12.7	1.2	10.2	14.5	9.6	8.5	2.4			
Prop In Lane	1.00		0.11	1.00		1.00	0.61		1.00			
Lane Grp Cap(c), veh/h	343	2464	1327	32	3282	1022	245	240	215			
V/C Ratio(X)	0.83	0.44	0.44	0.68	0.34	0.45	0.73	0.66	0.20			
Avail Cap(c_a), veh/h	343	2464	1327	177	3695	1151	990	969	867			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	44.4	5.5	5.5	49.0	8.1	8.9	41.7	41.2	38.6			
Incr Delay (d2), s/veh	15.2	0.6	1.0	22.0	0.1	0.3	4.2	3.1	0.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.6	6.0	6.7	0.8	4.7	6.3	5.1	4.4	1.1			
LnGrp Delay(d), s/veh	59.6	6.1	6.5	71.0	8.2	9.2	45.8	44.3	39.0			
LnGrp LOS	E	A	A	E	A	A	D	D	D			
Approach Vol, veh/h		1935			1609			380				
Approach Delay, s/veh		14.0			9.3			44.4				
Approach LOS		B			A			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	5.8	77.0			14.0	68.8		17.6
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	73.0			10.0	73.0		55.0
Max Q Clear Time (g_c+I1), s	3.2	14.7			10.1	16.5		11.6
Green Ext Time (p_c), s	0.0	17.1			0.0	13.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1230	220	230	1130	0	0	0	0	330	10	50
Future Volume (vph)	0	1230	220	230	1130	0	0	0	0	330	10	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3238	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3238	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1337	239	250	1228	0	0	0	0	359	11	54
RTOR Reduction (vph)	0	0	63	0	0	0	0	0	0	0	0	46
Lane Group Flow (vph)	0	1337	176	250	1228	0	0	0	0	179	191	8
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		81.7	81.7	13.5	99.2					19.5	19.5	19.5
Effective Green, g (s)		81.7	81.7	13.5	99.2					19.5	19.5	19.5
Actuated g/C Ratio		0.64	0.64	0.11	0.78					0.15	0.15	0.15
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		3278	1020	365	3981					247	498	243
v/s Ratio Prot		c0.26		c0.07	0.24					c0.11	0.06	
v/s Ratio Perm			0.11									0.01
v/c Ratio		0.41	0.17	0.68	0.31					0.72	0.38	0.03
Uniform Delay, d1		10.8	9.0	54.6	3.9					51.0	48.2	45.6
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.3	0.2					10.1	0.5	0.1
Delay (s)		10.9	9.1	59.8	4.1					61.1	48.7	45.6
Level of Service		B	A	E	A					E	D	D
Approach Delay (s/veh)		10.6			13.6			0.0			53.5	
Approach LOS		B			B			A			D	

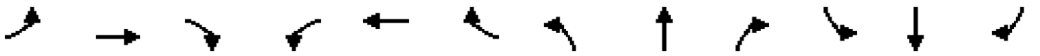
Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	126.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	10	20	100	290	270	420	0	0	1170	60
Future Volume (veh/h)	40	0	10	20	100	290	270	420	0	0	1170	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	11	22	109	315	293	457	0	0	1272	65
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	73	774	371	379	3437	0	0	2580	132
Arrive On Green	0.00	0.00	0.00	0.23	0.23	0.23	0.11	0.68	0.00	0.00	0.52	0.52
Sat Flow, veh/h		0		310	3307	1583	3442	5253	0	0	5123	253
Grp Volume(v), veh/h		0.0		131	0	315	293	457	0	0	870	467
Grp Sat Flow(s),veh/h/ln				1847	1770	1583	1721	1695	0	0	1695	1818
Q Serve(g_s), s				5.2	0.0	16.9	7.4	2.8	0.0	0.0	14.7	14.7
Cycle Q Clear(g_c), s				5.2	0.0	16.9	7.4	2.8	0.0	0.0	14.7	14.7
Prop In Lane				0.17		1.00	1.00		0.00	0.00		0.14
Lane Grp Cap(c), veh/h				432	414	371	379	3437	0	0	1765	947
V/C Ratio(X)				0.30	0.00	0.85	0.77	0.13	0.00	0.00	0.49	0.49
Avail Cap(c_a), veh/h				1436	1375	1231	543	3437	0	0	1765	947
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				28.0	0.0	32.5	38.4	5.1	0.0	0.0	13.7	13.7
Incr Delay (d2), s/veh				0.4	0.0	5.5	4.3	0.1	0.0	0.0	1.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				2.7	0.0	7.9	3.7	1.3	0.0	0.0	7.0	7.7
LnGrp Delay(d), s/veh				28.4	0.0	38.0	42.8	5.2	0.0	0.0	14.7	15.6
LnGrp LOS				C	A	D	D	A			B	B
Approach Vol, veh/h					446			750			1337	
Approach Delay, s/veh					35.2			19.9			15.0	
Approach LOS					D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		64.0			13.8	50.2		24.8
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		60.0			14.0	42.0		69.0
Max Q Clear Time (g_c+I1), s		4.8			9.4	16.7		18.9
Green Ext Time (p_c), s		3.4			0.4	10.1		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	10	230	0	0	0	0	690	100	380	810	0
Future Volume (vph)	20	10	230	0	0	0	0	690	100	380	810	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.86	0.85					0.98		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2923	1441					4989		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2923	1441					4989		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	22	11	250	0	0	0	0	750	109	413	880	0
RTOR Reduction (vph)	0	118	118	0	0	0	0	7	0	0	0	0
Lane Group Flow (vph)	22	18	7	0	0	0	0	852	0	413	880	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	8.1	8.1	8.1					99.5		22.5	126.0	
Effective Green, g (s)	8.1	8.1	8.1					99.5		22.5	126.0	
Actuated g/C Ratio	0.06	0.06	0.06					0.70		0.16	0.89	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	100	166	82					3493		543	4508	
v/s Ratio Prot	c0.01	0.01						c0.17		c0.12	0.17	
v/s Ratio Perm			0.00									
v/c Ratio	0.22	0.11	0.09					0.24		0.76	0.20	
Uniform Delay, d1	64.0	63.6	63.5					7.7		57.2	1.1	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.1	0.3	0.5					0.2		6.2	0.1	
Delay (s)	65.1	63.9	64.0					7.9		63.4	1.2	
Level of Service	E	E	E					A		E	A	
Approach Delay (s/veh)		64.0			0.0			7.9			21.1	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	142.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	39.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	93	1120	131	34	856	32	159	326	55	45	349	62
Future Volume (veh/h)	93	1120	131	34	856	32	159	326	55	45	349	62
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	99	1191	139	36	911	34	169	347	59	48	371	66
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1978	231	166	2157	80	469	1485	250	486	1476	260
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	591	4610	538	410	5029	187	947	3025	509	975	3007	530
Grp Volume(v), veh/h	99	876	454	36	614	331	169	201	205	48	217	220
Grp Sat Flow(s),veh/h/ln	591	1695	1757	410	1695	1826	947	1770	1764	975	1770	1768
Q Serve(g_s), s	14.0	19.9	19.9	7.4	12.6	12.6	12.6	6.5	6.7	3.0	7.1	7.2
Cycle Q Clear(g_c), s	26.7	19.9	19.9	27.3	12.6	12.6	19.8	6.5	6.7	9.6	7.1	7.2
Prop In Lane	1.00		0.31	1.00		0.10	1.00		0.29	1.00		0.30
Lane Grp Cap(c), veh/h	251	1454	754	166	1454	783	469	869	866	486	869	868
V/C Ratio(X)	0.39	0.60	0.60	0.22	0.42	0.42	0.36	0.23	0.24	0.10	0.25	0.25
Avail Cap(c_a), veh/h	548	3158	1637	373	3158	1701	469	869	866	486	869	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	21.9	21.9	32.4	19.9	19.9	20.5	14.6	14.6	17.4	14.7	14.8
Incr Delay (d2), s/veh	1.0	0.4	0.8	0.6	0.2	0.4	2.2	0.6	0.6	0.4	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	9.3	9.8	0.9	5.9	6.4	3.6	3.3	3.4	0.9	3.6	3.7
LnGrp Delay(d), s/veh	30.2	22.3	22.7	33.1	20.1	20.2	22.7	15.2	15.3	17.8	15.4	15.5
LnGrp LOS	C	C	C	C	C	C	C	B	B	B	B	B
Approach Vol, veh/h		1429			981			575			485	
Approach Delay, s/veh		23.0			20.6			17.4			15.7	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		46.8		53.0		46.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		93.0		49.0		93.0
Max Q Clear Time (g_c+I1), s		21.8		28.7		11.6		29.3
Green Ext Time (p_c), s		3.3		14.2		2.8		8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	74	40	33	210	65	219	18	248	81	136	491	66
Future Volume (veh/h)	74	40	33	210	65	219	18	248	81	136	491	66
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	84	45	38	239	74	249	20	282	92	155	558	75
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	270	144	109	297	80	269	414	1419	452	540	1917	831
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	559	352	269	633	196	659	806	2673	851	1022	3610	1566
Grp Volume(v), veh/h	167	0	0	562	0	0	20	188	186	155	558	75
Grp Sat Flow(s),veh/h/ln	1180	0	0	1488	0	0	806	1805	1718	1022	1805	1566
Q Serve(g_s), s	0.0	0.0	0.0	35.0	0.0	0.0	1.8	7.1	7.4	12.2	11.1	3.1
Cycle Q Clear(g_c), s	11.9	0.0	0.0	46.9	0.0	0.0	13.0	7.1	7.4	19.6	11.1	3.1
Prop In Lane	0.50		0.23	0.43		0.44	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	522	0	0	646	0	0	414	959	913	540	1917	831
V/C Ratio(X)	0.32	0.00	0.00	0.87	0.00	0.00	0.05	0.20	0.20	0.29	0.29	0.09
Avail Cap(c_a), veh/h	728	0	0	878	0	0	414	959	913	540	1917	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.0	0.0	0.0	37.0	0.0	0.0	20.5	15.9	16.0	21.2	16.9	15.0
Incr Delay (d2), s/veh	0.3	0.0	0.0	7.3	0.0	0.0	0.2	0.5	0.5	1.3	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	20.5	0.0	0.0	0.4	3.6	3.6	3.6	5.6	1.4
LnGrp Delay(d), s/veh	26.4	0.0	0.0	44.2	0.0	0.0	20.7	16.4	16.5	22.5	17.3	15.2
LnGrp LOS	C			D			C	B	B	C	B	B
Approach Vol, veh/h		167			562			394			788	
Approach Delay, s/veh		26.4			44.2			16.7			18.1	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		56.9		73.0		56.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		73.0		69.0		73.0
Max Q Clear Time (g_c+I1), s		15.0		13.9		21.6		48.9
Green Ext Time (p_c), s		2.4		1.3		5.1		4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	35	125	10	124	260	153	45	742	135	73	1117	78
Future Volume (veh/h)	35	125	10	124	260	153	45	742	135	73	1117	78
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	40	142	11	141	295	174	51	843	153	83	1269	89
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	70	233	16	232	484	404	259	2442	1061	386	2442	1062
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	148	906	64	1241	1881	1569	403	3574	1552	569	3574	1554
Grp Volume(v), veh/h	193	0	0	141	295	174	51	843	153	83	1269	89
Grp Sat Flow(s),veh/h/ln	1117	0	0	1241	1881	1569	403	1787	1552	569	1787	1554
Q Serve(g_s), s	6.6	0.0	0.0	4.9	18.6	12.5	9.6	13.2	4.7	9.5	23.5	2.6
Cycle Q Clear(g_c), s	25.2	0.0	0.0	30.1	18.6	12.5	33.1	13.2	4.7	22.7	23.5	2.6
Prop In Lane	0.21		0.06	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	320	0	0	232	484	404	259	2442	1061	386	2442	1062
V/C Ratio(X)	0.60	0.00	0.00	0.61	0.61	0.43	0.20	0.35	0.14	0.21	0.52	0.08
Avail Cap(c_a), veh/h	495	0	0	373	699	583	259	2442	1061	386	2442	1062
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	0.0	0.0	50.8	44.0	41.8	18.6	8.8	7.5	13.6	10.5	7.2
Incr Delay (d2), s/veh	1.8	0.0	0.0	2.6	1.2	0.7	1.7	0.4	0.3	1.3	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.8	0.0	0.0	5.2	9.8	5.5	1.2	6.6	2.1	1.6	11.7	1.2
LnGrp Delay(d), s/veh	47.2	0.0	0.0	53.4	45.3	42.5	20.3	9.2	7.8	14.8	11.3	7.3
LnGrp LOS	D			D	D	D	C	A	A	B	B	A
Approach Vol, veh/h		193			610			1047			1441	
Approach Delay, s/veh		47.2			46.4			9.6			11.2	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		38.6		96.0		38.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		35.1		27.2		25.5		32.1
Green Ext Time (p_c), s		8.7		1.1		15.2		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	820	410	760	520	0	0	0	0	290	0	420
Future Volume (veh/h)	0	820	410	760	520	0	0	0	0	290	0	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	891	446	826	565	0	0	0	0	315	0	457
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	708	331	924	1796	0	0	806	0	1597	0	685
Arrive On Green	0.00	0.21	0.21	0.27	0.51	0.00	0.00	0.00	0.00	0.43	0.00	0.43
Sat Flow, veh/h	0	3558	1583	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	891	446	826	565	0	0	0	0	315	0	457
Grp Sat Flow(s),veh/h/ln	0	1695	1583	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	28.0	28.0	30.9	12.5	0.0	0.0	0.0	0.0	7.7	0.0	30.8
Cycle Q Clear(g_c), s	0.0	28.0	28.0	30.9	12.5	0.0	0.0	0.0	0.0	7.7	0.0	30.8
Prop In Lane	0.00		1.00	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	708	331	924	1796	0	0	806	0	1597	0	685
V/C Ratio(X)	0.00	1.26	1.35	0.89	0.31	0.00	0.00	0.00	0.00	0.20	0.00	0.67
Avail Cap(c_a), veh/h	0	708	331	1336	2219	0	0	806	0	1597	0	685
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	53.0	53.0	47.2	19.3	0.0	0.0	0.0	0.0	23.7	0.0	30.3
Incr Delay (d2), s/veh	0.0	127.2	175.4	5.9	0.1	0.0	0.0	0.0	0.0	0.3	0.0	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	25.6	28.3	15.4	6.1	0.0	0.0	0.0	0.0	3.7	0.0	14.4
LnGrp Delay(d), s/veh	0.0	180.2	228.4	53.0	19.4	0.0	0.0	0.0	0.0	24.0	0.0	35.4
LnGrp LOS		F	F	D	B					C		D
Approach Vol, veh/h		1337			1391			0			772	
Approach Delay, s/veh		196.3			39.4			0.0			30.7	
Approach LOS		F			D						C	

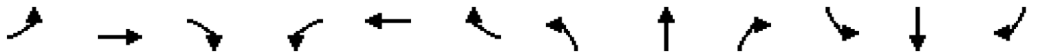
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		62.0	40.0	32.0		62.0		72.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0	52.0	28.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		0.0	32.9	30.0		32.8		14.5
Green Ext Time (p_c), s		0.0	3.0	0.0		4.2		4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	97.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	830	280	180	1080	10	190	10	980	10	10	10
Future Volume (vph)	10	830	280	180	1080	10	190	10	980	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3374	1441	3433	3534		1681	1694	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.77	1.00	0.68	1.00	
Satd. Flow (perm)	1770	3374	1441	3433	3534		1681	1354	2787	1274	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	902	304	196	1174	11	207	11	1065	11	11	11
RTOR Reduction (vph)	0	2	169	0	1	0	0	0	286	0	8	0
Lane Group Flow (vph)	11	930	105	196	1184	0	110	108	779	11	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	0.7	40.5	40.5	11.3	51.1		12.1	41.4	41.4	25.3	25.3	
Effective Green, g (s)	0.7	40.5	40.5	11.3	51.1		12.1	41.4	41.4	25.3	25.3	
Actuated g/C Ratio	0.01	0.38	0.38	0.11	0.49		0.12	0.39	0.39	0.24	0.24	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	11	1298	554	368	1716		193	571	1096	306	414	
v/s Ratio Prot	0.01	0.28		c0.06	c0.34		0.07	0.02			0.01	
v/s Ratio Perm			0.07					0.05	c0.28	0.01		
v/c Ratio	1.00	0.72	0.19	0.53	0.69		0.57	0.19	0.71	0.04	0.03	
Uniform Delay, d1	52.3	27.5	21.5	44.4	20.9		44.1	20.9	26.9	30.6	30.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	271.4	1.9	0.2	1.5	1.2		3.8	0.2	3.9	0.2	0.1	
Delay (s)	323.6	29.4	21.6	45.9	22.1		47.9	21.1	30.8	30.8	30.7	
Level of Service	F	C	C	D	C		D	C	C	C	C	
Approach Delay (s/veh)		30.3			25.5			31.4			30.8	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	10	10	10	70	1170	10	10	220	240
Future Volume (vph)	10	10	10	10	10	10	70	1170	10	10	220	240
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.93			0.96		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00			0.98		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1639			1750		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00			0.92		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1635			1631		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	11	11	11	11	11	76	1272	11	11	239	261
RTOR Reduction (vph)	0	9	0	0	10	0	0	0	3	0	0	77
Lane Group Flow (vph)	10	14	0	0	23	0	76	1272	8	11	239	184
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	1.5	19.0			13.5		9.6	105.4	105.4	1.5	97.3	97.3
Effective Green, g (s)	1.5	19.0			13.5		9.6	105.4	105.4	1.5	97.3	97.3
Actuated g/C Ratio	0.01	0.14			0.10		0.07	0.76	0.76	0.01	0.71	0.71
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	18	225			159		123	2704	1209	19	2497	1116
v/s Ratio Prot	c0.01	0.00					c0.04	c0.36		0.01	0.07	
v/s Ratio Perm		0.01			c0.01				0.01			0.12
v/c Ratio	0.56	0.06			0.15		0.62	0.47	0.01	0.58	0.10	0.17
Uniform Delay, d1	67.9	51.7			56.9		62.4	6.0	3.9	67.9	6.4	6.8
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	32.3	0.1			0.4		8.9	0.6	0.0	36.3	0.1	0.3
Delay (s)	100.2	51.8			57.3		71.3	6.6	3.9	104.2	6.5	7.1
Level of Service	F	D			E		E	A	A	F	A	A
Approach Delay (s/veh)		66.5			57.3			10.2			8.9	
Approach LOS		E			E			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	137.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1620	180	30	1190	140	70	30	220	0	0	0
Future Volume (veh/h)	270	1620	180	30	1190	140	70	30	220	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	293	1761	196	33	1293	152	76	33	239			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	252	2307	252	42	2362	1057	215	93	271			
Arrive On Green	0.07	0.72	0.72	0.02	0.67	0.67	0.17	0.17	0.17			
Sat Flow, veh/h	3442	3219	352	1774	3539	1583	1255	545	1583			
Grp Volume(v), veh/h	293	953	1004	33	1293	152	109	0	239			
Grp Sat Flow(s),veh/h/ln	1721	1770	1801	1774	1770	1583	1800	0	1583			
Q Serve(g_s), s	10.0	45.1	48.6	2.5	26.1	4.8	7.3	0.0	20.1			
Cycle Q Clear(g_c), s	10.0	45.1	48.6	2.5	26.1	4.8	7.3	0.0	20.1			
Prop In Lane	1.00		0.20	1.00		1.00	0.70		1.00			
Lane Grp Cap(c), veh/h	252	1268	1291	42	2362	1057	308	0	271			
V/C Ratio(X)	1.16	0.75	0.78	0.78	0.55	0.14	0.35	0.00	0.88			
Avail Cap(c_a), veh/h	252	1268	1291	247	2362	1057	488	0	430			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.2	11.9	12.4	66.2	11.9	8.3	49.8	0.0	55.1			
Incr Delay (d2), s/veh	107.2	4.1	4.7	25.9	0.9	0.3	0.7	0.0	12.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	8.5	23.2	25.6	1.5	12.9	2.2	3.7	0.0	9.7			
LnGrp Delay(d), s/veh	170.4	16.0	17.0	92.1	12.8	8.6	50.5	0.0	67.3			
LnGrp LOS	F	B	B	F	B	A	D		E			
Approach Vol, veh/h		2250			1478			348				
Approach Delay, s/veh		36.5			14.1			62.1				
Approach LOS		D			B			E				

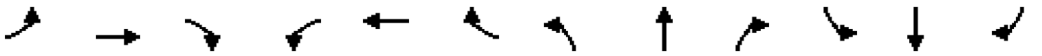
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	7.3	101.7			14.0	95.0		27.4
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	19.0	82.0			10.0	91.0		37.0
Max Q Clear Time (g_c+I1), s	4.5	50.6			12.0	28.1		22.1
Green Ext Time (p_c), s	0.0	19.7			0.0	14.0		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1840	0	0	1340	300	40	10	90	0	0	0
Future Volume (veh/h)	50	1840	0	0	1340	300	40	10	90	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	54	2000	0	0	1457	326	43	11	98			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	98	4319	0	0	3997	1245	144	152	129			
Arrive On Green	0.03	0.85	0.00	0.00	0.79	0.79	0.08	0.08	0.08			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	54	2000	0	0	1457	326	43	11	98			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	1.8	11.3	0.0	0.0	9.9	6.4	2.6	0.6	7.0			
Cycle Q Clear(g_c), s	1.8	11.3	0.0	0.0	9.9	6.4	2.6	0.6	7.0			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	98	4319	0	0	3997	1245	144	152	129			
V/C Ratio(X)	0.55	0.46	0.00	0.00	0.36	0.26	0.30	0.07	0.76			
Avail Cap(c_a), veh/h	119	4319	0	0	3997	1245	676	710	604			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	55.3	2.2	0.0	0.0	3.7	3.3	49.9	49.0	51.9			
Incr Delay (d2), s/veh	4.7	0.4	0.0	0.0	0.3	0.5	1.1	0.2	8.8			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.9	5.3	0.0	0.0	4.7	2.9	1.3	0.3	3.4			
LnGrp Delay(d), s/veh	60.1	2.5	0.0	0.0	4.0	3.8	51.0	49.2	60.7			
LnGrp LOS	E	A			A	A	D	D	E			
Approach Vol, veh/h		2054			1783			152				
Approach Delay, s/veh		4.0			3.9			57.1				
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		102.0			7.3	94.7		13.4
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		98.0			4.0	90.0		44.0
Max Q Clear Time (g_c+I1), s		13.3			3.8	11.9		9.0
Green Ext Time (p_c), s		29.6			0.0	18.4		0.5

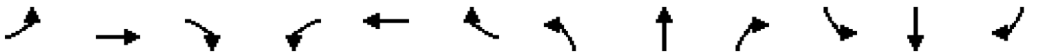
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.0
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1520	320	50	1380	90	100	10	150	120	10	260
Future Volume (vph)	90	1520	320	50	1380	90	100	10	150	120	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.97		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4953		1770	5039		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4953		1770	5039		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1652	348	54	1500	98	109	11	163	130	11	283
RTOR Reduction (vph)	0	17	0	0	3	0	0	0	100	0	0	230
Lane Group Flow (vph)	98	1983	0	54	1595	0	109	11	63	130	11	53
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	9.0	77.3		4.0	72.3		13.0	13.0	13.0	14.1	14.1	23.1
Effective Green, g (s)	9.0	77.3		4.0	72.3		13.0	13.0	13.0	14.1	14.1	23.1
Actuated g/C Ratio	0.07	0.62		0.03	0.58		0.10	0.10	0.10	0.11	0.11	0.19
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	3077		56	2928		184	194	165	200	211	517
v/s Ratio Prot	0.03	c0.40		c0.03	0.32		c0.06	0.01		c0.07	0.01	0.01
v/s Ratio Perm									0.04			0.01
v/c Ratio	0.40	0.64		0.96	0.54		0.59	0.06	0.38	0.65	0.05	0.10
Uniform Delay, d1	55.1	14.9		60.1	16.0		53.2	50.2	51.9	52.8	49.2	42.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.0	1.1		106.5	0.7		5.0	0.1	1.5	7.3	0.1	0.1
Delay (s)	56.1	15.9		166.6	16.7		58.2	50.3	53.4	60.1	49.3	42.1
Level of Service	E	B		F	B		E	D	D	E	D	D
Approach Delay (s/veh)		17.8			21.6			55.1			47.8	
Approach LOS		B			C			E			D	

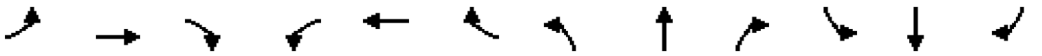
Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	124.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	62.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	236	1652	0	31	1044	810	14	10	22	89	6	130
Future Volume (vph)	236	1652	0	31	1044	810	14	10	22	89	6	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	0.99	0.97		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.96	0.85		0.94			0.97	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98			0.96	1.00
Satd. Flow (prot)	1787	5136		1787	4615	1331		1732			1673	1519
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98			0.96	1.00
Satd. Flow (perm)	1787	5136		1787	4615	1331		1732			1673	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	246	1721	0	32	1088	844	15	10	23	93	6	135
RTOR Reduction (vph)	0	0	0	0	43	244	0	20	0	0	6	99
Lane Group Flow (vph)	246	1721	0	32	1450	195	0	28	0	0	116	13
Confl. Peds. (#/hr)	9		4	4		9						
Confl. Bikes (#/hr)						1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	22.2	72.0		3.0	52.8	52.8		13.5			14.1	14.1
Effective Green, g (s)	22.2	72.0		3.0	52.8	52.8		13.5			14.1	14.1
Actuated g/C Ratio	0.19	0.61		0.03	0.45	0.45		0.11			0.12	0.12
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	334	3117		45	2054	592		197			198	180
v/s Ratio Prot	c0.14	0.34		0.02	c0.31			c0.02			c0.07	
v/s Ratio Perm						0.15						0.01
v/c Ratio	0.74	0.55		0.71	0.71	0.33		0.14			0.59	0.07
Uniform Delay, d1	45.4	13.8		57.4	26.6	21.4		47.3			49.5	46.4
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	8.2	0.2		41.4	1.1	0.3		1.5			4.4	0.2
Delay (s)	53.6	14.0		98.7	27.7	21.7		48.8			53.8	46.6
Level of Service	D	B		F	C	C		D			D	D
Approach Delay (s/veh)		18.9			27.6			48.8			50.4	
Approach LOS		B			C			D			D	

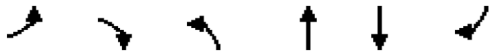
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	118.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	186	1305	280	188	1279	116	493	231	380	85	55	115
Future Volume (vph)	186	1305	280	188	1279	116	493	231	380	85	55	115
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	0.99		1.00	1.00		1.00	0.99	0.92	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.98	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1770	4902		1770	4998		1681	1630	1383	1681	1750	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1770	4902		1770	4998		1681	1630	1383	1681	1750	1583
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	198	1388	298	200	1361	123	524	246	404	90	59	122
RTOR Reduction (vph)	0	22	0	0	7	0	0	3	228	0	0	115
Lane Group Flow (vph)	198	1664	0	200	1477	0	403	408	132	73	76	7
Confl. Peds. (#/hr)	8		16	16		8			25	25		
Confl. Bikes (#/hr)			2			3			5			
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	17.0	52.1		21.1	56.2		45.1	45.1	45.1	8.0	8.0	8.0
Effective Green, g (s)	17.0	52.1		21.1	56.2		45.1	45.1	45.1	8.0	8.0	8.0
Actuated g/C Ratio	0.12	0.37		0.15	0.39		0.32	0.32	0.32	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	211	1794		262	1973		532	516	438	94	98	88
v/s Ratio Prot	c0.11	c0.34		c0.11	0.30		0.24	c0.25		0.04	c0.04	
v/s Ratio Perm									0.10			0.00
v/c Ratio	0.94	0.93		0.76	0.75		0.76	0.79	0.30	0.78	0.78	0.08
Uniform Delay, d1	62.1	43.3		58.2	37.0		43.7	44.3	36.7	66.3	66.3	63.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	44.4	8.8		12.4	1.6		9.7	11.8	1.8	45.7	44.2	1.7
Delay (s)	106.5	52.1		70.6	38.6		53.4	56.1	38.5	112.0	110.4	65.4
Level of Service	F	D		E	D		D	E	D	F	F	E
Approach Delay (s/veh)		57.8			42.4			49.7			90.6	
Approach LOS		E			D			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	142.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	592	70	265	521	230	316
Future Volume (veh/h)	592	70	265	521	230	316
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	637	0	285	560	247	340
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	743	342	319	2502	1746	763
Arrive On Green	0.22	0.00	0.18	0.71	0.50	0.50
Sat Flow, veh/h	3408	1568	1757	3597	3597	1533
Grp Volume(v), veh/h	637	0	285	560	247	340
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1533
Q Serve(g_s), s	21.1	0.0	18.6	6.4	4.5	16.8
Cycle Q Clear(g_c), s	21.1	0.0	18.6	6.4	4.5	16.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	743	342	319	2502	1746	763
V/C Ratio(X)	0.86	0.00	0.89	0.22	0.14	0.45
Avail Cap(c_a), veh/h	1680	773	567	2502	1746	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.2	0.0	47.0	5.7	15.9	19.0
Incr Delay (d2), s/veh	3.0	0.0	8.7	0.2	0.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	0.0	9.8	3.1	2.2	7.5
LnGrp Delay(d), s/veh	47.2	0.0	55.7	5.9	16.1	20.9
LnGrp LOS	D		E	A	B	C
Approach Vol, veh/h	637			845	587	
Approach Delay, s/veh	47.2			22.7	18.9	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		88.0		29.7	25.4	62.6		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		84.0		58.0	38.0	42.0		
Max Q Clear Time (g_c+I1), s		8.4		23.1	20.6	18.8		
Green Ext Time (p_c), s		4.2		2.5	0.8	2.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	764	623	222	632	615	175
Future Volume (veh/h)	764	623	222	632	615	175
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	788	0	229	652	634	180
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	914	420	264	2381	1726	744
Arrive On Green	0.26	0.00	0.15	0.67	0.48	0.48
Sat Flow, veh/h	3476	1599	1792	3668	3668	1540
Grp Volume(v), veh/h	788	0	229	652	634	180
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1540
Q Serve(g_s), s	24.3	0.0	14.1	8.4	12.6	7.7
Cycle Q Clear(g_c), s	24.3	0.0	14.1	8.4	12.6	7.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	914	420	264	2381	1726	744
V/C Ratio(X)	0.86	0.00	0.87	0.27	0.37	0.24
Avail Cap(c_a), veh/h	2068	952	541	2381	1726	744
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.6	0.0	46.9	7.7	18.3	17.0
Incr Delay (d2), s/veh	2.6	0.0	8.3	0.3	0.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	0.0	7.5	4.2	6.3	3.4
LnGrp Delay(d), s/veh	42.1	0.0	55.2	8.0	18.9	17.8
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	788			881	814	
Approach Delay, s/veh	42.1			20.3	18.7	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		79.0		33.6	20.6	58.4		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		75.0		67.0	34.0	37.0		
Max Q Clear Time (g_c+I1), s		10.4		26.3	16.1	14.6		
Green Ext Time (p_c), s		4.8		3.3	0.6	4.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	181	1285	204	195	1213	47	201	721	436	79	384	93
Future Volume (veh/h)	181	1285	204	195	1213	47	201	721	436	79	384	93
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	185	1311	208	199	1238	48	205	736	445	81	392	95
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	180	1500	442	226	1607	62	232	1490	642	90	1207	516
Arrive On Green	0.10	0.29	0.29	0.13	0.32	0.32	0.13	0.42	0.42	0.05	0.34	0.34
Sat Flow, veh/h	1792	5136	1514	1792	5063	196	1792	3574	1541	1792	3574	1529
Grp Volume(v), veh/h	185	1311	208	199	837	449	205	736	445	81	392	95
Grp Sat Flow(s),veh/h/ln	1792	1712	1514	1792	1712	1836	1792	1787	1541	1792	1787	1529
Q Serve(g_s), s	14.0	33.8	15.7	15.2	30.7	30.8	15.7	21.0	33.0	6.3	11.4	6.1
Cycle Q Clear(g_c), s	14.0	33.8	15.7	15.2	30.7	30.8	15.7	21.0	33.0	6.3	11.4	6.1
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	1500	442	226	1087	583	232	1490	642	90	1207	516
V/C Ratio(X)	1.03	0.87	0.47	0.88	0.77	0.77	0.89	0.49	0.69	0.90	0.32	0.18
Avail Cap(c_a), veh/h	180	1587	468	335	1353	726	335	1490	642	90	1207	516
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.6	46.8	40.4	59.8	42.9	42.9	59.6	29.8	33.3	65.7	34.3	32.5
Incr Delay (d2), s/veh	74.1	5.5	0.8	16.6	2.2	4.0	17.6	1.2	6.1	62.8	0.7	0.8
Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.6	16.8	6.7	8.6	14.9	16.2	8.9	10.6	15.1	4.7	5.7	2.7
LnGrp Delay(d), s/veh	137.0	52.4	41.2	76.4	45.1	46.9	77.1	31.0	39.3	128.5	35.0	33.3
LnGrp LOS	F	D	D	E	D	D	E	C	D	F	C	C
Approach Vol, veh/h		1704			1485			1386			568	
Approach Delay, s/veh		60.2			49.8			40.5			48.0	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	62.0	21.5	44.6	22.0	51.0	18.0	48.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	58.0	26.0	43.0	26.0	39.0	14.0	55.0
Max Q Clear Time (g_c+I1), s	8.3	35.0	17.2	35.8	17.7	13.4	16.0	32.8
Green Ext Time (p_c), s	0.0	6.9	0.3	4.9	0.3	2.8	0.0	8.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.6
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	50	80	670	0	0	840
Future Volume (veh/h)	50	80	670	0	0	840
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	54	87	728	0	0	913
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	175	110	2988	0	1	2988
Arrive On Green	0.10	0.10	0.84	0.00	0.00	0.84
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	54	87	728	0	0	913
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	4.0	11.6	5.6	0.0	0.0	7.6
Cycle Q Clear(g_c), s	4.0	11.6	5.6	0.0	0.0	7.6
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	175	110	2988	0	1	2988
V/C Ratio(X)	0.31	0.79	0.24	0.00	0.00	0.31
Avail Cap(c_a), veh/h	305	227	2988	0	51	2988
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	58.6	132.7	2.1	0.0	0.0	2.3
Incr Delay (d2), s/veh	1.0	11.6	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	8.5	2.8	0.0	0.0	3.8
LnGrp Delay(d), s/veh	59.6	144.3	2.3	0.0	0.0	2.5
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	141		728			913
Approach Delay, s/veh	111.9		2.3			2.5
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	122.0				122.0		17.7
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	110.0				118.0		24.0
Max Q Clear Time (g_c+I1), s	0.0	7.6				9.6		13.6
Green Ext Time (p_c), s	0.0	5.5				7.5		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.1
HCM 2010 LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	340	450	590	610	240
Future Volume (veh/h)	80	340	450	590	610	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	370	489	641	663	261
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	308	274	464	2737	1920	756
Arrive On Green	0.17	0.17	0.77	0.77	0.77	0.77
Sat Flow, veh/h	1774	1583	603	3632	2576	977
Grp Volume(v), veh/h	87	370	489	641	473	451
Grp Sat Flow(s),veh/h/ln	1774	1583	603	1770	1770	1690
Q Serve(g_s), s	6.4	26.0	103.6	7.5	12.4	12.4
Cycle Q Clear(g_c), s	6.4	26.0	116.0	7.5	12.4	12.4
Prop In Lane	1.00	1.00	1.00			0.58
Lane Grp Cap(c), veh/h	308	274	464	2737	1368	1307
V/C Ratio(X)	0.28	1.35	1.05	0.23	0.35	0.35
Avail Cap(c_a), veh/h	308	274	464	2737	1368	1307
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	62.0	28.6	4.7	5.3	5.3
Incr Delay (d2), s/veh	0.5	178.9	56.5	0.2	0.7	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	25.0	26.5	3.7	6.3	6.0
LnGrp Delay(d), s/veh	54.4	240.9	85.1	4.9	5.9	6.0
LnGrp LOS	D	F	F	A	A	A
Approach Vol, veh/h	457			1130	924	
Approach Delay, s/veh	205.4			39.6	6.0	
Approach LOS	F			D	A	

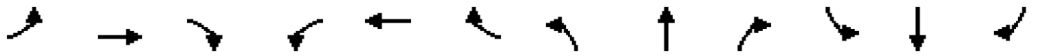
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		120.0		30.0		120.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		116.0		26.0		116.0		
Max Q Clear Time (g_c+I1), s		118.0		28.0		14.4		
Green Ext Time (p_c), s		0.0		0.0		6.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	770	110	250	640	260	320	540	440	440	370	140
Future Volume (veh/h)	80	770	110	250	640	260	320	540	440	440	370	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	87	837	120	272	696	283	348	587	478	478	402	152
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1569	702	336	1699	1774	346	676	457	540	542	242
Arrive On Green	0.06	0.44	0.44	0.10	0.48	0.48	0.19	0.19	0.19	0.16	0.15	0.15
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	87	837	120	272	696	283	348	587	478	478	402	152
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.0	24.8	6.6	11.1	18.3	5.9	28.0	23.1	27.5	19.6	15.6	12.9
Cycle Q Clear(g_c), s	7.0	24.8	6.6	11.1	18.3	5.9	28.0	23.1	27.5	19.6	15.6	12.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	1569	702	336	1699	1774	346	676	457	540	542	242
V/C Ratio(X)	0.80	0.53	0.17	0.81	0.41	0.16	1.01	0.87	1.05	0.89	0.74	0.63
Avail Cap(c_a), veh/h	185	1569	702	910	1699	1774	346	676	457	670	542	242
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.7	29.2	24.1	63.6	24.2	10.6	57.9	56.4	51.1	59.4	58.2	57.0
Incr Delay (d2), s/veh	12.9	1.3	0.5	4.7	0.7	0.2	50.2	14.2	54.7	11.6	8.9	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	12.4	3.0	5.5	9.1	2.3	18.4	12.7	25.1	10.2	8.3	6.4
LnGrp Delay(d), s/veh	79.6	30.5	24.6	68.2	24.9	10.7	108.1	70.6	105.8	71.0	67.1	68.7
LnGrp LOS	E	C	C	E	C	B	F	E	F	E	E	E
Approach Vol, veh/h		1044			1251			1413			1032	
Approach Delay, s/veh		33.9			31.1			91.7			69.1	
Approach LOS		C			C			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	67.7	32.0	26.0	12.8	73.0	26.5	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	38.0	46.0	28.0	22.0	15.0	69.0	28.0	22.0
Max Q Clear Time (g_c+I1), s	13.1	26.8	30.0	17.6	9.0	20.3	21.6	29.5
Green Ext Time (p_c), s	0.9	5.8	0.0	1.2	0.1	6.6	1.0	0.0

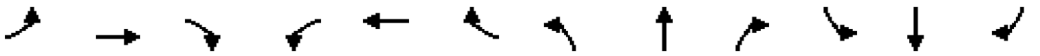
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.1
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1280	0	0	780	70	530	10	30	0	0	0
Future Volume (vph)	30	1280	0	0	780	70	530	10	30	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1688	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.95	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1688	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	1391	0	0	848	76	576	11	33	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	27	0	0	0
Lane Group Flow (vph)	33	1391	0	0	848	76	294	293	6	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	7.1	115.8			104.7	104.7	27.0	27.0	27.0			
Effective Green, g (s)	7.1	115.8			104.7	104.7	27.0	27.0	27.0			
Actuated g/C Ratio	0.05	0.77			0.69	0.69	0.18	0.18	0.18			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	83	2717			3530	1099	300	302	283			
v/s Ratio Prot	0.02	c0.39			0.17		c0.17	0.17				
v/s Ratio Perm						0.05			0.00			
v/c Ratio	0.40	0.51			0.24	0.07	0.98	0.97	0.02			
Uniform Delay, d1	69.8	6.7			8.5	7.4	61.6	61.5	51.0			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	3.1	0.7			0.2	0.1	46.3	43.5	0.0			
Delay (s)	72.9	7.4			8.6	7.5	107.9	105.0	51.0			
Level of Service	E	A			A	A	F	F	D			
Approach Delay (s/veh)		8.9			8.5			103.5			0.0	
Approach LOS		A			A			F			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1240	400	50	1270	0	0	0	0	70	10	80
Future Volume (vph)	0	1240	400	50	1270	0	0	0	0	70	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1706	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1706	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1348	435	54	1380	0	0	0	0	76	11	87
RTOR Reduction (vph)	0	0	198	0	0	0	0	0	0	0	0	64
Lane Group Flow (vph)	0	1348	237	54	1380	0	0	0	0	43	44	23
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		48.1	48.1	6.9	59.0					24.2	24.2	24.2
Effective Green, g (s)		48.1	48.1	6.9	59.0					24.2	24.2	24.2
Actuated g/C Ratio		0.53	0.53	0.08	0.65					0.27	0.27	0.27
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1866	834	133	3289					446	452	420
v/s Ratio Prot		c0.38		0.03	c0.27					0.03	c0.03	0.01
v/s Ratio Perm			0.15									
v/c Ratio		0.72	0.28	0.41	0.42					0.10	0.10	0.05
Uniform Delay, d1		16.5	12.0	40.2	7.8					25.3	25.3	25.0
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.4	0.2	2.0	0.1					0.4	0.4	0.2
Delay (s)		17.9	12.2	42.2	7.9					25.7	25.7	25.2
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		16.5			9.2			0.0			25.5	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	91.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	109	1095	139	230	1144	89	173	270	269	166	283	67
Future Volume (veh/h)	109	1095	139	230	1144	89	173	270	269	166	283	67
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	110	1106	140	232	1156	90	175	273	272	168	286	68
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	136	1251	533	261	2032	158	201	476	414	194	751	175
Arrive On Green	0.08	0.35	0.35	0.15	0.42	0.42	0.11	0.27	0.27	0.11	0.27	0.27
Sat Flow, veh/h	1774	3539	1508	1774	4795	373	1774	1770	1538	1774	2831	660
Grp Volume(v), veh/h	110	1106	140	232	817	429	175	273	272	168	177	177
Grp Sat Flow(s),veh/h/ln	1774	1770	1508	1774	1695	1778	1774	1770	1538	1774	1770	1722
Q Serve(g_s), s	8.1	38.8	8.7	16.9	24.1	24.2	12.8	17.6	20.7	12.3	10.7	11.1
Cycle Q Clear(g_c), s	8.1	38.8	8.7	16.9	24.1	24.2	12.8	17.6	20.7	12.3	10.7	11.1
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	136	1251	533	261	1437	753	201	476	414	194	470	457
V/C Ratio(X)	0.81	0.88	0.26	0.89	0.57	0.57	0.87	0.57	0.66	0.87	0.38	0.39
Avail Cap(c_a), veh/h	377	1395	595	390	1437	753	242	476	414	256	470	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	40.1	30.4	55.2	28.9	28.9	57.6	41.7	42.8	57.8	39.5	39.7
Incr Delay (d2), s/veh	10.9	6.6	0.3	15.6	0.5	1.0	24.4	5.0	7.9	20.6	2.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	20.0	3.7	9.4	11.3	12.0	7.6	9.2	9.8	7.1	5.6	5.6
LnGrp Delay(d), s/veh	70.8	46.7	30.7	70.8	29.4	29.9	82.0	46.6	50.8	78.4	41.8	42.2
LnGrp LOS	E	D	C	E	C	C	F	D	D	E	D	D
Approach Vol, veh/h		1356			1478			720			522	
Approach Delay, s/veh		47.0			36.0			56.8			53.7	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	39.5	23.4	50.6	18.9	39.0	14.1	59.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	34.0	29.0	52.0	18.0	35.0	28.0	53.0
Max Q Clear Time (g_c+I1), s	14.3	22.7	18.9	40.8	14.8	13.1	10.1	26.2
Green Ext Time (p_c), s	0.2	2.6	0.4	5.9	0.1	2.1	0.2	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	18.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	160	190	360	80	60	60
Future Vol, veh/h	160	190	360	80	60	60
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	174	207	391	87	65	65

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	967	98	130	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	869	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	282	958	1455	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	410	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	206	958	1455	-	-	-
Mov Cap-2 Maneuver	206	-	-	-	-	-
Stage 1	677	-	-	-	-	-
Stage 2	410	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	40.1	6.9	0
HCM LOS	E		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1455	-	206	958	-	-
HCM Lane V/C Ratio	0.269	-	0.844	0.216	-	-
HCM Control Delay (s/veh)	8.4	-	76.1	9.8	-	-
HCM Lane LOS	A	-	F	A	-	-
HCM 95th %tile Q(veh)	1.1	-	6.3	0.8	-	-

Intersection	
Int Delay, s/veh	6.4

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	190	50	10	100	30	30
Future Vol, veh/h	190	50	10	100	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	207	54	11	109	33	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	110	11	0	0	120	0
Stage 1	11	-	-	-	-	-
Stage 2	99	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	887	1070	-	-	1468	-
Stage 1	1012	-	-	-	-	-
Stage 2	925	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	867	1070	-	-	1468	-
Mov Cap-2 Maneuver	867	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	904	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10	0	3.8
HCM LOS	B		

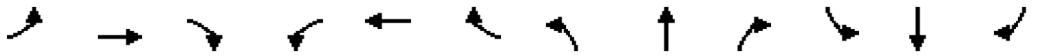
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	867	1070	1468	-	-	-
HCM Lane V/C Ratio	0.238	0.051	0.022	-	-	-
HCM Control Delay (s/veh)	10.4	8.5	7.5	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	0.9	0.2	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	455	944	67	54	859	129	174	907	89	153	675	452
Future Volume (veh/h)	455	944	67	54	859	129	174	907	89	153	675	452
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	469	973	69	56	886	133	179	935	92	158	696	466
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	523	1167	83	72	1054	157	202	1394	613	183	1356	845
Arrive On Green	0.15	0.35	0.35	0.04	0.24	0.24	0.11	0.39	0.39	0.10	0.38	0.38
Sat Flow, veh/h	3442	3344	237	1774	4442	663	1774	3539	1558	1774	3539	1577
Grp Volume(v), veh/h	469	515	527	56	675	344	179	935	92	158	696	466
Grp Sat Flow(s),veh/h/ln	1721	1770	1812	1774	1695	1715	1774	1770	1558	1774	1770	1577
Q Serve(g_s), s	18.9	37.6	37.7	4.4	26.7	27.0	14.0	30.7	5.4	12.4	21.3	27.5
Cycle Q Clear(g_c), s	18.9	37.6	37.7	4.4	26.7	27.0	14.0	30.7	5.4	12.4	21.3	27.5
Prop In Lane	1.00		0.13	1.00		0.39	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	523	617	632	72	805	407	202	1394	613	183	1356	845
V/C Ratio(X)	0.90	0.83	0.83	0.78	0.84	0.84	0.89	0.67	0.15	0.86	0.51	0.55
Avail Cap(c_a), veh/h	586	666	681	126	938	475	214	1394	613	290	1356	845
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.7	42.1	42.1	67.0	51.2	51.3	61.5	35.2	27.5	62.2	33.4	21.6
Incr Delay (d2), s/veh	15.4	8.5	8.3	16.3	6.0	11.7	31.8	2.6	0.5	14.3	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	19.9	20.3	2.5	13.1	14.1	8.6	15.4	2.4	6.8	10.7	12.6
LnGrp Delay(d), s/veh	74.0	50.6	50.4	83.3	57.2	63.0	93.3	37.8	28.0	76.5	34.8	24.2
LnGrp LOS	E	D	D	F	E	E	F	D	C	E	C	C
Approach Vol, veh/h		1511			1075			1206			1320	
Approach Delay, s/veh		57.8			60.4			45.3			36.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.6	59.5	9.7	53.1	20.0	58.0	25.4	37.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	48.0	10.0	53.0	17.0	54.0	24.0	39.0
Max Q Clear Time (g_c+I1), s	14.4	32.7	6.4	39.7	16.0	29.5	20.9	29.0
Green Ext Time (p_c), s	0.2	5.6	0.0	5.3	0.0	6.5	0.6	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D

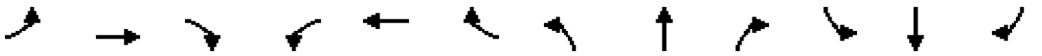
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	120	0	220	270	520	0	0	450	290
Future Volume (vph)	0	0	0	120	0	220	270	520	0	0	450	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.45	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1629	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	130	0	239	293	565	0	0	489	315
RTOR Reduction (vph)	0	0	0	0	0	209	0	0	0	0	0	64
Lane Group Flow (vph)	0	0	0	130	0	30	293	565	0	0	489	251
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				12.7		12.7	80.6	80.6			80.6	80.6
Effective Green, g (s)				12.7		12.7	80.6	80.6			80.6	80.6
Actuated g/C Ratio				0.13		0.13	0.80	0.80			0.80	0.80
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				221		198	1296	4045			5098	1259
v/s Ratio Prot								0.11			0.08	
v/s Ratio Perm				c0.07		0.02	c0.18					0.16
v/c Ratio				0.59		0.15	0.23	0.14			0.10	0.20
Uniform Delay, d1				41.8		39.5	2.6	2.4			2.3	2.5
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				4.0		0.4	0.4	0.1			0.0	0.4
Delay (s)				45.8		39.9	3.0	2.5			2.3	2.9
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			41.9			2.6			2.5	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.28		
Actuated Cycle Length (s)	101.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

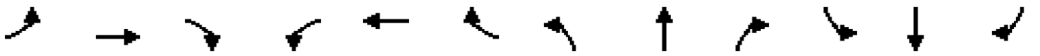
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	0	220	0	0	0	0	760	90	140	420	0
Future Volume (vph)	40	0	220	0	0	0	0	760	90	140	420	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1130	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	0	239	0	0	0	0	826	98	152	457	0
RTOR Reduction (vph)	0	0	220	0	0	0	0	0	16	0	0	0
Lane Group Flow (vph)	43	0	19	0	0	0	0	826	82	152	457	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	7.8		7.8					82.8	82.8	82.8	82.8	
Effective Green, g (s)	7.8		7.8					82.8	82.8	82.8	82.8	
Actuated g/C Ratio	0.08		0.08					0.84	0.84	0.84	0.84	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	140		220					5381	1329	948	4270	
v/s Ratio Prot								0.13			0.09	
v/s Ratio Perm	c0.02		0.01						0.05	c0.13		
v/c Ratio	0.31		0.09					0.15	0.06	0.16	0.11	
Uniform Delay, d1	42.8		42.1					1.5	1.3	1.5	1.4	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2		0.2					0.1	0.1	0.4	0.1	
Delay (s)	44.1		42.3					1.5	1.4	1.8	1.4	
Level of Service	D		D					A	A	A	A	
Approach Delay (s/veh)		42.5			0.0			1.5			1.5	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	98.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	7	3	1	488	0	201	0	784	481	176	1266	10
Future Volume (vph)	7	3	1	488	0	201	0	784	481	176	1266	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.96		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.97		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1782		1698	1698	1537		5136	1558	1787	5130	
Flt Permitted		0.88		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		1615		1698	1698	1537		5136	1558	1787	5130	
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	8	3	1	555	0	228	0	891	547	200	1439	11
RTOR Reduction (vph)	0	1	0	0	0	176	0	0	159	0	0	0
Lane Group Flow (vph)	0	11	0	277	278	52	0	891	388	200	1450	0
Confl. Peds. (#/hr)	10					10			10	10		
Confl. Bikes (#/hr)						2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		3.8		30.5	30.5	30.5		64.5	95.0	19.2	87.7	
Effective Green, g (s)		3.8		30.5	30.5	30.5		64.5	95.0	19.2	87.7	
Actuated g/C Ratio		0.03		0.23	0.23	0.23		0.48	0.71	0.14	0.65	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		45		386	386	349		2472	1104	256	3357	
v/s Ratio Prot				0.16	c0.16			0.17	0.08	c0.11	c0.28	
v/s Ratio Perm		c0.01				0.03			0.17			
v/c Ratio		0.25		0.72	0.72	0.15		0.36	0.35	0.78	0.43	
Uniform Delay, d1		63.7		47.8	47.8	41.4		21.8	7.6	55.4	11.2	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.8		6.3	6.5	0.2		0.4	0.2	14.3	0.4	
Delay (s)		66.5		54.0	54.3	41.6		22.2	7.8	69.7	11.6	
Level of Service		E		D	D	D		C	A	E	B	
Approach Delay (s/veh)		66.5			50.5			16.7			18.6	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	134.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	451	30	214	13	14	6	116	554	8	15	719	272
Future Volume (veh/h)	451	30	214	13	14	6	116	554	8	15	719	272
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	518	34	246	15	16	7	133	637	9	17	826	313
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	619	37	674	0	806	674	191	1659	23	26	1499	657
Arrive On Green	0.43	0.43	0.43	0.00	0.43	0.43	0.06	0.46	0.46	0.01	0.42	0.42
Sat Flow, veh/h	1311	86	1572	0	1881	1572	3476	3606	51	1792	3574	1566
Grp Volume(v), veh/h	552	0	246	0	16	7	133	316	330	17	826	313
Grp Sat Flow(s),veh/h/ln	1398	0	1572	0	1881	1572	1738	1787	1870	1792	1787	1566
Q Serve(g_s), s	45.7	0.0	13.1	0.0	0.6	0.3	4.7	14.3	14.4	1.2	21.6	18.0
Cycle Q Clear(g_c), s	46.3	0.0	13.1	0.0	0.6	0.3	4.7	14.3	14.4	1.2	21.6	18.0
Prop In Lane	0.94		1.00	0.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	655	0	674	0	806	674	191	822	861	26	1499	657
V/C Ratio(X)	0.84	0.00	0.36	0.00	0.02	0.01	0.69	0.38	0.38	0.66	0.55	0.48
Avail Cap(c_a), veh/h	825	0	863	0	1154	965	449	822	861	72	1499	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	0.0	24.0	0.0	20.4	20.3	57.5	21.9	21.9	60.8	27.2	26.1
Incr Delay (d2), s/veh	6.5	0.0	0.3	0.0	0.0	0.0	4.5	1.4	1.3	25.6	1.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.0	0.0	5.7	0.0	0.3	0.1	2.4	7.4	7.7	0.8	11.0	8.2
LnGrp Delay(d), s/veh	40.2	0.0	24.3	0.0	20.4	20.3	62.0	23.3	23.2	86.4	28.6	28.6
LnGrp LOS	D		C		C	C	E	C	C	F	C	C
Approach Vol, veh/h		798			23			779			1156	
Approach Delay, s/veh		35.3			20.4			29.9			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	61.0	0.0	57.1	10.8	55.9		57.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	57.0	4.0	68.0	16.0	46.0		76.0
Max Q Clear Time (g_c+I1), s	3.2	16.4	0.0	48.3	6.7	23.6		2.6
Green Ext Time (p_c), s	0.0	4.0	0.0	4.8	0.2	6.9		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	14	36	14	33	36	247	17	352	16	385	559	23
Future Volume (veh/h)	14	36	14	33	36	247	17	352	16	385	559	23
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.95		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	15	39	15	36	39	268	18	383	17	418	608	25
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	80	196	68	175	177	292	604	2666	1161	757	2666	1161
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	249	987	343	693	894	1473	798	3574	1556	988	3574	1557
Grp Volume(v), veh/h	69	0	0	75	0	268	18	383	17	418	608	25
Grp Sat Flow(s),veh/h/ln	1579	0	0	1587	0	1473	798	1787	1556	988	1787	1557
Q Serve(g_s), s	0.0	0.0	0.0	0.3	0.0	25.6	1.0	4.4	0.4	29.9	7.5	0.6
Cycle Q Clear(g_c), s	4.7	0.0	0.0	5.0	0.0	25.6	8.5	4.4	0.4	34.3	7.5	0.6
Prop In Lane	0.22		0.22	0.48		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	344	0	0	352	0	292	604	2666	1161	757	2666	1161
V/C Ratio(X)	0.20	0.00	0.00	0.21	0.00	0.92	0.03	0.14	0.01	0.55	0.23	0.02
Avail Cap(c_a), veh/h	413	0	0	422	0	359	604	2666	1161	757	2666	1161
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	0.0	0.0	48.0	0.0	56.3	6.9	5.2	4.7	10.1	5.6	4.7
Incr Delay (d2), s/veh	0.3	0.0	0.0	0.3	0.0	24.7	0.1	0.1	0.0	2.9	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	0.0	2.5	0.0	12.4	0.2	2.2	0.2	8.7	3.7	0.3
LnGrp Delay(d), s/veh	48.3	0.0	0.0	48.3	0.0	81.0	7.0	5.3	4.7	13.0	5.8	4.7
LnGrp LOS	D			D		F	A	A	A	B	A	A
Approach Vol, veh/h		69			343			418			1051	
Approach Delay, s/veh		48.3			73.9			5.3			8.6	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		111.0		32.5		111.0		32.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		107.0		35.0		107.0		35.0
Max Q Clear Time (g_c+I1), s		10.5		6.7		36.3		27.6
Green Ext Time (p_c), s		2.8		0.4		7.6		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	13.2
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	286	21	34	0	13	24	36	30	0	12	16	203
Future Vol, veh/h	286	21	34	0	13	24	36	30	0	12	16	203
Peak Hour Factor	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80	0.80
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	358	26	43	0	16	30	45	38	0	15	20	254
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	15.7	8.6	10.3	11.2
HCM LOS	C	A	B	B

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	55%	0%	84%	0%	5%
Vol Thru, %	45%	100%	6%	35%	7%
Vol Right, %	0%	0%	10%	65%	88%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	66	0	341	37	231
LT Vol	36	0	286	0	12
Through Vol	30	0	21	13	16
RT Vol	0	0	34	24	203
Lane Flow Rate	83	0	426	46	289
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.148	0	0.605	0.067	0.396
Departure Headway (Hd)	6.463	6.186	5.11	5.189	4.933
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	555	0	708	689	731
Service Time	4.203	3.926	3.127	3.229	2.956
HCM Lane V/C Ratio	0.15	0	0.602	0.067	0.395
HCM Control Delay, s/veh	10.3	8.9	15.7	8.6	11.2
HCM Lane LOS	B	N	C	A	B
HCM 95th-tile Q	0.5	0	4.1	0.2	1.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	16	19	185	65	28	58	62	1357	32	40	955	10
Future Volume (veh/h)	16	19	185	65	28	58	62	1357	32	40	955	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	17	20	197	69	30	62	66	1444	34	43	1016	11
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	96	101	215	136	67	150	85	2624	1145	55	2566	1131
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.05	0.75	0.75	0.03	0.73	0.73
Sat Flow, veh/h	439	733	1565	646	485	1090	1757	3505	1529	1757	3505	1546
Grp Volume(v), veh/h	37	0	197	77	0	84	66	1444	34	43	1016	11
Grp Sat Flow(s),veh/h/ln	1172	0	1565	737	0	1483	1757	1752	1529	1757	1752	1546
Q Serve(g_s), s	0.4	0.0	18.1	8.8	0.0	7.6	5.4	25.6	0.8	3.5	15.9	0.3
Cycle Q Clear(g_c), s	8.0	0.0	18.1	16.8	0.0	7.6	5.4	25.6	0.8	3.5	15.9	0.3
Prop In Lane	0.46		1.00	0.90		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	197	0	215	148	0	204	85	2624	1145	55	2566	1131
V/C Ratio(X)	0.19	0.00	0.92	0.52	0.00	0.41	0.78	0.55	0.03	0.78	0.40	0.01
Avail Cap(c_a), veh/h	197	0	215	148	0	204	350	2624	1145	109	2566	1131
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.8	0.0	62.0	64.8	0.0	57.4	68.5	7.8	4.7	70.0	7.4	5.3
Incr Delay (d2), s/veh	0.5	0.0	39.1	3.1	0.0	1.3	14.2	0.8	0.0	20.5	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	10.1	3.2	0.0	3.2	3.0	12.5	0.4	2.0	7.8	0.1
LnGrp Delay(d), s/veh	56.2	0.0	101.1	67.9	0.0	58.8	82.7	8.7	4.7	90.5	7.8	5.3
LnGrp LOS	E		F	E		E	F	A	A	F	A	A
Approach Vol, veh/h		234			161			1544			1070	
Approach Delay, s/veh		94.0			63.1			11.7			11.1	
Approach LOS		F			E			B			B	

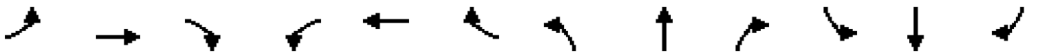
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.6	113.0		24.0	11.0	110.6		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	109.0		20.0	29.0	89.0		20.0
Max Q Clear Time (g_c+I1), s	5.5	27.6		20.1	7.4	17.9		18.8
Green Ext Time (p_c), s	0.0	18.8		0.0	0.1	9.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.7
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1168	35	303	1302	308	539
Future Volume (veh/h)	1168	35	303	1302	308	539
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	1192	36	309	1329	314	550
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1434	1242	385	2801	694	619
Arrive On Green	0.40	0.40	0.11	0.55	0.39	0.39
Sat Flow, veh/h	3668	1552	3476	5305	1792	1599
Grp Volume(v), veh/h	1192	36	309	1329	314	550
Grp Sat Flow(s),veh/h/ln	1787	1552	1738	1712	1792	1599
Q Serve(g_s), s	35.6	0.6	10.3	18.9	15.5	38.2
Cycle Q Clear(g_c), s	35.6	0.6	10.3	18.9	15.5	38.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1434	1242	385	2801	694	619
V/C Ratio(X)	0.83	0.03	0.80	0.47	0.45	0.89
Avail Cap(c_a), veh/h	2046	1508	702	4151	694	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	2.7	51.6	16.6	27.0	34.0
Incr Delay (d2), s/veh	2.1	0.0	4.0	0.1	2.1	17.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.0	0.7	5.1	8.9	8.1	19.7
LnGrp Delay(d), s/veh	34.0	2.7	55.5	16.7	29.2	51.2
LnGrp LOS	C	A	E	B	C	D
Approach Vol, veh/h	1228			1638	864	
Approach Delay, s/veh	33.1			24.0	43.2	
Approach LOS	C			C	D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		50.0	17.1	51.6				68.8
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		46.0	24.0	68.0				96.0
Max Q Clear Time (g_c+I1), s		40.2	12.3	37.6				20.9
Green Ext Time (p_c), s		1.8	0.8	10.0				14.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	48	585	345	32	885	77	7	8	17	676	23	292
Future Volume (vph)	48	585	345	32	885	77	7	8	17	676	23	292
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.96		1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1781	3574	1552	1787	3574	1533		1730		1698	1620	1495
Flt Permitted	0.17	1.00	1.00	0.95	1.00	1.00		0.90		0.95	0.71	1.00
Satd. Flow (perm)	326	3574	1552	1787	3574	1533		1577		1698	1201	1495
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	52	629	371	34	952	83	8	9	18	727	25	314
RTOR Reduction (vph)	0	0	147	0	0	52	0	14	0	0	1	63
Lane Group Flow (vph)	52	629	224	34	952	31	0	21	0	393	389	220
Confl. Peds. (#/hr)	7		1	1		7	2					2
Confl. Bikes (#/hr)			5									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	29.2	29.2	29.2	3.4	36.6	36.6		20.5		29.0	53.5	53.5
Effective Green, g (s)	29.2	29.2	29.2	3.4	36.6	36.6		20.5		29.0	53.5	53.5
Actuated g/C Ratio	0.30	0.30	0.30	0.03	0.37	0.37		0.21		0.30	0.55	0.55
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	97	1063	461	61	1333	571		329		501	778	815
v/s Ratio Prot		0.18		0.02	c0.27					c0.23	0.15	
v/s Ratio Perm	0.16		0.14			0.02		0.01			c0.12	0.15
v/c Ratio	0.54	0.59	0.48	0.56	0.71	0.05		0.06		0.78	0.50	0.27
Uniform Delay, d1	28.8	29.4	28.3	46.6	26.3	19.7		31.1		31.7	13.9	11.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	5.6	0.9	0.8	10.6	1.8	0.0		0.1		7.9	0.5	0.8
Delay (s)	34.4	30.3	29.1	57.2	28.1	19.7		31.2		39.6	14.4	12.7
Level of Service	C	C	C	E	C	B		C		D	B	B
Approach Delay (s/veh)		30.0			28.4			31.2			23.2	
Approach LOS		C			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	98.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	194	1045	384	167	1191	103	296	615	148	223	615	179
Future Volume (veh/h)	194	1045	384	167	1191	103	296	615	148	223	615	179
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	198	1066	392	170	1215	105	302	628	151	228	628	183
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	221	1178	521	194	1509	130	329	1141	494	236	956	410
Arrive On Green	0.12	0.33	0.33	0.11	0.31	0.31	0.18	0.32	0.32	0.13	0.27	0.27
Sat Flow, veh/h	1792	3574	1582	1792	4803	415	1792	3574	1548	1792	3574	1533
Grp Volume(v), veh/h	198	1066	392	170	866	454	302	628	151	228	628	183
Grp Sat Flow(s),veh/h/ln	1792	1787	1582	1792	1712	1794	1792	1787	1548	1792	1787	1533
Q Serve(g_s), s	15.7	41.0	31.8	13.5	33.4	33.5	23.8	20.9	10.6	18.2	22.5	14.3
Cycle Q Clear(g_c), s	15.7	41.0	31.8	13.5	33.4	33.5	23.8	20.9	10.6	18.2	22.5	14.3
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	221	1178	521	194	1076	564	329	1141	494	236	956	410
V/C Ratio(X)	0.89	0.91	0.75	0.88	0.81	0.81	0.92	0.55	0.31	0.96	0.66	0.45
Avail Cap(c_a), veh/h	249	1241	549	236	1165	610	448	1141	494	236	956	410
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.2	46.1	43.1	63.3	45.4	45.4	57.7	40.5	37.0	62.2	46.9	43.9
Incr Delay (d2), s/veh	29.1	9.3	5.5	25.4	4.0	7.3	19.5	1.9	1.6	48.5	3.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	21.8	14.7	8.0	16.3	17.7	13.6	10.6	4.8	12.2	11.5	6.5
LnGrp Delay(d), s/veh	91.3	55.5	48.6	88.7	49.3	52.7	77.2	42.4	38.6	110.7	50.4	47.4
LnGrp LOS	F	E	D	F	D	D	E	D	D	F	D	D
Approach Vol, veh/h		1656			1490			1081			1039	
Approach Delay, s/veh		58.1			54.8			51.6			63.1	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.0	50.0	19.6	51.5	30.5	42.5	21.8	49.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	19.0	50.0	36.0	29.0	20.0	49.0
Max Q Clear Time (g_c+I1), s	20.2	22.9	15.5	43.0	25.8	24.5	17.7	35.5
Green Ext Time (p_c), s	0.0	4.6	0.1	4.4	0.6	1.9	0.1	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.8
HCM 2010 LOS	E

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	76	149	589	81	58	720	64	12	120	418	216	11
Future Volume (vph)	76	149	589	81	58	720	64	12	120	418	216	11
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.95	1.00	0.99			1.00	0.99	0.88	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.99			1.00	0.99	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1787	3574	1513	1787	5035			1787	3357	1279	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1787	3574	1513	1787	5035			1787	3357	1279	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	82	160	633	87	62	774	69	13	129	449	232	12
RTOR Reduction (vph)	0	0	0	64	0	1	0	0	0	0	121	0
Lane Group Flow (vph)	0	242	633	23	62	855	0	0	129	484	88	0
Confl. Peds. (#/hr)		15		15	15		15		22		39	
Confl. Bikes (#/hr)							2				1	
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		21.0	39.0	39.0	7.8	25.8			11.0	31.0	31.0	
Effective Green, g (s)		21.0	39.0	39.0	7.8	25.8			11.0	31.0	31.0	
Actuated g/C Ratio		0.14	0.26	0.26	0.05	0.17			0.07	0.21	0.21	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		249	926	392	92	863			130	691	263	
v/s Ratio Prot		c0.14	0.18		0.03	c0.17			c0.07	0.14		
v/s Ratio Perm				0.01							0.07	
v/c Ratio		0.97	0.68	0.06	0.67	0.99			0.99	0.70	0.33	
Uniform Delay, d1		64.5	50.2	41.9	70.1	62.2			69.7	55.4	50.9	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		48.9	2.1	0.1	17.7	28.3			76.3	5.8	3.4	
Delay (s)		113.4	52.3	42.0	87.8	90.5			146.0	61.3	54.3	
Level of Service		F	D	D	F	F			F	E	D	
Approach Delay (s/veh)			66.7			90.3				72.8		
Approach LOS			E			F				E		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	75.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	150.5	Sum of lost time (s)	24.0
Intersection Capacity Utilization	92.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	54	238	179	21	141	47	111	452	17	52	621	48
Future Volume (veh/h)	54	238	179	21	141	47	111	452	17	52	621	48
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	63	277	208	24	164	55	129	526	20	60	722	56
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	175	346	293	90	346	293	518	2619	1144	647	2619	1145
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1134	1827	1546	889	1827	1546	678	3471	1517	840	3471	1518
Grp Volume(v), veh/h	63	277	208	24	164	55	129	526	20	60	722	56
Grp Sat Flow(s),veh/h/ln	1134	1827	1546	889	1827	1546	678	1736	1517	840	1736	1518
Q Serve(g_s), s	7.5	20.7	18.0	3.8	11.4	4.3	10.4	6.3	0.5	3.2	9.2	1.3
Cycle Q Clear(g_c), s	18.9	20.7	18.0	24.5	11.4	4.3	19.7	6.3	0.5	9.5	9.2	1.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	346	293	90	346	293	518	2619	1144	647	2619	1145
V/C Ratio(X)	0.36	0.80	0.71	0.27	0.47	0.19	0.25	0.20	0.02	0.09	0.28	0.05
Avail Cap(c_a), veh/h	229	434	367	133	434	367	518	2619	1144	647	2619	1145
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.1	55.4	54.3	67.1	51.6	48.7	8.5	5.1	4.4	6.5	5.4	4.5
Incr Delay (d2), s/veh	1.2	8.2	4.6	1.6	1.0	0.3	1.1	0.2	0.0	0.3	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	11.3	8.1	1.0	5.9	1.9	2.1	3.1	0.2	0.8	4.5	0.6
LnGrp Delay(d), s/veh	61.3	63.6	59.0	68.7	52.6	49.0	9.6	5.3	4.4	6.7	5.7	4.6
LnGrp LOS	E	E	E	E	D	D	A	A	A	A	A	A
Approach Vol, veh/h		548			243			675			838	
Approach Delay, s/veh		61.6			53.4			6.1			5.7	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		31.1		112.0		31.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		21.7		22.7		11.5		26.5
Green Ext Time (p_c), s		5.2		1.9		6.2		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	105	81	173	20	38	37	90	1037	22	50	822	47
Future Volume (veh/h)	105	81	173	20	38	37	90	1037	22	50	822	47
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	107	83	177	20	39	38	92	1058	22	51	839	48
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	38	7	356	32	49	356	447	2573	1145	364	2573	1121
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	32	1571	0	216	1571	630	3574	1590	525	3574	1557
Grp Volume(v), veh/h	190	0	177	59	0	38	92	1058	22	51	839	48
Grp Sat Flow(s),veh/h/ln	32	0	1571	216	0	1571	630	1787	1590	525	1787	1557
Q Serve(g_s), s	0.0	0.0	14.7	0.0	0.0	2.9	9.4	17.7	0.6	6.4	12.9	1.3
Cycle Q Clear(g_c), s	34.0	0.0	14.7	34.0	0.0	2.9	22.3	17.7	0.6	24.1	12.9	1.3
Prop In Lane	0.56		1.00	0.34		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	45	0	356	81	0	356	447	2573	1145	364	2573	1121
V/C Ratio(X)	4.23	0.00	0.50	0.73	0.00	0.11	0.21	0.41	0.02	0.14	0.33	0.04
Avail Cap(c_a), veh/h	45	0	356	81	0	356	447	2573	1145	364	2573	1121
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	69.5	0.0	50.5	49.3	0.0	46.0	11.8	8.4	6.0	13.1	7.7	6.1
Incr Delay (d2), s/veh	1505.9	0.0	1.1	27.9	0.0	0.1	1.0	0.5	0.0	0.8	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.6	0.0	6.5	2.6	0.0	1.3	1.8	8.8	0.3	1.0	6.4	0.6
LnGrp Delay(d), s/veh	1575.4	0.0	51.6	77.2	0.0	46.1	12.8	8.8	6.0	13.9	8.0	6.1
LnGrp LOS	F		D	E		D	B	A	A	B	A	A
Approach Vol, veh/h		367			97			1172			938	
Approach Delay, s/veh		840.5			65.0			9.1			8.2	
Approach LOS		F			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		24.3		36.0		26.1		36.0
Green Ext Time (p_c), s		11.7		0.0		8.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	129.4
HCM 2010 LOS	F

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	130	0	0	157	0	0
Future Volume (veh/h)	130	0	0	157	0	0
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	141	0	0	171	0	0
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1805	1535	55	1805	1	1
Arrive On Green	0.97	0.00	0.00	0.97	0.00	0.00
Sat Flow, veh/h	1863	1583	1243	1863	1774	1583
Grp Volume(v), veh/h	141	0	0	171	0	0
Grp Sat Flow(s),veh/h/ln	1863	1583	1243	1863	1774	1583
Q Serve(g_s), s	0.3	0.0	0.0	0.4	0.0	0.0
Cycle Q Clear(g_c), s	0.3	0.0	0.0	0.4	0.0	0.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1805	1535	55	1805	1	1
V/C Ratio(X)	0.08	0.00	0.00	0.09	0.00	0.00
Avail Cap(c_a), veh/h	1805	1535	55	1805	218	195
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	0.1	0.0	0.0	0.1	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	0.2	0.0	0.0	0.2	0.0	0.0
LnGrp LOS	A			A		
Approach Vol, veh/h	141			171	0	
Approach Delay, s/veh	0.2			0.2	0.0	
Approach LOS	A			A		

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		130.0		0.0		130.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		126.0		16.0		126.0		
Max Q Clear Time (g_c+I1), s		2.4		0.0		2.3		
Green Ext Time (p_c), s		1.1		0.0		0.9		

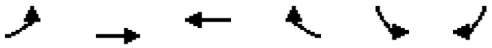
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.2
HCM 2010 LOS	A



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1000	50	0	1000	100	100
Future Volume (vph)	1000	50	0	1000	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	1.00
Frt	0.99			1.00	1.00	0.85
Flt Protected	1.00			1.00	0.95	1.00
Satd. Flow (prot)	5049			5085	1770	1583
Flt Permitted	1.00			1.00	0.95	1.00
Satd. Flow (perm)	5049			5085	1770	1583
Peak-hour factor, PHF	0.25	0.25	0.25	0.25	0.25	0.25
Adj. Flow (vph)	4000	200	0	4000	400	400
RTOR Reduction (vph)	4	0	0	0	0	72
Lane Group Flow (vph)	4196	0	0	4000	400	328
Turn Type	NA			NA	Prot	Prot
Protected Phases	4			8 5	6	6
Permitted Phases						
Actuated Green, G (s)	87.0			113.0	29.0	29.0
Effective Green, g (s)	87.0			113.0	29.0	29.0
Actuated g/C Ratio	0.58			0.75	0.19	0.19
Clearance Time (s)	4.0				4.0	4.0
Vehicle Extension (s)	3.0				3.0	3.0
Lane Grp Cap (vph)	2928			3830	342	306
v/s Ratio Prot	c0.83			c0.79	c0.23	0.21
v/s Ratio Perm						
v/c Ratio	1.43			1.04	1.17	1.07
Uniform Delay, d1	31.5			18.5	60.5	60.5
Progression Factor	1.00			0.94	1.00	1.00
Incremental Delay, d2	196.9			27.7	103.2	72.1
Delay (s)	228.4			45.0	163.7	132.6
Level of Service	F			D	F	F
Approach Delay (s/veh)	228.4			45.0	148.1	
Approach LOS	F			D	F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	139.8	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.33		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	33.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0
Number	7	4	8	18		
Initial Q (Qb), veh	0	0	0	0		
Ped-Bike Adj(A_pbT)	1.00			1.00		
Parking Bus, Adj	1.00	1.00	1.00	1.00		
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900		
Adj Flow Rate, veh/h	0	0	0	0		
Adj No. of Lanes	1	2	3	0		
Peak Hour Factor	0.25	0.25	0.25	0.25		
Percent Heavy Veh, %	2	2	2	2		
Cap, veh/h				0		
Arrive On Green	0.00	0.00	0.00	0.00		
Sat Flow, veh/h	1774	3632	-70952	0		
Grp Volume(v), veh/h	0	0	0	0		
Grp Sat Flow(s),veh/h/ln	1774	1770	1695	0		
Q Serve(g_s), s	0.0	0.0	0.0	0.0		
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0		
Prop In Lane	1.00			0.00		
Lane Grp Cap(c), veh/h				0		
V/C Ratio(X)	0.00	0.00	0.00	0.00		
Avail Cap(c_a), veh/h				0		
HCM Platoon Ratio	1.00	1.00	1.00	1.00		
Upstream Filter(I)	0.00	0.00	0.00	0.00		
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0		
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0		
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0		
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0		
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0		
LnGrp LOS						
Approach Vol, veh/h		0	0			
Approach Delay, s/veh		0.0	0.0			
Approach LOS						

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBR	SEL	SER
Lane Configurations										
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0
Number	7	4	14	3	8	18				
Initial Q (Qb), veh	0	0	0	0	0	0				
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00				
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				
Adj Sat Flow, veh/h/ln	0	1863	1900	0	1863	1900				
Adj Flow Rate, veh/h	0	0	0	0	0	0				
Adj No. of Lanes	0	2	0	0	3	0				
Peak Hour Factor	0.25	0.25	0.25	0.25	0.25	0.25				
Percent Heavy Veh, %	0	2	2	0	2	2				
Cap, veh/h	--2104	7483648	0	--2104	7483648	0				
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00				
Sat Flow, veh/h	0	-72647	0	0	-70952	0				
Grp Volume(v), veh/h	0	0	0	0	0	0				
Grp Sat Flow(s),veh/h/ln	0	1770	0	0	1695	0				
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0				
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0				
Prop In Lane	0.00		0.00	0.00		0.00				
Lane Grp Cap(c), veh/h	4053	35506944	0	5824	43129344	0				
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00				
Avail Cap(c_a), veh/h	591818	39155200	0	850349	66974464	0				
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00				
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0				
LnGrp LOS										
Approach Vol, veh/h		0			0					
Approach Delay, s/veh		0.0			0.0					
Approach LOS										

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4				8
Phs Duration (G+Y+Rc), s				0.0				0.0
Change Period (Y+Rc), s				4.0				4.0
Max Green Setting (Gmax), s				146.0				146.0
Max Q Clear Time (g_c+I1), s				0.0				0.0
Green Ext Time (p_c), s				0.0				0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

2040 SCENARIO

ALIGNMENT NO PROJECT AM

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Future Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.95	1.00	1.00		1.00		0.95		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.97	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3276	1372	1770	3528		3433		1504		
Flt Permitted			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3276	1372	1770	3528		3433		1504		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	819	606	160	713	11	500	0	138	0	0
RTOR Reduction (vph)	0	0	14	278	0	1	0	0	0	82	0	0
Lane Group Flow (vph)	0	0	975	158	160	723	0	500	0	56	0	0
Confl. Peds. (#/hr)		9		16	16		9			18	18	
Confl. Bikes (#/hr)				5			2			2		
Turn Type	Prot		NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases				4						2		
Actuated Green, G (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Effective Green, g (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Actuated g/C Ratio			0.36	0.36	0.13	0.53		0.18		0.40		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1184	495	229	1857		631		605		
v/s Ratio Prot			c0.30		c0.09	0.20		c0.15				
v/s Ratio Perm				0.11						c0.04		
v/c Ratio			0.82	0.32	0.70	0.39		0.79		0.09		
Uniform Delay, d1			32.7	25.9	46.9	15.9		43.9		20.9		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			4.8	0.4	9.0	0.1		6.8		0.3		
Delay (s)			37.4	26.3	55.9	16.0		50.7		21.2		
Level of Service			D	C	E	B		D		C		
Approach Delay (s/veh)			34.0			23.2			44.3			37.7
Approach LOS			C			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1611
Flt Permitted	1.00
Satd. Flow (perm)	1611
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	20.6
Effective Green, g (s)	20.6
Actuated g/C Ratio	0.18
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	294
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	37.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	37.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	260	10	150	30	0	480	90	90	710
Future Volume (vph)	0	0	60	260	10	150	30	0	480	90	90	710
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.85	1.00	0.85		1.00		1.00	0.93	1.00	1.00
Flpb, ped/bikes			1.00	0.87	1.00		1.00		1.00	1.00	0.98	1.00
Frt			0.87	1.00	0.86		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1374	1531	1360		1770		3539	1476	1730	3539
Flt Permitted			1.00	0.95	1.00		0.34		1.00	1.00	0.45	1.00
Satd. Flow (perm)			1374	1531	1360		627		3539	1476	827	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	277	11	160	32	0	511	96	96	755
RTOR Reduction (vph)	0	0	48	0	120	0	0	0	0	33	0	0
Lane Group Flow (vph)	0	0	16	277	51	0	32	0	511	63	96	755
Confl. Peds. (#/hr)	93		85	85		93		2		18	18	
Confl. Bikes (#/hr)			4			6				2		
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			21.3	21.3	21.3		55.4		55.4	55.4	55.4	55.4
Effective Green, g (s)			21.3	21.3	21.3		55.4		55.4	55.4	55.4	55.4
Actuated g/C Ratio			0.25	0.25	0.25		0.65		0.65	0.65	0.65	0.65
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			345	385	342		410		2314	965	540	2314
v/s Ratio Prot					0.04				0.14			c0.21
v/s Ratio Perm			0.01	c0.18			0.05			0.04	0.12	
v/c Ratio			0.05	0.72	0.15		0.08		0.22	0.07	0.18	0.33
Uniform Delay, d1			24.0	29.0	24.7		5.3		5.9	5.3	5.7	6.4
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	6.3	0.2		0.4		0.2	0.1	0.7	0.4
Delay (s)			24.1	35.3	24.9		5.7		6.1	5.4	6.5	6.8
Level of Service			C	D	C		A		A	A	A	A
Approach Delay (s/veh)		24.1			31.3				6.0			6.7
Approach LOS		C			C				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	84.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	900	130	190	1110	100	70	460	100	130	650	140
Future Volume (veh/h)	120	900	130	190	1110	100	70	460	100	130	650	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	947	137	200	1168	105	74	484	105	137	684	147
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	157	1256	181	237	1543	139	299	1262	551	401	1356	732
Arrive On Green	0.09	0.28	0.28	0.13	0.33	0.33	0.04	0.36	0.36	0.07	0.38	0.38
Sat Flow, veh/h	1774	4463	643	1774	4725	425	1774	3539	1544	1774	3539	1546
Grp Volume(v), veh/h	126	719	365	200	838	435	74	484	105	137	684	147
Grp Sat Flow(s),veh/h/ln	1774	1695	1716	1774	1695	1760	1774	1770	1544	1774	1770	1546
Q Serve(g_s), s	6.9	19.2	19.3	10.9	21.9	22.0	2.6	10.1	4.7	4.7	14.7	5.5
Cycle Q Clear(g_c), s	6.9	19.2	19.3	10.9	21.9	22.0	2.6	10.1	4.7	4.7	14.7	5.5
Prop In Lane	1.00		0.37	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	157	954	483	237	1107	575	299	1262	551	401	1356	732
V/C Ratio(X)	0.80	0.75	0.76	0.84	0.76	0.76	0.25	0.38	0.19	0.34	0.50	0.20
Avail Cap(c_a), veh/h	304	1196	605	447	1469	763	334	1262	551	443	1356	732
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	32.5	32.6	41.9	29.9	29.9	19.6	23.8	22.0	18.2	23.4	15.3
Incr Delay (d2), s/veh	9.0	2.1	4.2	7.9	1.6	3.1	0.4	0.9	0.8	0.5	1.3	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	9.3	9.7	5.9	10.5	11.1	1.3	5.1	2.1	2.3	7.4	2.5
LnGrp Delay(d), s/veh	53.4	34.6	36.8	49.8	31.5	33.0	20.1	24.7	22.8	18.7	24.8	15.9
LnGrp LOS	D	C	D	D	C	C	C	C	C	B	C	B
Approach Vol, veh/h		1210			1473			663			968	
Approach Delay, s/veh		37.2			34.4			23.9			22.6	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	39.4	17.3	31.9	8.0	42.0	12.8	36.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	35.0	25.0	35.0	6.0	38.0	17.0	43.0
Max Q Clear Time (g_c+I1), s	6.7	12.1	12.9	21.3	4.6	16.7	8.9	24.0
Green Ext Time (p_c), s	0.1	3.5	0.4	6.0	0.0	5.1	0.2	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	220	100	60	170	30	40	530	60	40	1030	40
Future Volume (veh/h)	40	220	100	60	170	30	40	530	60	40	1030	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	43	239	109	65	185	33	43	576	65	43	1120	43
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	269	328	150	164	418	75	296	2272	986	518	2228	86
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1145	1191	543	1019	1519	271	476	3505	1521	776	3437	132
Grp Volume(v), veh/h	43	0	348	65	0	218	43	576	65	43	571	592
Grp Sat Flow(s),veh/h/ln	1145	0	1734	1019	0	1790	476	1752	1521	776	1752	1817
Q Serve(g_s), s	3.4	0.0	19.1	6.5	0.0	10.5	5.4	7.3	1.6	2.6	17.8	17.8
Cycle Q Clear(g_c), s	13.9	0.0	19.1	25.6	0.0	10.5	23.3	7.3	1.6	9.8	17.8	17.8
Prop In Lane	1.00		0.31	1.00		0.15	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	269	0	477	164	0	493	296	2272	986	518	1136	1178
V/C Ratio(X)	0.16	0.00	0.73	0.40	0.00	0.44	0.15	0.25	0.07	0.08	0.50	0.50
Avail Cap(c_a), veh/h	434	0	727	311	0	751	296	2272	986	518	1136	1178
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.1	0.0	34.4	46.0	0.0	31.4	15.7	7.8	6.8	9.8	9.6	9.6
Incr Delay (d2), s/veh	0.3	0.0	2.2	1.6	0.0	0.6	1.0	0.3	0.1	0.3	1.6	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	9.4	1.9	0.0	5.3	0.8	3.5	0.7	0.6	9.1	9.4
LnGrp Delay(d), s/veh	37.4	0.0	36.6	47.6	0.0	32.0	16.7	8.0	6.9	10.1	11.2	11.2
LnGrp LOS	D		D	D		C	B	A	A	B	B	B
Approach Vol, veh/h		391			283			684			1206	
Approach Delay, s/veh		36.7			35.6			8.5			11.1	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		32.9		72.0		32.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		44.0		68.0		44.0
Max Q Clear Time (g_c+I1), s		25.3		21.1		19.8		27.6
Green Ext Time (p_c), s		5.3		2.3		10.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	90	70	210	120	50	20	540	80	50	1130	30
Future Volume (veh/h)	30	90	70	210	120	50	20	540	80	50	1130	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	94	73	219	125	52	21	562	83	52	1177	31
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	319	277	215	325	357	148	278	2245	976	512	2233	59
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1199	962	747	1209	1241	516	461	3539	1538	781	3521	93
Grp Volume(v), veh/h	31	0	167	219	0	177	21	562	83	52	591	617
Grp Sat Flow(s),veh/h/ln	1199	0	1710	1209	0	1757	461	1770	1538	781	1770	1844
Q Serve(g_s), s	2.2	0.0	7.9	17.9	0.0	8.2	2.7	7.1	2.1	3.2	18.8	18.8
Cycle Q Clear(g_c), s	10.3	0.0	7.9	25.8	0.0	8.2	21.5	7.1	2.1	10.3	18.8	18.8
Prop In Lane	1.00		0.44	1.00		0.29	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	319	0	492	325	0	505	278	2245	976	512	1122	1169
V/C Ratio(X)	0.10	0.00	0.34	0.67	0.00	0.35	0.08	0.25	0.09	0.10	0.53	0.53
Avail Cap(c_a), veh/h	524	0	784	532	0	806	278	2245	976	512	1122	1169
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.0	0.0	28.8	39.0	0.0	28.9	16.2	8.2	7.2	10.4	10.3	10.3
Incr Delay (d2), s/veh	0.1	0.0	0.4	2.4	0.0	0.4	0.5	0.3	0.2	0.4	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	3.8	6.2	0.0	4.0	0.4	3.5	0.9	0.7	9.6	10.0
LnGrp Delay(d), s/veh	33.1	0.0	29.2	41.4	0.0	29.3	16.7	8.4	7.4	10.8	12.1	12.0
LnGrp LOS	C		C	D		C	B	A	A	B	B	B
Approach Vol, veh/h		198			396			666			1260	
Approach Delay, s/veh		29.8			36.0			8.6			12.0	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		33.5		69.0		33.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		23.5		12.3		20.8		27.8
Green Ext Time (p_c), s		4.8		1.1		11.0		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Future Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	228	120	207	130	43	33	554	196	76	1380	33
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	431	227	296	709	578	162	1937	838	393	1937	838
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1190	1132	596	1029	1863	1517	379	3539	1532	708	3539	1532
Grp Volume(v), veh/h	43	0	348	207	130	43	33	554	196	76	1380	33
Grp Sat Flow(s),veh/h/ln	1190	0	1727	1029	1863	1517	379	1770	1532	708	1770	1532
Q Serve(g_s), s	2.8	0.0	17.4	21.8	5.2	2.0	7.9	9.4	7.4	7.2	32.2	1.1
Cycle Q Clear(g_c), s	8.0	0.0	17.4	39.2	5.2	2.0	40.1	9.4	7.4	16.5	32.2	1.1
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	0	658	296	709	578	162	1937	838	393	1937	838
V/C Ratio(X)	0.09	0.00	0.53	0.70	0.18	0.07	0.20	0.29	0.23	0.19	0.71	0.04
Avail Cap(c_a), veh/h	554	0	791	375	852	694	162	1937	838	393	1937	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	26.7	41.9	23.0	22.0	33.6	13.5	13.1	18.0	18.7	11.7
Incr Delay (d2), s/veh	0.1	0.0	0.7	4.1	0.1	0.1	2.8	0.4	0.7	1.1	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	8.4	6.5	2.7	0.8	1.0	4.6	3.3	1.5	16.3	0.5
LnGrp Delay(d), s/veh	25.7	0.0	27.4	46.0	23.1	22.0	36.4	13.9	13.7	19.1	21.0	11.8
LnGrp LOS	C		C	D	C	C	D	B	B	B	C	B
Approach Vol, veh/h		391			380			783			1489	
Approach Delay, s/veh		27.2			35.5			14.8			20.7	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		46.4		65.0		46.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		61.0		51.0		61.0		51.0
Max Q Clear Time (g_c+I1), s		42.1		19.4		34.2		41.2
Green Ext Time (p_c), s		4.7		2.4		12.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Future Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	186	649	103	175	598	113	113	763	134	82	577	186
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	894	384	211	727	137	143	1428	620	106	998	321
Arrive On Green	0.13	0.25	0.25	0.12	0.25	0.25	0.08	0.40	0.40	0.06	0.38	0.38
Sat Flow, veh/h	1774	3539	1519	1774	2953	556	1774	3539	1537	1774	2610	839
Grp Volume(v), veh/h	186	649	103	175	358	353	113	763	134	82	391	372
Grp Sat Flow(s),veh/h/ln	1774	1770	1519	1774	1770	1740	1774	1770	1537	1774	1770	1680
Q Serve(g_s), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Cycle Q Clear(g_c), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	223	894	384	211	435	428	143	1428	620	106	677	642
V/C Ratio(X)	0.84	0.73	0.27	0.83	0.82	0.83	0.79	0.53	0.22	0.78	0.58	0.58
Avail Cap(c_a), veh/h	385	1208	518	367	586	576	275	1428	620	220	677	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	33.1	29.0	41.6	34.4	34.5	43.7	21.9	18.9	44.8	23.7	23.7
Incr Delay (d2), s/veh	8.0	1.4	0.4	8.1	6.8	7.2	9.4	1.4	0.8	11.5	3.6	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	8.1	2.2	5.0	9.9	9.8	3.3	8.0	2.5	2.5	8.9	8.5
LnGrp Delay(d), s/veh	49.3	34.5	29.3	49.8	41.3	41.7	53.0	23.4	19.7	56.3	27.2	27.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	E	C	C
Approach Vol, veh/h		938			886			1010			845	
Approach Delay, s/veh		36.9			43.1			26.2			30.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	43.0	15.5	28.4	11.8	41.0	16.1	27.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	39.0	20.0	33.0	15.0	36.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	17.9	11.3	18.2	8.0	19.0	11.9	20.6
Green Ext Time (p_c), s	0.1	5.7	0.3	4.1	0.1	4.3	0.3	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	200	60	110	270	120	60	620	100	70	650	50
Future Volume (veh/h)	80	200	60	110	270	120	60	620	100	70	650	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	0.99		0.90	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	86	215	65	118	290	129	65	667	108	75	699	54
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	198	458	138	308	405	180	400	1743	282	389	1913	148
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	964	1335	404	1081	1180	525	707	3030	490	692	3327	257
Grp Volume(v), veh/h	86	0	280	118	0	419	65	389	386	75	372	381
Grp Sat Flow(s),veh/h/ln	964	0	1739	1081	0	1705	707	1770	1751	692	1770	1814
Q Serve(g_s), s	8.3	0.0	12.3	9.4	0.0	20.9	5.3	11.7	11.7	6.5	11.0	11.0
Cycle Q Clear(g_c), s	29.2	0.0	12.3	21.6	0.0	20.9	16.3	11.7	11.7	18.2	11.0	11.0
Prop In Lane	1.00		0.23	1.00		0.31	1.00		0.28	1.00		0.14
Lane Grp Cap(c), veh/h	198	0	596	308	0	584	400	1018	1007	389	1018	1043
V/C Ratio(X)	0.43	0.00	0.47	0.38	0.00	0.72	0.16	0.38	0.38	0.19	0.37	0.37
Avail Cap(c_a), veh/h	422	0	1000	559	0	980	400	1018	1007	389	1018	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.6	0.0	25.1	33.5	0.0	27.9	15.5	11.3	11.3	16.2	11.1	11.1
Incr Delay (d2), s/veh	1.5	0.0	0.6	0.8	0.0	1.7	0.9	1.1	1.1	1.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	0.0	6.0	2.9	0.0	10.0	1.1	5.9	5.9	1.3	5.7	5.8
LnGrp Delay(d), s/veh	42.1	0.0	25.6	34.3	0.0	29.5	16.4	12.4	12.4	17.3	12.1	12.1
LnGrp LOS	D		C	C		C	B	B	B	B	B	B
Approach Vol, veh/h		366			537			840			828	
Approach Delay, s/veh		29.5			30.6			12.7			12.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		37.4		60.0		37.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s		18.3		31.2		20.2		23.6
Green Ext Time (p_c), s		6.1		2.2		5.9		3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	800	90	250	1200	240	90	490	150	210	560	170
Future Volume (veh/h)	180	800	90	250	1200	240	90	490	150	210	560	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.93	0.99		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	186	825	93	258	1237	247	93	505	155	216	577	175
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	1049	439	289	1418	283	310	793	242	343	1239	528
Arrive On Green	0.12	0.30	0.30	0.16	0.34	0.34	0.05	0.30	0.30	0.10	0.35	0.35
Sat Flow, veh/h	1774	3539	1482	1774	4196	838	1774	2638	804	1774	3539	1509
Grp Volume(v), veh/h	186	825	93	258	1000	484	93	338	322	216	577	175
Grp Sat Flow(s),veh/h/ln	1774	1770	1482	1774	1695	1643	1774	1770	1673	1774	1770	1509
Q Serve(g_s), s	11.8	24.4	5.4	16.3	31.6	31.6	4.1	18.8	19.1	9.2	14.5	9.7
Cycle Q Clear(g_c), s	11.8	24.4	5.4	16.3	31.6	31.6	4.1	18.8	19.1	9.2	14.5	9.7
Prop In Lane	1.00		1.00	1.00		0.51	1.00		0.48	1.00		1.00
Lane Grp Cap(c), veh/h	215	1049	439	289	1146	555	310	532	503	343	1239	528
V/C Ratio(X)	0.86	0.79	0.21	0.89	0.87	0.87	0.30	0.63	0.64	0.63	0.47	0.33
Avail Cap(c_a), veh/h	264	1053	441	373	1216	589	313	532	503	399	1239	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	36.9	30.2	46.8	35.5	35.5	25.8	34.5	34.6	24.7	28.9	27.3
Incr Delay (d2), s/veh	21.2	4.0	0.2	19.1	6.9	13.0	0.5	5.7	6.2	2.5	1.3	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	12.5	2.2	9.5	15.8	16.3	2.0	10.0	9.6	4.7	7.3	4.3
LnGrp Delay(d), s/veh	70.5	40.9	30.4	66.0	42.4	48.5	26.3	40.2	40.8	27.2	30.1	29.0
LnGrp LOS	E	D	C	E	D	D	C	D	D	C	C	C
Approach Vol, veh/h		1104			1742			753			968	
Approach Delay, s/veh		45.0			47.6			38.7			29.3	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	38.4	22.6	37.9	9.8	44.0	17.9	42.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	31.0	24.0	34.0	6.0	40.0	17.0	41.0
Max Q Clear Time (g_c+I1), s	11.2	21.1	18.3	26.4	6.1	16.5	13.8	33.6
Green Ext Time (p_c), s	0.2	2.9	0.4	3.4	0.0	4.6	0.1	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	190	70	70	160	160	40	330	30	100	800	70
Future Volume (veh/h)	190	190	70	70	160	160	40	330	30	100	800	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	200	200	74	74	168	168	42	347	32	105	842	74
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	309	490	181	365	323	323	297	1737	159	546	1744	153
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1030	1275	472	1088	842	842	601	3237	296	987	3251	286
Grp Volume(v), veh/h	200	0	274	74	0	336	42	187	192	105	454	462
Grp Sat Flow(s),veh/h/ln	1030	0	1747	1088	0	1684	601	1752	1781	987	1752	1784
Q Serve(g_s), s	18.7	0.0	11.5	5.4	0.0	15.5	4.7	5.6	5.6	6.2	16.3	16.3
Cycle Q Clear(g_c), s	34.1	0.0	11.5	16.9	0.0	15.5	21.0	5.6	5.6	11.9	16.3	16.3
Prop In Lane	1.00		0.27	1.00		0.50	1.00		0.17	1.00		0.16
Lane Grp Cap(c), veh/h	309	0	671	365	0	647	297	940	956	546	940	957
V/C Ratio(X)	0.65	0.00	0.41	0.20	0.00	0.52	0.14	0.20	0.20	0.19	0.48	0.48
Avail Cap(c_a), veh/h	507	0	1007	574	0	970	297	940	956	546	940	957
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	22.6	28.8	0.0	23.9	21.2	12.1	12.1	15.2	14.6	14.6
Incr Delay (d2), s/veh	2.3	0.0	0.4	0.3	0.0	0.6	1.0	0.5	0.5	0.8	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	5.6	1.6	0.0	7.3	0.9	2.8	2.9	1.8	8.3	8.4
LnGrp Delay(d), s/veh	39.3	0.0	23.0	29.1	0.0	24.5	22.2	12.6	12.6	16.0	16.4	16.3
LnGrp LOS	D		C	C		C	C	B	B	B	B	B
Approach Vol, veh/h		474			410			421			1021	
Approach Delay, s/veh		29.9			25.3			13.5			16.3	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		58.0		42.7		58.0		42.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		54.0		58.0		54.0		58.0
Max Q Clear Time (g_c+I1), s		23.0		36.1		18.3		18.9
Green Ext Time (p_c), s		2.7		2.5		7.4		2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	170	160	90	130	60	70	270	40	50	810	70
Future Volume (veh/h)	60	170	160	90	130	60	70	270	40	50	810	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	64	181	170	96	138	64	74	287	43	53	862	74
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	300	257	241	174	352	163	244	1167	954	644	1167	977
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1157	856	804	1016	1176	545	590	1845	1508	1031	1845	1543
Grp Volume(v), veh/h	64	0	351	96	0	202	74	287	43	53	862	74
Grp Sat Flow(s),veh/h/ln	1157	0	1660	1016	0	1721	590	1845	1508	1031	1845	1543
Q Serve(g_s), s	5.5	0.0	22.3	11.0	0.0	11.0	11.7	8.0	1.3	2.8	38.2	2.2
Cycle Q Clear(g_c), s	16.5	0.0	22.3	33.2	0.0	11.0	49.9	8.0	1.3	10.8	38.2	2.2
Prop In Lane	1.00		0.48	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	300	0	497	174	0	516	244	1167	954	644	1167	977
V/C Ratio(X)	0.21	0.00	0.71	0.55	0.00	0.39	0.30	0.25	0.05	0.08	0.74	0.08
Avail Cap(c_a), veh/h	314	0	518	187	0	537	244	1167	954	644	1167	977
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.5	0.0	36.9	51.6	0.0	32.9	32.2	9.5	8.2	11.8	15.0	8.4
Incr Delay (d2), s/veh	0.4	0.0	4.2	2.9	0.0	0.5	3.2	0.5	0.1	0.3	4.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	10.7	3.2	0.0	5.3	2.1	4.2	0.5	0.8	20.5	1.0
LnGrp Delay(d), s/veh	39.8	0.0	41.0	54.6	0.0	33.4	35.4	10.0	8.3	12.1	19.2	8.5
LnGrp LOS	D		D	D		C	D	A	A	B	B	A
Approach Vol, veh/h		415			298			404			989	
Approach Delay, s/veh		40.8			40.2			14.4			18.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		79.0		39.5		79.0		39.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		75.0		37.0		75.0		37.0
Max Q Clear Time (g_c+I1), s		51.9		24.3		40.2		35.2
Green Ext Time (p_c), s		2.5		2.0		8.2		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Future Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.88	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	102	245	224	71	204	71	71	214	51	82	929	112
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	501	396	212	342	119	339	1206	994	733	2057	248
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1085	1845	1458	904	1260	439	534	1845	1520	1095	3147	379
Grp Volume(v), veh/h	102	245	224	71	0	275	71	214	51	82	517	524
Grp Sat Flow(s),veh/h/ln	1085	1845	1458	904	0	1699	534	1845	1520	1095	1752	1774
Q Serve(g_s), s	9.7	11.9	14.2	7.7	0.0	15.1	8.1	4.9	1.3	3.4	15.5	15.5
Cycle Q Clear(g_c), s	24.7	11.9	14.2	19.6	0.0	15.1	23.6	4.9	1.3	8.3	15.5	15.5
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	209	501	396	212	0	462	339	1206	994	733	1145	1160
V/C Ratio(X)	0.49	0.49	0.57	0.33	0.00	0.60	0.21	0.18	0.05	0.11	0.45	0.45
Avail Cap(c_a), veh/h	340	723	572	321	0	666	339	1206	994	733	1145	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	32.8	33.6	41.0	0.0	33.9	14.9	7.3	6.6	8.9	9.1	9.1
Incr Delay (d2), s/veh	1.8	0.7	1.3	0.9	0.0	1.2	1.4	0.3	0.1	0.3	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	6.2	5.8	2.0	0.0	7.2	1.3	2.5	0.6	1.1	7.9	8.0
LnGrp Delay(d), s/veh	46.4	33.5	34.8	41.9	0.0	35.1	16.3	7.6	6.7	9.2	10.4	10.4
LnGrp LOS	D	C	C	D		D	B	A	A	A	B	B
Approach Vol, veh/h		571			346			336			1123	
Approach Delay, s/veh		36.3			36.5			9.3			10.3	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		33.1		74.0		33.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		25.6		26.7		17.5		21.6
Green Ext Time (p_c), s		2.3		2.4		9.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Future Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	191	489	117	106	415	96	106	521	64	106	915	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	292	679	299	235	532	230	363	2022	247	526	1849	150
Arrive On Green	0.11	0.19	0.19	0.07	0.15	0.15	0.04	0.63	0.63	0.55	0.55	0.55
Sat Flow, veh/h	1792	3574	1574	1792	3574	1546	1792	3196	391	830	3341	270
Grp Volume(v), veh/h	191	489	117	106	415	96	106	290	295	106	489	500
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1546	1792	1787	1800	830	1787	1824
Q Serve(g_s), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Cycle Q Clear(g_c), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.15
Lane Grp Cap(c), veh/h	292	679	299	235	532	230	363	1130	1139	526	989	1009
V/C Ratio(X)	0.65	0.72	0.39	0.45	0.78	0.42	0.29	0.26	0.26	0.20	0.49	0.49
Avail Cap(c_a), veh/h	383	964	425	301	765	331	471	1130	1139	526	989	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	40.8	38.1	35.7	44.1	41.5	10.8	8.7	8.7	12.3	14.8	14.8
Incr Delay (d2), s/veh	2.5	1.5	0.8	1.4	3.3	1.2	0.4	0.5	0.6	0.9	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	6.9	3.1	2.7	6.2	2.7	1.3	4.0	4.0	1.7	9.3	9.5
LnGrp Delay(d), s/veh	35.3	42.4	38.9	37.1	47.4	42.7	11.3	9.2	9.2	13.2	16.5	16.5
LnGrp LOS	D	D	D	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h		797			617			691			1095	
Approach Delay, s/veh		40.2			44.9			9.5			16.2	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		72.0	11.1	24.4	8.5	63.5	15.5	20.0
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	11.0	29.0	11.0	53.0	17.0	23.0
Max Q Clear Time (g_c+I1), s		9.7	7.3	15.8	4.6	20.1	11.3	14.0
Green Ext Time (p_c), s		3.9	0.1	2.9	0.1	8.3	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Future Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.93	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	217	207	87	272	163	141	511	109	109	707	185
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	404	331	265	330	189	308	1795	381	496	1160	1143
Arrive On Green	0.11	0.22	0.22	0.05	0.16	0.16	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	1774	1863	1524	1774	2108	1208	621	2883	611	798	1863	1545
Grp Volume(v), veh/h	207	217	207	87	226	209	141	313	307	109	707	185
Grp Sat Flow(s),veh/h/ln	1774	1863	1524	1774	1770	1546	621	1770	1724	798	1863	1545
Q Serve(g_s), s	10.6	11.6	13.8	4.6	13.9	14.8	20.1	9.1	9.2	8.2	25.9	4.0
Cycle Q Clear(g_c), s	10.6	11.6	13.8	4.6	13.9	14.8	46.0	9.1	9.2	17.4	25.9	4.0
Prop In Lane	1.00		1.00	1.00		0.78	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	290	404	331	265	277	242	308	1102	1074	496	1160	1143
V/C Ratio(X)	0.71	0.54	0.63	0.33	0.82	0.86	0.46	0.28	0.29	0.22	0.61	0.16
Avail Cap(c_a), veh/h	372	530	434	265	315	275	308	1102	1074	496	1160	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	39.0	39.9	37.0	45.9	46.2	26.9	9.7	9.7	13.7	12.9	4.4
Incr Delay (d2), s/veh	4.6	1.1	1.9	0.7	13.9	21.5	4.9	0.6	0.7	1.0	2.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.1	6.0	2.3	7.9	7.8	3.9	4.6	4.6	1.9	13.9	1.8
LnGrp Delay(d), s/veh	38.4	40.1	41.8	37.7	59.8	67.7	31.7	10.4	10.4	14.7	15.3	4.7
LnGrp LOS	D	D	D	D	E	E	C	B	B	B	B	A
Approach Vol, veh/h		631			522			761			1001	
Approach Delay, s/veh		40.1			59.3			14.3			13.3	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.0	10.0	28.4		74.0	16.8	21.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		70.0	6.0	32.0		70.0	18.0	20.0
Max Q Clear Time (g_c+I1), s		48.0	6.6	15.8		27.9	12.6	16.8
Green Ext Time (p_c), s		5.2	0.0	1.7		7.5	0.3	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Future Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	290	828	366	269	634	65	183	817	183	140	1118	215
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	955	393	310	837	86	244	1134	254	263	1367	560
Arrive On Green	0.14	0.27	0.27	0.13	0.26	0.26	0.08	0.40	0.40	0.06	0.39	0.39
Sat Flow, veh/h	1774	3539	1457	1774	3213	329	1774	2822	632	1774	3539	1449
Grp Volume(v), veh/h	290	828	366	269	349	350	183	512	488	140	1118	215
Grp Sat Flow(s),veh/h/ln	1774	1770	1457	1774	1770	1772	1774	1770	1684	1774	1770	1449
Q Serve(g_s), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Cycle Q Clear(g_c), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	363	955	393	310	461	462	244	711	677	263	1367	560
V/C Ratio(X)	0.80	0.87	0.93	0.87	0.76	0.76	0.75	0.72	0.72	0.53	0.82	0.38
Avail Cap(c_a), veh/h	408	968	398	341	461	462	271	711	677	272	1367	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	40.7	41.6	29.5	39.8	39.9	26.0	29.5	29.5	23.3	32.2	25.9
Incr Delay (d2), s/veh	9.7	8.3	28.3	19.1	7.0	7.2	10.0	6.2	6.5	1.9	5.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	13.9	14.6	7.8	11.3	11.3	4.1	15.2	14.5	2.8	17.2	5.3
LnGrp Delay(d), s/veh	38.1	49.0	69.9	48.6	46.8	47.0	36.0	35.7	36.0	25.1	37.7	27.8
LnGrp LOS	D	D	E	D	D	D	D	D	D	C	D	C
Approach Vol, veh/h		1484			968			1183			1473	
Approach Delay, s/veh		52.1			47.4			35.9			35.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	51.0	19.0	35.6	13.3	49.2	20.0	34.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	47.0	17.0	32.0	11.0	44.0	19.0	30.0
Max Q Clear Time (g_c+I1), s	7.5	30.5	14.8	30.7	9.2	35.1	15.8	23.3
Green Ext Time (p_c), s	0.0	6.0	0.2	0.9	0.1	5.3	0.3	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Future Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.88	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	299	1165	227	155	1144	93	258	691	113	216	1433	289
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1149	222	164	1132	447	241	1237	199	343	1455	421
Arrive On Green	0.17	0.39	0.39	0.09	0.32	0.32	0.10	0.28	0.28	0.10	0.28	0.28
Sat Flow, veh/h	1792	2933	566	1792	3574	1411	1792	4410	710	1792	5136	1487
Grp Volume(v), veh/h	299	705	687	155	1144	93	258	534	270	216	1433	289
Grp Sat Flow(s),veh/h/ln	1792	1787	1712	1792	1787	1411	1792	1712	1696	1792	1712	1487
Q Serve(g_s), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Cycle Q Clear(g_c), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	299	700	670	164	1132	447	241	960	476	343	1455	421
V/C Ratio(X)	1.00	1.01	1.02	0.94	1.01	0.21	1.07	0.56	0.57	0.63	0.98	0.69
Avail Cap(c_a), veh/h	299	700	670	164	1132	447	241	960	476	397	1455	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	36.5	36.5	54.2	41.0	30.0	33.4	36.8	36.9	27.6	42.7	38.2
Incr Delay (d2), s/veh	52.4	35.8	41.1	53.7	29.4	0.2	78.1	2.3	4.8	2.5	20.2	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	30.1	29.8	7.6	23.3	2.3	13.2	7.9	8.3	5.2	18.4	9.5
LnGrp Delay(d), s/veh	102.4	72.4	77.6	107.9	70.4	30.2	111.6	39.1	41.8	30.1	63.0	47.0
LnGrp LOS	F	F	F	F	F	C	F	D	D	C	E	D
Approach Vol, veh/h		1691			1392			1062			1938	
Approach Delay, s/veh		79.8			71.9			57.4			56.9	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	37.7	15.0	51.0	16.0	38.0	24.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	11.0	47.0	12.0	34.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	12.1	18.3	12.3	49.0	14.0	35.3	22.0	40.0
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Future Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.88	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	133	561	224	173	520	276	173	531	153	255	827	61
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	787	306	211	875	346	211	1234	341	297	1765	129
Arrive On Green	0.09	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.17	0.37	0.37
Sat Flow, veh/h	1774	3539	1376	1774	3539	1397	1774	3872	1070	1774	4804	352
Grp Volume(v), veh/h	133	561	224	173	520	276	173	462	222	255	582	306
Grp Sat Flow(s),veh/h/ln	1774	1770	1376	1774	1770	1397	1774	1695	1552	1774	1695	1766
Q Serve(g_s), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Cycle Q Clear(g_c), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.69	1.00		0.20
Lane Grp Cap(c), veh/h	166	787	306	211	875	346	211	1080	495	297	1246	649
V/C Ratio(X)	0.80	0.71	0.73	0.82	0.59	0.80	0.82	0.43	0.45	0.86	0.47	0.47
Avail Cap(c_a), veh/h	307	1071	416	403	1262	498	403	1080	495	556	1246	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	33.3	33.4	39.8	30.7	32.7	39.8	24.9	25.1	37.4	22.4	22.4
Incr Delay (d2), s/veh	8.6	1.4	4.3	7.7	0.6	5.8	7.7	1.2	2.9	7.1	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.8	5.7	4.8	5.9	7.1	4.8	4.8	4.9	6.9	5.9	6.4
LnGrp Delay(d), s/veh	49.6	34.7	37.7	47.6	31.4	38.5	47.6	26.1	28.0	44.6	23.6	24.8
LnGrp LOS	D	C	D	D	C	D	D	C	C	D	C	C
Approach Vol, veh/h		918			969			857			1143	
Approach Delay, s/veh		37.6			36.3			30.9			28.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	33.5	15.0	24.6	15.0	38.0	12.7	26.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	26.0	21.0	28.0	21.0	34.0	16.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	12.5	10.8	16.0	10.8	14.3	8.8	19.1
Green Ext Time (p_c), s	0.6	3.6	0.3	3.5	0.3	5.4	0.2	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Future Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	268	1000	165	423	1247	144	175	505	93	278	928	113
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	1570	258	502	1443	628	236	1270	375	346	1288	156
Arrive On Green	0.10	0.36	0.36	0.15	0.41	0.41	0.07	0.25	0.25	0.10	0.28	0.28
Sat Flow, veh/h	3442	4379	721	3442	3539	1540	3442	5085	1500	3442	4570	554
Grp Volume(v), veh/h	268	774	391	423	1247	144	175	505	93	278	687	354
Grp Sat Flow(s),veh/h/ln	1721	1695	1710	1721	1770	1540	1721	1695	1500	1721	1695	1734
Q Serve(g_s), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Cycle Q Clear(g_c), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Prop In Lane	1.00		0.42	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	332	1215	613	502	1443	628	236	1270	375	346	955	489
V/C Ratio(X)	0.81	0.64	0.64	0.84	0.86	0.23	0.74	0.40	0.25	0.80	0.72	0.72
Avail Cap(c_a), veh/h	407	1294	653	688	1641	714	282	1270	375	469	955	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	29.3	29.4	45.8	29.8	21.3	50.3	34.4	33.0	48.4	35.6	35.6
Incr Delay (d2), s/veh	9.5	1.0	1.9	6.9	4.6	0.2	8.4	0.9	1.6	7.1	4.7	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	9.9	10.2	6.8	18.2	2.9	2.9	4.4	2.4	4.5	10.0	10.9
LnGrp Delay(d), s/veh	58.2	30.3	31.3	52.7	34.4	21.5	58.7	35.3	34.6	55.5	40.3	44.7
LnGrp LOS	E	C	C	D	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1433			1814			773			1319	
Approach Delay, s/veh		35.8			37.6			40.5			44.7	
Approach LOS		D			D			D			D	

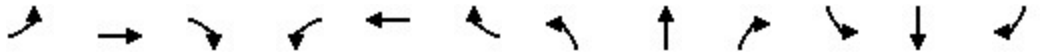
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	31.5	20.1	43.4	11.5	35.0	14.6	48.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	25.0	22.0	42.0	9.0	31.0	13.0	51.0
Max Q Clear Time (g_c+I1), s	10.7	11.1	15.2	23.0	7.5	22.2	10.4	37.4
Green Ext Time (p_c), s	0.4	3.0	0.9	7.4	0.1	4.2	0.2	7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Future Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	205	102	330	23	114	68	205	830	11	45	1580	216
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	524	36	156	524	235	2760	37	58	1948	265
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.13	0.53	0.53	0.03	0.43	0.43
Sat Flow, veh/h	0	0	1562	0	465	1560	1792	5219	69	1792	4529	617
Grp Volume(v), veh/h	307	0	330	137	0	68	205	544	297	45	1193	603
Grp Sat Flow(s),veh/h/ln	0	0	1562	465	0	1560	1792	1712	1864	1792	1712	1722
Q Serve(g_s), s	0.0	0.0	20.7	0.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Cycle Q Clear(g_c), s	39.0	0.0	20.7	39.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Prop In Lane	0.67		1.00	0.17		1.00	1.00		0.04	1.00		0.36
Lane Grp Cap(c), veh/h	52	0	524	192	0	524	235	1811	986	58	1473	741
V/C Ratio(X)	5.94	0.00	0.63	0.71	0.00	0.13	0.87	0.30	0.30	0.78	0.81	0.81
Avail Cap(c_a), veh/h	52	0	524	192	0	524	293	1811	986	123	1473	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	32.5	31.4	0.0	26.8	49.6	15.3	15.3	55.8	29.0	29.0
Incr Delay (d2), s/veh	2265.5	0.0	2.4	11.7	0.0	0.1	20.6	0.4	0.8	19.4	4.9	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.2	0.0	9.3	3.8	0.0	1.5	7.8	4.9	5.5	1.8	17.7	18.9
LnGrp Delay(d), s/veh	2323.6	0.0	34.9	43.1	0.0	26.9	70.1	15.8	16.1	75.3	33.9	38.6
LnGrp LOS	F		C	D		C	E	B	B	E	C	D
Approach Vol, veh/h		637			205			1046			1841	
Approach Delay, s/veh		1137.9			37.7			26.5			36.4	
Approach LOS		F			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	65.5		43.0	19.2	54.0		43.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	61.0		39.0	19.0	50.0		39.0
Max Q Clear Time (g_c+I1), s	4.9	12.4		41.0	15.0	37.7		41.0
Green Ext Time (p_c), s	0.0	6.0		0.0	0.2	8.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		221.9
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Future Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.81		0.67	0.82		0.67	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	117	85	106	117	43	53	649	96	85	1532	21
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	353	201	198	353	201	259	2350	989	545	2388	33
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.03	0.66	0.66	0.03	0.67	0.67
Sat Flow, veh/h	992	1863	1063	967	1863	1063	1774	3539	1490	1774	3571	49
Grp Volume(v), veh/h	21	117	85	106	117	43	53	649	96	85	758	795
Grp Sat Flow(s),veh/h/ln	992	1863	1063	967	1863	1063	1774	1770	1490	1774	1770	1850
Q Serve(g_s), s	2.0	5.8	7.5	11.4	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Cycle Q Clear(g_c), s	7.8	5.8	7.5	17.2	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	201	353	201	198	353	201	259	2350	989	545	1183	1238
V/C Ratio(X)	0.10	0.33	0.42	0.54	0.33	0.21	0.20	0.28	0.10	0.16	0.64	0.64
Avail Cap(c_a), veh/h	310	557	318	304	557	318	306	2350	989	567	1183	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	37.5	38.2	44.9	37.5	36.6	9.0	7.4	6.4	5.5	10.3	10.3
Incr Delay (d2), s/veh	0.2	0.5	1.4	2.2	0.5	0.5	0.4	0.3	0.2	0.1	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.0	2.3	3.2	3.0	1.1	0.5	4.0	1.1	0.8	13.7	14.4
LnGrp Delay(d), s/veh	41.1	38.0	39.6	47.2	38.0	37.1	9.4	7.7	6.6	5.6	12.9	12.8
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	B
Approach Vol, veh/h		223			266			798			1638	
Approach Delay, s/veh		38.9			41.5			7.7			12.5	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	75.0		24.2	7.2	75.5		24.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	71.0		32.0	6.0	70.0		32.0
Max Q Clear Time (g_c+I1), s	3.6	10.1		9.8	3.0	28.7		19.2
Green Ext Time (p_c), s	0.0	5.4		1.1	0.0	16.7		1.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Future Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	146	385	167	62	1146	83	167	1177	31	73	969	250
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	164	1549	785	355	1163	84	197	1403	37	172	1009	259
Arrive On Green	0.06	0.45	0.45	0.36	0.36	0.36	0.07	0.41	0.41	0.04	0.38	0.38
Sat Flow, veh/h	1723	3438	1491	822	3242	235	1723	3420	90	1723	2686	691
Grp Volume(v), veh/h	146	385	167	62	607	622	167	592	616	73	619	600
Grp Sat Flow(s),veh/h/ln	1723	1719	1491	822	1719	1758	1723	1719	1791	1723	1719	1658
Q Serve(g_s), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Cycle Q Clear(g_c), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.05	1.00		0.42
Lane Grp Cap(c), veh/h	164	1549	785	355	617	631	197	706	735	172	646	623
V/C Ratio(X)	0.89	0.25	0.21	0.17	0.98	0.99	0.85	0.84	0.84	0.42	0.96	0.96
Avail Cap(c_a), veh/h	164	1549	785	355	617	631	199	706	735	177	646	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	20.4	15.3	26.6	38.1	38.1	28.1	31.8	31.8	26.9	36.5	36.6
Incr Delay (d2), s/veh	40.3	0.1	0.1	0.2	32.1	32.2	27.5	11.4	11.1	1.7	26.6	28.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	4.0	3.0	1.5	25.4	26.0	4.7	19.8	20.6	1.5	24.7	24.2
LnGrp Delay(d), s/veh	69.7	20.4	15.4	26.9	70.2	70.3	55.6	43.2	42.8	28.5	63.1	64.8
LnGrp LOS	E	C	B	C	E	E	E	D	D	C	E	E
Approach Vol, veh/h		698			1291			1375			1292	
Approach Delay, s/veh		29.5			68.2			44.5			62.0	
Approach LOS		C			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	53.2		58.0	12.8	49.0	11.0	47.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0		54.0	9.0	45.0	7.0	43.0
Max Q Clear Time (g_c+I1), s	5.1	39.1		10.3	8.9	44.5	8.3	44.1
Green Ext Time (p_c), s	0.0	5.3		3.2	0.0	0.4	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		53.7
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Future Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
Arrive On Green	0.11	0.32	0.32	0.04	0.25	0.25	0.20	0.46	0.00	0.05	0.31	0.00
Sat Flow, veh/h	1723	3438	1537	1723	3438	1536	1723	3438	1538	1723	3438	1538
Grp Volume(v), veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1537	1723	1719	1536	1723	1719	1538	1723	1719	1538
Q Serve(g_s), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Cycle Q Clear(g_c), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
V/C Ratio(X)	0.85	0.15	0.30	0.78	0.90	0.35	0.91	0.65	0.00	0.78	0.81	0.00
Avail Cap(c_a), veh/h	196	1088	486	136	904	404	393	1577	706	151	1055	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	28.0	29.4	54.4	41.5	35.3	44.8	23.9	0.0	53.9	36.5	0.0
Incr Delay (d2), s/veh	27.5	0.1	0.3	18.0	11.6	0.6	23.7	2.1	0.0	15.4	6.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.9	3.5	2.0	13.2	3.6	11.9	12.9	0.0	2.3	13.3	0.0
LnGrp Delay(d), s/veh	77.6	28.1	29.8	72.4	53.1	35.8	68.6	26.0	0.0	69.2	43.2	0.0
LnGrp LOS	E	C	C	E	D	D	E	C		E	D	
Approach Vol, veh/h		469			958			1343			916	
Approach Delay, s/veh		45.1			51.7			35.9			45.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	56.3	8.4	40.1	26.6	39.0	16.1	32.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	51.0	9.0	34.0	26.0	35.0	13.0	30.0
Max Q Clear Time (g_c+I1), s	6.1	28.4	5.4	10.2	22.2	28.1	12.1	26.8
Green Ext Time (p_c), s	0.0	7.4	0.0	1.4	0.3	3.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	170	660	170	170	780	20	130	560	110	30	460	80
Future Volume (veh/h)	170	660	170	170	780	20	130	560	110	30	460	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	179	695	0	179	821	21	137	589	116	32	484	84
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	216	1021	457	216	1021	453	170	1740	336	43	1191	518
Arrive On Green	0.12	0.29	0.00	0.12	0.29	0.29	0.10	0.40	0.40	0.02	0.33	0.33
Sat Flow, veh/h	1792	3574	1599	1792	3574	1586	1792	4302	831	1792	3574	1555
Grp Volume(v), veh/h	179	695	0	179	821	21	137	466	239	32	484	84
Grp Sat Flow(s),veh/h/ln	1792	1787	1599	1792	1787	1586	1792	1712	1709	1792	1787	1555
Q Serve(g_s), s	9.4	16.6	0.0	9.4	20.5	0.9	7.2	9.1	9.3	1.7	10.1	3.7
Cycle Q Clear(g_c), s	9.4	16.6	0.0	9.4	20.5	0.9	7.2	9.1	9.3	1.7	10.1	3.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	216	1021	457	216	1021	453	170	1384	691	43	1191	518
V/C Ratio(X)	0.83	0.68	0.00	0.83	0.80	0.05	0.80	0.34	0.35	0.75	0.41	0.16
Avail Cap(c_a), veh/h	372	1445	647	372	1445	641	316	1384	691	111	1191	518
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.5	30.6	0.0	41.5	32.0	24.9	42.8	19.8	19.9	46.8	24.8	22.7
Incr Delay (d2), s/veh	8.0	0.8	0.0	8.0	2.3	0.0	8.6	0.7	1.4	22.5	1.0	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	8.3	0.0	5.2	10.5	0.4	4.0	4.4	4.6	1.1	5.1	1.7
LnGrp Delay(d), s/veh	49.4	31.4	0.0	49.4	34.2	25.0	51.3	20.5	21.3	69.3	25.8	23.3
LnGrp LOS	D	C		D	C	C	D	C	C	E	C	C
Approach Vol, veh/h		874			1021			842			600	
Approach Delay, s/veh		35.1			36.7			25.7			27.8	
Approach LOS		D			D			C			C	

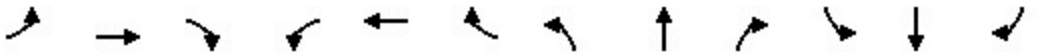
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	43.0	15.6	31.5	13.2	36.1	15.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	39.0	20.0	39.0	17.0	28.0	20.0	39.0
Max Q Clear Time (g_c+I1), s	3.7	11.3	11.4	18.6	9.2	12.1	11.4	22.5
Green Ext Time (p_c), s	0.0	4.6	0.3	4.4	0.2	2.9	0.3	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Future Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	432	211	105	979	21	168	484	32	42	526	21
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	96	1152	507	135	1229	548	205	1983	130	53	1611	64
Arrive On Green	0.05	0.32	0.32	0.08	0.34	0.34	0.11	0.40	0.40	0.03	0.32	0.32
Sat Flow, veh/h	1792	3574	1573	1792	3574	1593	1792	4919	322	1792	5063	201
Grp Volume(v), veh/h	74	432	211	105	979	21	168	335	181	42	355	192
Grp Sat Flow(s),veh/h/ln	1792	1787	1573	1792	1787	1593	1792	1712	1817	1792	1712	1840
Q Serve(g_s), s	3.8	8.8	9.9	5.4	23.3	0.8	8.6	6.1	6.2	2.2	7.4	7.5
Cycle Q Clear(g_c), s	3.8	8.8	9.9	5.4	23.3	0.8	8.6	6.1	6.2	2.2	7.4	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	96	1152	507	135	1229	548	205	1380	733	53	1089	586
V/C Ratio(X)	0.77	0.37	0.42	0.78	0.80	0.04	0.82	0.24	0.25	0.79	0.33	0.33
Avail Cap(c_a), veh/h	190	1630	717	304	1858	828	418	1380	733	133	1089	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	24.6	25.0	42.8	27.9	20.6	40.8	18.6	18.6	45.4	24.4	24.5
Incr Delay (d2), s/veh	12.3	0.2	0.5	9.4	1.5	0.0	7.8	0.4	0.8	22.0	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.4	4.3	3.0	11.7	0.4	4.7	3.0	3.3	1.4	3.6	4.0
LnGrp Delay(d), s/veh	56.4	24.8	25.5	52.2	29.4	20.6	48.5	19.0	19.4	67.4	25.2	26.0
LnGrp LOS	E	C	C	D	C	C	D	B	B	E	C	C
Approach Vol, veh/h		717			1105			684			589	
Approach Delay, s/veh		28.3			31.4			26.4			28.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	42.0	11.1	34.4	14.8	34.0	9.0	36.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	38.0	16.0	43.0	22.0	23.0	10.0	49.0
Max Q Clear Time (g_c+I1), s	4.2	8.2	7.4	11.9	10.6	9.5	5.8	25.3
Green Ext Time (p_c), s	0.0	3.2	0.1	3.6	0.3	2.7	0.0	7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Future Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3574		1783	5136					3467		1599
Flt Permitted		1.00		0.41	1.00					0.95		1.00
Satd. Flow (perm)		3574		778	5136					3467		1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	119
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	101
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		32.2		32.2	32.2					51.2		51.2
Effective Green, g (s)		32.2		32.2	32.2					51.2		51.2
Actuated g/C Ratio		0.35		0.35	0.35					0.56		0.56
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1259		274	1809					1942		895
v/s Ratio Prot		0.13			c0.24							
v/s Ratio Perm				0.16						c0.18		0.06
v/c Ratio		0.36		0.45	0.68					0.32		0.11
Uniform Delay, d1		21.9		22.7	25.3					10.8		9.4
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		1.2	1.1					0.4		0.3
Delay (s)		22.1		23.9	26.3					11.2		9.7
Level of Service		C		C	C					B		A
Approach Delay (s/veh)		22.1			26.1			0.0			11.0	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	91.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Future Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	139	748	147	16	871	554	159	158	0	241	683	42
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	198	1094	215	25	1168	609	231	1135	508	275	1447	635
Arrive On Green	0.06	0.37	0.37	0.01	0.33	0.33	0.07	0.32	0.00	0.15	0.40	0.40
Sat Flow, veh/h	3476	2960	581	1792	3574	1539	3476	3574	1599	1792	3574	1568
Grp Volume(v), veh/h	139	452	443	16	871	554	159	158	0	241	683	42
Grp Sat Flow(s),veh/h/ln	1738	1787	1754	1792	1787	1539	1738	1787	1599	1792	1787	1568
Q Serve(g_s), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Cycle Q Clear(g_c), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	660	648	25	1168	609	231	1135	508	275	1447	635
V/C Ratio(X)	0.70	0.68	0.68	0.64	0.75	0.91	0.69	0.14	0.00	0.88	0.47	0.07
Avail Cap(c_a), veh/h	221	660	648	65	1168	609	852	1135	508	423	1447	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	29.3	29.3	54.0	33.0	31.7	50.3	26.8	0.0	45.6	24.1	20.1
Incr Delay (d2), s/veh	8.5	2.9	3.0	23.5	2.7	17.8	3.6	0.3	0.0	12.3	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	12.1	11.9	0.6	12.2	18.8	2.5	1.8	0.0	8.1	7.8	0.8
LnGrp Delay(d), s/veh	59.6	32.2	32.3	77.6	35.7	49.5	54.0	27.1	0.0	57.9	25.2	20.3
LnGrp LOS	E	C	C	E	D	D	D	C		E	C	C
Approach Vol, veh/h		1034			1441			317			966	
Approach Delay, s/veh		35.9			41.5			40.6			33.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	48.6	5.5	44.7	20.9	39.0	10.3	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	34.0	4.0	39.0	26.0	35.0	7.0	36.0
Max Q Clear Time (g_c+I1), s	6.9	17.5	3.0	25.5	16.5	5.5	6.3	38.0
Green Ext Time (p_c), s	0.4	4.0	0.0	4.6	0.4	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Future Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	167	771	42	62	1271	167	198	1135	21	219	1344	333
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	164	1563	85	80	1222	161	194	1370	608	224	1430	773
Arrive On Green	0.09	0.31	0.31	0.04	0.27	0.27	0.11	0.38	0.38	0.13	0.40	0.40
Sat Flow, veh/h	1792	4981	270	1792	4583	602	1792	3574	1586	1792	3574	1567
Grp Volume(v), veh/h	167	529	284	62	949	489	198	1135	21	219	1344	333
Grp Sat Flow(s),veh/h/ln	1792	1712	1828	1792	1712	1762	1792	1787	1586	1792	1787	1567
Q Serve(g_s), s	11.0	15.1	15.1	4.1	32.0	32.0	13.0	34.4	1.0	14.6	43.4	16.5
Cycle Q Clear(g_c), s	11.0	15.1	15.1	4.1	32.0	32.0	13.0	34.4	1.0	14.6	43.4	16.5
Prop In Lane	1.00		0.15	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	1074	573	80	913	470	194	1370	608	224	1430	773
V/C Ratio(X)	1.02	0.49	0.50	0.78	1.04	1.04	1.02	0.83	0.03	0.98	0.94	0.43
Avail Cap(c_a), veh/h	164	1074	573	134	913	470	194	1370	608	224	1430	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	33.4	33.5	56.7	44.0	44.0	53.5	33.4	23.1	52.3	34.6	19.7
Incr Delay (d2), s/veh	74.7	0.4	0.7	14.7	40.7	52.3	69.9	5.9	0.1	53.7	13.2	1.7
Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	7.2	7.8	2.4	20.2	22.4	10.2	18.0	0.4	10.6	23.9	7.5
LnGrp Delay(d), s/veh	129.4	33.8	34.1	71.4	84.7	96.3	123.6	39.3	23.2	106.0	47.9	21.4
LnGrp LOS	F	C	C	E	F	F	F	D	C	F	D	C
Approach Vol, veh/h		980			1500			1354			1896	
Approach Delay, s/veh		50.2			87.9			51.4			49.9	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	50.0	9.4	41.6	17.0	52.0	15.0	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	46.0	9.0	34.0	13.0	48.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	16.6	36.4	6.1	17.1	15.0	45.4	13.0	34.0
Green Ext Time (p_c), s	0.0	5.1	0.0	4.6	0.0	2.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Future Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	90	883	149	145	1386	122	83	434	58	99	546	157
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1477	248	178	1776	156	300	1611	654	404	1206	345
Arrive On Green	0.06	0.34	0.34	0.10	0.37	0.37	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1792	4408	740	1792	4800	423	747	3574	1451	893	2676	765
Grp Volume(v), veh/h	90	685	347	145	989	519	83	434	58	99	363	340
Grp Sat Flow(s),veh/h/ln	1792	1712	1724	1792	1712	1799	747	1787	1451	893	1787	1654
Q Serve(g_s), s	5.2	17.3	17.5	8.3	26.7	26.7	9.0	7.9	2.4	8.1	14.6	14.8
Cycle Q Clear(g_c), s	5.2	17.3	17.5	8.3	26.7	26.7	23.8	7.9	2.4	16.0	14.6	14.8
Prop In Lane	1.00		0.43	1.00		0.23	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	115	1147	578	178	1267	665	300	1611	654	404	805	745
V/C Ratio(X)	0.78	0.60	0.60	0.82	0.78	0.78	0.28	0.27	0.09	0.25	0.45	0.46
Avail Cap(c_a), veh/h	223	1346	678	344	1576	828	300	1611	654	404	805	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	28.8	28.9	46.0	29.1	29.1	28.0	17.9	16.4	22.9	19.7	19.8
Incr Delay (d2), s/veh	10.9	0.5	1.1	8.8	2.1	3.8	2.3	0.4	0.3	1.4	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.3	8.5	4.5	13.0	14.0	2.0	4.0	1.0	2.2	7.6	7.1
LnGrp Delay(d), s/veh	58.9	29.4	30.0	54.8	31.2	33.0	30.3	18.3	16.7	24.4	21.6	21.8
LnGrp LOS	E	C	C	D	C	C	C	B	B	C	C	C
Approach Vol, veh/h		1122			1653			575			802	
Approach Delay, s/veh		31.9			33.8			19.9			22.0	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	14.3	38.9		51.0	10.7	42.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	20.0	41.0		47.0	13.0	48.0
Max Q Clear Time (g_c+I1), s		25.8	10.3	19.5		18.0	7.2	28.7
Green Ext Time (p_c), s		3.9	0.2	6.8		5.7	0.1	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Future Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.88	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	151	925	54	129	1409	86	97	398	65	333	419	151
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	1642	96	157	1575	96	122	591	444	390	898	318
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.07	0.32	0.32	0.11	0.37	0.37
Sat Flow, veh/h	1757	4861	283	1757	4839	295	1757	1845	1387	3408	2458	870
Grp Volume(v), veh/h	151	638	341	129	977	518	97	398	65	333	297	273
Grp Sat Flow(s),veh/h/ln	1757	1679	1786	1757	1679	1777	1757	1845	1387	1704	1752	1575
Q Serve(g_s), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Cycle Q Clear(g_c), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Prop In Lane	1.00		0.16	1.00		0.17	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	179	1134	603	157	1092	578	122	591	444	390	640	575
V/C Ratio(X)	0.85	0.56	0.56	0.82	0.89	0.89	0.80	0.67	0.15	0.85	0.46	0.48
Avail Cap(c_a), veh/h	213	1134	603	243	1133	600	198	591	444	413	640	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	31.3	31.3	51.7	37.1	37.1	53.0	34.0	28.0	50.2	28.0	28.2
Incr Delay (d2), s/veh	22.7	0.6	1.2	12.2	9.2	15.6	11.3	6.0	0.7	15.3	2.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	8.4	9.1	4.6	16.2	18.2	3.4	11.9	1.6	6.1	7.7	7.1
LnGrp Delay(d), s/veh	73.7	31.9	32.5	64.0	46.3	52.7	64.2	40.1	28.7	65.6	30.4	31.0
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	C	C
Approach Vol, veh/h		1130			1624			560			903	
Approach Delay, s/veh		37.7			49.7			43.0			43.5	
Approach LOS		D			D			D			D	

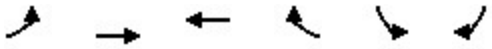
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	41.0	14.3	43.0	12.0	46.2	15.7	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	37.0	16.0	37.0	13.0	38.0	14.0	39.0
Max Q Clear Time (g_c+I1), s	13.1	23.6	10.3	20.0	8.3	17.4	11.8	34.0
Green Ext Time (p_c), s	0.1	2.4	0.1	5.7	0.1	3.8	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Future Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	85	798	394	170	1532	96	574	362	457	223	340	543
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	59	727	328	161	1330	83	512	1458	640	250	935	414
Arrive On Green	0.03	0.22	0.22	0.09	0.28	0.28	0.29	0.42	0.42	0.14	0.27	0.27
Sat Flow, veh/h	1757	3357	1516	1757	4835	303	1757	3505	1539	1757	3505	1554
Grp Volume(v), veh/h	85	798	394	170	1064	564	574	362	457	223	340	543
Grp Sat Flow(s),veh/h/ln	1757	1679	1516	1757	1679	1781	1757	1752	1539	1757	1752	1554
Q Serve(g_s), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Cycle Q Clear(g_c), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	727	328	161	923	490	512	1458	640	250	935	414
V/C Ratio(X)	1.45	1.10	1.20	1.06	1.15	1.15	1.12	0.25	0.71	0.89	0.36	1.31
Avail Cap(c_a), veh/h	59	727	328	161	923	490	512	1458	640	278	935	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	47.0	47.0	54.5	43.5	43.5	42.5	22.8	29.1	50.6	35.7	44.0
Incr Delay (d2), s/veh	275.9	63.0	115.5	86.4	80.9	89.9	77.1	0.4	6.7	26.5	1.1	156.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	18.4	21.4	9.2	25.6	28.4	27.9	4.0	13.8	9.1	4.7	31.7
LnGrp Delay(d), s/veh	333.9	110.0	162.5	141.0	124.4	133.4	119.6	23.2	35.8	77.0	36.8	200.1
LnGrp LOS	F	F	F	F	F	F	F	C	D	E	D	F
Approach Vol, veh/h		1277			1798			1393			1106	
Approach Delay, s/veh		141.1			128.8			67.0			125.1	
Approach LOS		F			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	53.9	15.0	30.0	39.0	36.0	8.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	48.0	11.0	26.0	35.0	32.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	17.0	31.6	13.0	28.0	37.0	34.0	6.0	35.0
Green Ext Time (p_c), s	0.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		115.5
HCM 2010 LOS		F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	320	1050	40	30	180
Future Volume (veh/h)	30	320	1050	40	30	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	33	356	1167	44	33	200
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	165	1528	1528	668	724	646
Arrive On Green	0.46	0.46	0.46	0.46	0.44	0.44
Sat Flow, veh/h	430	3399	3399	1448	1660	1482
Grp Volume(v), veh/h	33	356	1167	44	33	200
Grp Sat Flow(s),veh/h/ln	430	1656	1656	1448	1660	1482
Q Serve(g_s), s	5.4	5.1	22.9	1.3	0.9	6.9
Cycle Q Clear(g_c), s	28.2	5.1	22.9	1.3	0.9	6.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	165	1528	1528	668	724	646
V/C Ratio(X)	0.20	0.23	0.76	0.07	0.05	0.31
Avail Cap(c_a), veh/h	396	3313	3313	1449	724	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	12.7	17.5	11.7	12.7	14.3
Incr Delay (d2), s/veh	0.6	0.1	0.8	0.0	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.3	10.5	0.5	0.4	3.0
LnGrp Delay(d), s/veh	29.8	12.8	18.3	11.7	12.8	15.6
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h		389	1211		233	
Approach Delay, s/veh		14.2	18.0		15.2	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				40.0		38.0		40.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				78.0		34.0		78.0
Max Q Clear Time (g_c+I1), s				30.2		8.9		24.9
Green Ext Time (p_c), s				3.0		0.8		11.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Future Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	97	258	54	204	785	269	97	1065	0	75	677	237
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	120	1132	499	264	851	292	121	1338	599	95	1286	551
Arrive On Green	0.07	0.33	0.33	0.08	0.34	0.34	0.07	0.39	0.00	0.06	0.38	0.38
Sat Flow, veh/h	1707	3406	1503	3312	2490	853	1707	3406	1524	1707	3406	1460
Grp Volume(v), veh/h	97	258	54	204	537	517	97	1065	0	75	677	237
Grp Sat Flow(s),veh/h/ln	1707	1703	1503	1656	1703	1640	1707	1703	1524	1707	1703	1460
Q Serve(g_s), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Cycle Q Clear(g_c), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1132	499	264	582	561	121	1338	599	95	1286	551
V/C Ratio(X)	0.81	0.23	0.11	0.77	0.92	0.92	0.80	0.80	0.00	0.79	0.53	0.43
Avail Cap(c_a), veh/h	149	1132	499	376	609	587	194	1338	599	119	1286	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	27.6	26.5	51.7	36.2	36.2	52.4	30.7	0.0	53.5	27.7	26.5
Incr Delay (d2), s/veh	22.6	0.1	0.1	6.2	19.2	19.8	11.7	5.0	0.0	24.3	1.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.0	1.2	3.4	19.4	18.8	3.4	15.7	0.0	3.0	8.6	5.9
LnGrp Delay(d), s/veh	75.1	27.7	26.6	57.9	55.5	56.1	64.2	35.7	0.0	77.7	29.2	28.9
LnGrp LOS	E	C	C	E	E	E	E	D		E	C	C
Approach Vol, veh/h		409			1258			1162			989	
Approach Delay, s/veh		38.8			56.1			38.1			32.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	49.0	13.1	42.1	12.1	47.2	12.1	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	13.0	38.0	13.0	40.0	10.0	41.0
Max Q Clear Time (g_c+I1), s	7.0	33.6	8.9	8.3	8.4	19.7	8.4	36.7
Green Ext Time (p_c), s	0.0	5.4	0.2	1.8	0.1	5.2	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	430	1280	50	20	20
Future Vol, veh/h	30	430	1280	50	20	20
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	31	448	1333	52	21	21

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	1386	0	-	0	1620	668			
Stage 1	-	-	-	-	1334	-			
Stage 2	-	-	-	-	286	-			
Critical Hdwy	4.28	-	-	-	6.98	7.08			
Critical Hdwy Stg 1	-	-	-	-	5.98	-			
Critical Hdwy Stg 2	-	-	-	-	5.98	-			
Follow-up Hdwy	2.29	-	-	-	3.59	3.39			
Pot Cap-1 Maneuver	455	-	-	-	87	385			
Stage 1	-	-	-	-	198	-			
Stage 2	-	-	-	-	717	-			
Platoon blocked, %		-	-	-					
Mov Cap-1 Maneuver	455	-	-	-	81	385			
Mov Cap-2 Maneuver	-	-	-	-	81	-			
Stage 1	-	-	-	-	184	-			
Stage 2	-	-	-	-	716	-			

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	39.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	455	-	-	-	81	385
HCM Lane V/C Ratio	0.069	-	-	-	0.257	0.054
HCM Control Delay (s/veh)	13.5	-	-	-	64.2	14.9
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.9	0.2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	410	1340	80	50	70
Future Volume (veh/h)	130	410	1340	80	50	70
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712
Adj Flow Rate, veh/h	135	427	1396	83	52	73
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	168	2244	1754	768	350	312
Arrive On Green	0.10	0.69	0.54	0.54	0.21	0.21
Sat Flow, veh/h	1630	3338	3338	1424	1630	1455
Grp Volume(v), veh/h	135	427	1396	83	52	73
Grp Sat Flow(s),veh/h/ln	1630	1626	1626	1424	1630	1455
Q Serve(g_s), s	6.8	3.9	29.1	2.4	2.2	3.5
Cycle Q Clear(g_c), s	6.8	3.9	29.1	2.4	2.2	3.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	168	2244	1754	768	350	312
V/C Ratio(X)	0.80	0.19	0.80	0.11	0.15	0.23
Avail Cap(c_a), veh/h	389	3646	2715	1189	350	312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	4.6	15.6	9.5	26.7	27.2
Incr Delay (d2), s/veh	8.7	0.0	0.9	0.1	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.7	13.2	1.0	1.1	0.2
LnGrp Delay(d), s/veh	45.4	4.7	16.5	9.5	27.6	29.0
LnGrp LOS	D	A	B	A	C	C
Approach Vol, veh/h		562	1479		125	
Approach Delay, s/veh		14.5	16.1		28.4	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				61.8		22.0	12.6	49.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				94.0		18.0	20.0	70.0
Max Q Clear Time (g_c+I1), s				5.9		5.5	8.8	31.1
Green Ext Time (p_c), s				3.0		0.3	0.2	14.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

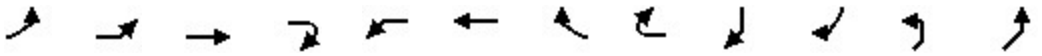
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Future Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	0	480	10	0	1429	173	0	0	51	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	248	-	-	715
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.36	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.03	-	-	3.43
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	616	0	0	349
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	614	-	-	349
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	11.4	16
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	614	-	-	-	-	349
HCM Lane V/C Ratio	0.083	-	-	-	-	0.058
HCM Control Delay (s/veh)	11.4	-	-	-	-	16
HCM Lane LOS	B	-	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.2



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	280	180	640	160	210	410	230	150	180	990	100	940
Future Volume (vph)	280	180	640	160	210	410	230	150	180	990	100	940
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.96	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.99	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1424		4504	1422	1656	1743	1462	1583	1304	1482	1656	3213
Flt Permitted	0.95		0.71	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1424		3246	1422	1656	1743	1462	1583	1304	1482	1656	3213
Peak-hour factor, PHF	0.91	0.92	0.91	0.91	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.91
Adj. Flow (vph)	308	196	703	176	231	451	253	163	198	1088	110	1033
RTOR Reduction (vph)	0	0	0	89	0	0	0	129	107	166	0	0
Lane Group Flow (vph)	277	0	930	88	231	451	253	34	537	476	110	1033
Confl. Peds. (#/hr)				12	12							
Confl. Bikes (#/hr)				2			1					
Heavy Vehicles (%)	9%	2%	9%	9%	9%	9%	9%	2%	9%	9%	9%	9%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	pm+ov	Prot	Prot
Protected Phases	7	7	4		3	8				7!	5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	16.0		45.0	30.0	11.0	25.0	25.0	25.0	37.0	53.0	26.0	26.0
Effective Green, g (s)	16.0		45.0	30.0	11.0	25.0	25.0	25.0	37.0	53.0	26.0	26.0
Actuated g/C Ratio	0.13		0.38	0.25	0.09	0.21	0.21	0.21	0.31	0.44	0.22	0.22
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	189		1384	355	151	363	304	329	402	703	358	696
v/s Ratio Prot	c0.19		0.09		0.14	c0.26				0.09	0.07	c0.32
v/s Ratio Perm			0.16	0.06			0.17	0.02	c0.41	0.23		
v/c Ratio	1.47		1.02dl	0.25	1.53	1.24	0.83	0.10	1.34	0.68	0.31	1.48
Uniform Delay, d1	52.0		31.3	36.0	54.5	47.5	45.5	38.4	41.5	26.7	39.4	47.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	236.1		1.3	0.4	268.9	130.4	17.4	0.1	167.0	2.6	0.5	225.5
Delay (s)	288.1		32.6	36.3	323.4	177.9	62.9	38.6	208.5	29.3	39.9	272.5
Level of Service	F		C	D	F	F	E	D	F	C	D	F
Approach Delay (s/veh)			84.3			161.3						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	112.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	118.5%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
! Phase conflict between lane groups.
c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	750	330	90	910
Future Volume (vph)	750	330	90	910
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.95		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4714		1770	5085
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4714		1770	5085
Peak-hour factor, PHF	0.92	0.91	0.92	0.92
Adj. Flow (vph)	815	363	98	989
RTOR Reduction (vph)	65	0	0	0
Lane Group Flow (vph)	1113	0	98	989
Confl. Peds. (#/hr)		5		
Confl. Bikes (#/hr)		3		
Heavy Vehicles (%)	2%	9%	2%	2%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	51.9		11.1	37.0
Effective Green, g (s)	51.9		11.1	37.0
Actuated g/C Ratio	0.43		0.09	0.31
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	2038		163	1567
v/s Ratio Prot	0.24		0.06	0.19
v/s Ratio Perm				
v/c Ratio	0.55		0.60	0.63
Uniform Delay, d1	25.3		52.3	35.6
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	1.1		6.1	1.9
Delay (s)	26.4		58.4	37.6
Level of Service	C		E	D
Approach Delay (s/veh)	136.6			39.5
Approach LOS	F			D

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Future Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1759	1759	1759	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	461	843	124	90	787	0	79	382	393	101	730	112
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	541	1452	214	113	1334	597	100	1019	555	125	1093	424
Arrive On Green	0.17	0.50	0.50	0.07	0.40	0.00	0.06	0.21	0.21	0.07	0.23	0.23
Sat Flow, veh/h	3250	2916	429	1675	3343	1495	1675	4803	1445	1675	4803	1420
Grp Volume(v), veh/h	461	483	484	90	787	0	79	382	393	101	730	112
Grp Sat Flow(s),veh/h/ln	1625	1671	1673	1675	1671	1495	1675	1601	1445	1675	1601	1420
Q Serve(g_s), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.5
Cycle Q Clear(g_c), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.5
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	541	832	833	113	1334	597	100	1019	555	125	1093	424
V/C Ratio(X)	0.85	0.58	0.58	0.80	0.59	0.00	0.79	0.37	0.71	0.81	0.67	0.26
Avail Cap(c_a), veh/h	750	832	833	201	1334	597	185	1019	555	216	1108	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	19.2	19.2	49.8	25.6	0.0	50.3	36.6	28.8	49.4	38.1	29.3
Incr Delay (d2), s/veh	6.9	2.9	2.9	12.1	1.9	0.0	13.1	0.2	4.1	11.3	1.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	10.9	10.9	3.0	9.5	0.0	2.7	3.3	10.6	3.4	6.8	2.6
LnGrp Delay(d), s/veh	50.8	22.2	22.2	61.9	27.5	0.0	63.5	36.8	32.9	60.7	39.7	29.6
LnGrp LOS	D	C	C	E	C		E	D	C	E	D	C
Approach Vol, veh/h		1428			877			854			943	
Approach Delay, s/veh		31.4			31.1			37.5			40.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	58.0	12.1	27.0	22.0	47.3	10.4	28.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	14.0	23.0	25.0	42.0	12.0	25.0
Max Q Clear Time (g_c+I1), s	7.7	24.1	8.4	25.0	16.9	22.1	7.0	17.0
Green Ext Time (p_c), s	0.1	6.7	0.1	0.0	1.1	5.1	0.1	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Future Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
Arrive On Green	0.09	0.08	0.08	0.10	0.09	0.00	0.07	0.51	0.51	0.15	0.58	0.58
Sat Flow, veh/h	1707	3406	1482	1707	3406	1524	1707	3406	1474	1707	3406	1493
Grp Volume(v), veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Grp Sat Flow(s),veh/h/ln	1707	1703	1482	1707	1703	1524	1707	1703	1474	1707	1703	1493
Q Serve(g_s), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Cycle Q Clear(g_c), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
V/C Ratio(X)	0.82	0.62	0.40	0.82	0.61	0.00	0.80	0.62	0.11	0.86	0.58	0.67
Avail Cap(c_a), veh/h	253	539	235	270	573	256	220	1731	749	389	1988	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	44.7	43.8	44.6	44.2	0.0	46.1	17.9	12.9	42.0	13.2	14.3
Incr Delay (d2), s/veh	10.5	2.2	2.0	10.5	2.0	0.0	10.8	1.7	0.3	12.1	1.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.5	1.4	4.3	2.6	0.0	3.1	11.2	1.2	6.8	10.4	11.9
LnGrp Delay(d), s/veh	55.5	46.9	45.9	55.2	46.2	0.0	56.9	19.6	13.2	54.1	14.4	18.3
LnGrp LOS	E	D	D	E	D		E	B	B	D	B	B
Approach Vol, veh/h		360			330			1260			1950	
Approach Delay, s/veh		49.9			50.0			22.2			20.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	55.4	14.1	12.5	11.4	63.0	13.4	13.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	49.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.7	25.1	10.1	7.2	7.8	28.7	9.6	7.4
Green Ext Time (p_c), s	0.4	8.3	0.2	0.7	0.1	12.9	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	55

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	450	100	260	0	120	400
Future Vol, veh/h	450	100	260	0	120	400
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	506	112	292	0	135	449

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	1416	-
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	1124	-
Critical Hdwy	4.19	-	-	-	6.49	-
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.281	-	-	-	3.581	-
Pot Cap-1 Maneuver	1231	-	-	-	146	0
Stage 1	-	-	-	-	742	0
Stage 2	-	-	-	-	301	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1231	-	-	-	~ 86	-
Mov Cap-2 Maneuver	-	-	-	-	~ 86	-
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	301	-

Approach	EB	WB	SW
HCM Control Delay, s/v	8.1	0	$ 388.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1231	-	-	-	86	-
HCM Lane V/C Ratio	0.411	-	-	-	1.568	-
HCM Control Delay (s/veh)	9.9	-	-	-	$ 388.8	0
HCM Lane LOS	A	-	-	-	F	A
HCM 95th %tile Q(veh)	2	-	-	-	10.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Future Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	42	104	52	31	281	125	240	1146	0	115	990	94
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	145	303	151	335	312	139	347	1729	773	276	1594	689
Arrive On Green	0.03	0.27	0.27	0.02	0.27	0.27	0.09	0.51	0.00	0.05	0.47	0.47
Sat Flow, veh/h	1707	1119	559	1707	1173	522	1707	3406	1524	1707	3406	1472
Grp Volume(v), veh/h	42	0	156	31	0	406	240	1146	0	115	990	94
Grp Sat Flow(s),veh/h/ln	1707	0	1678	1707	0	1695	1707	1703	1524	1707	1703	1472
Q Serve(g_s), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Cycle Q Clear(g_c), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Prop In Lane	1.00		0.33	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	454	335	0	451	347	1729	773	276	1594	689
V/C Ratio(X)	0.29	0.00	0.34	0.09	0.00	0.90	0.69	0.66	0.00	0.42	0.62	0.14
Avail Cap(c_a), veh/h	163	0	573	359	0	579	475	1729	773	314	1594	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	31.8	28.2	0.0	38.3	17.1	19.8	0.0	16.6	21.6	16.4
Incr Delay (d2), s/veh	1.1	0.0	0.4	0.1	0.0	14.4	2.6	2.0	0.0	1.0	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	3.8	0.7	0.0	13.5	3.7	13.1	0.0	1.8	11.4	1.7
LnGrp Delay(d), s/veh	31.9	0.0	32.2	28.3	0.0	52.7	19.6	21.8	0.0	17.6	23.5	16.8
LnGrp LOS	C		C	C		D	B	C		B	C	B
Approach Vol, veh/h		198			437			1386			1199	
Approach Delay, s/veh		32.2			51.0			21.4			22.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	59.0	6.4	33.3	13.9	54.7	6.9	32.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	55.0	4.0	37.0	18.0	45.0	4.0	37.0
Max Q Clear Time (g_c+I1), s	5.8	29.1	3.4	10.1	9.5	25.6	3.9	27.0
Green Ext Time (p_c), s	0.1	9.3	0.0	0.9	0.4	7.2	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	160	50	150	480	30	30
Future Vol, veh/h	160	50	150	480	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	14	14	14	14	14	14
Mvmt Flow	176	55	165	527	33	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	231	0	1033	176
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	857	-
Critical Hdwy	-	-	4.24	-	6.54	6.34
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.326	-	3.626	3.426
Pot Cap-1 Maneuver	-	-	1269	-	245	837
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1269	-	200	837
Mov Cap-2 Maneuver	-	-	-	-	200	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	323	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	200	837	-	-	1269	-
HCM Lane V/C Ratio	0.165	0.039	-	-	0.13	-
HCM Control Delay (s/veh)	26.5	9.5	-	-	8.3	0
HCM Lane LOS	D	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.4	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	190	10	20	740	40	50
Future Vol, veh/h	190	10	20	740	40	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	198	10	21	771	42	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	208	0	1011	198
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	813	-
Critical Hdwy	-	-	4.26	-	6.56	6.36
Critical Hdwy Stg 1	-	-	-	-	5.56	-
Critical Hdwy Stg 2	-	-	-	-	5.56	-
Follow-up Hdwy	-	-	2.344	-	3.644	3.444
Pot Cap-1 Maneuver	-	-	1284	-	250	809
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	413	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1284	-	246	809
Mov Cap-2 Maneuver	-	-	-	-	246	-
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	406	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.2	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	246	809	-	-	1284	-
HCM Lane V/C Ratio	0.169	0.064	-	-	0.016	-
HCM Control Delay (s/veh)	22.6	9.8	-	-	7.9	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	140	50	20	680	60	40
Future Volume (veh/h)	140	50	20	680	60	40
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1624	1624	1624	1624	1624	1624
Adj Flow Rate, veh/h	149	53	21	723	64	43
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	17	17	17	17	17	17
Cap, veh/h	850	722	609	850	527	470
Arrive On Green	0.52	0.52	0.52	0.52	0.34	0.34
Sat Flow, veh/h	1624	1380	1025	1624	1547	1380
Grp Volume(v), veh/h	149	53	21	723	64	43
Grp Sat Flow(s),veh/h/ln	1624	1380	1025	1624	1547	1380
Q Serve(g_s), s	2.8	1.1	0.6	22.5	1.7	1.2
Cycle Q Clear(g_c), s	2.8	1.1	3.5	22.5	1.7	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	850	722	609	850	527	470
V/C Ratio(X)	0.18	0.07	0.03	0.85	0.12	0.09
Avail Cap(c_a), veh/h	2544	2162	1679	2544	527	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	6.9	8.3	12.0	13.3	13.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.5	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	0.2	10.4	0.8	0.5
LnGrp Delay(d), s/veh	7.4	7.0	8.3	14.5	13.8	13.6
LnGrp LOS	A	A	A	B	B	B
Approach Vol, veh/h	202			744	107	
Approach Delay, s/veh	7.3			14.4	13.7	
Approach LOS	A			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		24.0		34.7				34.7
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		20.0		92.0				92.0
Max Q Clear Time (g_c+I1), s		3.7		4.8				24.5
Green Ext Time (p_c), s		0.2		1.1				6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.0
HCM 2010 LOS	B

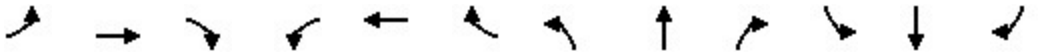
Intersection	
Int Delay, s/veh	4.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	160	10	10	550	160	20
Future Vol, veh/h	160	10	10	550	160	20
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	168	11	11	579	168	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	180	0	770	169
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	601	-
Critical Hdwy	-	-	4.28	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	-	-	2.362	-	3.662	3.462
Pot Cap-1 Maneuver	-	-	1305	-	347	835
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	344	834
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	514	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	23.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	344	834	-	-	1304	-
HCM Lane V/C Ratio	0.49	0.025	-	-	0.008	-
HCM Control Delay (s/veh)	25.1	9.4	-	-	7.8	-
HCM Lane LOS	D	A	-	-	A	-
HCM 95th %tile Q(veh)	2.6	0.1	-	-	0	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Future Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1900	1792	1792	1900
Adj Flow Rate, veh/h	281	375	104	198	844	219	52	1115	73	52	885	135
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	318	1062	281	413	939	242	66	1416	93	66	1286	196
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.04	0.44	0.44	0.04	0.44	0.44
Sat Flow, veh/h	1707	3824	1011	1707	3874	999	1707	3241	212	1707	2945	449
Grp Volume(v), veh/h	281	317	162	198	710	353	52	585	603	52	512	508
Grp Sat Flow(s),veh/h/ln	1707	1631	1573	1707	1631	1610	1707	1703	1751	1707	1703	1691
Q Serve(g_s), s	13.3	8.7	9.3	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.2	27.2
Cycle Q Clear(g_c), s	13.3	8.7	9.3	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.2	27.2
Prop In Lane	1.00		0.64	1.00		0.62	1.00		0.12	1.00		0.27
Lane Grp Cap(c), veh/h	318	906	437	413	791	390	66	744	765	66	744	739
V/C Ratio(X)	0.88	0.35	0.37	0.48	0.90	0.90	0.79	0.79	0.79	0.79	0.69	0.69
Avail Cap(c_a), veh/h	399	1018	491	448	814	402	91	744	765	91	744	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	32.4	32.6	27.2	41.2	41.2	53.5	27.1	27.1	53.5	25.4	25.4
Incr Delay (d2), s/veh	17.4	0.2	0.5	0.9	12.6	23.0	26.2	8.2	8.1	26.2	5.2	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	3.9	4.1	4.6	12.0	13.1	2.1	17.2	17.6	2.1	13.9	13.8
LnGrp Delay(d), s/veh	45.3	32.6	33.1	28.1	53.7	64.3	79.7	35.4	35.2	79.7	30.6	30.6
LnGrp LOS	D	C	C	C	D	E	E	D	D	E	C	C
Approach Vol, veh/h		760			1261			1240			1072	
Approach Delay, s/veh		37.4			52.7			37.2			33.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	53.0	15.7	35.2	8.3	53.0	19.7	31.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	49.0	14.0	35.0	6.0	49.0	21.0	28.0
Max Q Clear Time (g_c+I1), s	5.4	35.2	11.6	11.3	5.4	29.2	15.3	25.9
Green Ext Time (p_c), s	0.0	6.6	0.1	2.9	0.0	6.6	0.4	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.7
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	170	10	600	230	0	730
Future Volume (veh/h)	170	10	600	230	0	730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	0	1810
Adj Flow Rate, veh/h	191	11	674	0	0	820
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	5	0	5
Cap, veh/h	276	127	2871	1411	0	2871
Arrive On Green	0.08	0.08	0.84	0.00	0.00	0.84
Sat Flow, veh/h	3343	1538	3529	1538	0	3619
Grp Volume(v), veh/h	191	11	674	0	0	820
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	1538	0	1719
Q Serve(g_s), s	5.4	0.6	3.9	0.0	0.0	5.0
Cycle Q Clear(g_c), s	5.4	0.6	3.9	0.0	0.0	5.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	276	127	2871	1411	0	2871
V/C Ratio(X)	0.69	0.09	0.23	0.00	0.00	0.29
Avail Cap(c_a), veh/h	1068	492	2871	1411	0	2871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	43.3	41.1	1.6	0.0	0.0	1.7
Incr Delay (d2), s/veh	3.1	0.3	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.3	1.9	0.0	0.0	2.4
LnGrp Delay(d), s/veh	46.4	41.4	1.8	0.0	0.0	2.0
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	202		674			820
Approach Delay, s/veh	46.1		1.8			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		85.0				85.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		81.0				81.0		31.0
Max Q Clear Time (g_c+I1), s		5.9				7.0		7.4
Green Ext Time (p_c), s		5.0				6.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Future Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	8	251	29	458	618	13	205	8	330	15	13	12
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	14	1617	500	502	3036	64	382	15	353	54	27	25
Arrive On Green	0.01	0.31	0.31	0.28	0.59	0.59	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1792	5136	1589	1792	5174	109	1727	67	1595	1792	894	826
Grp Volume(v), veh/h	8	251	29	458	408	223	213	0	330	15	0	25
Grp Sat Flow(s),veh/h/ln	1792	1712	1589	1792	1712	1859	1795	0	1595	1792	0	1720
Q Serve(g_s), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Cycle Q Clear(g_c), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.06	0.96		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	14	1617	500	502	2009	1091	397	0	353	54	0	52
V/C Ratio(X)	0.56	0.16	0.06	0.91	0.20	0.20	0.54	0.00	0.94	0.28	0.00	0.48
Avail Cap(c_a), veh/h	69	1617	500	793	2009	1091	397	0	353	276	0	265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	25.7	24.9	36.2	10.1	10.1	35.8	0.0	39.7	49.3	0.0	49.6
Incr Delay (d2), s/veh	30.5	0.2	0.2	10.1	0.2	0.4	1.4	0.0	31.7	2.8	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.6	14.1	2.8	3.1	5.5	0.0	12.4	0.5	0.0	0.8
LnGrp Delay(d), s/veh	81.8	25.9	25.1	46.3	10.3	10.5	37.2	0.0	71.5	52.1	0.0	56.5
LnGrp LOS	F	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		288			1089			543			40	
Approach Delay, s/veh		27.3			25.5			58.0			54.8	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	65.0		27.0	33.1	36.7		7.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	61.0		23.0	46.0	19.0		16.0
Max Q Clear Time (g_c+I1), s	2.5	7.8		23.1	27.7	5.7		3.5
Green Ext Time (p_c), s	0.0	4.7		0.0	1.4	1.2		0.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		35.4
HCM 2010 LOS		D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	190	120	530	670	340	10	1120	290	120	1320	70
Future Volume (veh/h)	30	190	120	530	670	340	10	1120	290	120	1320	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	32	202	128	564	713	362	11	1191	309	128	1404	74
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	40	595	257	631	1165	651	38	1368	620	155	1852	813
Arrive On Green	0.02	0.17	0.17	0.19	0.34	0.34	0.41	0.41	0.41	0.09	0.53	0.53
Sat Flow, veh/h	1740	3471	1501	3375	3471	1528	11	3348	1517	1740	3471	1524
Grp Volume(v), veh/h	32	202	128	564	713	362	639	563	309	128	1404	74
Grp Sat Flow(s),veh/h/ln	1740	1736	1501	1688	1736	1528	1780	1579	1517	1740	1736	1524
Q Serve(g_s), s	2.0	5.7	8.6	18.1	19.1	19.8	8.0	36.3	16.8	8.0	35.2	2.6
Cycle Q Clear(g_c), s	2.0	5.7	8.6	18.1	19.1	19.8	36.2	36.3	16.8	8.0	35.2	2.6
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	595	257	631	1165	651	760	645	620	155	1852	813
V/C Ratio(X)	0.81	0.34	0.50	0.89	0.61	0.56	0.84	0.87	0.50	0.83	0.76	0.09
Avail Cap(c_a), veh/h	78	595	257	700	1165	651	847	726	697	173	2065	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	40.4	41.6	44.0	30.8	24.1	29.9	30.1	24.4	49.7	20.3	12.7
Incr Delay (d2), s/veh	30.3	1.6	6.7	13.0	2.4	3.4	7.0	10.4	0.6	25.2	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	4.0	9.6	9.5	8.9	19.4	17.6	7.1	5.0	17.2	1.1
LnGrp Delay(d), s/veh	84.3	42.0	48.4	57.0	33.2	27.5	36.9	40.5	25.0	74.9	21.8	12.7
LnGrp LOS	F	D	D	E	C	C	D	D	C	E	C	B
Approach Vol, veh/h		362			1639			1511			1606	
Approach Delay, s/veh		48.0			40.2			35.8			25.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	41.2	13.9	49.3	24.8	23.0		63.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0	11.0	51.0	23.0	19.0		66.0
Max Q Clear Time (g_c+I1), s	4.0	21.8	10.0	38.3	20.1	10.6		37.2
Green Ext Time (p_c), s	0.0	5.2	0.0	7.0	0.7	1.0		12.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.9
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	390	220	400	830	670	20
Future Volume (vph)	390	220	400	830	670	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3471	1553	1736	3471	3366	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3471	1553	1736	3471	3366	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	398	224	408	847	684	20
RTOR Reduction (vph)	0	87	0	0	2	0
Lane Group Flow (vph)	398	137	408	847	702	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	39.6	68.6	31.6	75.2	29.0	
Effective Green, g (s)	39.6	68.6	31.6	75.2	29.0	
Actuated g/C Ratio	0.35	0.61	0.28	0.67	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1225	1004	488	2326	870	
v/s Ratio Prot	0.11	0.04	c0.24	c0.24	c0.21	
v/s Ratio Perm		0.05				
v/c Ratio	0.32	0.14	0.84	0.36	0.81	
Uniform Delay, d1	26.5	9.2	37.9	8.1	39.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.1	11.8	0.4	5.5	
Delay (s)	27.2	9.3	49.7	8.5	44.5	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	20.8			21.9	44.5	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	112.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	424	290	69	407	1072	266
Future Volume (veh/h)	424	290	69	407	1072	266
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	433	0	70	415	1094	271
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	850	391	288	2383	2383	1064
Arrive On Green	0.24	0.00	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3476	1599	401	3668	3668	1595
Grp Volume(v), veh/h	433	0	70	415	1094	271
Grp Sat Flow(s),veh/h/ln	1738	1599	401	1787	1787	1595
Q Serve(g_s), s	9.7	0.0	9.2	3.9	13.2	6.1
Cycle Q Clear(g_c), s	9.7	0.0	22.4	3.9	13.2	6.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	850	391	288	2383	2383	1064
V/C Ratio(X)	0.51	0.00	0.24	0.17	0.46	0.25
Avail Cap(c_a), veh/h	850	391	288	2383	2383	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	12.6	5.7	7.2	6.0
Incr Delay (d2), s/veh	2.2	0.0	0.4	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	1.0	1.9	6.6	2.8
LnGrp Delay(d), s/veh	31.5	0.0	13.0	5.7	7.8	6.6
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	433			485	1365	
Approach Delay, s/veh	31.5			6.7	7.6	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		64.0				64.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		60.0				60.0
Max Q Clear Time (g_c+I1), s		11.7		24.4				15.2
Green Ext Time (p_c), s		1.1		4.0				10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.0
HCM 2010 LOS	B



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	90	430	40	80	710
Future Volume (veh/h)	60	90	430	40	80	710
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	62	94	448	42	83	740
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	144	129	2831	1266	776	2831
Arrive On Green	0.08	0.08	0.83	0.83	0.83	0.83
Sat Flow, veh/h	1707	1524	3495	1524	869	3495
Grp Volume(v), veh/h	62	94	448	42	83	740
Grp Sat Flow(s),veh/h/ln	1707	1524	1703	1524	869	1703
Q Serve(g_s), s	3.3	5.7	2.4	0.5	2.0	4.5
Cycle Q Clear(g_c), s	3.3	5.7	2.4	0.5	4.4	4.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	144	129	2831	1266	776	2831
V/C Ratio(X)	0.43	0.73	0.16	0.03	0.11	0.26
Avail Cap(c_a), veh/h	593	529	2831	1266	776	2831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	42.4	1.6	1.4	2.0	1.7
Incr Delay (d2), s/veh	2.0	7.6	0.1	0.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.7	1.2	0.2	0.5	2.1
LnGrp Delay(d), s/veh	43.3	50.1	1.7	1.4	2.3	2.0
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	156		490			823
Approach Delay, s/veh	47.4		1.7			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		4.4				6.5		7.7
Green Ext Time (p_c), s		3.2				6.4		0.5

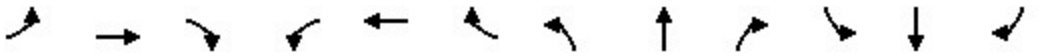
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.7
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	80	170	70	50	30
Future Vol, veh/h	30	80	170	70	50	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	19	19	19	19	19	19
Mvmt Flow	33	87	185	76	54	33
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	8.6	11.3	8.2
HCM LOS	A	B	A

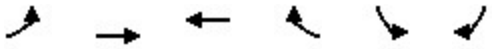
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	71%	100%	0%	0%	0%
Vol Thru, %	29%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	30	80	50	30
LT Vol	170	30	0	0	0
Through Vol	70	0	0	50	0
RT Vol	0	0	80	0	30
Lane Flow Rate	261	33	87	54	33
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.376	0.056	0.121	0.081	0.042
Departure Headway (Hd)	5.188	6.231	5.024	5.386	4.682
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	694	576	714	666	765
Service Time	3.209	3.96	2.753	3.113	2.408
HCM Lane V/C Ratio	0.376	0.057	0.122	0.081	0.043
HCM Control Delay, s/veh	11.3	9.3	8.4	8.6	7.6
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	1.8	0.2	0.4	0.3	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Future Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.96			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1703	4869		1703	4676			3391	1524	1550	3135	1492
Flt Permitted	0.95	1.00		0.95	1.00			0.92	1.00	0.95	0.58	1.00
Satd. Flow (perm)	1703	4869		1703	4676			3131	1524	1550	1878	1492
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	189	663	21	453	1316	442	21	263	589	368	42	32
RTOR Reduction (vph)	0	2	0	0	51	0	0	0	401	0	0	19
Lane Group Flow (vph)	189	682	0	453	1707	0	0	284	188	184	226	13
Confl. Peds. (#/hr)	6					6	4					4
Confl. Bikes (#/hr)			2			4						
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Effective Green, g (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Actuated g/C Ratio	0.12	0.21		0.29	0.38			0.24	0.24	0.13	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	210	1007		497	1756			737	358	204	918	597
v/s Ratio Prot	0.11	0.14		c0.27	c0.37					c0.12	0.03	
v/s Ratio Perm								0.09	c0.12		0.07	0.01
v/c Ratio	0.90	0.68		0.91	0.97			0.39	0.53	0.90	0.87dl	0.02
Uniform Delay, d1	51.8	43.8		40.9	36.8			38.5	40.0	51.2	23.9	21.7
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.0	1.8		20.9	15.4			1.5	5.4	37.1	0.1	0.1
Delay (s)	87.8	45.6		61.8	52.1			40.0	45.4	88.3	24.0	21.8
Level of Service	F	D		E	D			D	D	F	C	C
Approach Delay (s/veh)		54.7			54.1			43.7			50.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	51.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	1000	1580	80	60	30
Future Volume (veh/h)	80	1000	1580	80	60	30
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1658	1658	1792	1792	1792	1792
Adj Flow Rate, veh/h	92	1149	1816	92	69	34
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	176	2442	2640	1156	256	228
Arrive On Green	0.78	0.78	0.78	0.78	0.15	0.15
Sat Flow, veh/h	209	3233	3495	1491	1707	1524
Grp Volume(v), veh/h	92	1149	1816	92	69	34
Grp Sat Flow(s),veh/h/ln	209	1575	1703	1491	1707	1524
Q Serve(g_s), s	40.5	13.8	27.4	1.6	3.8	2.1
Cycle Q Clear(g_c), s	67.9	13.8	27.4	1.6	3.8	2.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	176	2442	2640	1156	256	228
V/C Ratio(X)	0.52	0.47	0.69	0.08	0.27	0.15
Avail Cap(c_a), veh/h	202	2833	3063	1341	256	228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	4.2	5.8	2.9	40.2	39.5
Incr Delay (d2), s/veh	2.4	0.1	0.5	0.0	2.6	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.0	12.8	0.6	2.0	1.0
LnGrp Delay(d), s/veh	24.5	4.4	6.3	2.9	42.8	40.8
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		1241	1908		103	
Approach Delay, s/veh		5.9	6.2		42.1	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				86.7		20.0		86.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				96.0		16.0		96.0
Max Q Clear Time (g_c+I1), s				69.9		5.8		29.4
Green Ext Time (p_c), s				12.8		0.2		26.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Future Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	234	660	85	213	1479	128	96	574	117	74	713	223
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	262	1623	207	244	1648	143	119	1055	466	94	1004	437
Arrive On Green	0.15	0.36	0.36	0.14	0.35	0.35	0.07	0.30	0.30	0.05	0.29	0.29
Sat Flow, veh/h	1740	4470	569	1740	4674	404	1740	3471	1533	1740	3471	1511
Grp Volume(v), veh/h	234	489	256	213	1052	555	96	574	117	74	713	223
Grp Sat Flow(s),veh/h/ln	1740	1663	1714	1740	1663	1754	1740	1736	1533	1740	1736	1511
Q Serve(g_s), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Cycle Q Clear(g_c), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Prop In Lane	1.00		0.33	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	1207	622	244	1172	618	119	1055	466	94	1004	437
V/C Ratio(X)	0.89	0.41	0.41	0.87	0.90	0.90	0.81	0.54	0.25	0.79	0.71	0.51
Avail Cap(c_a), veh/h	302	1207	622	363	1212	639	136	1055	466	106	1004	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	27.4	27.5	48.5	35.3	35.3	52.9	33.4	30.2	53.8	36.6	34.1
Incr Delay (d2), s/veh	24.4	0.2	0.4	14.3	8.9	15.2	25.9	2.0	1.3	29.2	4.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	5.8	6.2	7.6	17.2	19.3	3.9	7.9	3.0	3.1	10.7	6.4
LnGrp Delay(d), s/veh	72.4	27.6	27.9	62.8	44.2	50.5	78.8	35.5	31.5	83.1	40.9	38.3
LnGrp LOS	E	C	C	E	D	D	E	D	C	F	D	D
Approach Vol, veh/h		979			1820			787			1010	
Approach Delay, s/veh		38.4			48.3			40.2			43.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	39.0	20.2	45.8	11.9	37.3	21.4	44.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	24.0	38.0	9.0	33.0	20.0	42.0
Max Q Clear Time (g_c+I1), s	6.8	17.9	15.8	14.9	8.3	23.2	17.2	36.5
Green Ext Time (p_c), s	0.0	3.6	0.4	4.7	0.0	3.7	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Future Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	160	670	117	298	1553	149	117	1106	170	85	989	117
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	176	1104	190	326	1591	153	142	1140	175	88	1206	687
Arrive On Green	0.10	0.26	0.26	0.19	0.34	0.34	0.08	0.38	0.38	0.05	0.34	0.34
Sat Flow, veh/h	1757	4305	741	1757	4658	446	1757	3039	466	1757	3505	1539
Grp Volume(v), veh/h	160	520	267	298	1119	583	117	636	640	85	989	117
Grp Sat Flow(s),veh/h/ln	1757	1679	1689	1757	1679	1747	1757	1752	1752	1757	1752	1539
Q Serve(g_s), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Cycle Q Clear(g_c), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Prop In Lane	1.00		0.44	1.00		0.26	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	176	861	433	326	1147	597	142	657	657	88	1206	687
V/C Ratio(X)	0.91	0.60	0.62	0.92	0.98	0.98	0.82	0.97	0.97	0.97	0.82	0.17
Avail Cap(c_a), veh/h	176	861	433	366	1147	597	161	657	657	88	1206	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.3	39.4	48.0	39.0	39.0	54.3	36.8	36.9	56.9	35.9	20.1
Incr Delay (d2), s/veh	43.3	1.2	2.6	25.4	20.8	30.9	25.6	28.2	29.1	85.0	6.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.7	8.1	12.0	21.5	24.2	4.8	25.8	26.1	4.9	16.0	2.4
LnGrp Delay(d), s/veh	96.7	40.5	42.0	73.4	59.8	70.0	80.0	65.0	66.1	141.9	42.2	20.6
LnGrp LOS	F	D	D	E	E	E	E	E	E	F	D	C
Approach Vol, veh/h		947			2000			1393			1191	
Approach Delay, s/veh		50.4			64.8			66.7			47.2	
Approach LOS		D			E			E			D	

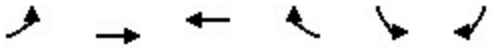
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	26.2	34.8	13.7	45.3	16.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	25.0	28.0	11.0	40.0	12.0	41.0
Max Q Clear Time (g_c+I1), s	7.8	45.1	22.0	18.7	9.9	32.9	12.8	41.6
Green Ext Time (p_c), s	0.0	0.0	0.3	3.3	0.0	3.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Future Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	73	823	115	219	1615	73	594	365	500	188	375	167
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	88	1084	150	246	1645	74	614	1373	601	331	413	181
Arrive On Green	0.05	0.24	0.24	0.14	0.33	0.33	0.31	0.39	0.39	0.09	0.18	0.18
Sat Flow, veh/h	1757	4457	619	1757	4934	223	1757	3505	1534	1757	2350	1028
Grp Volume(v), veh/h	73	619	319	219	1099	589	594	365	500	188	278	264
Grp Sat Flow(s),veh/h/ln	1757	1679	1718	1757	1679	1800	1757	1752	1534	1757	1752	1626
Q Serve(g_s), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Cycle Q Clear(g_c), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Prop In Lane	1.00		0.36	1.00		0.12	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	88	816	418	246	1119	600	614	1373	601	331	308	286
V/C Ratio(X)	0.83	0.76	0.76	0.89	0.98	0.98	0.97	0.27	0.83	0.57	0.90	0.92
Avail Cap(c_a), veh/h	88	816	418	278	1119	600	615	1373	601	331	308	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	42.1	42.2	50.7	39.6	39.7	31.2	24.8	32.9	36.0	48.4	48.6
Incr Delay (d2), s/veh	46.1	4.1	8.2	25.8	22.5	32.2	28.2	0.5	12.7	2.3	31.3	36.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	10.0	10.8	8.9	21.5	24.7	24.1	4.2	17.0	5.3	11.7	11.5
LnGrp Delay(d), s/veh	102.6	46.3	50.4	76.5	62.1	71.8	59.4	25.3	45.7	38.3	79.7	85.3
LnGrp LOS	F	D	D	E	E	E	E	C	D	D	E	F
Approach Vol, veh/h		1011			1907			1459			730	
Approach Delay, s/veh		51.6			66.8			46.2			71.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	51.0	20.8	33.2	40.9	25.1	10.0	44.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	47.0	19.0	27.0	37.0	21.0	6.0	40.0
Max Q Clear Time (g_c+I1), s	12.5	37.3	16.7	22.7	36.8	21.2	6.9	41.0
Green Ext Time (p_c), s	0.0	3.3	0.1	2.2	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.5
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	820	1720	0	470	520
Future Volume (veh/h)	0	820	1720	0	470	520
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	0	1706	1706
Adj Flow Rate, veh/h	0	845	1773	0	485	536
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	1858	1858	0	654	584
Arrive On Green	0.00	0.53	0.53	0.00	0.40	0.40
Sat Flow, veh/h	0	3689	3689	0	1625	1450
Grp Volume(v), veh/h	0	845	1773	0	485	536
Grp Sat Flow(s),veh/h/ln	0	1752	1752	0	1625	1450
Q Serve(g_s), s	0.0	17.8	57.3	0.0	30.3	41.7
Cycle Q Clear(g_c), s	0.0	17.8	57.3	0.0	30.3	41.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1858	1858	0	654	584
V/C Ratio(X)	0.00	0.45	0.95	0.00	0.74	0.92
Avail Cap(c_a), veh/h	0	1882	1882	0	654	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.3	26.6	0.0	30.3	33.7
Incr Delay (d2), s/veh	0.0	0.2	11.7	0.0	7.4	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.6	30.6	0.0	15.0	20.2
LnGrp Delay(d), s/veh	0.0	17.5	38.3	0.0	37.7	55.4
LnGrp LOS		B	D		D	E
Approach Vol, veh/h		845	1773		1021	
Approach Delay, s/veh		17.5	38.3		47.0	
Approach LOS		B	D		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				67.2		52.0		67.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				64.0		48.0		64.0
Max Q Clear Time (g_c+I1), s				19.8		43.7		59.3
Green Ext Time (p_c), s				6.3		1.7		3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Future Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	863	358	147	1463	568	211	379	147	368	537	326
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	217	1464	605	175	1388	617	238	492	213	348	712	310
Arrive On Green	0.13	0.42	0.42	0.10	0.40	0.40	0.14	0.14	0.14	0.20	0.21	0.21
Sat Flow, veh/h	1740	3447	1424	1740	3471	1543	1740	3471	1504	1740	3471	1513
Grp Volume(v), veh/h	232	832	389	147	1463	568	211	379	147	368	537	326
Grp Sat Flow(s),veh/h/ln	1740	1663	1547	1740	1736	1543	1740	1736	1504	1740	1736	1513
Q Serve(g_s), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Cycle Q Clear(g_c), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Prop In Lane	1.00		0.92	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	1412	657	175	1388	617	238	492	213	348	712	310
V/C Ratio(X)	1.07	0.59	0.59	0.84	1.05	0.92	0.89	0.77	0.69	1.06	0.75	1.05
Avail Cap(c_a), veh/h	217	1412	657	261	1388	617	261	492	213	348	712	310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	26.5	26.5	53.0	36.0	34.2	50.9	49.6	49.0	48.0	44.9	47.7
Incr Delay (d2), s/veh	79.8	0.6	1.4	14.4	39.7	19.2	27.3	11.1	16.8	64.2	7.3	64.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	10.6	10.1	5.5	30.6	21.1	8.7	6.8	5.6	17.7	9.1	15.9
LnGrp Delay(d), s/veh	132.3	27.1	27.9	67.5	75.7	53.4	78.2	60.7	65.8	112.2	52.1	112.6
LnGrp LOS	F	C	C	E	F	D	E	E	E	F	D	F
Approach Vol, veh/h		1453			2178			737			1231	
Approach Delay, s/veh		44.1			69.3			66.7			86.1	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	21.0	16.0	55.0	20.4	28.6	19.0	52.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	18.0	23.0	15.0	48.0
Max Q Clear Time (g_c+I1), s	26.0	14.6	12.0	25.2	16.3	26.6	17.0	50.0
Green Ext Time (p_c), s	0.0	0.7	0.2	7.9	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Future Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	154	901	143	110	1473	275	143	549	99	286	956	143
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	1732	274	136	1578	294	223	900	374	387	1103	464
Arrive On Green	0.10	0.40	0.40	0.08	0.37	0.37	0.08	0.26	0.26	0.13	0.31	0.31
Sat Flow, veh/h	1757	4373	691	1757	4261	794	1757	3505	1456	1757	3505	1473
Grp Volume(v), veh/h	154	691	353	110	1160	588	143	549	99	286	956	143
Grp Sat Flow(s),veh/h/ln	1757	1679	1706	1757	1679	1697	1757	1752	1456	1757	1752	1473
Q Serve(g_s), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Cycle Q Clear(g_c), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Prop In Lane	1.00		0.40	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	1330	676	136	1244	629	223	900	374	387	1103	464
V/C Ratio(X)	0.85	0.52	0.52	0.81	0.93	0.94	0.64	0.61	0.26	0.74	0.87	0.31
Avail Cap(c_a), veh/h	209	1330	676	224	1257	635	225	900	374	407	1103	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	27.0	27.0	53.4	35.6	35.6	31.7	38.5	34.8	26.9	37.9	30.5
Incr Delay (d2), s/veh	24.3	0.4	0.7	10.8	12.5	21.2	5.9	3.1	1.7	6.6	9.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	8.6	8.9	3.9	20.2	22.0	3.7	8.2	2.7	7.2	16.0	3.7
LnGrp Delay(d), s/veh	76.1	27.3	27.7	64.2	48.0	56.8	37.6	41.5	36.5	33.5	47.1	32.3
LnGrp LOS	E	C	C	E	D	E	D	D	D	C	D	C
Approach Vol, veh/h		1198			1858			791			1385	
Approach Delay, s/veh		33.7			51.8			40.2			42.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	34.2	13.1	50.6	12.9	41.0	16.1	47.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	15.0	43.0	9.0	37.0	14.0	44.0
Max Q Clear Time (g_c+I1), s	15.5	18.2	9.2	20.5	9.0	32.2	12.1	41.2
Green Ext Time (p_c), s	0.1	2.8	0.1	7.0	0.0	2.7	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Future Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	232	895	147	32	1516	274	74	179	11	326	358	211
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	2249	368	40	1674	302	306	1226	75	449	1282	565
Arrive On Green	0.15	0.51	0.51	0.02	0.39	0.39	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1774	4395	719	1774	4324	779	839	3385	206	1187	3539	1560
Grp Volume(v), veh/h	232	689	353	32	1188	602	74	93	97	326	358	211
Grp Sat Flow(s),veh/h/ln	1774	1695	1724	1774	1695	1712	839	1770	1822	1187	1770	1560
Q Serve(g_s), s	14.9	14.5	14.6	2.1	38.3	38.6	8.0	4.1	4.2	29.6	8.3	11.6
Cycle Q Clear(g_c), s	14.9	14.5	14.6	2.1	38.3	38.6	16.3	4.1	4.2	33.8	8.3	11.6
Prop In Lane	1.00		0.42	1.00		0.45	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	261	1735	882	40	1313	663	306	641	660	449	1282	565
V/C Ratio(X)	0.89	0.40	0.40	0.80	0.90	0.91	0.24	0.15	0.15	0.73	0.28	0.37
Avail Cap(c_a), veh/h	306	1754	892	92	1345	679	306	641	660	449	1282	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	17.4	17.4	56.4	33.5	33.6	32.0	24.9	24.9	36.3	26.2	27.3
Incr Delay (d2), s/veh	23.3	0.1	0.3	28.7	8.8	16.0	1.9	0.5	0.5	9.8	0.5	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	7.0	1.3	19.4	21.2	2.0	2.1	2.2	10.9	4.2	5.3
LnGrp Delay(d), s/veh	71.9	17.5	17.7	85.1	42.3	49.6	33.9	25.4	25.4	46.1	26.8	29.2
LnGrp LOS	E	B	B	F	D	D	C	C	C	D	C	C
Approach Vol, veh/h		1274			1822			264			895	
Approach Delay, s/veh		27.5			45.5			27.8			34.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		46.0	6.6	63.3		46.0	21.1	48.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		42.0	6.0	60.0		42.0	20.0	46.0
Max Q Clear Time (g_c+I1), s		18.3	4.1	16.6		35.8	16.9	40.6
Green Ext Time (p_c), s		1.4	0.0	8.1		2.3	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Future Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5027		1787	5054		1785	3574	1568	1781	3574	1573
Flt Permitted	0.95	1.00		0.95	1.00		0.30	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)	1787	5027		1787	5054		568	3574	1568	948	3574	1573
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	968	138	128	1394	138	106	340	43	106	649	287
RTOR Reduction (vph)	0	15	0	0	9	0	0	0	25	0	0	169
Lane Group Flow (vph)	106	1091	0	128	1523	0	106	340	18	106	649	118
Confl. Peds. (#/hr)	6		3	3		6	2		3	3		2
Confl. Bikes (#/hr)			3			2			2			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7			7				2			2	
Permitted Phases		8			8		2		2	2		2
Actuated Green, G (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Effective Green, g (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Actuated g/C Ratio	0.11	0.38		0.11	0.38		0.41	0.41	0.41	0.41	0.41	0.41
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	199	1888		199	1899		232	1465	642	388	1465	644
v/s Ratio Prot	0.06			c0.07				0.10			0.18	
v/s Ratio Perm		0.22			c0.30		c0.19		0.01	0.11		0.07
v/c Ratio	0.53	0.58		0.64	0.80		0.46	0.23	0.03	0.27	0.44	0.18
Uniform Delay, d1	49.1	29.1		49.8	32.7		25.1	22.5	20.6	23.0	24.9	22.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	0.4		6.9	2.5		6.4	0.4	0.1	1.7	1.0	0.6
Delay (s)	51.8	29.6		56.7	35.2		31.4	22.9	20.7	24.7	25.9	22.7
Level of Service	D	C		E	D		C	C	C	C	C	C
Approach Delay (s/veh)		31.5			36.8			24.6			24.9	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Future Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	12	12	25	358	12	284	12	580	160	284	1012	12
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	127	217	462	530	448	334	2238	985	468	2238	996
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	282	442	754	1344	1845	1557	543	3505	1542	709	3505	1559
Grp Volume(v), veh/h	49	0	0	358	12	284	12	580	160	284	1012	12
Grp Sat Flow(s),veh/h/ln	1479	0	0	1344	1845	1557	543	1752	1542	709	1752	1559
Q Serve(g_s), s	0.0	0.0	0.0	24.7	0.5	17.2	1.2	7.7	4.5	31.3	15.9	0.3
Cycle Q Clear(g_c), s	2.3	0.0	0.0	27.0	0.5	17.2	17.1	7.7	4.5	39.1	15.9	0.3
Prop In Lane	0.24		0.51	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	466	0	0	462	530	448	334	2238	985	468	2238	996
V/C Ratio(X)	0.11	0.00	0.00	0.78	0.02	0.63	0.04	0.26	0.16	0.61	0.45	0.01
Avail Cap(c_a), veh/h	625	0	0	610	734	620	334	2238	985	468	2238	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	36.8	27.6	33.6	14.3	8.5	7.9	16.9	9.9	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	4.5	0.0	1.5	0.2	0.3	0.4	5.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	10.8	0.3	7.5	0.2	3.8	2.0	6.8	7.8	0.1
LnGrp Delay(d), s/veh	28.4	0.0	0.0	41.3	27.6	35.0	14.5	8.7	8.2	22.7	10.6	7.1
LnGrp LOS	C			D	C	D	B	A	A	C	B	A
Approach Vol, veh/h		49			654			752			1308	
Approach Delay, s/veh		28.4			38.3			8.7			13.2	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		35.1		73.0		35.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		43.0		69.0		43.0
Max Q Clear Time (g_c+I1), s		19.1		4.3		41.1		29.0
Green Ext Time (p_c), s		5.1		0.3		11.3		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Future Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	1359	196	141	1489	163	163	228	130	217	272	33
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	111	1734	250	174	1966	215	198	692	304	255	806	359
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.11	0.20	0.20	0.15	0.23	0.23
Sat Flow, veh/h	1757	4437	640	1757	4608	504	1757	3505	1539	1757	3505	1562
Grp Volume(v), veh/h	87	1028	527	141	1085	567	163	228	130	217	272	33
Grp Sat Flow(s),veh/h/ln	1757	1679	1720	1757	1679	1755	1757	1752	1539	1757	1752	1562
Q Serve(g_s), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Cycle Q Clear(g_c), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Prop In Lane	1.00		0.37	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	1312	672	174	1432	749	198	692	304	255	806	359
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.76	0.76	0.82	0.33	0.43	0.85	0.34	0.09
Avail Cap(c_a), veh/h	220	1579	809	331	1790	936	349	692	304	441	806	359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	25.6	25.6	42.2	23.2	23.2	41.5	33.0	33.7	39.9	30.7	29.0
Incr Delay (d2), s/veh	11.1	2.2	4.2	8.6	1.5	2.8	8.3	1.3	4.4	7.8	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	12.3	12.9	4.1	12.3	13.2	4.7	2.7	3.4	6.2	3.1	0.7
LnGrp Delay(d), s/veh	55.3	27.8	29.8	50.7	24.7	26.1	49.8	34.2	38.0	47.6	31.9	29.5
LnGrp LOS	E	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1642			1793			521			522	
Approach Delay, s/veh		29.9			27.2			40.0			38.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	22.9	13.5	41.4	14.8	26.0	10.1	44.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	19.0	22.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	13.5	9.1	9.5	27.7	10.7	8.2	6.7	28.2
Green Ext Time (p_c), s	0.4	1.1	0.2	9.6	0.2	1.4	0.1	12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Future Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	61	235	163	61	337	204	61	378	61	235	827	92
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	78	410	272	78	433	257	375	1707	745	628	1898	837
Arrive On Green	0.04	0.21	0.21	0.04	0.21	0.21	0.03	0.49	0.49	0.09	0.55	0.55
Sat Flow, veh/h	1740	1986	1318	1740	2097	1244	1740	3471	1514	1740	3471	1530
Grp Volume(v), veh/h	61	204	194	61	278	263	61	378	61	235	827	92
Grp Sat Flow(s),veh/h/ln	1740	1736	1568	1740	1736	1605	1740	1736	1514	1740	1736	1530
Q Serve(g_s), s	3.3	10.1	10.7	3.3	14.4	14.8	1.6	5.9	2.0	5.9	13.5	2.8
Cycle Q Clear(g_c), s	3.3	10.1	10.7	3.3	14.4	14.8	1.6	5.9	2.0	5.9	13.5	2.8
Prop In Lane	1.00		0.84	1.00		0.78	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	78	358	324	78	358	331	375	1707	745	628	1898	837
V/C Ratio(X)	0.78	0.57	0.60	0.78	0.78	0.79	0.16	0.22	0.08	0.37	0.44	0.11
Avail Cap(c_a), veh/h	201	602	544	201	602	557	462	1707	745	840	1898	837
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	33.9	34.2	45.0	35.7	35.8	11.5	13.8	12.8	9.2	12.8	10.4
Incr Delay (d2), s/veh	15.3	1.4	1.8	15.3	3.6	4.3	0.2	0.3	0.2	0.4	0.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	5.0	4.8	1.9	7.2	7.0	0.8	2.9	0.9	2.9	6.6	1.2
LnGrp Delay(d), s/veh	60.2	35.4	36.0	60.2	39.3	40.2	11.7	14.1	13.0	9.5	13.6	10.7
LnGrp LOS	E	D	D	E	D	D	B	B	B	A	B	B
Approach Vol, veh/h		459			602			500			1154	
Approach Delay, s/veh		38.9			41.8			13.7			12.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	50.8	8.3	23.6	7.2	56.0	8.3	23.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	40.0	11.0	33.0	8.0	52.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	7.9	7.9	5.3	12.7	3.6	15.5	5.3	16.8
Green Ext Time (p_c), s	0.5	2.9	0.0	2.2	0.0	7.3	0.0	2.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Future Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	715	1845	1543	928	1845	1528	561	3505	1528	778	3505	1530
Grp Volume(v), veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Grp Sat Flow(s),veh/h/ln	715	1845	1543	928	1845	1528	561	1752	1528	778	1752	1530
Q Serve(g_s), s	5.1	16.7	5.0	23.0	30.7	9.6	13.3	10.2	2.4	29.1	17.2	4.6
Cycle Q Clear(g_c), s	35.8	16.7	5.0	39.7	30.7	9.6	30.4	10.2	2.4	39.4	17.2	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
V/C Ratio(X)	0.23	0.49	0.17	0.68	0.78	0.31	0.31	0.30	0.08	0.59	0.45	0.15
Avail Cap(c_a), veh/h	168	761	636	311	761	630	288	1927	840	421	1927	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	27.4	23.8	42.6	31.8	25.2	24.8	14.1	12.3	24.7	15.7	12.8
Incr Delay (d2), s/veh	0.8	0.5	0.1	5.1	5.0	0.3	2.8	0.4	0.2	5.9	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.6	2.2	6.3	16.6	4.1	2.3	5.0	1.0	6.9	8.5	2.0
LnGrp Delay(d), s/veh	48.3	28.0	24.0	47.7	36.7	25.5	27.6	14.5	12.5	30.6	16.4	13.2
LnGrp LOS	D	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		483			922			730			1236	
Approach Delay, s/veh		28.6			36.8			15.9			18.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		68.0		48.4		68.0		48.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		64.0		48.0		64.0		48.0
Max Q Clear Time (g_c+I1), s		32.4		37.8		41.4		41.7
Green Ext Time (p_c), s		5.2		1.8		8.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Future Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	41	557	227	247	1031	52	258	660	186	72	979	72
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	52	623	246	276	1491	75	288	1657	728	92	1267	555
Arrive On Green	0.03	0.18	0.18	0.16	0.30	0.30	0.16	0.47	0.47	0.05	0.36	0.36
Sat Flow, veh/h	1757	3535	1398	1757	4905	247	1757	3505	1540	1757	3505	1536
Grp Volume(v), veh/h	41	528	256	247	705	378	258	660	186	72	979	72
Grp Sat Flow(s),veh/h/ln	1757	1679	1575	1757	1679	1795	1757	1752	1540	1757	1752	1536
Q Serve(g_s), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Cycle Q Clear(g_c), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Prop In Lane	1.00		0.89	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	592	278	276	1021	546	288	1657	728	92	1267	555
V/C Ratio(X)	0.79	0.89	0.92	0.89	0.69	0.69	0.90	0.40	0.26	0.78	0.77	0.13
Avail Cap(c_a), veh/h	108	592	278	325	1021	546	341	1657	728	155	1267	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	45.7	45.9	46.9	34.8	34.8	46.5	19.4	17.9	53.1	32.1	24.3
Incr Delay (d2), s/veh	22.3	15.8	33.9	23.0	2.0	3.7	22.6	0.7	0.8	13.4	4.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.4	10.5	9.4	10.0	11.0	9.8	6.9	3.7	2.6	14.4	1.6
LnGrp Delay(d), s/veh	77.0	61.4	79.8	69.8	36.8	38.5	69.1	20.1	18.8	66.5	36.7	24.7
LnGrp LOS	E	E	E	E	D	D	E	C	B	E	D	C
Approach Vol, veh/h		825			1330			1104			1123	
Approach Delay, s/veh		67.9			43.4			31.3			37.9	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	57.6	21.9	24.0	22.6	45.0	7.4	38.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	53.0	21.0	20.0	22.0	41.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	6.6	15.9	17.6	20.1	18.3	30.1	4.6	23.0
Green Ext Time (p_c), s	0.0	5.5	0.2	0.0	0.3	4.8	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Future Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	98	87	196	98	141	87	163	1022	43	43	1337	109
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	28	443	44	38	443	191	2043	891	55	1771	769
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.58	0.58	0.03	0.51	0.51
Sat Flow, veh/h	0	99	1565	0	133	1565	1757	3505	1528	1757	3505	1521
Grp Volume(v), veh/h	185	0	196	239	0	87	163	1022	43	43	1337	109
Grp Sat Flow(s),veh/h/ln	99	0	1565	133	0	1565	1757	1752	1528	1757	1752	1521
Q Serve(g_s), s	0.0	0.0	12.0	0.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Cycle Q Clear(g_c), s	33.0	0.0	12.0	33.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Prop In Lane	0.53		1.00	0.41		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	443	81	0	443	191	2043	891	55	1771	769
V/C Ratio(X)	2.46	0.00	0.44	2.94	0.00	0.20	0.85	0.50	0.05	0.78	0.76	0.14
Avail Cap(c_a), veh/h	75	0	443	81	0	443	256	2043	891	105	1771	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	34.3	43.6	0.0	31.8	51.0	14.3	10.4	56.1	23.1	15.4
Incr Delay (d2), s/veh	693.8	0.0	0.7	907.6	0.0	0.2	18.2	0.9	0.1	21.1	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	0.0	5.2	23.1	0.0	2.1	6.1	9.9	0.6	1.7	17.8	2.0
LnGrp Delay(d), s/veh	740.1	0.0	35.0	951.2	0.0	32.0	69.2	15.2	10.5	77.2	26.1	15.8
LnGrp LOS	F		C	F		C	E	B	B	E	C	B
Approach Vol, veh/h		381			326			1228			1489	
Approach Delay, s/veh		377.4			705.9			22.2			26.9	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	72.0		37.0	16.7	62.9		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	68.0		33.0	17.0	58.0		33.0
Max Q Clear Time (g_c+I1), s	4.8	22.0		35.0	12.6	37.6		35.0
Green Ext Time (p_c), s	0.0	8.5		0.0	0.1	9.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		128.8
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Future Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
Arrive On Green	0.07	0.22	0.22	0.15	0.31	0.31	0.10	0.42	0.42	0.07	0.39	0.39
Sat Flow, veh/h	1757	3505	1526	1757	3505	1531	1757	3505	1534	1757	3505	1528
Grp Volume(v), veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Grp Sat Flow(s),veh/h/ln	1757	1752	1526	1757	1752	1531	1757	1752	1534	1757	1752	1528
Q Serve(g_s), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Cycle Q Clear(g_c), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
V/C Ratio(X)	0.90	1.00	0.24	1.04	0.89	0.40	1.02	0.62	0.10	0.81	1.00	0.16
Avail Cap(c_a), veh/h	117	789	343	264	1081	472	176	1464	641	205	1373	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	46.5	38.1	51.0	39.5	32.7	54.0	27.4	21.2	54.7	36.4	23.7
Incr Delay (d2), s/veh	52.5	32.2	0.4	66.2	9.1	0.5	72.9	2.0	0.3	12.1	23.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	16.6	2.3	13.6	16.4	5.0	9.4	12.1	1.3	3.9	27.1	2.1
LnGrp Delay(d), s/veh	108.0	78.7	38.5	117.2	48.6	33.3	127.1	29.4	21.5	66.8	59.9	24.2
LnGrp LOS	F	F	D	F	D	C	F	C	C	E	E	C
Approach Vol, veh/h		978			1421			1147			1568	
Approach Delay, s/veh		78.4			59.8			44.2			58.2	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	54.1	22.0	31.0	16.0	51.0	12.0	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	45.0	18.0	27.0	12.0	47.0	8.0	37.0
Max Q Clear Time (g_c+I1), s	9.1	26.3	20.0	29.0	14.0	48.7	9.1	33.2
Green Ext Time (p_c), s	0.1	5.9	0.0	0.0	0.0	0.0	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Future Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	71	101	141	131	162	91	899	0	101	1485	20
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	156	139	175	313	280	117	1962	878	129	2901	39
Arrive On Green	0.01	0.09	0.09	0.10	0.18	0.18	0.07	0.57	0.00	0.07	0.57	0.57
Sat Flow, veh/h	1740	1736	1553	1740	1736	1553	1740	3471	1553	1740	5070	68
Grp Volume(v), veh/h	10	71	101	141	131	162	91	899	0	101	974	531
Grp Sat Flow(s),veh/h/ln	1740	1736	1553	1740	1736	1553	1740	1736	1553	1740	1663	1814
Q Serve(g_s), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Cycle Q Clear(g_c), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	17	156	139	175	313	280	117	1962	878	129	1903	1038
V/C Ratio(X)	0.59	0.46	0.73	0.81	0.42	0.58	0.78	0.46	0.00	0.79	0.51	0.51
Avail Cap(c_a), veh/h	74	296	265	371	592	530	278	1962	878	278	1903	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	40.5	41.6	41.3	34.1	35.2	43.1	12.0	0.0	42.7	12.1	12.1
Incr Delay (d2), s/veh	28.2	2.1	7.0	8.4	0.9	1.9	10.7	0.8	0.0	10.0	1.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.8	2.8	4.0	3.1	4.0	2.7	7.0	0.0	2.9	7.8	8.8
LnGrp Delay(d), s/veh	74.5	42.6	48.5	49.7	35.0	37.0	53.8	12.7	0.0	52.7	13.1	13.9
LnGrp LOS	E	D	D	D	C	D	D	B		D	B	B
Approach Vol, veh/h		182			434			990			1606	
Approach Delay, s/veh		47.6			40.5			16.5			15.9	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	57.0	13.4	12.4	10.3	57.6	4.9	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	53.0	20.0	16.0	15.0	53.0	4.0	32.0
Max Q Clear Time (g_c+I1), s	7.4	16.2	9.4	7.9	6.8	18.6	2.5	11.0
Green Ext Time (p_c), s	0.1	6.7	0.2	0.5	0.1	12.2	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Future Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	11	11	87	22	11	11	109	1011	33	22	1652	54
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	62	44	173	74	26	173	136	2599	1137	31	3413	112
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.08	0.76	0.76	0.02	0.70	0.70
Sat Flow, veh/h	96	394	1534	157	230	1534	1723	3438	1504	1723	4909	160
Grp Volume(v), veh/h	22	0	87	33	0	11	109	1011	33	22	1108	598
Grp Sat Flow(s),veh/h/ln	490	0	1534	387	0	1534	1723	1719	1504	1723	1647	1777
Q Serve(g_s), s	0.1	0.0	5.6	1.2	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Cycle Q Clear(g_c), s	10.6	0.0	5.6	11.1	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Prop In Lane	0.50		1.00	0.67		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	106	0	173	100	0	173	136	2599	1137	31	2289	1235
V/C Ratio(X)	0.21	0.00	0.50	0.33	0.00	0.06	0.80	0.39	0.03	0.71	0.48	0.48
Avail Cap(c_a), veh/h	224	0	290	207	0	290	326	2599	1137	130	2289	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	44.2	46.3	0.0	41.9	48.0	4.5	3.2	51.7	7.4	7.4
Incr Delay (d2), s/veh	1.0	0.0	2.2	1.9	0.0	0.2	10.5	0.4	0.0	26.2	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.5	1.0	0.0	0.3	3.5	5.2	0.3	0.9	7.6	8.4
LnGrp Delay(d), s/veh	43.5	0.0	46.4	48.2	0.0	42.1	58.5	4.9	3.3	77.9	8.1	8.8
LnGrp LOS	D		D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		109			44			1153			1728	
Approach Delay, s/veh		45.8			46.7			9.9			9.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	84.0		16.5	12.4	77.5		16.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	80.0		20.0	20.0	68.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	12.8		12.6	8.6	18.4		13.1
Green Ext Time (p_c), s	0.0	8.5		0.1	0.2	16.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	730	110	150	1100	120	90
Future Volume (veh/h)	730	110	150	1100	120	90
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1900	1827	1827	1827	1827
Adj Flow Rate, veh/h	785	118	161	1183	129	97
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1211	181	207	2263	750	670
Arrive On Green	0.28	0.28	0.12	0.45	0.43	0.43
Sat Flow, veh/h	4530	651	1740	5152	1740	1553
Grp Volume(v), veh/h	596	307	161	1183	129	97
Grp Sat Flow(s),veh/h/ln	1663	1691	1740	1663	1740	1553
Q Serve(g_s), s	11.0	11.1	6.3	11.8	3.2	2.6
Cycle Q Clear(g_c), s	11.0	11.1	6.3	11.8	3.2	2.6
Prop In Lane		0.38	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	923	469	207	2263	750	670
V/C Ratio(X)	0.65	0.65	0.78	0.52	0.17	0.14
Avail Cap(c_a), veh/h	2199	1118	800	5879	750	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.2	29.8	13.6	12.2	12.0
Incr Delay (d2), s/veh	0.8	1.5	6.2	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	5.4	3.4	5.4	1.6	1.2
LnGrp Delay(d), s/veh	22.9	23.7	36.0	13.8	12.6	12.5
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	903			1344	226	
Approach Delay, s/veh	23.2			16.5	12.6	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		34.0	12.3	23.3				35.6
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		30.0	32.0	46.0				82.0
Max Q Clear Time (g_c+I1), s		5.2	8.3	13.1				13.8
Green Ext Time (p_c), s		0.6	0.4	6.2				10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	23.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Future Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	24	200	35	59	188	165	35	129	94	106	153	35
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

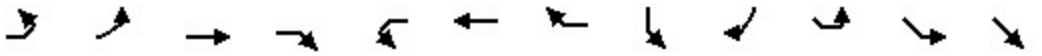
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	18.7	37.8	13.6	14.6
HCM LOS	C	E	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	14%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	85%	46%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	15%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	110	80	20	200	350	90	130	30
LT Vol	30	0	0	20	0	50	90	0	0
Through Vol	0	110	0	0	170	160	0	130	0
RT Vol	0	0	80	0	30	140	0	0	30
Lane Flow Rate	35	129	94	24	235	412	106	153	35
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.088	0.304	0.202	0.057	0.527	0.837	0.26	0.354	0.074
Departure Headway (Hd)	8.973	8.452	7.723	8.686	8.068	7.431	8.832	8.324	7.596
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	401	427	466	414	449	490	408	434	474
Service Time	6.701	6.18	5.451	6.395	5.778	5.131	6.559	6.039	5.311
HCM Lane V/C Ratio	0.087	0.302	0.202	0.058	0.523	0.841	0.26	0.353	0.074
HCM Control Delay, s/veh	12.6	14.8	12.4	11.9	19.4	37.8	14.6	15.5	10.9
HCM Lane LOS	B	B	B	B	C	E	B	C	B
HCM 95th-tile Q	0.3	1.3	0.7	0.2	3	8.3	1	1.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Future Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	96	904	117	43	1160	85	43	32	21	74	43	74
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	125	1681	736	55	1542	676	75	36	517	78	28	510
Arrive On Green	0.07	0.48	0.48	0.03	0.44	0.44	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1757	3505	1534	1757	3505	1535	0	110	1565	0	86	1545
Grp Volume(v), veh/h	96	904	117	43	1160	85	75	0	21	117	0	74
Grp Sat Flow(s),veh/h/ln	1757	1752	1534	1757	1752	1535	110	0	1565	86	0	1545
Q Serve(g_s), s	4.1	13.7	3.3	1.8	21.0	2.5	0.0	0.0	0.7	0.0	0.0	2.5
Cycle Q Clear(g_c), s	4.1	13.7	3.3	1.8	21.0	2.5	25.0	0.0	0.7	25.0	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	0.57		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	125	1681	736	55	1542	676	111	0	517	106	0	510
V/C Ratio(X)	0.77	0.54	0.16	0.78	0.75	0.13	0.67	0.00	0.04	1.10	0.00	0.14
Avail Cap(c_a), veh/h	395	3427	1500	209	3056	1339	111	0	517	106	0	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.5	13.8	11.1	36.4	17.7	12.6	26.1	0.0	17.2	31.3	0.0	17.8
Incr Delay (d2), s/veh	9.5	0.3	0.1	20.5	0.8	0.1	28.2	0.0	0.1	118.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.6	1.4	1.2	10.2	1.1	2.4	0.0	0.3	5.7	0.0	1.2
LnGrp Delay(d), s/veh	44.1	14.1	11.2	56.9	18.5	12.6	54.3	0.0	17.3	149.5	0.0	18.4
LnGrp LOS	D	B	B	E	B	B	D		B	F		B
Approach Vol, veh/h		1117			1288			96			191	
Approach Delay, s/veh		16.3			19.4			46.2			98.7	
Approach LOS		B			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	6.4	40.3		29.0	9.4	37.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	9.0	74.0		25.0	17.0	66.0
Max Q Clear Time (g_c+I1), s		27.0	3.8	15.7		27.0	6.1	23.0
Green Ext Time (p_c), s		0.0	0.0	7.6		0.0	0.1	10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.7
HCM 2010 LOS	C



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	60	90	500	50	10	1230	80	0	0	20	50	120
Future Volume (vph)	60	90	500	50	10	1230	80	0	0	20	50	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%		15%				0%
Total Lost time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Lane Util. Factor		1.00	0.91		1.00	0.91					1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Frt		1.00	0.99		1.00	0.99					1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00					0.95	1.00
Satd. Flow (prot)		1787	5056		1787	5089					1787	1881
Flt Permitted		0.95	1.00		0.42	1.00					0.50	1.00
Satd. Flow (perm)		1787	5056		786	5089					944	1881
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	97	538	54	11	1323	86	0	0	22	54	129
RTOR Reduction (vph)	0	0	8	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	162	584	0	11	1409	0	0	0	0	76	129
Confl. Peds. (#/hr)								2	3			
Confl. Bikes (#/hr)				1								
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Perm	Perm	Perm	NA
Protected Phases	7	7	4		3	8		9				6
Permitted Phases					8				10	6	6	
Actuated Green, G (s)		12.9	48.1		36.6	35.9					25.3	25.3
Effective Green, g (s)		12.9	48.1		36.6	35.9					25.3	25.3
Actuated g/C Ratio		0.15	0.56		0.43	0.42					0.29	0.29
Clearance Time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0					3.0	3.0
Lane Grp Cap (vph)		267	2824		342	2121					277	552
v/s Ratio Prot		c0.09	0.12		0.00	c0.28						0.07
v/s Ratio Perm					0.01						0.08	
v/c Ratio		0.61	0.21		0.03	0.66					0.27	0.23
Uniform Delay, d1		34.2	9.5		14.3	20.2					23.3	23.0
Progression Factor		1.00	1.00		1.00	1.00					1.00	1.00
Incremental Delay, d2		3.9	0.0		0.0	0.8					0.5	0.2
Delay (s)		38.1	9.5		14.4	21.0					23.9	23.3
Level of Service		D	A		B	C					C	C
Approach Delay (s/veh)			15.7			21.0		0.0				22.9
Approach LOS			B			C		A				C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	86.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	69.7%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	230	1570	50	10	2490	150	90	20	250	80	50	20
Future Volume (vph)	230	1570	50	10	2490	150	90	20	250	80	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5055		1766	5085	1583	1766	1863	1562	1770	1863	1556
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.72	1.00	1.00	0.74	1.00	1.00
Satd. Flow (perm)	3433	5055		1766	5085	1583	1342	1863	1562	1384	1863	1556
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	1707	54	11	2707	163	98	22	272	87	54	22
RTOR Reduction (vph)	0	2	0	0	0	49	0	0	92	0	0	19
Lane Group Flow (vph)	250	1759	0	11	2707	114	98	22	180	87	54	3
Confl. Peds. (#/hr)			6	6			1					1
Confl. Bikes (#/hr)			1						1			2
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	11.5	89.2		0.8	78.5	78.5	17.0	17.0	17.0	17.0	17.0	17.0
Effective Green, g (s)	11.5	89.2		0.8	78.5	78.5	17.0	17.0	17.0	17.0	17.0	17.0
Actuated g/C Ratio	0.10	0.75		0.01	0.66	0.66	0.14	0.14	0.14	0.14	0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	331	3789		11	3354	1044	191	266	223	197	266	222
v/s Ratio Prot	c0.07	0.35		0.01	c0.53			0.01			0.03	
v/s Ratio Perm						0.07	0.07		c0.12	0.06		0.00
v/c Ratio	0.76	0.46		1.00	0.81	0.11	0.51	0.08	0.81	0.44	0.20	0.01
Uniform Delay, d1	52.4	5.7		59.1	14.7	7.4	47.2	44.2	49.4	46.7	45.0	43.8
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	9.4	0.4		271.4	2.2	0.2	2.3	0.1	19.0	1.6	0.4	0.0
Delay (s)	61.8	6.1		330.5	16.9	7.6	49.5	44.4	68.4	48.2	45.4	43.8
Level of Service	E	A		F	B	A	D	D	E	D	D	D
Approach Delay (s/veh)		13.1			17.6			62.3			46.7	
Approach LOS		B			B			E			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	119.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.0%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	60	230	80	190	20	650	630	10	10	1010	480
Future Volume (veh/h)	220	60	230	80	190	20	650	630	10	10	1010	480
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	229	62	240	83	198	21	677	656	0	10	1052	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	291	312	265	106	237	25	761	2227	996	17	1478	661
Arrive On Green	0.08	0.17	0.17	0.06	0.14	0.14	0.22	0.62	0.00	0.01	0.41	0.00
Sat Flow, veh/h	3476	1881	1596	1792	1672	177	3476	3574	1599	1792	3574	1599
Grp Volume(v), veh/h	229	62	240	83	0	219	677	656	0	10	1052	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1596	1792	0	1849	1738	1787	1599	1792	1787	1599
Q Serve(g_s), s	7.3	3.2	16.6	5.1	0.0	13.0	21.2	9.5	0.0	0.6	27.5	0.0
Cycle Q Clear(g_c), s	7.3	3.2	16.6	5.1	0.0	13.0	21.2	9.5	0.0	0.6	27.5	0.0
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	312	265	106	0	262	761	2227	996	17	1478	661
V/C Ratio(X)	0.79	0.20	0.91	0.78	0.00	0.84	0.89	0.29	0.00	0.58	0.71	0.00
Avail Cap(c_a), veh/h	340	318	270	175	0	313	897	2227	996	64	1478	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.5	40.4	46.0	52.1	0.0	47.0	42.6	9.8	0.0	55.4	27.4	0.0
Incr Delay (d2), s/veh	10.2	0.3	31.2	11.8	0.0	15.5	9.8	0.3	0.0	27.9	2.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.7	9.6	2.9	0.0	7.8	11.2	4.8	0.0	0.4	14.2	0.0
LnGrp Delay(d), s/veh	60.7	40.7	77.2	64.0	0.0	62.4	52.3	10.1	0.0	83.3	30.3	0.0
LnGrp LOS	E	D	E	E		E	D	B		F	C	
Approach Vol, veh/h		531			302			1333			1062	
Approach Delay, s/veh		65.8			62.8			31.5			30.8	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	74.0	10.6	22.6	28.6	50.5	13.4	19.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	70.0	11.0	19.0	29.0	45.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	2.6	11.5	7.1	18.6	23.2	29.5	9.3	15.0
Green Ext Time (p_c), s	0.0	4.8	0.1	0.1	1.4	6.3	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.9
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	330	1280	200	190	1800	300	120	750	510	350	690	80
Future Volume (veh/h)	330	1280	200	190	1800	300	120	750	510	350	690	80
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	351	1362	213	202	1915	319	128	798	543	372	734	85
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	412	2079	634	231	2133	735	186	788	535	383	1291	148
Arrive On Green	0.12	0.40	0.40	0.13	0.42	0.42	0.05	0.22	0.22	0.11	0.28	0.28
Sat Flow, veh/h	3476	5136	1567	1792	5136	1564	3476	3574	1566	3476	4662	536
Grp Volume(v), veh/h	351	1362	213	202	1915	319	128	798	543	372	537	282
Grp Sat Flow(s),veh/h/ln	1738	1712	1567	1792	1712	1564	1738	1787	1566	1738	1712	1774
Q Serve(g_s), s	11.7	25.3	11.0	13.1	41.0	16.0	4.3	26.0	26.0	12.6	15.9	16.1
Cycle Q Clear(g_c), s	11.7	25.3	11.0	13.1	41.0	16.0	4.3	26.0	26.0	12.6	15.9	16.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.30
Lane Grp Cap(c), veh/h	412	2079	634	231	2133	735	186	788	535	383	948	491
V/C Ratio(X)	0.85	0.66	0.34	0.87	0.90	0.43	0.69	1.01	1.02	0.97	0.57	0.57
Avail Cap(c_a), veh/h	471	2079	634	289	2133	735	354	788	535	383	948	491
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	28.4	24.2	50.4	32.2	20.9	54.9	46.0	39.1	52.3	36.6	36.7
Incr Delay (d2), s/veh	12.7	1.6	1.4	20.8	6.5	1.9	4.4	35.4	43.0	38.3	0.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	12.3	5.0	7.8	20.6	7.3	2.2	16.7	23.8	8.1	7.6	8.1
LnGrp Delay(d), s/veh	63.7	30.1	25.6	71.3	38.6	22.8	59.3	81.3	82.0	90.6	37.4	38.3
LnGrp LOS	E	C	C	E	D	C	E	F	F	F	D	D
Approach Vol, veh/h		1926			2436			1469			1191	
Approach Delay, s/veh		35.7			39.3			79.7			54.2	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	51.7	17.0	30.0	18.0	53.0	10.3	36.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	13.0	26.0	16.0	49.0	12.0	27.0
Max Q Clear Time (g_c+I1), s	15.1	27.3	14.6	28.0	13.7	43.0	6.3	18.1
Green Ext Time (p_c), s	0.2	9.3	0.0	0.0	0.3	5.2	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	10	10	70	20	1640	10	40	2500	210
Future Volume (veh/h)	110	20	20	10	10	70	20	1640	10	40	2500	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	115	21	21	10	10	73	21	1708	10	42	2604	219
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	4	291	46	32	295	30	3542	21	54	3311	271
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.68	0.68	0.03	0.69	0.69
Sat Flow, veh/h	0	23	1548	0	169	1568	1774	5216	31	1774	4782	392
Grp Volume(v), veh/h	136	0	21	20	0	73	21	1110	608	42	1826	997
Grp Sat Flow(s),veh/h/ln	23	0	1548	169	0	1568	1774	1695	1857	1774	1695	1783
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	4.6	1.4	18.3	18.3	2.8	42.0	45.7
Cycle Q Clear(g_c), s	22.0	0.0	1.3	22.0	0.0	4.6	1.4	18.3	18.3	2.8	42.0	45.7
Prop In Lane	0.85		1.00	0.50		1.00	1.00		0.02	1.00		0.22
Lane Grp Cap(c), veh/h	61	0	291	78	0	295	30	2302	1261	54	2347	1235
V/C Ratio(X)	2.22	0.00	0.07	0.26	0.00	0.25	0.70	0.48	0.48	0.78	0.78	0.81
Avail Cap(c_a), veh/h	61	0	291	78	0	295	76	2302	1261	106	2347	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	39.1	40.7	0.0	40.4	57.2	9.0	9.0	56.3	12.0	12.6
Incr Delay (d2), s/veh	599.8	0.0	0.1	1.7	0.0	0.4	25.4	0.7	1.3	21.3	2.6	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	0.0	0.6	0.6	0.0	2.0	0.9	8.7	9.8	1.7	20.1	24.1
LnGrp Delay(d), s/veh	656.7	0.0	39.2	42.4	0.0	40.9	82.6	9.7	10.3	77.6	14.6	18.3
LnGrp LOS	F		D	D		D	F	A	B	E	B	B
Approach Vol, veh/h		157			93			1739			2865	
Approach Delay, s/veh		574.1			41.2			10.8			16.8	
Approach LOS		F			D			B			B	

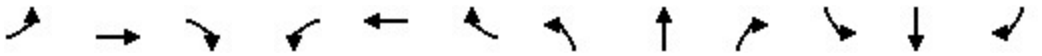
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	83.4		26.0	6.0	85.0		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	79.0		22.0	5.0	81.0		22.0
Max Q Clear Time (g_c+I1), s	4.8	20.3		24.0	3.4	47.7		24.0
Green Ext Time (p_c), s	0.0	18.3		0.0	0.0	28.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	530	70	70	580	120	90	1250	70	100	1880	420
Future Volume (veh/h)	370	530	70	70	580	120	90	1250	70	100	1880	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	378	541	71	71	592	122	92	1276	71	102	1918	429
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	435	989	439	116	661	288	142	2494	139	154	2124	461
Arrive On Green	0.13	0.28	0.28	0.03	0.19	0.19	0.04	0.51	0.51	0.04	0.51	0.51
Sat Flow, veh/h	3442	3539	1570	3442	3539	1543	3442	4929	274	3442	4167	905
Grp Volume(v), veh/h	378	541	71	71	592	122	92	878	469	102	1550	797
Grp Sat Flow(s),veh/h/ln	1721	1770	1570	1721	1770	1543	1721	1695	1813	1721	1695	1682
Q Serve(g_s), s	12.7	15.3	4.0	2.4	19.2	8.2	3.1	20.3	20.3	3.4	48.6	52.0
Cycle Q Clear(g_c), s	12.7	15.3	4.0	2.4	19.2	8.2	3.1	20.3	20.3	3.4	48.6	52.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.15	1.00		0.54
Lane Grp Cap(c), veh/h	435	989	439	116	661	288	142	1716	917	154	1728	857
V/C Ratio(X)	0.87	0.55	0.16	0.61	0.90	0.42	0.65	0.51	0.51	0.66	0.90	0.93
Avail Cap(c_a), veh/h	468	1022	453	146	691	301	146	1716	917	205	1728	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	36.1	32.0	56.1	46.7	42.3	55.6	19.4	19.4	55.3	26.1	26.9
Incr Delay (d2), s/veh	15.2	0.6	0.2	5.1	13.9	1.0	9.3	1.1	2.0	4.8	7.8	17.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	7.6	1.8	1.2	10.7	3.6	1.7	9.8	10.7	1.7	24.5	28.4
LnGrp Delay(d), s/veh	65.6	36.6	32.2	61.2	60.7	43.3	64.9	20.5	21.4	60.1	33.8	44.8
LnGrp LOS	E	D	C	E	E	D	E	C	C	E	C	D
Approach Vol, veh/h		990			785			1439			2449	
Approach Delay, s/veh		47.4			58.0			23.6			38.5	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	63.6	8.0	36.9	8.8	64.0	18.9	26.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	58.0	5.0	34.0	5.0	60.0	16.0	23.0
Max Q Clear Time (g_c+I1), s	5.4	22.3	4.4	17.3	5.1	54.0	14.7	21.2
Green Ext Time (p_c), s	0.0	11.0	0.0	3.3	0.0	5.4	0.2	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	820	430	450	680	20	200	160	420	40	170	20
Future Volume (vph)	10	820	430	450	680	20	200	160	420	40	170	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.99	1.00		0.99	
Satd. Flow (prot)	1787	3574	1571	3467	3559		1698	1769	1579		1841	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.53	0.90	1.00		0.92	
Satd. Flow (perm)	1787	3574	1571	3467	3559		951	1611	1579		1703	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	863	453	474	716	21	211	168	442	42	179	21
RTOR Reduction (vph)	0	0	266	0	1	0	0	0	246	0	2	0
Lane Group Flow (vph)	11	863	187	474	736	0	169	210	196	0	240	0
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			2						1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	0.7	38.8	38.8	20.1	58.2		43.3	43.3	43.3		43.3	
Effective Green, g (s)	0.7	38.8	38.8	20.1	58.2		43.3	43.3	43.3		43.3	
Actuated g/C Ratio	0.01	0.34	0.34	0.18	0.51		0.38	0.38	0.38		0.38	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	10	1214	533	610	1813		360	610	598		645	
v/s Ratio Prot	0.01	c0.24		c0.14	0.21							
v/s Ratio Perm			0.12				c0.18	0.13	0.12		0.14	
v/c Ratio	1.10	0.71	0.35	0.78	0.41		0.47	0.34	0.33		0.37	
Uniform Delay, d1	56.8	32.8	28.3	44.9	17.3		26.8	25.3	25.1		25.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	321.8	2.0	0.4	6.2	0.1		4.3	1.5	1.5		1.6	
Delay (s)	378.6	34.8	28.7	51.1	17.5		31.1	26.9	26.6		27.3	
Level of Service	F	C	C	D	B		C	C	C		C	
Approach Delay (s/veh)		35.6			30.6			27.6			27.3	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	114.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	10	70	90	10	30	40	650	20	10	990	60
Future Volume (veh/h)	80	10	70	90	10	30	40	650	20	10	990	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	87	11	76	98	11	33	43	707	22	11	1076	65
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	277	31	279	169	24	40	55	2456	1075	19	2384	1042
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.03	0.69	0.69	0.01	0.67	0.67
Sat Flow, veh/h	1180	175	1567	612	136	226	1774	3539	1549	1774	3539	1548
Grp Volume(v), veh/h	98	0	76	142	0	0	43	707	22	11	1076	65
Grp Sat Flow(s),veh/h/ln	1355	0	1567	974	0	0	1774	1770	1549	1774	1770	1548
Q Serve(g_s), s	0.0	0.0	4.3	9.1	0.0	0.0	2.5	7.8	0.5	0.6	14.6	1.5
Cycle Q Clear(g_c), s	6.5	0.0	4.3	15.6	0.0	0.0	2.5	7.8	0.5	0.6	14.6	1.5
Prop In Lane	0.89		1.00	0.69		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	308	0	279	233	0	0	55	2456	1075	19	2384	1042
V/C Ratio(X)	0.32	0.00	0.27	0.61	0.00	0.00	0.78	0.29	0.02	0.59	0.45	0.06
Avail Cap(c_a), veh/h	482	0	475	405	0	0	173	2456	1075	104	2384	1042
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.2	0.0	36.3	43.0	0.0	0.0	49.2	6.0	4.9	50.4	7.8	5.7
Incr Delay (d2), s/veh	0.6	0.0	0.5	2.6	0.0	0.0	21.1	0.3	0.0	26.4	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.9	4.1	0.0	0.0	1.5	3.8	0.2	0.4	7.2	0.6
LnGrp Delay(d), s/veh	37.8	0.0	36.8	45.5	0.0	0.0	70.3	6.3	4.9	76.8	8.5	5.8
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		174			142			772			1152	
Approach Delay, s/veh		37.4			45.5			9.8			9.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	75.0		22.2	7.2	72.9		22.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	71.0		31.0	10.0	67.0		31.0
Max Q Clear Time (g_c+I1), s	2.6	9.8		8.5	4.5	16.6		17.6
Green Ext Time (p_c), s	0.0	5.4		0.8	0.0	9.8		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	380	360	150	30	230	10	70	300	80	30	570	500
Future Volume (veh/h)	380	360	150	30	230	10	70	300	80	30	570	500
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	418	396	165	33	253	11	77	330	88	33	626	549
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	521	758	311	205	360	16	289	1946	849	558	1946	857
Arrive On Green	0.23	0.31	0.31	0.02	0.10	0.10	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1792	2460	1011	1792	3490	151	480	3574	1560	973	3574	1575
Grp Volume(v), veh/h	418	286	275	33	129	135	77	330	88	33	626	549
Grp Sat Flow(s),veh/h/ln	1792	1787	1683	1792	1787	1853	480	1787	1560	973	1787	1575
Q Serve(g_s), s	19.2	12.8	13.1	1.6	6.8	6.9	10.3	4.5	2.7	1.7	9.4	23.7
Cycle Q Clear(g_c), s	19.2	12.8	13.1	1.6	6.8	6.9	19.7	4.5	2.7	6.2	9.4	23.7
Prop In Lane	1.00		0.60	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	521	551	519	205	184	191	289	1946	849	558	1946	857
V/C Ratio(X)	0.80	0.52	0.53	0.16	0.70	0.71	0.27	0.17	0.10	0.06	0.32	0.64
Avail Cap(c_a), veh/h	792	936	882	235	330	343	289	1946	849	558	1946	857
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	27.7	27.8	37.8	42.2	42.2	17.7	11.1	10.7	12.7	12.3	15.5
Incr Delay (d2), s/veh	3.5	0.8	0.8	0.4	4.7	4.7	2.3	0.2	0.2	0.2	0.4	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.8	6.5	6.2	0.8	3.6	3.8	1.5	2.3	1.2	0.5	4.7	11.1
LnGrp Delay(d), s/veh	30.7	28.5	28.7	38.1	46.9	46.9	19.9	11.3	11.0	12.9	12.7	19.2
LnGrp LOS	C	C	C	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		979			297			495			1208	
Approach Delay, s/veh		29.5			46.0			12.6			15.6	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	6.4	34.0		57.0	26.3	14.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	4.0	51.0		53.0	37.0	18.0
Max Q Clear Time (g_c+I1), s		21.7	3.6	15.1		25.7	21.2	8.9
Green Ext Time (p_c), s		3.6	0.0	3.5		7.0	1.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	570	110	340	610	10	170	30	190	30	60	20
Future Volume (veh/h)	10	570	110	340	610	10	170	30	190	30	60	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	11	640	124	382	685	11	191	34	213	34	67	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	307	809	157	455	1582	25	581	635	530	431	709	221
Arrive On Green	0.01	0.27	0.27	0.18	0.44	0.44	0.10	0.34	0.34	0.03	0.27	0.27
Sat Flow, veh/h	1792	2979	576	1792	3599	58	1792	1881	1569	1792	2667	832
Grp Volume(v), veh/h	11	384	380	382	340	356	191	34	213	34	44	45
Grp Sat Flow(s),veh/h/ln	1792	1787	1768	1792	1787	1869	1792	1881	1569	1792	1787	1712
Q Serve(g_s), s	0.4	17.1	17.2	12.3	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Cycle Q Clear(g_c), s	0.4	17.1	17.2	12.3	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Prop In Lane	1.00		0.33	1.00		0.03	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	307	485	480	455	786	822	581	635	530	431	475	455
V/C Ratio(X)	0.04	0.79	0.79	0.84	0.43	0.43	0.33	0.05	0.40	0.08	0.09	0.10
Avail Cap(c_a), veh/h	371	749	741	865	1394	1458	676	635	530	468	475	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.3	29.0	29.0	18.5	16.7	16.7	18.2	19.2	21.8	22.0	23.7	23.8
Incr Delay (d2), s/veh	0.0	3.2	3.3	4.2	0.4	0.4	0.3	0.2	2.3	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	8.8	8.8	6.5	5.7	5.9	3.1	0.6	4.2	0.6	0.8	0.9
LnGrp Delay(d), s/veh	22.3	32.2	32.3	22.7	17.0	17.0	18.5	19.4	24.1	22.1	24.1	24.2
LnGrp LOS	C	C	C	C	B	B	B	B	C	C	C	C
Approach Vol, veh/h		775			1078			438			123	
Approach Delay, s/veh		32.1			19.0			21.3			23.6	
Approach LOS		C			B			C			C	

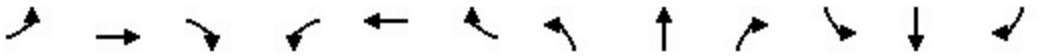
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	33.0	19.3	27.3	12.4	26.8	4.9	41.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	29.0	35.0	36.0	13.0	20.0	4.0	67.0
Max Q Clear Time (g_c+I1), s	3.2	10.9	14.3	19.2	8.3	3.7	2.4	13.3
Green Ext Time (p_c), s	0.0	0.8	1.1	4.2	0.2	0.3	0.0	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	340	80	40	380	140	100	190	30	230	360	160
Future Volume (veh/h)	120	340	80	40	380	140	100	190	30	230	360	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	136	386	91	45	432	159	114	216	34	261	409	182
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	171	1006	439	57	555	202	146	1009	156	306	999	439
Arrive On Green	0.10	0.28	0.28	0.03	0.22	0.22	0.08	0.33	0.33	0.17	0.42	0.42
Sat Flow, veh/h	1774	3539	1546	1774	2524	919	1774	3064	475	1774	2380	1045
Grp Volume(v), veh/h	136	386	91	45	301	290	114	123	127	261	303	288
Grp Sat Flow(s),veh/h/ln	1774	1770	1546	1774	1770	1673	1774	1770	1769	1774	1770	1655
Q Serve(g_s), s	6.6	7.7	3.9	2.2	14.1	14.4	5.6	4.4	4.6	12.6	10.6	10.8
Cycle Q Clear(g_c), s	6.6	7.7	3.9	2.2	14.1	14.4	5.6	4.4	4.6	12.6	10.6	10.8
Prop In Lane	1.00		1.00	1.00		0.55	1.00		0.27	1.00		0.63
Lane Grp Cap(c), veh/h	171	1006	439	57	389	368	146	583	583	306	743	695
V/C Ratio(X)	0.79	0.38	0.21	0.79	0.78	0.79	0.78	0.21	0.22	0.85	0.41	0.41
Avail Cap(c_a), veh/h	383	1687	737	161	623	589	342	583	583	644	743	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	25.3	24.0	42.3	32.3	32.4	39.7	21.3	21.3	35.4	17.9	18.0
Incr Delay (d2), s/veh	8.0	0.2	0.2	21.0	3.3	3.8	8.8	0.8	0.9	6.7	1.7	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.8	1.7	1.4	7.2	7.0	3.1	2.3	2.4	6.7	5.5	5.2
LnGrp Delay(d), s/veh	47.0	25.6	24.2	63.4	35.7	36.2	48.4	22.1	22.2	42.0	19.5	19.8
LnGrp LOS	D	C	C	E	D	D	D	C	C	D	B	B
Approach Vol, veh/h		613			636			364			852	
Approach Delay, s/veh		30.1			37.9			30.4			26.5	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	33.0	6.8	29.0	11.2	41.0	12.5	23.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	32.0	22.0	8.0	42.0	17.0	37.0	19.0	31.0
Max Q Clear Time (g_c+I1), s	14.6	6.6	4.2	9.7	7.6	12.8	8.6	16.4
Green Ext Time (p_c), s	0.7	1.1	0.0	2.8	0.2	3.5	0.2	3.0

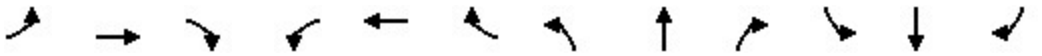
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Future Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		0.99		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1610	3319		1770	3539	1572		3426		1681	1747	2739
Flt Permitted	0.95	0.64		0.95	1.00	1.00		0.89		0.95	0.47	1.00
Satd. Flow (perm)	1610	2163		1770	3539	1572		3057		1681	823	2739
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	478	33	65	283	228	43	467	87	478	293	761
RTOR Reduction (vph)	0	3	0	0	0	49	0	11	0	0	0	39
Lane Group Flow (vph)	328	669	0	65	283	179	0	586	0	378	393	722
Confl. Peds. (#/hr)	2		2	2		2	1		12	12		1
Confl. Bikes (#/hr)			3			2			9			2
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Effective Green, g (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Actuated g/C Ratio	0.23	0.43		0.03	0.16	0.40		0.24		0.24	0.51	0.74
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	368	1184		59	575	679		728		397	637	2111
v/s Ratio Prot	c0.20	0.13		0.04	0.08	0.06				c0.22	0.15	0.08
v/s Ratio Perm		c0.11				0.05		c0.19			0.17	0.19
v/c Ratio	0.89	0.57		1.10	0.49	0.26		0.80		0.95	0.62	0.34
Uniform Delay, d1	44.8	26.1		58.0	45.7	24.2		43.1		45.1	21.1	5.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	22.6	0.6		148.0	0.7	0.2		9.2		32.9	1.8	0.1
Delay (s)	67.4	26.7		206.0	46.4	24.4		52.3		78.0	22.9	5.6
Level of Service	E	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		40.1			55.7			52.3			27.9	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

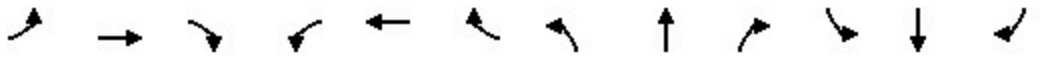
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Future Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1753	3539	1567	1770	3520		1681	1689	1552	1740	1723	
Flt Permitted	0.52	1.00	1.00	0.17	1.00		0.95	0.61	1.00	0.95	1.00	
Satd. Flow (perm)	967	3539	1567	317	3520		1681	1086	1552	1740	1723	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	10	542	604	552	375	10	385	10	510	10	10	10
RTOR Reduction (vph)	0	0	270	0	2	0	0	0	46	0	8	0
Lane Group Flow (vph)	10	542	334	552	383	0	196	199	464	10	12	0
Confl. Peds. (#/hr)	9		2	2		9			11	11		
Confl. Bikes (#/hr)			3			4			4			
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Effective Green, g (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Actuated g/C Ratio	0.21	0.21	0.36	0.54	0.49		0.16	0.39	0.65	0.01	0.20	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	209	727	625	599	1741		266	522	1059	10	343	
v/s Ratio Prot	0.00	0.15	c0.08	c0.27	0.11		c0.12	0.06	c0.13	0.01	0.01	
v/s Ratio Perm	0.01		0.13	c0.22				0.09	0.17			
v/c Ratio	0.05	0.75	0.53	0.92	0.22		0.74	0.38	0.44	1.00	0.03	
Uniform Delay, d1	35.4	42.3	28.5	28.4	16.2		45.4	24.6	9.8	56.4	36.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	4.2	0.9	19.7	0.1		10.2	0.5	0.3	284.6	0.2	
Delay (s)	35.5	46.4	29.3	48.1	16.3		55.6	25.0	10.1	341.0	36.8	
Level of Service	D	D	C	D	B		E	C	B	F	D	
Approach Delay (s/veh)		37.4			35.1			23.3			138.2	
Approach LOS		D			D			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Future Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	140	333	140	871	613	570	75	602	183	183	882	54
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	321	132	814	840	724	131	623	189	200	930	57
Arrive On Green	0.08	0.13	0.13	0.43	0.47	0.47	0.03	0.23	0.23	0.08	0.28	0.28
Sat Flow, veh/h	1774	2410	989	1774	1770	1525	1774	2671	810	1774	3383	207
Grp Volume(v), veh/h	140	242	231	871	613	570	75	398	387	183	461	475
Grp Sat Flow(s),veh/h/ln	1774	1770	1629	1774	1770	1525	1774	1770	1711	1774	1770	1821
Q Serve(g_s), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Cycle Q Clear(g_c), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Prop In Lane	1.00		0.61	1.00		1.00	1.00		0.47	1.00		0.11
Lane Grp Cap(c), veh/h	270	236	217	814	840	724	131	413	399	200	487	501
V/C Ratio(X)	0.52	1.03	1.06	1.07	0.73	0.79	0.57	0.97	0.97	0.92	0.95	0.95
Avail Cap(c_a), veh/h	300	236	217	814	840	724	131	413	399	200	487	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	52.0	52.0	28.9	25.3	26.4	36.8	45.5	45.6	34.9	42.7	42.7
Incr Delay (d2), s/veh	1.5	65.7	78.4	52.0	3.2	5.8	6.0	36.4	37.7	41.1	29.7	29.2
Initial Q Delay(d3),s/veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	12.1	11.9	38.7	17.1	17.0	2.1	17.2	16.9	3.9	19.0	19.5
LnGrp Delay(d), s/veh	41.5	117.8	130.4	80.9	28.6	32.2	42.8	81.9	83.3	76.0	72.4	71.8
LnGrp LOS	D	F	F	F	C	C	D	F	F	E	E	E
Approach Vol, veh/h		613			2054			860			1119	
Approach Delay, s/veh		105.1			51.8			79.1			72.7	
Approach LOS		F			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	32.0	55.0	20.0	8.0	37.0	14.0	61.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	28.0	51.0	16.0	4.0	33.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	11.0	28.8	53.0	18.0	5.9	32.7	10.1	39.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.2	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Future Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1129	280	634	871	75	97	806	495	118	914	269
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	731	2497	619	463	3124	970	75	1162	511	115	681	200
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.04	0.32	0.32	0.25	0.25	0.25
Sat Flow, veh/h	1156	4104	1018	745	5136	1594	1792	3574	1572	426	2724	800
Grp Volume(v), veh/h	258	942	467	634	871	75	97	806	495	118	599	584
Grp Sat Flow(s),veh/h/ln	578	1712	1698	373	1712	1594	1792	1787	1572	426	1787	1737
Q Serve(g_s), s	16.3	17.8	17.8	55.2	9.6	2.3	5.0	23.6	37.2	15.4	30.0	30.0
Cycle Q Clear(g_c), s	25.9	17.8	17.8	73.0	9.6	2.3	5.0	23.6	37.2	30.0	30.0	30.0
Prop In Lane	1.00		0.60	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
V/C Ratio(X)	0.35	0.45	0.45	1.37	0.28	0.08	1.30	0.69	0.97	1.03	1.34	1.35
Avail Cap(c_a), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	12.7	12.7	39.6	11.1	9.7	57.5	35.3	39.9	56.3	45.0	45.0
Incr Delay (d2), s/veh	0.3	0.2	0.3	180.2	0.0	0.0	203.9	3.4	32.8	91.9	167.7	170.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.4	8.4	19.2	4.5	1.0	6.7	12.2	20.7	6.7	35.6	34.9
LnGrp Delay(d), s/veh	17.5	12.9	13.0	219.7	11.1	9.7	261.4	38.7	72.7	148.7	212.7	215.1
LnGrp LOS	B	B	B	F	B	A	F	D	E	F	F	F
Approach Vol, veh/h		1667			1580			1398			1301	
Approach Delay, s/veh		13.6			94.8			66.2			208.0	
Approach LOS		B			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		43.0		77.0	9.0	34.0		77.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		39.0		73.0	5.0	30.0		73.0
Max Q Clear Time (g_c+I1), s		39.2		27.9	7.0	32.0		75.0
Green Ext Time (p_c), s		0.0		17.2	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh	90.1	
HCM 2010 LOS	F	

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	280	70	60	1020	1480	220
Future Volume (veh/h)	280	70	60	1020	1480	220
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	73	62	1062	1542	229
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	293	80	2630	2047	298
Arrive On Green	0.19	0.19	0.04	0.74	0.66	0.66
Sat Flow, veh/h	1774	1583	1774	3632	3184	450
Grp Volume(v), veh/h	292	73	62	1062	870	901
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1772
Q Serve(g_s), s	17.9	4.4	3.9	12.3	36.5	39.0
Cycle Q Clear(g_c), s	17.9	4.4	3.9	12.3	36.5	39.0
Prop In Lane	1.00	1.00	1.00			0.25
Lane Grp Cap(c), veh/h	329	293	80	2630	1172	1174
V/C Ratio(X)	0.89	0.25	0.78	0.40	0.74	0.77
Avail Cap(c_a), veh/h	461	411	111	2630	1172	1174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	38.9	52.8	5.3	12.5	12.9
Incr Delay (d2), s/veh	14.4	0.4	20.2	0.5	4.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.1	2.3	6.1	19.0	20.3
LnGrp Delay(d), s/veh	58.8	39.3	73.0	5.7	16.8	17.8
LnGrp LOS	E	D	E	A	B	B
Approach Vol, veh/h	365			1124	1771	
Approach Delay, s/veh	54.9			9.4	17.3	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		87.0		24.7	9.0	78.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		83.0		29.0	7.0	72.0		
Max Q Clear Time (g_c+I1), s		14.3		19.9	5.9	41.0		
Green Ext Time (p_c), s		9.4		0.8	0.0	16.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Future Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	250	783	0	0	674	0	11	152	22	630	0	424
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	450	1721	0	0	997	446	40	554	80	0	0	0
Arrive On Green	0.13	0.49	0.00	0.00	0.28	0.00	0.37	0.37	0.37	0.00	0.00	0.00
Sat Flow, veh/h	1774	3632	0	0	3632	1583	108	1488	215		0	
Grp Volume(v), veh/h	250	783	0	0	674	0	185	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1811	0	0			
Q Serve(g_s), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Cycle Q Clear(g_c), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.06		0.12			
Lane Grp Cap(c), veh/h	450	1721	0	0	997	446	674	0	0			
V/C Ratio(X)	0.56	0.46	0.00	0.00	0.68	0.00	0.27	0.00	0.00			
Avail Cap(c_a), veh/h	905	3574	0	0	1944	870	674	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.7	9.6	0.0	0.0	18.0	0.0	12.4	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.2	0.0	0.0	0.8	0.0	1.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	4.0	0.0	0.0	4.7	0.0	2.2	0.0	0.0			
LnGrp Delay(d), s/veh	12.7	9.8	0.0	0.0	18.8	0.0	13.4	0.0	0.0			
LnGrp LOS	B	A			B		B					
Approach Vol, veh/h		1033			674			185				
Approach Delay, s/veh		10.5			18.8			13.4				
Approach LOS		B			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		25.0		31.4			11.5	19.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		57.0			22.0	31.0
Max Q Clear Time (g_c+I1), s		6.0		10.2			7.1	11.5
Green Ext Time (p_c), s		0.8		6.3			0.6	4.4

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		13.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Future Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	155	742	196	124	1423	52	443	505	93	93	670	361
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	174	1229	321	150	1481	54	478	1474	657	142	704	379
Arrive On Green	0.10	0.31	0.31	0.09	0.30	0.30	0.14	0.42	0.42	0.04	0.32	0.32
Sat Flow, veh/h	1740	3920	1023	1740	4938	180	3375	3471	1546	3375	2165	1166
Grp Volume(v), veh/h	155	628	310	124	958	517	443	505	93	93	537	494
Grp Sat Flow(s),veh/h/ln	1740	1663	1618	1740	1663	1793	1688	1736	1546	1688	1736	1596
Q Serve(g_s), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Cycle Q Clear(g_c), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Prop In Lane	1.00		0.63	1.00		0.10	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	174	1043	507	150	998	538	478	1474	657	142	564	519
V/C Ratio(X)	0.89	0.60	0.61	0.82	0.96	0.96	0.93	0.34	0.14	0.65	0.95	0.95
Avail Cap(c_a), veh/h	174	1043	507	232	998	538	478	1474	657	197	564	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	34.8	35.0	53.9	41.3	41.3	50.9	23.2	21.1	56.6	39.6	39.6
Incr Delay (d2), s/veh	39.0	1.0	2.1	13.1	19.6	29.0	24.2	0.6	0.5	5.0	27.7	29.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	8.9	9.0	4.6	18.3	21.1	8.9	5.7	2.0	1.6	21.6	20.1
LnGrp Delay(d), s/veh	92.4	35.8	37.1	67.0	60.9	70.3	75.1	23.9	21.6	61.6	67.3	68.9
LnGrp LOS	F	D	D	E	E	E	E	C	C	E	E	E
Approach Vol, veh/h		1093			1599			1041			1124	
Approach Delay, s/veh		44.2			64.4			45.5			67.6	
Approach LOS		D			E			D			E	

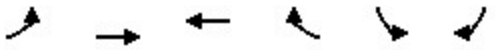
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	54.9	14.4	41.6	21.0	43.0	16.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	49.0	16.0	32.0	17.0	39.0	12.0	36.0
Max Q Clear Time (g_c+I1), s	5.3	13.8	10.4	21.5	17.6	38.3	12.6	36.0
Green Ext Time (p_c), s	0.0	3.6	0.1	4.3	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Future Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	74	695	179	242	1421	116	253	800	284	253	884	137
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	1176	596	272	1586	129	282	1095	719	282	1095	566
Arrive On Green	0.05	0.23	0.23	0.16	0.34	0.34	0.16	0.31	0.31	0.16	0.31	0.31
Sat Flow, veh/h	1757	5036	1477	1757	4734	386	1757	3505	1522	1757	3505	1544
Grp Volume(v), veh/h	74	695	179	242	1008	529	253	800	284	253	884	137
Grp Sat Flow(s),veh/h/ln	1757	1679	1477	1757	1679	1763	1757	1752	1522	1757	1752	1544
Q Serve(g_s), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Cycle Q Clear(g_c), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	1176	596	272	1125	591	282	1095	719	282	1095	566
V/C Ratio(X)	0.79	0.59	0.30	0.89	0.90	0.90	0.90	0.73	0.40	0.90	0.81	0.24
Avail Cap(c_a), veh/h	107	1176	596	351	1165	612	320	1095	719	320	1095	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	39.3	24.1	47.7	36.4	36.4	47.5	35.3	20.1	47.5	36.4	25.4
Incr Delay (d2), s/veh	28.5	0.8	0.3	19.5	9.1	15.5	24.7	4.3	1.6	24.7	6.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.6	4.0	9.0	16.7	18.6	9.8	12.0	6.2	9.8	13.9	3.2
LnGrp Delay(d), s/veh	82.3	40.1	24.4	67.2	45.5	51.9	72.1	39.6	21.7	72.1	42.9	26.4
LnGrp LOS	F	D	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		948			1779			1337			1274	
Approach Delay, s/veh		40.4			50.4			42.0			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	40.0	21.9	30.9	22.5	40.0	10.2	42.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	36.0	23.0	24.0	21.0	36.0	7.0	40.0
Max Q Clear Time (g_c+I1), s	18.3	25.4	17.6	16.1	18.3	28.7	6.8	34.9
Green Ext Time (p_c), s	0.2	4.6	0.3	3.1	0.2	3.5	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.7
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	320	850	730	500	100	100
Future Volume (vph)	320	850	730	500	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.95	1.00	1.00
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	0.96	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.96	1.00
Satd. Flow (prot)	1584	3195	3195	1362	3020	1301
Flt Permitted	0.33	1.00	1.00	1.00	0.96	1.00
Satd. Flow (perm)	556	3195	3195	1362	3020	1301
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	340	904	777	532	106	106
RTOR Reduction (vph)	0	0	0	172	30	52
Lane Group Flow (vph)	340	904	777	360	115	15
Confl. Peds. (#/hr)	11			11	1	
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	53.6	53.6	53.6	53.6	17.7	17.7
Effective Green, g (s)	53.6	53.6	53.6	53.6	17.7	17.7
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.22	0.22
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	375	2159	2159	920	674	290
v/s Ratio Prot		0.28	0.24		c0.04	
v/s Ratio Perm	c0.61			0.26		0.01
v/c Ratio	0.91	0.42	0.36	0.39	0.17	0.05
Uniform Delay, d1	10.8	5.8	5.5	5.7	24.9	24.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	24.7	0.1	0.1	0.3	0.6	0.3
Delay (s)	35.4	5.9	5.6	5.9	25.4	24.5
Level of Service	D	A	A	A	C	C
Approach Delay (s/veh)		14.0	5.7		25.1	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	79.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Future Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	21	830	64	74	1787	96	117	96	85	64	32	21
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	152	2629	202	363	2698	145	541	657	549	462	657	549
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	238	4760	365	614	4886	262	1329	1845	1543	1184	1845	1543
Grp Volume(v), veh/h	21	584	310	74	1227	656	117	96	85	64	32	21
Grp Sat Flow(s),veh/h/ln	238	1679	1769	614	1679	1791	1329	1845	1543	1184	1845	1543
Q Serve(g_s), s	6.0	8.2	8.3	6.5	22.5	22.6	5.5	3.1	3.3	3.4	1.0	0.8
Cycle Q Clear(g_c), s	28.5	8.2	8.3	14.8	22.5	22.6	6.5	3.1	3.3	6.5	1.0	0.8
Prop In Lane	1.00		0.21	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1854	977	363	1854	989	541	657	549	462	657	549
V/C Ratio(X)	0.14	0.32	0.32	0.20	0.66	0.66	0.22	0.15	0.15	0.14	0.05	0.04
Avail Cap(c_a), veh/h	242	3123	1645	595	3123	1665	541	657	549	462	657	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	10.6	10.6	14.6	13.8	13.8	20.5	19.1	19.1	21.2	18.4	18.3
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.3	0.4	0.8	0.9	0.5	0.6	0.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.8	4.1	1.1	10.5	11.3	2.2	1.7	1.5	1.2	0.5	0.3
LnGrp Delay(d), s/veh	24.3	10.7	10.8	14.9	14.2	14.6	21.4	19.5	19.7	21.9	18.5	18.4
LnGrp LOS	C	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		915			1957			298			117	
Approach Delay, s/veh		11.0			14.3			20.3			20.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		52.1		35.0		52.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		81.0		31.0		81.0
Max Q Clear Time (g_c+I1), s		8.5		30.5		8.5		24.6
Green Ext Time (p_c), s		1.2		7.5		0.4		23.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Future Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	11	11	114	57	11	11	45	375	45	11	545	11
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	31	326	55	6	315	137	1123	1112	40	1332	1116
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	0	149	1563	0	29	1510	143	1548	1534	13	1837	1539
Grp Volume(v), veh/h	22	0	114	68	0	11	420	0	45	556	0	11
Grp Sat Flow(s),veh/h/ln	149	0	1563	29	0	1510	1692	0	1534	1850	0	1539
Q Serve(g_s), s	0.0	0.0	7.5	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	25.0	0.0	7.5	25.0	0.0	0.7	9.6	0.0	1.0	14.0	0.0	0.2
Prop In Lane	0.50		1.00	0.84		1.00	0.11		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
V/C Ratio(X)	0.29	0.00	0.35	1.11	0.00	0.03	0.33	0.00	0.04	0.41	0.00	0.01
Avail Cap(c_a), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.3	0.0	40.6	57.6	0.0	37.9	5.9	0.0	4.7	6.5	0.0	4.6
Incr Delay (d2), s/veh	2.1	0.0	0.6	149.2	0.0	0.0	0.7	0.0	0.1	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.3	4.6	0.0	0.3	5.1	0.0	0.4	7.4	0.0	0.1
LnGrp Delay(d), s/veh	42.3	0.0	41.2	207.8	0.0	37.9	6.6	0.0	4.7	7.4	0.0	4.6
LnGrp LOS	D		D	F		D	A		A	A		A
Approach Vol, veh/h		136			79			465			567	
Approach Delay, s/veh		41.4			184.2			6.4			7.3	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0		29.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		87.0		25.0		87.0		25.0
Max Q Clear Time (g_c+I1), s		11.6		27.0		16.0		27.0
Green Ext Time (p_c), s		3.6		0.0		4.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Future Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	44	44	66	121	209	66	297	1275	44	33	1077	110
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	56	236	367	150	242	77	373	2101	72	42	1831	807
Arrive On Green	0.03	0.13	0.13	0.09	0.18	0.18	0.11	0.61	0.61	0.02	0.52	0.52
Sat Flow, veh/h	1757	1845	1528	1757	1333	421	3408	3454	119	1757	3505	1545
Grp Volume(v), veh/h	44	44	66	121	0	275	297	646	673	33	1077	110
Grp Sat Flow(s),veh/h/ln	1757	1845	1528	1757	0	1755	1704	1752	1820	1757	1752	1545
Q Serve(g_s), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Cycle Q Clear(g_c), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	56	236	367	150	0	319	373	1066	1107	42	1831	807
V/C Ratio(X)	0.79	0.19	0.18	0.80	0.00	0.86	0.80	0.61	0.61	0.79	0.59	0.14
Avail Cap(c_a), veh/h	119	338	452	271	0	474	559	1066	1107	102	1831	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.3	31.5	46.5	0.0	41.1	45.0	12.6	12.6	50.3	17.0	12.7
Incr Delay (d2), s/veh	21.1	0.4	0.2	9.6	0.0	10.3	4.8	2.6	2.5	27.7	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.1	1.5	3.8	0.0	8.6	4.4	12.1	12.5	1.3	11.0	1.7
LnGrp Delay(d), s/veh	70.9	40.7	31.7	56.1	0.0	51.4	49.7	15.2	15.1	78.0	18.4	13.1
LnGrp LOS	E	D	C	E		D	D	B	B	E	B	B
Approach Vol, veh/h		154			396			1616			1220	
Approach Delay, s/veh		45.5			52.9			21.5			19.6	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	67.0	12.9	17.3	15.3	58.1	7.3	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	63.0	16.0	19.0	17.0	52.0	7.0	28.0
Max Q Clear Time (g_c+I1), s	3.9	25.8	9.0	5.6	10.8	23.9	4.6	17.8
Green Ext Time (p_c), s	0.0	11.0	0.1	0.3	0.5	8.9	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	24.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Future Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	34	57	102	136	136	11	102	273	45	11	352	68
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	12.9	22.3	29.2	25.5
HCM LOS	B	C	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	38%	0%	50%	0%	3%	0%
Vol Thru, %	73%	0%	63%	0%	50%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	330	40	80	90	240	10	320	60
LT Vol	90	0	30	0	120	0	10	0
Through Vol	240	0	50	0	120	0	310	0
RT Vol	0	40	0	90	0	10	0	60
Lane Flow Rate	375	45	91	102	273	11	364	68
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.774	0.083	0.212	0.213	0.611	0.022	0.739	0.125
Departure Headway (Hd)	7.431	6.572	8.402	7.483	8.061	7.082	7.321	6.586
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	542	425	477	447	503	491	541
Service Time	5.212	4.353	6.201	5.281	5.846	4.865	5.103	4.368
HCM Lane V/C Ratio	0.775	0.083	0.214	0.214	0.611	0.022	0.741	0.126
HCM Control Delay, s/veh	31.5	10	13.5	12.3	22.8	10	28.3	10.3
HCM Lane LOS	D	A	B	B	C	A	D	B
HCM 95th-tile Q	6.8	0.3	0.8	0.8	4	0.1	6.1	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	640	130	70	860	220	160	530	70	180	730	290
Future Volume (veh/h)	210	640	130	70	860	220	160	530	70	180	730	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	228	696	141	76	935	239	174	576	76	196	793	315
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	231	1876	817	331	1876	837	183	1297	171	277	1459	653
Arrive On Green	0.52	0.52	0.52	0.52	0.52	0.52	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	481	3574	1557	660	3574	1594	512	3176	418	785	3574	1599
Grp Volume(v), veh/h	228	696	141	76	935	239	174	323	329	196	793	315
Grp Sat Flow(s),veh/h/ln	481	1787	1557	660	1787	1594	512	1787	1807	785	1787	1599
Q Serve(g_s), s	42.8	13.8	5.7	9.2	20.2	10.1	28.8	15.7	15.8	28.9	20.2	17.4
Cycle Q Clear(g_c), s	63.0	13.8	5.7	23.0	20.2	10.1	49.0	15.7	15.8	44.7	20.2	17.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	231	1876	817	331	1876	837	183	730	738	277	1459	653
V/C Ratio(X)	0.99	0.37	0.17	0.23	0.50	0.29	0.95	0.44	0.45	0.71	0.54	0.48
Avail Cap(c_a), veh/h	231	1876	817	331	1876	837	183	730	738	277	1459	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	16.8	14.9	23.6	18.3	15.9	49.9	25.6	25.7	41.8	27.0	26.2
Incr Delay (d2), s/veh	54.8	0.1	0.1	0.4	0.2	0.2	55.3	1.9	1.9	14.1	1.5	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	6.8	2.5	1.7	9.9	4.4	8.6	8.1	8.2	7.4	10.2	8.2
LnGrp Delay(d), s/veh	98.7	16.9	15.0	23.9	18.5	16.1	105.1	27.6	27.6	56.0	28.5	28.7
LnGrp LOS	F	B	B	C	B	B	F	C	C	E	C	C
Approach Vol, veh/h		1065			1250			826			1304	
Approach Delay, s/veh		34.2			18.4			43.9			32.6	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		67.0		53.0		67.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		63.0		49.0		63.0
Max Q Clear Time (g_c+I1), s		51.0		65.0		46.7		25.0
Green Ext Time (p_c), s		0.0		0.0		1.6		9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	640	100	270	1090	90	180	840	210	80	1070	370
Future Volume (veh/h)	200	640	100	270	1090	90	180	840	210	80	1070	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1810
Adj Flow Rate, veh/h	211	674	105	284	1147	95	189	884	221	84	1126	389
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	238	969	149	311	1241	103	227	1080	270	105	1343	589
Arrive On Green	0.14	0.22	0.22	0.18	0.27	0.27	0.07	0.40	0.40	0.06	0.39	0.39
Sat Flow, veh/h	1723	4313	664	1723	4640	384	3343	2715	678	1723	3438	1508
Grp Volume(v), veh/h	211	513	266	284	814	428	189	559	546	84	1126	389
Grp Sat Flow(s),veh/h/ln	1723	1647	1684	1723	1647	1731	1672	1719	1674	1723	1719	1508
Q Serve(g_s), s	14.2	16.8	17.1	19.0	28.3	28.3	6.6	34.2	34.3	5.7	34.9	24.9
Cycle Q Clear(g_c), s	14.2	16.8	17.1	19.0	28.3	28.3	6.6	34.2	34.3	5.7	34.9	24.9
Prop In Lane	1.00		0.39	1.00		0.22	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	238	740	378	311	881	463	227	684	666	105	1343	589
V/C Ratio(X)	0.89	0.69	0.70	0.91	0.92	0.92	0.83	0.82	0.82	0.80	0.84	0.66
Avail Cap(c_a), veh/h	263	740	378	351	895	470	227	684	666	117	1343	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	41.9	42.0	47.3	42.0	42.0	54.2	31.7	31.7	54.6	32.5	29.5
Incr Delay (d2), s/veh	26.8	2.8	5.8	25.5	14.9	24.0	22.3	10.5	10.8	28.8	6.4	5.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	7.9	8.6	11.3	14.7	16.6	3.7	18.2	17.8	3.5	17.8	11.3
LnGrp Delay(d), s/veh	76.6	44.7	47.8	72.8	56.8	66.0	76.5	42.2	42.5	83.4	38.9	35.2
LnGrp LOS	E	D	D	E	E	E	E	D	D	F	D	D
Approach Vol, veh/h		990			1526			1294			1599	
Approach Delay, s/veh		52.3			62.4			47.3			40.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	50.8	25.3	30.5	12.0	50.0	20.2	35.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	46.0	24.0	26.0	8.0	46.0	18.0	32.0
Max Q Clear Time (g_c+I1), s	7.7	36.3	21.0	19.1	8.6	36.9	16.2	30.3
Green Ext Time (p_c), s	0.0	4.6	0.2	2.6	0.0	5.9	0.1	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Future Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	266	43	330	319	170	32	1351	298	64	1989	85
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	393	206	405	391	203	41	2398	528	83	2994	128
Arrive On Green	0.05	0.11	0.11	0.12	0.18	0.18	0.02	0.57	0.57	0.05	0.60	0.60
Sat Flow, veh/h	1774	3539	1526	3442	2230	1158	1774	4170	919	1774	5002	213
Grp Volume(v), veh/h	74	266	43	330	251	238	32	1098	551	64	1347	727
Grp Sat Flow(s),veh/h/ln	1774	1770	1526	1721	1770	1618	1774	1695	1698	1774	1695	1825
Q Serve(g_s), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Cycle Q Clear(g_c), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.54	1.00		0.12
Lane Grp Cap(c), veh/h	95	393	206	405	310	284	41	1949	977	83	2029	1092
V/C Ratio(X)	0.78	0.68	0.21	0.81	0.81	0.84	0.79	0.56	0.56	0.78	0.66	0.67
Avail Cap(c_a), veh/h	166	530	265	579	397	363	100	1949	977	166	2029	1092
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	45.7	41.3	46.0	42.4	42.6	52.0	14.3	14.3	50.4	14.3	14.3
Incr Delay (d2), s/veh	12.8	2.1	0.5	5.9	9.5	12.8	27.3	1.2	2.4	14.2	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.9	1.2	5.1	7.9	7.8	1.3	10.4	10.7	2.2	13.6	15.1
LnGrp Delay(d), s/veh	62.7	47.8	41.8	51.9	51.9	55.4	79.3	15.5	16.7	64.7	16.0	17.5
LnGrp LOS	E	D	D	D	D	E	E	B	B	E	B	B
Approach Vol, veh/h		383			819			1681			2138	
Approach Delay, s/veh		50.0			52.9			17.1			18.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	65.5	16.6	15.9	6.5	68.0	9.7	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	60.0	18.0	16.0	6.0	64.0	10.0	24.0
Max Q Clear Time (g_c+I1), s	5.8	23.8	12.0	9.7	3.9	30.5	6.4	17.2
Green Ext Time (p_c), s	0.0	15.9	0.6	0.8	0.0	20.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	270	20	20	590	50	60	0	20	60	0	20
Future Volume (veh/h)	120	270	20	20	590	50	60	0	20	60	0	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	130	293	22	22	641	54	65	0	22	65	0	22
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	244	687	55	73	1259	104	807	0	789	601	13	178
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.49	0.00	0.49	0.49	0.00	0.49
Sat Flow, veh/h	397	1746	139	48	3197	265	1430	0	1599	1037	26	360
Grp Volume(v), veh/h	178	0	267	378	0	339	65	0	22	87	0	0
Grp Sat Flow(s),veh/h/ln	595	0	1687	1845	0	1665	1430	0	1599	1423	0	0
Q Serve(g_s), s	11.4	0.0	8.1	0.0	0.0	11.0	0.0	0.0	0.5	1.5	0.0	0.0
Cycle Q Clear(g_c), s	22.4	0.0	8.1	10.8	0.0	11.0	1.4	0.0	0.5	2.8	0.0	0.0
Prop In Lane	0.73		0.08	0.06		0.16	1.00		1.00	0.75		0.25
Lane Grp Cap(c), veh/h	322	0	664	780	0	655	807	0	789	791	0	0
V/C Ratio(X)	0.55	0.00	0.40	0.48	0.00	0.52	0.08	0.00	0.03	0.11	0.00	0.00
Avail Cap(c_a), veh/h	945	0	1832	2027	0	1808	807	0	789	791	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	23.1	0.0	15.5	16.3	0.0	16.4	9.4	0.0	9.2	9.8	0.0	0.0
Incr Delay (d2), s/veh	1.5	0.0	0.4	0.5	0.0	0.6	0.2	0.0	0.1	0.3	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.8	5.7	0.0	5.1	0.7	0.0	0.2	1.0	0.0	0.0
LnGrp Delay(d), s/veh	24.6	0.0	15.9	16.8	0.0	17.0	9.6	0.0	9.3	10.1	0.0	0.0
LnGrp LOS	C		B	B		B	A		A	B		
Approach Vol, veh/h		445			717			87			87	
Approach Delay, s/veh		19.4			16.9			9.5			10.1	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		39.0		31.9		39.0		31.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		35.0		77.0		35.0		77.0
Max Q Clear Time (g_c+I1), s		3.4		24.4		4.8		13.0
Green Ext Time (p_c), s		0.4		3.5		0.5		4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	260	10	10	670	30	10	0	10	20	0	10
Future Volume (veh/h)	10	260	10	10	670	30	10	0	10	20	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	283	11	11	728	33	11	0	11	22	0	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	1106	42	80	1121	50	459	35	385	598	24	250
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.51	0.00	0.51	0.51	0.00	0.51
Sat Flow, veh/h	38	3342	128	16	3386	152	690	69	759	940	47	494
Grp Volume(v), veh/h	159	0	146	407	0	365	22	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	1818	0	1689	1869	0	1685	1518	0	0	1481	0	0
Q Serve(g_s), s	0.0	0.0	3.1	0.0	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.1	0.0	3.1	9.1	0.0	9.1	0.3	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.07		0.08	0.03		0.09	0.50		0.50	0.67		0.33
Lane Grp Cap(c), veh/h	680	0	559	694	0	558	879	0	0	872	0	0
V/C Ratio(X)	0.23	0.00	0.26	0.59	0.00	0.66	0.03	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	3099	0	2980	3337	0	2972	879	0	0	872	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	12.1	0.0	12.1	14.1	0.0	14.1	6.1	0.0	0.0	6.1	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	0.8	0.0	1.3	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	0.0	1.5	4.8	0.0	4.4	0.2	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	12.2	0.0	12.3	14.9	0.0	15.4	6.1	0.0	0.0	6.2	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		305			772			22			33	
Approach Delay, s/veh		12.3			15.1			6.1			6.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		20.3		29.0		20.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		87.0		25.0		87.0
Max Q Clear Time (g_c+I1), s		2.3		5.1		2.5		11.1
Green Ext Time (p_c), s		0.1		1.8		0.1		5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	250	20	20	580	20	250	20	20	10	0	10
Future Volume (veh/h)	10	250	20	20	580	20	250	20	20	10	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	272	22	22	630	22	272	22	22	11	0	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	735	60	56	820	28	903	73	68	546	19	507
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.67	0.67	0.67	0.67	0.00	0.67
Sat Flow, veh/h	33	3008	246	60	3354	116	1241	109	101	729	28	757
Grp Volume(v), veh/h	156	0	149	352	0	322	316	0	0	22	0	0
Grp Sat Flow(s),veh/h/ln	1619	0	1669	1838	0	1691	1451	0	0	1514	0	0
Q Serve(g_s), s	0.3	0.0	6.9	5.8	0.0	16.5	8.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	16.7	0.0	6.9	16.4	0.0	16.5	8.4	0.0	0.0	0.4	0.0	0.0
Prop In Lane	0.07		0.15	0.06		0.07	0.86		0.07	0.50		0.50
Lane Grp Cap(c), veh/h	437	0	408	490	0	413	1043	0	0	1072	0	0
V/C Ratio(X)	0.36	0.00	0.37	0.72	0.00	0.78	0.30	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	943	0	901	1022	0	913	1043	0	0	1072	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	28.9	0.0	29.0	32.6	0.0	32.7	6.4	0.0	0.0	5.1	0.0	0.0
Incr Delay (d2), s/veh	0.5	0.0	0.6	2.0	0.0	3.2	0.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.3	0.0	3.2	8.7	0.0	8.1	3.6	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	29.4	0.0	29.6	34.6	0.0	35.9	7.2	0.0	0.0	5.2	0.0	0.0
LnGrp LOS	C		C	C		D	A			A		
Approach Vol, veh/h		305			674			316			22	
Approach Delay, s/veh		29.5			35.2			7.2			5.2	
Approach LOS		C			D			A			A	

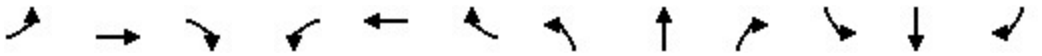
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		26.6		66.0		26.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		50.0		62.0		50.0
Max Q Clear Time (g_c+I1), s		10.4		18.7		2.4		18.5
Green Ext Time (p_c), s		2.3		1.7		0.1		4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	240	20	50	660	10	50	10	50	30	10	10
Future Volume (veh/h)	10	240	20	50	660	10	50	10	50	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	261	22	54	717	11	54	11	54	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	73	993	82	113	1021	15	444	110	392	572	191	168
Arrive On Green	0.31	0.31	0.31	0.31	0.31	0.31	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	41	3179	262	156	3269	49	644	195	697	857	339	299
Grp Volume(v), veh/h	154	0	140	402	0	380	119	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1817	0	1666	1771	0	1703	1535	0	0	1495	0	0
Q Serve(g_s), s	0.0	0.0	4.0	6.2	0.0	12.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	3.9	0.0	4.0	12.6	0.0	12.6	2.1	0.0	0.0	0.9	0.0	0.0
Prop In Lane	0.07		0.16	0.13		0.03	0.45		0.45	0.60		0.20
Lane Grp Cap(c), veh/h	628	0	520	617	0	532	946	0	0	931	0	0
V/C Ratio(X)	0.25	0.00	0.27	0.65	0.00	0.71	0.13	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2109	0	1979	2121	0	2023	946	0	0	931	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.5	0.0	16.5	19.3	0.0	19.5	6.6	0.0	0.0	6.3	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.3	1.2	0.0	1.8	0.3	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	0.0	1.9	6.5	0.0	6.2	1.0	0.0	0.0	0.5	0.0	0.0
LnGrp Delay(d), s/veh	16.7	0.0	16.8	20.5	0.0	21.3	6.8	0.0	0.0	6.4	0.0	0.0
LnGrp LOS	B		B	C		C	A			A		
Approach Vol, veh/h		294			782			119			55	
Approach Delay, s/veh		16.7			20.9			6.8			6.4	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.0		24.0		40.0		24.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		36.0		76.0		36.0		76.0
Max Q Clear Time (g_c+I1), s		4.1		6.0		2.9		14.6
Green Ext Time (p_c), s		0.7		1.8		0.3		5.3

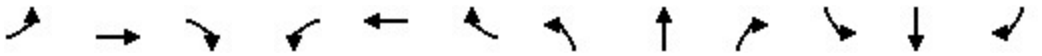
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type				Prot						Prot		Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	75.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)												
Lane Util. Factor												
Frt												
Flt Protected												
Satd. Flow (prot)												
Flt Permitted												
Satd. Flow (perm)												
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Prot		Perm	Prot		Perm				Perm		Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)												
Effective Green, g (s)												
Actuated g/C Ratio												
Clearance Time (s)												
Vehicle Extension (s)												
Lane Grp Cap (vph)												
v/s Ratio Prot												
v/s Ratio Perm												
v/c Ratio												
Uniform Delay, d1												
Progression Factor												
Incremental Delay, d2												
Delay (s)												
Level of Service												
Approach Delay (s/veh)		0.0			0.0			0.0			0.0	
Approach LOS		A			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	59.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	0.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	130	80	230	110	20	250	1010	130	20	970	160
Future Volume (veh/h)	40	130	80	230	110	20	250	1010	130	20	970	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	43	141	87	250	120	22	272	1098	141	22	1054	174
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	37	102	440	50	0	440	279	2353	1053	289	2023	333
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	0	369	1599	0	0	1599	457	3574	1599	452	3073	506
Grp Volume(v), veh/h	184	0	87	370	0	22	272	1098	141	22	612	616
Grp Sat Flow(s),veh/h/ln	369	0	1599	0	0	1599	457	1787	1599	452	1787	1792
Q Serve(g_s), s	0.0	0.0	5.0	0.0	0.0	1.2	57.5	18.2	4.0	3.0	21.4	21.5
Cycle Q Clear(g_c), s	33.0	0.0	5.0	33.0	0.0	1.2	79.0	18.2	4.0	21.2	21.4	21.5
Prop In Lane	0.23		1.00	0.68		1.00	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	139	0	440	50	0	440	279	2353	1053	289	1177	1180
V/C Ratio(X)	1.33	0.00	0.20	7.36	0.00	0.05	0.98	0.47	0.13	0.08	0.52	0.52
Avail Cap(c_a), veh/h	139	0	440	50	0	440	279	2353	1053	289	1177	1180
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	33.4	60.0	0.0	32.0	36.9	10.1	7.7	15.3	10.7	10.7
Incr Delay (d2), s/veh	188.8	0.0	0.2	2902.9	0.0	0.0	48.0	0.7	0.3	0.5	1.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	2.2	42.2	0.0	0.5	12.7	9.1	1.8	0.4	10.9	11.0
LnGrp Delay(d), s/veh	227.0	0.0	33.6	2962.9	0.0	32.0	84.8	10.8	7.9	15.9	12.3	12.3
LnGrp LOS	F		C	F		C	F	B	A	B	B	B
Approach Vol, veh/h		271			392			1511			1250	
Approach Delay, s/veh		164.9			2798.4			23.8			12.4	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		37.0		83.0		37.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		81.0		35.0		23.5		35.0
Green Ext Time (p_c), s		0.0		0.0		12.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	348.5
HCM 2010 LOS	F

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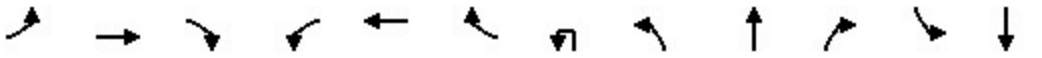
Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Future Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.94	1.00	1.00		1.00		0.96		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.98	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3337	1372	1787	3555		3467		1532		
Flt Permitted			0.90	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3014	1372	1787	3555		3467		1532		
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	22	725	516	187	1044	33	769	0	209	0	0
RTOR Reduction (vph)	0	0	8	281	0	2	0	0	0	117	0	0
Lane Group Flow (vph)	0	0	837	137	187	1075	0	769	0	92	0	0
Confl. Peds. (#/hr)		2		18	18		2			13	13	
Confl. Bikes (#/hr)				11						5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases		4		4						2		
Actuated Green, G (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Effective Green, g (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Actuated g/C Ratio			0.33	0.33	0.13	0.49		0.24		0.44		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			984	448	229	1740		845		676		
v/s Ratio Prot					c0.10	0.30		c0.22				
v/s Ratio Perm			c0.28	0.10						c0.06		
v/c Ratio			0.85	0.30	0.82	0.62		0.91		0.14		
Uniform Delay, d1			36.4	29.2	49.2	21.7		42.6		19.3		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			7.2	0.4	19.7	0.7		13.8		0.4		
Delay (s)			43.6	29.6	68.9	22.3		56.4		19.7		
Level of Service			D	C	E	C		E		B		
Approach Delay (s/veh)			38.9			29.2			48.5			40.7
Approach LOS			D			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1627
Flt Permitted	1.00
Satd. Flow (perm)	1627
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	18.9
Effective Green, g (s)	18.9
Actuated g/C Ratio	0.16
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	265
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	40.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	40.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	170	10	100	110	0	920	120	70	540
Future Volume (vph)	0	0	60	170	10	100	110	0	920	120	70	540
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.94	1.00	0.95		1.00		1.00	0.95	1.00	1.00
Flpb, ped/bikes			1.00	0.96	1.00		1.00		1.00	1.00	0.99	1.00
Frt			0.87	1.00	0.86		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1534	1719	1537		1787		3574	1513	1775	3574
Flt Permitted			1.00	0.95	1.00		0.43		1.00	1.00	0.27	1.00
Satd. Flow (perm)			1534	1719	1537		812		3574	1513	508	3574
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	181	11	106	117	0	979	128	74	574
RTOR Reduction (vph)	0	0	54	0	89	0	0	0	0	24	0	0
Lane Group Flow (vph)	0	0	10	181	28	0	117	0	979	104	74	574
Confl. Peds. (#/hr)	25		20	20		25		8		10	10	
Confl. Bikes (#/hr)			6			1				5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			15.9	15.9	15.9		77.8		77.8	77.8	77.8	77.8
Effective Green, g (s)			15.9	15.9	15.9		77.8		77.8	77.8	77.8	77.8
Actuated g/C Ratio			0.16	0.16	0.16		0.76		0.76	0.76	0.76	0.76
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			239	268	240		621		2734	1157	388	2734
v/s Ratio Prot					0.02				c0.27			0.16
v/s Ratio Perm			0.01	c0.11			0.14			0.07	0.15	
v/c Ratio			0.04	0.68	0.11		0.19		0.36	0.09	0.19	0.21
Uniform Delay, d1			36.4	40.5	36.9		3.3		3.9	3.0	3.3	3.3
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	6.6	0.2		0.7		0.4	0.2	1.1	0.2
Delay (s)			36.5	47.0	37.1		4.0		4.2	3.2	4.4	3.5
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		36.5			43.1				4.1			3.6
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	101.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	920	130	220	1280	190	140	750	170	170	460	80
Future Volume (veh/h)	120	920	130	220	1280	190	140	750	170	170	460	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	968	137	232	1347	200	147	789	179	179	484	84
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	154	1298	183	264	1565	232	395	1186	517	296	1231	675
Arrive On Green	0.09	0.29	0.29	0.15	0.35	0.35	0.07	0.34	0.34	0.08	0.35	0.35
Sat Flow, veh/h	1774	4485	633	1774	4453	661	1774	3539	1544	1774	3539	1544
Grp Volume(v), veh/h	126	731	374	232	1026	521	147	789	179	179	484	84
Grp Sat Flow(s),veh/h/ln	1774	1695	1728	1774	1695	1723	1774	1770	1544	1774	1770	1544
Q Serve(g_s), s	7.8	21.9	22.0	14.4	31.5	31.5	6.0	21.4	9.8	7.3	11.6	3.6
Cycle Q Clear(g_c), s	7.8	21.9	22.0	14.4	31.5	31.5	6.0	21.4	9.8	7.3	11.6	3.6
Prop In Lane	1.00		0.37	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	154	981	500	264	1192	606	395	1186	517	296	1231	675
V/C Ratio(X)	0.82	0.74	0.75	0.88	0.86	0.86	0.37	0.67	0.35	0.60	0.39	0.12
Avail Cap(c_a), veh/h	222	998	509	364	1270	646	412	1186	517	338	1231	675
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.3	36.1	36.1	46.7	33.8	33.8	22.1	31.9	28.0	24.0	27.6	18.9
Incr Delay (d2), s/veh	14.5	3.0	5.9	16.3	5.9	10.9	0.6	3.0	1.8	2.4	0.9	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	10.7	11.3	8.2	15.7	16.8	3.0	10.9	4.4	3.7	5.8	1.6
LnGrp Delay(d), s/veh	64.8	39.1	42.1	63.0	39.7	44.7	22.7	34.8	29.9	26.4	28.6	19.3
LnGrp LOS	E	D	D	E	D	D	C	C	C	C	C	B
Approach Vol, veh/h		1231			1779			1115			747	
Approach Delay, s/veh		42.6			44.2			32.4			27.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	41.6	20.7	36.4	12.0	43.0	13.7	43.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	36.0	23.0	33.0	9.0	39.0	14.0	42.0
Max Q Clear Time (g_c+I1), s	9.3	23.4	16.4	24.0	8.0	13.6	9.8	33.5
Green Ext Time (p_c), s	0.1	4.8	0.4	4.6	0.0	3.5	0.1	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	180	40	40	200	60	80	1000	60	60	760	70
Future Volume (veh/h)	50	180	40	40	200	60	80	1000	60	60	760	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	53	189	42	42	211	63	84	1053	63	63	800	74
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	159	326	72	193	304	91	450	2474	1072	358	2282	211
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1099	1466	326	1140	1367	408	631	3539	1533	503	3265	302
Grp Volume(v), veh/h	53	0	231	42	0	274	84	1053	63	63	433	441
Grp Sat Flow(s),veh/h/ln	1099	0	1792	1140	0	1775	631	1770	1533	503	1770	1798
Q Serve(g_s), s	4.7	0.0	11.7	3.5	0.0	14.4	6.2	12.9	1.3	6.2	9.9	9.9
Cycle Q Clear(g_c), s	19.2	0.0	11.7	15.2	0.0	14.4	16.1	12.9	1.3	19.2	9.9	9.9
Prop In Lane	1.00		0.18	1.00		0.23	1.00		1.00	1.00		0.17
Lane Grp Cap(c), veh/h	159	0	398	193	0	394	450	2474	1072	358	1237	1257
V/C Ratio(X)	0.33	0.00	0.58	0.22	0.00	0.69	0.19	0.43	0.06	0.18	0.35	0.35
Avail Cap(c_a), veh/h	358	0	723	400	0	716	450	2474	1072	358	1237	1257
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.1	0.0	35.3	42.0	0.0	36.3	9.3	6.6	4.8	10.7	6.1	6.1
Incr Delay (d2), s/veh	1.2	0.0	1.3	0.6	0.0	2.2	0.9	0.5	0.1	1.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	5.9	1.1	0.0	7.3	1.2	6.5	0.6	1.0	5.1	5.2
LnGrp Delay(d), s/veh	46.4	0.0	36.6	42.6	0.0	38.5	10.2	7.1	4.9	11.7	6.9	6.9
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		284			316			1200			937	
Approach Delay, s/veh		38.4			39.1			7.2			7.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		26.6		75.0		26.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		41.0		71.0		41.0
Max Q Clear Time (g_c+I1), s		18.1		21.2		21.2		17.2
Green Ext Time (p_c), s		11.4		1.4		7.7		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	110	30	110	180	60	70	1110	160	60	760	20
Future Volume (veh/h)	30	110	30	110	180	60	70	1110	160	60	760	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	0.98		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	115	31	115	188	62	73	1156	167	62	792	21
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	143	278	75	224	263	87	500	2563	1111	313	2548	68
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1120	1398	377	1218	1325	437	668	3539	1534	413	3519	93
Grp Volume(v), veh/h	31	0	146	115	0	250	73	1156	167	62	398	415
Grp Sat Flow(s),veh/h/ln	1120	0	1775	1218	0	1762	668	1770	1534	413	1770	1843
Q Serve(g_s), s	2.8	0.0	7.4	9.4	0.0	13.7	4.5	13.9	3.5	7.5	8.3	8.3
Cycle Q Clear(g_c), s	16.5	0.0	7.4	16.9	0.0	13.7	12.8	13.9	3.5	21.4	8.3	8.3
Prop In Lane	1.00		0.21	1.00		0.25	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	143	0	353	224	0	350	500	2563	1111	313	1281	1334
V/C Ratio(X)	0.22	0.00	0.41	0.51	0.00	0.71	0.15	0.45	0.15	0.20	0.31	0.31
Avail Cap(c_a), veh/h	321	0	634	417	0	629	500	2563	1111	313	1281	1334
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	0.0	36.2	43.6	0.0	38.8	7.4	5.9	4.4	10.2	5.1	5.1
Incr Delay (d2), s/veh	0.7	0.0	0.8	1.8	0.0	2.7	0.6	0.6	0.3	1.4	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	3.7	3.3	0.0	6.9	0.9	6.8	1.5	1.0	4.2	4.4
LnGrp Delay(d), s/veh	47.2	0.0	37.0	45.4	0.0	41.5	8.0	6.4	4.7	11.6	5.7	5.7
LnGrp LOS	D		D	D		D	A	A	A	B	A	A
Approach Vol, veh/h		177			365			1396			875	
Approach Delay, s/veh		38.8			42.7			6.3			6.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		79.0		24.6		79.0		24.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		75.0		37.0		75.0		37.0
Max Q Clear Time (g_c+I1), s		15.9		18.5		23.4		18.9
Green Ext Time (p_c), s		13.7		0.8		7.3		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Future Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	161	65	151	183	65	118	1301	183	54	871	32
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	334	135	248	499	404	402	2331	1000	229	2331	999
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1116	1245	502	1143	1863	1508	614	3539	1518	354	3539	1517
Grp Volume(v), veh/h	43	0	226	151	183	65	118	1301	183	54	871	32
Grp Sat Flow(s),veh/h/ln	1116	0	1747	1143	1863	1508	614	1770	1518	354	1770	1517
Q Serve(g_s), s	3.6	0.0	11.9	14.0	8.7	3.6	11.8	21.7	5.1	10.6	12.2	0.8
Cycle Q Clear(g_c), s	12.3	0.0	11.9	25.9	8.7	3.6	23.9	21.7	5.1	32.3	12.2	0.8
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	468	248	499	404	402	2331	1000	229	2331	999
V/C Ratio(X)	0.16	0.00	0.48	0.61	0.37	0.16	0.29	0.56	0.18	0.24	0.37	0.03
Avail Cap(c_a), veh/h	385	0	639	360	682	552	402	2331	1000	229	2331	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	33.6	44.5	32.5	30.6	13.9	10.1	7.2	18.8	8.4	6.5
Incr Delay (d2), s/veh	0.3	0.0	0.8	2.4	0.4	0.2	1.8	1.0	0.4	2.4	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	5.8	4.6	4.5	1.5	2.2	10.8	2.2	1.2	6.1	0.4
LnGrp Delay(d), s/veh	37.7	0.0	34.4	46.9	32.9	30.8	15.7	11.0	7.6	21.2	8.9	6.6
LnGrp LOS	D		C	D	C	C	B	B	A	C	A	A
Approach Vol, veh/h		269			399			1602			957	
Approach Delay, s/veh		34.9			37.9			11.0			9.5	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		33.3		76.0		33.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		25.9		14.3		34.3		27.9
Green Ext Time (p_c), s		16.8		1.5		8.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Future Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	196	660	155	227	959	134	165	773	227	165	711	309
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	222	1067	466	257	997	139	192	1133	494	193	763	331
Arrive On Green	0.12	0.30	0.30	0.14	0.32	0.32	0.11	0.32	0.32	0.11	0.32	0.32
Sat Flow, veh/h	1792	3574	1560	1792	3139	438	1792	3574	1558	1792	2401	1043
Grp Volume(v), veh/h	196	660	155	227	546	547	165	773	227	165	529	491
Grp Sat Flow(s),veh/h/ln	1792	1787	1560	1792	1787	1790	1792	1787	1558	1792	1787	1657
Q Serve(g_s), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Cycle Q Clear(g_c), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	222	1067	466	257	567	568	192	1133	494	193	568	526
V/C Ratio(X)	0.88	0.62	0.33	0.88	0.96	0.96	0.86	0.68	0.46	0.86	0.93	0.93
Avail Cap(c_a), veh/h	225	1067	466	329	568	569	195	1133	494	225	568	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	36.1	32.7	50.3	40.1	40.1	52.5	35.6	32.7	52.5	39.6	39.6
Incr Delay (d2), s/veh	30.5	1.1	0.4	19.9	28.4	28.5	30.0	3.3	3.1	23.8	24.3	25.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.5	4.1	8.8	22.2	22.3	7.0	11.6	6.4	6.6	20.7	19.4
LnGrp Delay(d), s/veh	82.0	37.2	33.1	70.2	68.5	68.6	82.5	38.9	35.7	76.3	63.8	65.2
LnGrp LOS	F	D	C	E	E	E	F	D	D	E	E	E
Approach Vol, veh/h		1011			1320			1165			1185	
Approach Delay, s/veh		45.3			68.8			44.5			66.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	41.9	21.1	39.7	16.8	42.0	18.9	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	36.0	22.0	31.0	13.0	38.0	15.0	38.0
Max Q Clear Time (g_c+I1), s	12.8	24.5	16.9	21.0	12.8	36.4	14.9	37.9
Green Ext Time (p_c), s	0.1	4.6	0.3	3.5	0.0	1.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	80	70	90	170	80	150	810	110	70	720	100
Future Volume (veh/h)	90	80	70	90	170	80	150	810	110	70	720	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	0.98		0.94	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	97	86	75	97	183	86	161	871	118	75	774	108
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	186	222	194	267	293	138	435	2172	294	390	2168	302
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	1126	906	790	1222	1194	561	639	3177	430	578	3171	442
Grp Volume(v), veh/h	97	0	161	97	0	269	161	495	494	75	440	442
Grp Sat Flow(s),veh/h/ln	1126	0	1696	1222	0	1755	639	1805	1802	578	1805	1809
Q Serve(g_s), s	9.5	0.0	8.9	8.1	0.0	15.4	15.9	13.5	13.5	7.3	11.5	11.5
Cycle Q Clear(g_c), s	24.8	0.0	8.9	17.0	0.0	15.4	27.4	13.5	13.5	20.8	11.5	11.5
Prop In Lane	1.00		0.47	1.00		0.32	1.00		0.24	1.00		0.24
Lane Grp Cap(c), veh/h	186	0	416	267	0	431	435	1234	1232	390	1234	1237
V/C Ratio(X)	0.52	0.00	0.39	0.36	0.00	0.62	0.37	0.40	0.40	0.19	0.36	0.36
Avail Cap(c_a), veh/h	260	0	527	347	0	545	435	1234	1232	390	1234	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.9	0.0	35.4	42.5	0.0	37.9	13.2	7.8	7.8	12.3	7.5	7.5
Incr Delay (d2), s/veh	2.2	0.0	0.6	0.8	0.0	1.5	2.4	1.0	1.0	1.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	4.2	2.8	0.0	7.7	3.1	6.9	6.9	1.3	5.9	5.9
LnGrp Delay(d), s/veh	51.2	0.0	36.0	43.4	0.0	39.4	15.6	8.7	8.7	13.4	8.3	8.3
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		258			366			1150			957	
Approach Delay, s/veh		41.7			40.4			9.7			8.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		81.0		31.6		81.0		31.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		77.0		35.0		77.0		35.0
Max Q Clear Time (g_c+I1), s		29.4		26.8		22.8		19.0
Green Ext Time (p_c), s		10.2		0.8		7.8		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	980	130	160	1300	330	180	610	150	300	480	210
Future Volume (veh/h)	250	980	130	160	1300	330	180	610	150	300	480	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	275	1077	143	176	1429	363	198	670	165	330	527	231
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	269	1322	567	203	1348	341	352	657	162	329	1011	432
Arrive On Green	0.15	0.37	0.37	0.11	0.33	0.33	0.10	0.23	0.23	0.15	0.28	0.28
Sat Flow, veh/h	1792	3574	1534	1792	4045	1022	1792	2816	693	1792	3574	1530
Grp Volume(v), veh/h	275	1077	143	176	1208	584	198	425	410	330	527	231
Grp Sat Flow(s),veh/h/ln	1792	1787	1534	1792	1712	1644	1792	1787	1722	1792	1787	1530
Q Serve(g_s), s	18.0	32.6	7.8	11.6	40.0	40.0	9.9	28.0	28.0	18.0	14.9	15.3
Cycle Q Clear(g_c), s	18.0	32.6	7.8	11.6	40.0	40.0	9.9	28.0	28.0	18.0	14.9	15.3
Prop In Lane	1.00		1.00	1.00		0.62	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	269	1322	567	203	1141	548	352	417	402	329	1011	432
V/C Ratio(X)	1.02	0.81	0.25	0.87	1.06	1.07	0.56	1.02	1.02	1.00	0.52	0.53
Avail Cap(c_a), veh/h	269	1322	567	224	1141	548	396	417	402	329	1011	432
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	34.1	26.3	52.3	40.0	40.0	30.4	46.0	46.0	36.2	36.2	36.4
Incr Delay (d2), s/veh	61.0	4.0	0.2	26.4	43.6	57.1	1.4	49.0	50.3	50.6	1.9	4.7
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.4	16.7	3.3	7.2	25.8	26.8	5.0	19.5	18.9	15.5	7.6	7.0
LnGrp Delay(d), s/veh	112.1	38.1	26.5	78.7	83.6	97.1	31.8	95.0	96.3	86.8	38.1	41.0
LnGrp LOS	F	D	C	E	F	F	C	F	F	F	D	D
Approach Vol, veh/h		1495			1968			1033			1088	
Approach Delay, s/veh		50.6			87.2			83.4			53.5	
Approach LOS		D			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	32.0	17.6	48.4	16.1	37.9	22.0	44.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	28.0	15.0	43.0	15.0	31.0	18.0	40.0
Max Q Clear Time (g_c+I1), s	20.0	30.0	13.6	34.6	11.9	17.3	20.0	42.0
Green Ext Time (p_c), s	0.0	0.0	0.1	4.8	0.2	3.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	70.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	140	60	50	240	130	70	670	60	100	380	80
Future Volume (veh/h)	120	140	60	50	240	130	70	670	60	100	380	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	124	144	62	52	247	134	72	691	62	103	392	82
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	226	417	180	364	385	209	551	1936	174	410	1723	357
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1008	1239	533	1179	1143	620	923	3309	297	714	2944	610
Grp Volume(v), veh/h	124	0	206	52	0	381	72	373	380	103	236	238
Grp Sat Flow(s),veh/h/ln	1008	0	1772	1179	0	1764	923	1787	1818	714	1787	1767
Q Serve(g_s), s	12.2	0.0	8.9	3.6	0.0	18.7	4.2	11.2	11.2	9.1	6.5	6.6
Cycle Q Clear(g_c), s	30.9	0.0	8.9	12.5	0.0	18.7	10.8	11.2	11.2	20.3	6.5	6.6
Prop In Lane	1.00		0.30	1.00		0.35	1.00		0.16	1.00		0.35
Lane Grp Cap(c), veh/h	226	0	597	364	0	594	551	1046	1064	410	1046	1034
V/C Ratio(X)	0.55	0.00	0.35	0.14	0.00	0.64	0.13	0.36	0.36	0.25	0.23	0.23
Avail Cap(c_a), veh/h	397	0	899	565	0	894	551	1046	1064	410	1046	1034
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	0.0	25.5	30.2	0.0	28.8	12.8	11.2	11.2	16.5	10.2	10.2
Incr Delay (d2), s/veh	2.1	0.0	0.3	0.2	0.0	1.2	0.5	1.0	0.9	1.5	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.0	4.4	1.2	0.0	9.3	1.1	5.8	5.9	1.9	3.3	3.4
LnGrp Delay(d), s/veh	43.9	0.0	25.9	30.4	0.0	29.9	13.3	12.1	12.1	18.0	10.7	10.7
LnGrp LOS	D		C	C		C	B	B	B	B	B	B
Approach Vol, veh/h		330			433			825			577	
Approach Delay, s/veh		32.6			30.0			12.2			12.0	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		38.5		64.0		38.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		13.2		32.9		22.3		20.7
Green Ext Time (p_c), s		5.8		1.6		4.0		2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	140	50	50	180	50	130	680	110	60	490	120
Future Volume (veh/h)	50	140	50	50	180	50	130	680	110	60	490	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	53	149	53	53	191	53	138	723	117	64	521	128
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	188	277	99	218	297	82	539	1299	1077	416	1299	1077
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1135	1315	468	1178	1408	391	787	1881	1561	658	1881	1561
Grp Volume(v), veh/h	53	0	202	53	0	244	138	723	117	64	521	128
Grp Sat Flow(s),veh/h/ln	1135	0	1782	1178	0	1799	787	1881	1561	658	1881	1561
Q Serve(g_s), s	3.6	0.0	8.2	3.4	0.0	10.0	7.4	15.7	2.0	4.4	9.6	2.2
Cycle Q Clear(g_c), s	13.7	0.0	8.2	11.6	0.0	10.0	17.0	15.7	2.0	20.1	9.6	2.2
Prop In Lane	1.00		0.26	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	376	218	0	380	539	1299	1077	416	1299	1077
V/C Ratio(X)	0.28	0.00	0.54	0.24	0.00	0.64	0.26	0.56	0.11	0.15	0.40	0.12
Avail Cap(c_a), veh/h	732	0	1230	783	0	1242	539	1299	1077	416	1299	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	0.0	28.5	33.6	0.0	29.2	9.0	6.3	4.2	11.4	5.4	4.2
Incr Delay (d2), s/veh	0.8	0.0	1.2	0.6	0.0	1.8	1.1	1.7	0.2	0.8	0.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	4.2	1.1	0.0	5.1	1.7	8.7	0.9	0.9	5.3	1.0
LnGrp Delay(d), s/veh	36.3	0.0	29.7	34.2	0.0	31.0	10.2	8.0	4.4	12.1	6.3	4.5
LnGrp LOS	D		C	C		C	B	A	A	B	A	A
Approach Vol, veh/h		255			297			978			713	
Approach Delay, s/veh		31.0			31.6			7.9			6.5	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		21.1		60.0		21.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s		19.0		15.7		22.1		13.6
Green Ext Time (p_c), s		7.6		1.4		4.7		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Future Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	84	274	116	32	168	42	137	737	116	53	337	53
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	187	391	324	138	300	75	749	1353	1124	416	2222	346
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1175	1881	1561	999	1442	361	999	1881	1563	651	3090	481
Grp Volume(v), veh/h	84	274	116	32	0	210	137	737	116	53	193	197
Grp Sat Flow(s),veh/h/ln	1175	1881	1561	999	0	1803	999	1881	1563	651	1787	1783
Q Serve(g_s), s	7.6	14.8	7.0	3.4	0.0	11.5	5.5	19.9	2.5	4.5	3.7	3.8
Cycle Q Clear(g_c), s	19.0	14.8	7.0	18.2	0.0	11.5	9.3	19.9	2.5	24.4	3.7	3.8
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	187	391	324	138	0	375	749	1353	1124	416	1285	1283
V/C Ratio(X)	0.45	0.70	0.36	0.23	0.00	0.56	0.18	0.54	0.10	0.13	0.15	0.15
Avail Cap(c_a), veh/h	296	565	469	231	0	542	749	1353	1124	416	1285	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	40.3	37.2	48.8	0.0	39.0	6.3	7.1	4.7	12.7	4.9	4.9
Incr Delay (d2), s/veh	1.7	2.3	0.7	0.8	0.0	1.3	0.5	1.6	0.2	0.6	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.9	3.1	1.0	0.0	5.9	1.6	10.8	1.1	0.9	1.9	1.9
LnGrp Delay(d), s/veh	49.2	42.6	37.9	49.6	0.0	40.3	6.9	8.7	4.9	13.4	5.1	5.1
LnGrp LOS	D	D	D	D		D	A	A	A	B	A	A
Approach Vol, veh/h		474			242			990			443	
Approach Delay, s/veh		42.6			41.5			8.0			6.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		26.8		83.0		26.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		21.9		21.0		26.4		20.2
Green Ext Time (p_c), s		7.2		1.8		3.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	1290	1280	410	400	270
Future Volume (veh/h)	390	1290	1280	410	400	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	411	1358	1347	432	421	284
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	451	3659	1618	516	733	337
Arrive On Green	0.25	0.71	0.42	0.42	0.21	0.21
Sat Flow, veh/h	1792	5305	4001	1222	3476	1599
Grp Volume(v), veh/h	411	1358	1203	576	421	284
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1630	1738	1599
Q Serve(g_s), s	23.2	10.8	32.6	33.0	11.3	17.8
Cycle Q Clear(g_c), s	23.2	10.8	32.6	33.0	11.3	17.8
Prop In Lane	1.00			0.75	1.00	1.00
Lane Grp Cap(c), veh/h	451	3659	1446	688	733	337
V/C Ratio(X)	0.91	0.37	0.83	0.84	0.57	0.84
Avail Cap(c_a), veh/h	653	4431	1575	750	733	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	5.9	26.8	26.9	37.0	39.5
Incr Delay (d2), s/veh	12.9	0.1	3.7	7.8	3.3	21.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	5.1	16.1	16.2	5.8	16.7
LnGrp Delay(d), s/veh	50.8	5.9	30.5	34.7	40.2	61.3
LnGrp LOS	D	A	C	C	D	E
Approach Vol, veh/h		1769	1779		705	
Approach Delay, s/veh		16.4	31.9		48.7	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				78.3		26.0	30.3	48.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	38.0	48.0
Max Q Clear Time (g_c+I1), s				12.8		19.8	25.2	35.0
Green Ext Time (p_c), s				13.5		0.7	1.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Future Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	467	130	98	435	98	261	967	76	130	707	217
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	306	741	318	243	517	219	418	2103	165	321	1355	416
Arrive On Green	0.12	0.21	0.21	0.06	0.14	0.14	0.09	0.63	0.63	0.51	0.51	0.51
Sat Flow, veh/h	1792	3574	1533	1792	3574	1515	1792	3352	263	543	2677	822
Grp Volume(v), veh/h	228	467	130	98	435	98	261	516	527	130	472	452
Grp Sat Flow(s),veh/h/ln	1792	1787	1533	1792	1787	1515	1792	1787	1828	543	1787	1711
Q Serve(g_s), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	18.9	20.3	20.3
Cycle Q Clear(g_c), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	22.3	20.3	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.48
Lane Grp Cap(c), veh/h	306	741	318	243	517	219	418	1121	1147	321	904	866
V/C Ratio(X)	0.74	0.63	0.41	0.40	0.84	0.45	0.62	0.46	0.46	0.40	0.52	0.52
Avail Cap(c_a), veh/h	351	903	387	244	592	251	481	1121	1147	321	904	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	41.5	39.4	38.5	47.8	44.9	14.0	11.2	11.2	20.7	19.0	19.0
Incr Delay (d2), s/veh	7.2	1.0	0.8	1.1	9.5	1.4	2.0	1.4	1.3	3.7	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.8	3.6	2.7	7.4	2.9	3.9	8.9	9.1	3.2	10.5	10.1
LnGrp Delay(d), s/veh	42.2	42.5	40.2	39.6	57.3	46.3	16.0	12.5	12.5	24.4	21.2	21.3
LnGrp LOS	D	D	D	D	E	D	B	B	B	C	C	C
Approach Vol, veh/h		825			631			1304			1054	
Approach Delay, s/veh		42.0			52.8			13.2			21.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		76.0	11.0	27.8	13.9	62.1	18.1	20.6
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		72.0	7.0	29.0	14.0	54.0	17.0	19.0
Max Q Clear Time (g_c+I1), s		19.3	7.3	15.7	9.6	24.3	14.0	15.6
Green Ext Time (p_c), s		8.4	0.0	2.9	0.3	8.7	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Future Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	253	126	168	105	463	221	116	663	53	95	484	242
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	338	600	498	424	567	268	330	1740	139	367	979	1017
Arrive On Green	0.12	0.32	0.32	0.05	0.24	0.24	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1810	1900	1577	1810	2355	1115	740	3376	270	746	1900	1582
Grp Volume(v), veh/h	253	126	168	105	354	330	116	354	362	95	484	242
Grp Sat Flow(s),veh/h/ln	1810	1900	1577	1810	1805	1665	740	1805	1841	746	1900	1582
Q Serve(g_s), s	10.1	4.9	8.2	4.4	18.7	18.9	12.2	11.9	12.0	8.9	16.7	6.6
Cycle Q Clear(g_c), s	10.1	4.9	8.2	4.4	18.7	18.9	28.9	11.9	12.0	20.8	16.7	6.6
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	338	600	498	424	435	401	330	930	949	367	979	1017
V/C Ratio(X)	0.75	0.21	0.34	0.25	0.81	0.82	0.35	0.38	0.38	0.26	0.49	0.24
Avail Cap(c_a), veh/h	525	961	797	424	590	545	330	930	949	367	979	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	25.3	26.4	27.0	36.2	36.3	25.3	14.7	14.7	21.0	15.9	7.7
Incr Delay (d2), s/veh	3.3	0.2	0.4	0.3	6.3	7.3	2.9	1.2	1.2	1.7	1.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	2.6	3.6	2.2	10.1	9.5	2.7	6.2	6.3	2.0	9.2	3.0
LnGrp Delay(d), s/veh	28.5	25.4	26.8	27.3	42.5	43.6	28.2	15.9	15.9	22.7	17.7	8.3
LnGrp LOS	C	C	C	C	D	D	C	B	B	C	B	A
Approach Vol, veh/h		547			789			832			821	
Approach Delay, s/veh		27.3			40.9			17.6			15.5	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	9.0	35.9		56.0	16.6	28.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	5.0	51.0		52.0	23.0	33.0
Max Q Clear Time (g_c+I1), s		30.9	6.4	10.2		22.8	12.1	20.9
Green Ext Time (p_c), s		5.3	0.0	1.3		4.9	0.5	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Future Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	274	653	505	611	832	105	463	1063	168	126	853	295
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	344	625	258	538	954	120	403	1152	182	169	834	347
Arrive On Green	0.14	0.17	0.17	0.27	0.30	0.30	0.19	0.38	0.38	0.05	0.23	0.23
Sat Flow, veh/h	1792	3574	1473	1792	3172	400	1792	3071	484	1792	3574	1487
Grp Volume(v), veh/h	274	653	505	611	469	468	463	618	613	126	853	295
Grp Sat Flow(s),veh/h/ln	1792	1787	1473	1792	1787	1785	1792	1787	1768	1792	1787	1487
Q Serve(g_s), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Cycle Q Clear(g_c), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	344	625	258	538	537	537	403	670	663	169	834	347
V/C Ratio(X)	0.80	1.04	1.96	1.14	0.87	0.87	1.15	0.92	0.93	0.75	1.02	0.85
Avail Cap(c_a), veh/h	360	625	258	538	537	537	403	670	663	169	834	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	49.5	49.5	35.0	39.8	39.8	36.8	35.8	35.9	37.6	46.0	44.0
Incr Delay (d2), s/veh	11.4	48.0	445.4	82.1	14.6	14.6	91.6	20.1	20.8	16.4	37.1	22.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	14.5	40.4	30.0	16.9	16.9	23.6	23.3	23.3	3.9	18.1	11.5
LnGrp Delay(d), s/veh	46.0	97.5	494.9	117.1	54.4	54.4	128.5	55.9	56.7	53.9	83.1	66.1
LnGrp LOS	D	F	F	F	D	D	F	E	E	D	F	E
Approach Vol, veh/h		1432			1548			1694			1274	
Approach Delay, s/veh		227.8			79.1			76.0			76.3	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	36.0	25.0	27.0	32.0	20.9	40.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	32.0	21.0	23.0	28.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	8.0	41.9	34.0	23.0	25.0	30.0	16.8	31.8
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	0.0	0.1	1.7

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		113.4	
HCM 2010 LOS		F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Future Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.89	1.00		0.93	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	333	1031	146	156	1469	198	365	1240	167	125	1000	271
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1334	189	183	1311	520	314	1322	178	144	984	276
Arrive On Green	0.17	0.43	0.43	0.10	0.37	0.37	0.14	0.29	0.29	0.04	0.19	0.19
Sat Flow, veh/h	1792	3096	438	1792	3574	1418	1792	4532	610	1792	5136	1441
Grp Volume(v), veh/h	333	594	583	156	1469	198	365	937	470	125	1000	271
Grp Sat Flow(s),veh/h/ln	1792	1787	1746	1792	1787	1418	1792	1712	1719	1792	1712	1441
Q Serve(g_s), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Cycle Q Clear(g_c), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	299	770	753	183	1311	520	314	999	501	144	984	276
V/C Ratio(X)	1.12	0.77	0.77	0.85	1.12	0.38	1.16	0.94	0.94	0.87	1.02	0.98
Avail Cap(c_a), veh/h	299	770	753	209	1311	520	314	999	501	144	984	276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	29.1	29.1	53.0	38.0	28.0	35.0	41.4	41.4	44.7	48.5	48.3
Incr Delay (d2), s/veh	86.7	4.8	5.0	24.8	65.1	0.5	102.7	17.0	27.4	38.9	32.7	49.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	17.7	17.4	6.3	33.5	4.9	19.3	17.4	19.0	4.9	13.8	12.8
LnGrp Delay(d), s/veh	136.7	33.9	34.2	77.7	103.1	28.4	137.6	58.4	68.9	83.6	81.2	97.9
LnGrp LOS	F	C	C	E	F	C	F	E	E	F	F	F
Approach Vol, veh/h		1510			1823			1772			1396	
Approach Delay, s/veh		56.7			92.8			77.5			84.7	
Approach LOS		E			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	39.0	16.3	55.7	21.0	27.0	24.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	35.0	14.0	50.0	17.0	23.0	20.0	44.0
Max Q Clear Time (g_c+I1), s	7.0	34.0	12.3	36.2	19.0	25.0	22.0	46.0
Green Ext Time (p_c), s	0.0	0.8	0.1	6.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	78.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Future Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.90	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	200	484	211	347	1021	389	358	1000	137	305	800	137
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	226	779	308	376	1077	436	385	1135	155	331	965	163
Arrive On Green	0.13	0.22	0.22	0.21	0.30	0.30	0.21	0.25	0.25	0.19	0.22	0.22
Sat Flow, veh/h	1792	3574	1411	1792	3574	1445	1792	4493	613	1792	4332	732
Grp Volume(v), veh/h	200	484	211	347	1021	389	358	761	376	305	630	307
Grp Sat Flow(s),veh/h/ln	1792	1787	1411	1792	1787	1445	1792	1712	1683	1792	1712	1640
Q Serve(g_s), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Cycle Q Clear(g_c), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.45
Lane Grp Cap(c), veh/h	226	779	308	376	1077	436	385	865	425	331	763	366
V/C Ratio(X)	0.88	0.62	0.69	0.92	0.95	0.89	0.93	0.88	0.88	0.92	0.83	0.84
Avail Cap(c_a), veh/h	226	779	308	422	1083	438	407	865	425	347	763	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	42.0	42.7	46.0	40.6	39.7	45.8	42.7	42.7	47.5	44.0	44.1
Incr Delay (d2), s/veh	31.1	1.5	6.2	24.3	16.3	20.1	27.2	12.4	22.6	28.3	9.9	20.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	7.4	6.9	13.7	18.7	14.6	14.4	13.4	14.6	12.4	10.9	11.7
LnGrp Delay(d), s/veh	82.1	43.5	48.9	70.3	56.9	59.7	72.9	55.1	65.3	75.9	53.9	64.3
LnGrp LOS	F	D	D	E	E	E	E	E	E	E	D	E
Approach Vol, veh/h		895			1757			1495			1242	
Approach Delay, s/veh		53.4			60.2			61.9			61.9	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	34.0	28.9	29.9	29.5	30.5	19.0	39.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	30.0	28.0	23.0	27.0	26.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	21.9	27.5	24.5	18.3	25.3	23.2	15.0	35.2
Green Ext Time (p_c), s	0.1	1.6	0.4	1.6	0.2	1.5	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Future Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	354	1081	152	374	1293	253	495	919	141	323	788	172
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	378	1639	230	440	1362	572	523	1372	399	379	941	203
Arrive On Green	0.11	0.36	0.36	0.13	0.38	0.38	0.15	0.27	0.27	0.11	0.23	0.23
Sat Flow, veh/h	3476	4514	634	3476	3574	1500	3476	5136	1492	3476	4167	898
Grp Volume(v), veh/h	354	820	413	374	1293	253	495	919	141	323	646	314
Grp Sat Flow(s),veh/h/ln	1738	1712	1724	1738	1787	1500	1738	1712	1492	1738	1712	1642
Q Serve(g_s), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Cycle Q Clear(g_c), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	378	1243	626	440	1362	572	523	1372	399	379	773	371
V/C Ratio(X)	0.94	0.66	0.66	0.85	0.95	0.44	0.95	0.67	0.35	0.85	0.84	0.85
Avail Cap(c_a), veh/h	378	1243	626	552	1375	577	523	1372	399	407	773	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	31.9	31.9	51.1	35.9	27.5	50.3	39.1	35.4	52.3	44.2	44.3
Incr Delay (d2), s/veh	30.6	1.3	2.6	9.9	13.9	0.5	26.4	2.6	2.4	15.0	10.3	20.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	11.5	11.8	6.6	23.3	6.3	10.0	9.4	4.1	6.0	11.2	12.1
LnGrp Delay(d), s/veh	83.5	33.2	34.5	61.0	49.8	28.1	76.7	41.7	37.9	67.3	54.5	65.1
LnGrp LOS	F	C	C	E	D	C	E	D	D	E	D	E
Approach Vol, veh/h		1587			1920			1555			1283	
Approach Delay, s/veh		44.7			49.1			52.5			60.3	
Approach LOS		D			D			D			E	

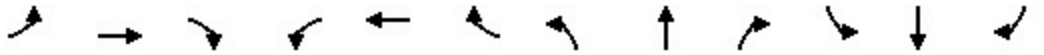
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	36.0	19.1	47.4	22.0	31.0	17.0	49.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	19.0	40.0	18.0	27.0	13.0	46.0
Max Q Clear Time (g_c+I1), s	12.9	21.1	14.6	26.0	18.9	23.9	14.1	43.9
Green Ext Time (p_c), s	0.1	4.5	0.6	6.7	0.0	1.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Future Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	287	32	191	11	32	32	202	1415	21	32	777	202
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	59	0	632	39	94	643	234	2457	36	40	1468	377
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.47	0.47	0.02	0.36	0.36
Sat Flow, veh/h	0	0	1568	0	233	1595	1792	5211	77	1792	4038	1038
Grp Volume(v), veh/h	319	0	191	43	0	32	202	930	506	32	658	321
Grp Sat Flow(s),veh/h/ln	0	0	1568	233	0	1595	1792	1712	1865	1792	1712	1652
Q Serve(g_s), s	0.0	0.0	9.7	0.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Cycle Q Clear(g_c), s	47.0	0.0	9.7	47.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Prop In Lane	0.90		1.00	0.26		1.00	1.00		0.04	1.00		0.63
Lane Grp Cap(c), veh/h	59	0	632	133	0	643	234	1615	879	40	1245	600
V/C Ratio(X)	5.44	0.00	0.30	0.32	0.00	0.05	0.86	0.58	0.58	0.79	0.53	0.54
Avail Cap(c_a), veh/h	59	0	632	133	0	643	384	1615	879	92	1245	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	23.7	28.5	0.0	21.2	49.7	22.4	22.4	56.7	29.2	29.3
Incr Delay (d2), s/veh	2035.1	0.0	0.3	1.4	0.0	0.0	10.6	1.5	2.7	28.1	1.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.0	0.0	4.2	0.9	0.0	0.6	7.1	11.2	12.5	1.3	8.6	8.8
LnGrp Delay(d), s/veh	2093.4	0.0	23.9	29.9	0.0	21.2	60.3	23.9	25.1	84.8	30.8	32.7
LnGrp LOS	F		C	C		C	E	C	C	F	C	C
Approach Vol, veh/h		510			75			1638			1011	
Approach Delay, s/veh		1318.4			26.2			28.7			33.2	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	59.0		51.0	19.2	46.4		51.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	55.0		47.0	25.0	36.0		47.0
Max Q Clear Time (g_c+I1), s	4.1	25.0		49.0	14.9	19.9		49.0
Green Ext Time (p_c), s	0.0	11.4		0.0	0.4	5.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		233.4
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Future Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.95		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	42	73	125	125	125	73	156	1250	94	62	948	52
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	319	246	223	319	248	462	2447	1049	336	2296	126
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.68	0.68	0.03	0.67	0.67
Sat Flow, veh/h	1142	1881	1453	1135	1881	1462	1792	3574	1532	1792	3437	188
Grp Volume(v), veh/h	42	73	125	125	125	73	156	1250	94	62	493	507
Grp Sat Flow(s),veh/h/ln	1142	1881	1453	1135	1881	1462	1792	1787	1532	1792	1787	1838
Q Serve(g_s), s	3.6	3.5	8.2	11.3	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Cycle Q Clear(g_c), s	9.8	3.5	8.2	14.8	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	194	319	246	223	319	248	462	2447	1049	336	1194	1228
V/C Ratio(X)	0.22	0.23	0.51	0.56	0.39	0.29	0.34	0.51	0.09	0.18	0.41	0.41
Avail Cap(c_a), veh/h	305	501	387	332	501	389	648	2447	1049	415	1194	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	37.7	39.7	44.1	38.9	38.2	5.8	8.0	5.6	6.4	8.0	8.0
Incr Delay (d2), s/veh	0.5	0.4	1.6	2.2	0.8	0.7	0.4	0.8	0.2	0.3	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	3.4	3.7	3.3	1.9	1.4	8.9	1.0	0.6	6.8	7.0
LnGrp Delay(d), s/veh	43.8	38.1	41.3	46.3	39.6	38.8	6.2	8.8	5.7	6.6	9.1	9.0
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		240			323			1500			1062	
Approach Delay, s/veh		40.8			42.0			8.3			8.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	76.0		21.8	9.1	74.3		21.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	72.0		28.0	16.0	64.0		28.0
Max Q Clear Time (g_c+I1), s	3.1	19.8		11.8	4.8	15.3		16.8
Green Ext Time (p_c), s	0.0	13.2		0.9	0.3	8.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1340	420	40	530	60	120	1080	30	150	1080	150
Future Volume (veh/h)	260	1340	420	40	530	60	120	1080	30	150	1080	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	271	1396	438	42	552	62	125	1125	31	156	1125	156
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	354	1504	747	73	933	104	193	1397	38	236	1271	176
Arrive On Green	0.10	0.43	0.43	0.29	0.29	0.29	0.06	0.40	0.40	0.07	0.41	0.41
Sat Flow, veh/h	1757	3505	1529	250	3167	355	1757	3482	96	1757	3083	426
Grp Volume(v), veh/h	271	1396	438	42	305	309	125	566	590	156	638	643
Grp Sat Flow(s),veh/h/ln	1757	1752	1529	250	1752	1769	1757	1752	1825	1757	1752	1757
Q Serve(g_s), s	12.0	44.9	24.5	6.1	17.6	17.8	4.9	34.0	34.0	6.1	40.0	40.3
Cycle Q Clear(g_c), s	12.0	44.9	24.5	35.0	17.6	17.8	4.9	34.0	34.0	6.1	40.0	40.3
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.05	1.00		0.24
Lane Grp Cap(c), veh/h	354	1504	747	73	516	521	193	703	732	236	723	725
V/C Ratio(X)	0.77	0.93	0.59	0.57	0.59	0.59	0.65	0.81	0.81	0.66	0.88	0.89
Avail Cap(c_a), veh/h	354	1504	747	73	516	521	210	703	732	264	723	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	32.2	21.9	58.5	35.8	35.8	27.2	31.5	31.5	25.5	32.3	32.4
Incr Delay (d2), s/veh	9.7	10.4	1.2	10.3	1.8	1.8	6.0	9.5	9.2	5.1	14.7	15.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	23.9	10.6	1.6	8.8	8.9	2.7	18.2	18.9	3.3	22.3	22.5
LnGrp Delay(d), s/veh	37.5	42.6	23.1	68.8	37.6	37.7	33.3	41.0	40.7	30.6	47.0	47.4
LnGrp LOS	D	D	C	E	D	D	C	D	D	C	D	D
Approach Vol, veh/h		2105			656			1281			1437	
Approach Delay, s/veh		37.9			39.6			40.1			45.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	51.7		55.0	10.8	53.0	16.0	39.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	47.0		51.0	8.0	49.0	12.0	35.0
Max Q Clear Time (g_c+I1), s	8.1	36.0		46.9	6.9	42.3	14.0	37.0
Green Ext Time (p_c), s	0.1	5.5		3.3	0.0	4.2	0.0	0.0

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		40.6	
HCM 2010 LOS		D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	870	500	40	410	50	210	900	30	130	1170	110
Future Volume (veh/h)	190	870	500	40	410	50	210	900	30	130	1170	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	906	521	42	427	52	219	938	0	135	1219	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	225	1009	444	53	666	293	246	1590	711	163	1424	637
Arrive On Green	0.13	0.29	0.29	0.03	0.19	0.19	0.14	0.45	0.00	0.09	0.41	0.00
Sat Flow, veh/h	1757	3505	1544	1757	3505	1542	1757	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	198	906	521	42	427	52	219	938	0	135	1219	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1544	1757	1752	1542	1757	1752	1568	1757	1752	1568
Q Serve(g_s), s	13.1	29.3	34.0	2.8	13.3	3.3	14.5	23.6	0.0	8.9	37.4	0.0
Cycle Q Clear(g_c), s	13.1	29.3	34.0	2.8	13.3	3.3	14.5	23.6	0.0	8.9	37.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1009	444	53	666	293	246	1590	711	163	1424	637
V/C Ratio(X)	0.88	0.90	1.17	0.79	0.64	0.18	0.89	0.59	0.00	0.83	0.86	0.00
Avail Cap(c_a), veh/h	253	1009	444	59	666	293	268	1590	711	253	1424	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	40.4	42.1	56.9	44.1	40.1	49.9	24.1	0.0	52.7	31.9	0.0
Incr Delay (d2), s/veh	25.9	10.7	99.3	45.3	2.1	0.3	27.3	1.6	0.0	12.5	6.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	15.7	26.7	2.0	6.6	1.4	8.9	11.7	0.0	4.9	19.5	0.0
LnGrp Delay(d), s/veh	76.5	51.1	141.4	102.2	46.2	40.4	77.2	25.7	0.0	65.2	38.7	0.0
LnGrp LOS	E	D	F	F	D	D	E	C		E	D	
Approach Vol, veh/h		1625			521			1157			1354	
Approach Delay, s/veh		83.2			50.2			35.4			41.4	
Approach LOS		F			D			D			D	

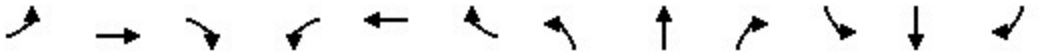
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	57.6	7.6	38.0	20.5	52.0	19.2	26.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	49.0	4.0	34.0	18.0	48.0	17.0	21.0
Max Q Clear Time (g_c+I1), s	10.9	25.6	4.8	36.0	16.5	39.4	15.1	15.3
Green Ext Time (p_c), s	0.1	6.6	0.0	0.0	0.1	5.0	0.1	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	110	800	60	130	1070	40	100	590	160	80	880	220
Future Volume (veh/h)	110	800	60	130	1070	40	100	590	160	80	880	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1759
Adj Flow Rate, veh/h	112	816	0	133	1092	41	102	602	163	82	898	224
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	136	1160	519	160	1207	526	125	1337	354	103	1145	498
Arrive On Green	0.08	0.35	0.00	0.10	0.36	0.36	0.07	0.36	0.36	0.06	0.34	0.34
Sat Flow, veh/h	1675	3343	1495	1675	3343	1456	1675	3760	995	1675	3343	1455
Grp Volume(v), veh/h	112	816	0	133	1092	41	102	511	254	82	898	224
Grp Sat Flow(s),veh/h/ln	1675	1671	1495	1675	1671	1456	1675	1601	1553	1675	1671	1455
Q Serve(g_s), s	7.5	24.0	0.0	8.9	35.3	2.1	6.8	13.9	14.4	5.5	27.5	13.6
Cycle Q Clear(g_c), s	7.5	24.0	0.0	8.9	35.3	2.1	6.8	13.9	14.4	5.5	27.5	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	136	1160	519	160	1207	526	125	1139	552	103	1145	498
V/C Ratio(X)	0.82	0.70	0.00	0.83	0.90	0.08	0.82	0.45	0.46	0.80	0.78	0.45
Avail Cap(c_a), veh/h	162	1160	519	235	1291	563	147	1139	552	177	1145	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	32.1	0.0	50.6	34.5	23.9	51.9	28.1	28.3	52.7	33.7	29.1
Incr Delay (d2), s/veh	24.3	1.9	0.0	14.9	8.9	0.1	25.3	1.3	2.8	13.0	5.4	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	11.4	0.0	4.8	17.7	0.9	4.1	6.4	6.6	2.9	13.6	5.9
LnGrp Delay(d), s/veh	75.8	34.0	0.0	65.6	43.4	24.0	77.2	29.4	31.0	65.8	39.1	32.0
LnGrp LOS	E	C		E	D	C	E	C	C	E	D	C
Approach Vol, veh/h		928			1266			867			1204	
Approach Delay, s/veh		39.1			45.1			35.5			39.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	44.5	14.8	43.5	12.5	43.0	13.3	45.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	37.0	16.0	39.0	10.0	39.0	11.0	44.0
Max Q Clear Time (g_c+I1), s	7.5	16.4	10.9	26.0	8.8	29.5	9.5	37.3
Green Ext Time (p_c), s	0.1	4.8	0.1	4.4	0.0	4.5	0.0	3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	990	130	190	870	40	160	550	90	60	470	20
Future Volume (veh/h)	60	990	130	190	870	40	160	550	90	60	470	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	65	1076	141	207	946	43	174	598	98	65	511	22
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Cap, veh/h	82	1266	558	240	1581	705	206	1158	187	82	968	41
Arrive On Green	0.05	0.38	0.38	0.14	0.47	0.47	0.12	0.28	0.28	0.05	0.20	0.20
Sat Flow, veh/h	1691	3374	1486	1691	3374	1505	1691	4195	676	1691	4761	204
Grp Volume(v), veh/h	65	1076	141	207	946	43	174	458	238	65	346	187
Grp Sat Flow(s),veh/h/ln	1691	1687	1486	1691	1687	1505	1691	1616	1639	1691	1616	1733
Q Serve(g_s), s	3.9	29.7	6.6	12.1	21.0	1.6	10.2	12.1	12.4	3.9	9.7	9.8
Cycle Q Clear(g_c), s	3.9	29.7	6.6	12.1	21.0	1.6	10.2	12.1	12.4	3.9	9.7	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		0.12
Lane Grp Cap(c), veh/h	82	1266	558	240	1581	705	206	892	453	82	657	352
V/C Ratio(X)	0.79	0.85	0.25	0.86	0.60	0.06	0.85	0.51	0.52	0.79	0.53	0.53
Avail Cap(c_a), veh/h	167	1497	659	350	1863	831	300	892	453	167	657	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	29.1	21.9	42.5	19.9	14.7	43.6	31.0	31.1	47.7	36.0	36.1
Incr Delay (d2), s/veh	15.1	4.2	0.2	13.8	0.4	0.0	13.7	2.1	4.3	15.1	3.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	14.5	2.8	6.6	9.8	0.7	5.6	5.7	6.1	2.2	4.6	5.2
LnGrp Delay(d), s/veh	62.8	33.3	22.1	56.3	20.3	14.8	57.3	33.1	35.4	62.8	39.0	41.7
LnGrp LOS	E	C	C	E	C	B	E	C	D	E	D	D
Approach Vol, veh/h		1282			1196			870			598	
Approach Delay, s/veh		33.5			26.3			38.5			42.5	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	32.0	18.4	42.0	16.3	24.6	8.9	51.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	28.0	21.0	45.0	18.0	20.0	10.0	56.0
Max Q Clear Time (g_c+I1), s	5.9	14.4	14.1	31.7	12.2	11.8	5.9	23.0
Green Ext Time (p_c), s	0.0	3.6	0.3	6.4	0.2	2.0	0.0	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Future Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	139	748	147	16	871	554	159	158	0	241	683	42
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	198	1094	215	25	1168	609	231	1135	508	275	1447	635
Arrive On Green	0.06	0.37	0.37	0.01	0.33	0.33	0.07	0.32	0.00	0.15	0.40	0.40
Sat Flow, veh/h	3476	2960	581	1792	3574	1539	3476	3574	1599	1792	3574	1568
Grp Volume(v), veh/h	139	452	443	16	871	554	159	158	0	241	683	42
Grp Sat Flow(s),veh/h/ln	1738	1787	1754	1792	1787	1539	1738	1787	1599	1792	1787	1568
Q Serve(g_s), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Cycle Q Clear(g_c), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	660	648	25	1168	609	231	1135	508	275	1447	635
V/C Ratio(X)	0.70	0.68	0.68	0.64	0.75	0.91	0.69	0.14	0.00	0.88	0.47	0.07
Avail Cap(c_a), veh/h	221	660	648	65	1168	609	852	1135	508	423	1447	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	29.3	29.3	54.0	33.0	31.7	50.3	26.8	0.0	45.6	24.1	20.1
Incr Delay (d2), s/veh	8.5	2.9	3.0	23.5	2.7	17.8	3.6	0.3	0.0	12.3	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	12.1	11.9	0.6	12.2	18.8	2.5	1.8	0.0	8.1	7.8	0.8
LnGrp Delay(d), s/veh	59.6	32.2	32.3	77.6	35.7	49.5	54.0	27.1	0.0	57.9	25.2	20.3
LnGrp LOS	E	C	C	E	D	D	D	C		E	C	C
Approach Vol, veh/h		1034			1441			317			966	
Approach Delay, s/veh		35.9			41.5			40.6			33.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	48.6	5.5	44.7	20.9	39.0	10.3	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	34.0	4.0	39.0	26.0	35.0	7.0	36.0
Max Q Clear Time (g_c+I1), s	6.9	17.5	3.0	25.5	16.5	5.5	6.3	38.0
Green Ext Time (p_c), s	0.4	4.0	0.0	4.6	0.4	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1100	70	50	890	150	60	1040	70	280	1060	290
Future Volume (veh/h)	210	1100	70	50	890	150	60	1040	70	280	1060	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	219	1146	73	52	927	156	62	1083	73	292	1104	302
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1541	98	67	957	160	80	1221	542	314	1687	954
Arrive On Green	0.13	0.31	0.31	0.04	0.22	0.22	0.04	0.34	0.34	0.17	0.47	0.47
Sat Flow, veh/h	1792	4929	314	1792	4417	740	1792	3574	1585	1792	3574	1569
Grp Volume(v), veh/h	219	796	423	52	718	365	62	1083	73	292	1104	302
Grp Sat Flow(s),veh/h/ln	1792	1712	1819	1792	1712	1733	1792	1787	1585	1792	1787	1569
Q Serve(g_s), s	14.5	25.0	25.0	3.5	24.9	25.1	4.1	34.3	3.8	19.3	28.3	11.3
Cycle Q Clear(g_c), s	14.5	25.0	25.0	3.5	24.9	25.1	4.1	34.3	3.8	19.3	28.3	11.3
Prop In Lane	1.00		0.17	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1070	569	67	742	375	80	1221	542	314	1687	954
V/C Ratio(X)	0.92	0.74	0.74	0.77	0.97	0.97	0.78	0.89	0.13	0.93	0.65	0.32
Avail Cap(c_a), veh/h	239	1070	569	105	742	375	134	1221	542	314	1687	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.3	36.9	37.0	57.2	46.6	46.6	56.7	37.3	27.3	48.8	24.2	11.6
Incr Delay (d2), s/veh	36.5	2.8	5.3	17.0	25.2	39.1	14.7	9.7	0.5	33.4	2.0	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	12.2	13.4	2.0	14.4	16.0	2.4	18.5	1.7	12.5	14.4	5.1
LnGrp Delay(d), s/veh	87.9	39.8	42.2	74.3	71.8	85.7	71.4	47.0	27.8	82.2	26.2	12.4
LnGrp LOS	F	D	D	E	E	F	E	D	C	F	C	B
Approach Vol, veh/h		1438			1135			1218			1698	
Approach Delay, s/veh		47.8			76.4			47.1			33.4	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	45.0	8.5	41.5	9.4	60.6	20.0	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	41.0	7.0	35.0	9.0	53.0	16.0	26.0
Max Q Clear Time (g_c+I1), s	21.3	36.3	5.5	27.0	6.1	30.3	16.5	27.1
Green Ext Time (p_c), s	0.0	2.8	0.0	4.5	0.0	9.3	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Future Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	90	883	149	145	1386	122	83	434	58	99	546	157
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1477	248	178	1776	156	300	1611	654	404	1206	345
Arrive On Green	0.06	0.34	0.34	0.10	0.37	0.37	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1792	4408	740	1792	4800	423	747	3574	1451	893	2676	765
Grp Volume(v), veh/h	90	685	347	145	989	519	83	434	58	99	363	340
Grp Sat Flow(s),veh/h/ln	1792	1712	1724	1792	1712	1799	747	1787	1451	893	1787	1654
Q Serve(g_s), s	5.2	17.3	17.5	8.3	26.7	26.7	9.0	7.9	2.4	8.1	14.6	14.8
Cycle Q Clear(g_c), s	5.2	17.3	17.5	8.3	26.7	26.7	23.8	7.9	2.4	16.0	14.6	14.8
Prop In Lane	1.00		0.43	1.00		0.23	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	115	1147	578	178	1267	665	300	1611	654	404	805	745
V/C Ratio(X)	0.78	0.60	0.60	0.82	0.78	0.78	0.28	0.27	0.09	0.25	0.45	0.46
Avail Cap(c_a), veh/h	223	1346	678	344	1576	828	300	1611	654	404	805	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	28.8	28.9	46.0	29.1	29.1	28.0	17.9	16.4	22.9	19.7	19.8
Incr Delay (d2), s/veh	10.9	0.5	1.1	8.8	2.1	3.8	2.3	0.4	0.3	1.4	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.3	8.5	4.5	13.0	14.0	2.0	4.0	1.0	2.2	7.6	7.1
LnGrp Delay(d), s/veh	58.9	29.4	30.0	54.8	31.2	33.0	30.3	18.3	16.7	24.4	21.6	21.8
LnGrp LOS	E	C	C	D	C	C	C	B	B	C	C	C
Approach Vol, veh/h		1122			1653			575			802	
Approach Delay, s/veh		31.9			33.8			19.9			22.0	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	14.3	38.9		51.0	10.7	42.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	20.0	41.0		47.0	13.0	48.0
Max Q Clear Time (g_c+I1), s		25.8	10.3	19.5		18.0	7.2	28.7
Green Ext Time (p_c), s		3.9	0.2	6.8		5.7	0.1	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Future Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	1542	115	146	1031	167	104	271	104	312	281	83
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	1840	137	176	1814	293	131	484	393	381	798	230
Arrive On Green	0.07	0.38	0.38	0.10	0.41	0.41	0.07	0.26	0.26	0.11	0.30	0.30
Sat Flow, veh/h	1774	4827	360	1774	4387	709	1774	1863	1514	3442	2686	774
Grp Volume(v), veh/h	94	1083	574	146	796	402	104	271	104	312	183	181
Grp Sat Flow(s),veh/h/ln	1774	1695	1796	1774	1695	1706	1774	1863	1514	1721	1770	1691
Q Serve(g_s), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Cycle Q Clear(g_c), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Prop In Lane	1.00		0.20	1.00		0.42	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	119	1293	685	176	1402	706	131	484	393	381	526	502
V/C Ratio(X)	0.79	0.84	0.84	0.83	0.57	0.57	0.80	0.56	0.26	0.82	0.35	0.36
Avail Cap(c_a), veh/h	214	1416	750	264	1511	760	214	484	393	479	526	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	30.3	30.3	47.6	24.2	24.2	49.1	34.5	31.7	46.8	29.7	29.8
Incr Delay (d2), s/veh	10.9	4.3	7.8	12.7	0.4	0.9	10.4	4.6	1.6	8.7	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	15.4	16.9	4.9	9.2	9.3	3.4	7.6	2.6	5.0	4.5	4.5
LnGrp Delay(d), s/veh	60.4	34.6	38.1	60.2	24.6	25.1	59.5	39.1	33.3	55.5	31.5	31.8
LnGrp LOS	E	C	D	E	C	C	E	D	C	E	C	C
Approach Vol, veh/h		1751			1344			479			676	
Approach Delay, s/veh		37.1			28.6			42.3			42.7	
Approach LOS		D			C			D			D	

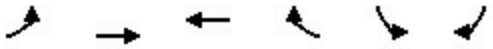
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	32.0	14.7	45.1	11.9	36.0	11.2	48.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	28.0	16.0	45.0	13.0	30.0	13.0	48.0
Max Q Clear Time (g_c+I1), s	11.5	15.6	10.7	33.3	8.2	11.1	7.6	21.5
Green Ext Time (p_c), s	0.4	1.6	0.2	7.8	0.1	2.2	0.1	8.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Future Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	253	1326	474	200	1063	147	305	653	316	242	316	337
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	1334	473	224	1487	205	332	834	365	268	706	313
Arrive On Green	0.16	0.36	0.36	0.13	0.33	0.33	0.19	0.23	0.23	0.15	0.20	0.20
Sat Flow, veh/h	1792	3720	1321	1792	4550	628	1792	3574	1565	1792	3574	1584
Grp Volume(v), veh/h	253	1220	580	200	799	411	305	653	316	242	316	337
Grp Sat Flow(s),veh/h/ln	1792	1712	1617	1792	1712	1755	1792	1787	1565	1792	1787	1584
Q Serve(g_s), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Cycle Q Clear(g_c), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Prop In Lane	1.00		0.82	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1228	580	224	1119	574	332	834	365	268	706	313
V/C Ratio(X)	0.90	0.99	1.00	0.89	0.71	0.72	0.92	0.78	0.86	0.90	0.45	1.08
Avail Cap(c_a), veh/h	314	1228	580	224	1119	574	359	834	365	269	706	313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	38.3	38.5	51.7	35.4	35.5	48.0	43.1	44.1	50.1	42.4	48.1
Incr Delay (d2), s/veh	25.7	24.0	37.6	33.0	2.2	4.2	26.9	7.2	22.9	31.0	2.0	72.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	24.3	25.2	8.6	12.0	12.7	12.4	11.0	12.4	10.2	4.8	16.7
LnGrp Delay(d), s/veh	75.4	62.4	76.1	84.6	37.6	39.7	74.9	50.3	67.1	81.1	44.4	120.9
LnGrp LOS	E	E	F	F	D	D	E	D	E	F	D	F
Approach Vol, veh/h		2053			1410			1274			895	
Approach Delay, s/veh		67.9			44.9			60.4			83.1	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	32.0	19.0	47.0	26.2	27.7	22.8	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	28.0	15.0	43.0	24.0	22.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	17.9	25.3	15.2	45.0	22.0	25.7	18.6	26.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.2	0.0	0.2	5.4

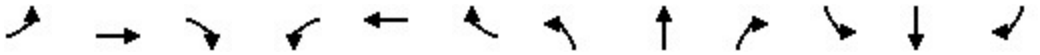
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.8
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	820	440	30	70	60
Future Volume (veh/h)	100	820	440	30	70	60
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	105	863	463	32	74	63
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	360	1277	1277	558	811	724
Arrive On Green	0.38	0.38	0.38	0.38	0.48	0.48
Sat Flow, veh/h	849	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	105	863	463	32	74	63
Grp Sat Flow(s),veh/h/ln	849	1671	1671	1461	1675	1495
Q Serve(g_s), s	6.1	12.9	5.9	0.8	1.4	1.4
Cycle Q Clear(g_c), s	12.0	12.9	5.9	0.8	1.4	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	360	1277	1277	558	811	724
V/C Ratio(X)	0.29	0.68	0.36	0.06	0.09	0.09
Avail Cap(c_a), veh/h	1212	4633	4633	2025	811	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	15.4	13.3	11.7	8.3	8.3
Incr Delay (d2), s/veh	0.4	0.6	0.2	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.0	2.7	0.3	0.7	0.6
LnGrp Delay(d), s/veh	18.0	16.0	13.4	11.7	8.6	8.6
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h		968	495		137	
Approach Delay, s/veh		16.3	13.3		8.6	
Approach LOS		B	B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				26.9		33.0		26.9
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s				14.9		3.4		7.9
Green Ext Time (p_c), s				8.0		0.4		3.3

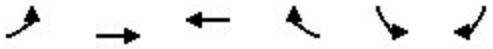
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	670	130	140	340	150	40	890	230	310	1200	90
Future Volume (veh/h)	140	670	130	140	340	150	40	890	230	310	1200	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	147	705	137	147	358	158	42	937	0	326	1263	95
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	175	805	354	202	446	193	53	1257	562	357	1863	778
Arrive On Green	0.10	0.23	0.23	0.06	0.19	0.19	0.03	0.36	0.00	0.21	0.54	0.54
Sat Flow, veh/h	1740	3471	1527	3375	2333	1009	1740	3471	1553	1740	3471	1448
Grp Volume(v), veh/h	147	705	137	147	265	251	42	937	0	326	1263	95
Grp Sat Flow(s),veh/h/ln	1740	1736	1527	1688	1736	1606	1740	1736	1553	1740	1736	1448
Q Serve(g_s), s	9.4	22.2	8.6	4.9	16.5	17.1	2.7	26.8	0.0	20.8	30.1	3.7
Cycle Q Clear(g_c), s	9.4	22.2	8.6	4.9	16.5	17.1	2.7	26.8	0.0	20.8	30.1	3.7
Prop In Lane	1.00		1.00	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	805	354	202	332	307	53	1257	562	357	1863	778
V/C Ratio(X)	0.84	0.88	0.39	0.73	0.80	0.82	0.79	0.75	0.00	0.91	0.68	0.12
Avail Cap(c_a), veh/h	214	886	390	208	336	311	107	1257	562	444	1863	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	42.1	36.8	52.5	43.8	44.0	54.7	31.7	0.0	44.1	19.2	13.0
Incr Delay (d2), s/veh	21.4	9.2	0.7	11.7	12.4	15.5	22.1	4.1	0.0	20.2	2.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	11.7	3.7	2.6	9.1	8.9	1.6	13.5	0.0	12.0	14.9	1.5
LnGrp Delay(d), s/veh	71.6	51.3	37.5	64.2	56.3	59.6	76.8	35.7	0.0	64.3	21.2	13.4
LnGrp LOS	E	D	D	E	E	E	E	D		E	C	B
Approach Vol, veh/h		989			663			979			1684	
Approach Delay, s/veh		52.4			59.3			37.5			29.1	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.3	45.1	10.8	30.3	7.5	65.0	15.4	25.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	39.0	7.0	29.0	7.0	61.0	14.0	22.0
Max Q Clear Time (g_c+I1), s	22.8	28.8	6.9	24.2	4.7	32.1	11.4	19.1
Green Ext Time (p_c), s	0.5	4.4	0.0	2.1	0.0	11.0	0.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.0
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	1230	570	30	160	150
Future Volume (veh/h)	90	1230	570	30	160	150
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	96	1309	606	32	170	160
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	123	1698	1284	562	655	585
Arrive On Green	0.07	0.51	0.38	0.38	0.39	0.39
Sat Flow, veh/h	1675	3431	3431	1463	1675	1495
Grp Volume(v), veh/h	96	1309	606	32	170	160
Grp Sat Flow(s),veh/h/ln	1675	1671	1671	1463	1675	1495
Q Serve(g_s), s	4.5	25.1	10.8	1.1	5.4	5.8
Cycle Q Clear(g_c), s	4.5	25.1	10.8	1.1	5.4	5.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	123	1698	1284	562	655	585
V/C Ratio(X)	0.78	0.77	0.47	0.06	0.26	0.27
Avail Cap(c_a), veh/h	402	3416	2446	1070	655	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	15.8	18.4	15.4	16.3	16.5
Incr Delay (d2), s/veh	10.2	0.8	0.3	0.0	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	11.6	5.0	0.4	2.7	5.8
LnGrp Delay(d), s/veh	46.3	16.5	18.6	15.4	17.3	17.6
LnGrp LOS	D	B	B	B	B	B
Approach Vol, veh/h		1405	638		330	
Approach Delay, s/veh		18.6	18.5		17.5	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				44.3		35.0	9.8	34.4
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				81.0		31.0	19.0	58.0
Max Q Clear Time (g_c+I1), s				27.1		7.8	6.5	12.8
Green Ext Time (p_c), s				13.2		1.0	0.2	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	360	780	80	130	760	70	110	990	400	90	610	100
Future Volume (veh/h)	360	780	80	130	760	70	110	990	400	90	610	100
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	367	796	82	133	776	0	112	1010	408	92	622	102
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	444	1292	133	162	1281	573	139	1329	617	116	1263	527
Arrive On Green	0.13	0.42	0.42	0.09	0.38	0.00	0.08	0.27	0.27	0.07	0.26	0.26
Sat Flow, veh/h	3312	3110	320	1707	3406	1524	1707	4893	1519	1707	4893	1480
Grp Volume(v), veh/h	367	436	442	133	776	0	112	1010	408	92	622	102
Grp Sat Flow(s),veh/h/ln	1656	1703	1728	1707	1703	1524	1707	1631	1519	1707	1631	1480
Q Serve(g_s), s	11.5	21.4	21.4	8.1	19.6	0.0	6.9	20.1	23.2	5.6	11.5	5.1
Cycle Q Clear(g_c), s	11.5	21.4	21.4	8.1	19.6	0.0	6.9	20.1	23.2	5.6	11.5	5.1
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	707	718	162	1281	573	139	1329	617	116	1263	527
V/C Ratio(X)	0.83	0.62	0.62	0.82	0.61	0.00	0.81	0.76	0.66	0.80	0.49	0.19
Avail Cap(c_a), veh/h	654	707	718	273	1281	573	241	1426	647	193	1288	534
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	24.4	24.4	47.3	26.8	0.0	48.0	35.5	25.7	48.9	33.5	23.9
Incr Delay (d2), s/veh	5.6	4.0	3.9	9.8	2.1	0.0	10.5	2.3	2.4	11.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	10.8	11.0	4.3	9.5	0.0	3.6	9.4	10.1	3.0	5.2	2.1
LnGrp Delay(d), s/veh	50.5	28.4	28.4	57.1	29.0	0.0	58.5	37.8	28.0	60.5	33.8	24.1
LnGrp LOS	D	C	C	E	C		E	D	C	E	C	C
Approach Vol, veh/h		1245			909			1530			816	
Approach Delay, s/veh		34.9			33.1			36.7			35.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	48.2	11.2	32.9	18.3	44.0	12.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	44.0	12.0	31.0	21.0	40.0	15.0	28.0
Max Q Clear Time (g_c+I1), s	10.1	23.4	7.6	25.2	13.5	21.6	8.9	13.5
Green Ext Time (p_c), s	0.2	5.3	0.1	3.7	0.8	4.9	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	230	820	90	50	260	120	200	960	140	260	1140	220
Future Volume (veh/h)	230	820	90	50	260	120	200	960	140	260	1140	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	242	863	95	53	274	0	211	1011	147	274	1200	232
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	271	966	424	68	559	250	239	1277	553	303	1404	615
Arrive On Green	0.16	0.28	0.28	0.04	0.16	0.00	0.14	0.37	0.37	0.17	0.40	0.40
Sat Flow, veh/h	1740	3471	1525	1740	3471	1553	1740	3471	1504	1740	3471	1520
Grp Volume(v), veh/h	242	863	95	53	274	0	211	1011	147	274	1200	232
Grp Sat Flow(s),veh/h/ln	1740	1736	1525	1740	1736	1553	1740	1736	1504	1740	1736	1520
Q Serve(g_s), s	15.5	27.2	5.5	3.4	8.2	0.0	13.5	29.5	7.8	17.5	35.8	12.2
Cycle Q Clear(g_c), s	15.5	27.2	5.5	3.4	8.2	0.0	13.5	29.5	7.8	17.5	35.8	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	966	424	68	559	250	239	1277	553	303	1404	615
V/C Ratio(X)	0.89	0.89	0.22	0.78	0.49	0.00	0.88	0.79	0.27	0.90	0.85	0.38
Avail Cap(c_a), veh/h	321	1038	456	92	580	260	275	1277	553	352	1404	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	39.4	31.6	54.2	43.4	0.0	48.1	32.0	25.2	46.0	30.8	23.8
Incr Delay (d2), s/veh	22.9	9.6	0.3	25.8	0.7	0.0	24.3	5.1	1.2	23.6	6.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	14.2	2.3	2.1	4.0	0.0	8.1	15.1	3.4	10.4	18.3	5.4
LnGrp Delay(d), s/veh	69.9	49.0	31.9	79.9	44.1	0.0	72.4	37.1	26.3	69.6	37.6	25.5
LnGrp LOS	E	D	C	E	D		E	D	C	E	D	C
Approach Vol, veh/h		1200			327			1369			1706	
Approach Delay, s/veh		51.9			49.9			41.4			41.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.8	45.8	8.4	35.6	19.6	50.0	21.7	22.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	41.0	6.0	34.0	18.0	46.0	21.0	19.0
Max Q Clear Time (g_c+I1), s	19.5	31.5	5.4	29.2	15.5	37.8	17.5	10.2
Green Ext Time (p_c), s	0.3	4.8	0.0	2.5	0.1	5.2	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	180	40	150	170	60	980	50	270	1170	90
Future Volume (veh/h)	210	430	180	40	150	170	60	980	50	270	1170	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	443	186	41	155	175	62	1010	0	278	1206	93
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	356	450	189	111	229	258	176	1231	551	311	1517	659
Arrive On Green	0.10	0.37	0.37	0.02	0.29	0.29	0.03	0.35	0.00	0.12	0.44	0.44
Sat Flow, veh/h	1740	1215	510	1740	776	876	1740	3471	1553	1740	3471	1508
Grp Volume(v), veh/h	216	0	629	41	0	330	62	1010	0	278	1206	93
Grp Sat Flow(s),veh/h/ln	1740	0	1726	1740	0	1652	1740	1736	1553	1740	1736	1508
Q Serve(g_s), s	9.9	0.0	43.0	2.0	0.0	21.0	2.7	31.5	0.0	11.6	35.7	4.4
Cycle Q Clear(g_c), s	9.9	0.0	43.0	2.0	0.0	21.0	2.7	31.5	0.0	11.6	35.7	4.4
Prop In Lane	1.00		0.30	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	0	638	111	0	487	176	1231	551	311	1517	659
V/C Ratio(X)	0.61	0.00	0.99	0.37	0.00	0.68	0.35	0.82	0.00	0.89	0.79	0.14
Avail Cap(c_a), veh/h	358	0	638	126	0	500	176	1231	551	344	1517	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	37.2	33.3	0.0	37.0	26.4	34.9	0.0	25.9	28.9	20.1
Incr Delay (d2), s/veh	2.9	0.0	31.8	2.1	0.0	3.6	1.2	6.2	0.0	22.9	4.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	26.1	1.0	0.0	10.0	1.3	16.1	0.0	7.5	18.0	1.9
LnGrp Delay(d), s/veh	29.2	0.0	69.0	35.3	0.0	40.5	27.6	41.1	0.0	48.8	33.3	20.5
LnGrp LOS	C		E	D		D	C	D		D	C	C
Approach Vol, veh/h		845			371			1072			1577	
Approach Delay, s/veh		58.8			40.0			40.3			35.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	46.2	7.0	48.0	8.0	56.0	15.9	39.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	40.0	4.0	44.0	4.0	52.0	12.0	36.0
Max Q Clear Time (g_c+I1), s	13.6	33.5	4.0	45.0	4.7	37.7	11.9	23.0
Green Ext Time (p_c), s	0.2	3.5	0.0	0.0	0.0	7.5	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.3
HCM 2010 LOS	D

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	830	120	90	270	50	70
Future Volume (veh/h)	830	120	90	270	50	70
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	874	126	95	284	53	74
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	1083	921	227	1083	442	395
Arrive On Green	0.62	0.62	0.62	0.62	0.27	0.27
Sat Flow, veh/h	1743	1482	525	1743	1660	1482
Grp Volume(v), veh/h	874	126	95	284	53	74
Grp Sat Flow(s),veh/h/ln	1743	1482	525	1743	1660	1482
Q Serve(g_s), s	27.2	2.5	12.0	5.3	1.7	2.7
Cycle Q Clear(g_c), s	27.2	2.5	39.1	5.3	1.7	2.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1083	921	227	1083	442	395
V/C Ratio(X)	0.81	0.14	0.42	0.26	0.12	0.19
Avail Cap(c_a), veh/h	2274	1933	586	2274	442	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	5.6	25.1	6.1	19.8	20.2
Incr Delay (d2), s/veh	1.5	0.1	1.2	0.1	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	1.0	1.8	2.6	0.8	1.2
LnGrp Delay(d), s/veh	11.7	5.7	26.3	6.2	20.4	21.2
LnGrp LOS	B	A	C	A	C	C
Approach Vol, veh/h	1000			379	127	
Approach Delay, s/veh	11.0			11.3	20.9	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		23.0		48.3				48.3
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		19.0		93.0				93.0
Max Q Clear Time (g_c+I1), s		4.7		29.2				41.1
Green Ext Time (p_c), s		0.3		9.0				3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	600	90	110	340	50	40	910	120	190	1100	70
Future Volume (veh/h)	160	600	90	110	340	50	40	910	120	190	1100	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.99		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	167	625	94	115	354	52	42	948	125	198	1146	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	301	754	112	211	646	92	53	1457	192	229	1899	121
Arrive On Green	0.10	0.17	0.17	0.07	0.15	0.15	0.03	0.48	0.48	0.13	0.58	0.58
Sat Flow, veh/h	1723	4311	637	1723	4357	623	1723	3048	402	1723	3276	209
Grp Volume(v), veh/h	167	475	244	115	265	141	42	535	538	198	601	618
Grp Sat Flow(s),veh/h/ln	1723	1647	1655	1723	1647	1686	1723	1719	1731	1723	1719	1766
Q Serve(g_s), s	9.0	15.6	16.0	6.3	8.4	8.7	2.7	26.4	26.4	12.6	25.3	25.4
Cycle Q Clear(g_c), s	9.0	15.6	16.0	6.3	8.4	8.7	2.7	26.4	26.4	12.6	25.3	25.4
Prop In Lane	1.00		0.39	1.00		0.37	1.00		0.23	1.00		0.12
Lane Grp Cap(c), veh/h	301	576	290	211	489	250	53	821	827	229	997	1023
V/C Ratio(X)	0.56	0.82	0.84	0.55	0.54	0.56	0.79	0.65	0.65	0.87	0.60	0.60
Avail Cap(c_a), veh/h	361	646	325	241	499	256	108	821	827	323	997	1023
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	44.6	44.8	37.4	44.2	44.4	54.0	22.2	22.2	47.7	15.2	15.2
Incr Delay (d2), s/veh	1.6	7.8	16.5	2.2	1.2	2.7	22.6	4.0	4.0	15.9	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	7.7	8.6	3.1	3.9	4.3	1.6	13.4	13.5	7.0	12.8	13.1
LnGrp Delay(d), s/veh	36.5	52.4	61.3	39.6	45.4	47.1	76.6	26.2	26.1	63.6	17.9	17.9
LnGrp LOS	D	D	E	D	D	D	E	C	C	E	B	B
Approach Vol, veh/h		886			521			1115			1417	
Approach Delay, s/veh		51.8			44.6			28.1			24.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	57.6	12.1	23.6	7.4	69.0	15.0	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	51.0	10.0	22.0	7.0	65.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.6	28.4	8.3	18.0	4.7	27.4	11.0	10.7
Green Ext Time (p_c), s	0.3	7.4	0.0	1.6	0.0	10.3	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	210	10	720	260	0	730
Future Volume (veh/h)	210	10	720	260	0	730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	0	1827
Adj Flow Rate, veh/h	226	11	774	0	0	785
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	0	4
Cap, veh/h	317	146	2856	1423	0	2856
Arrive On Green	0.09	0.09	0.82	0.00	0.00	0.82
Sat Flow, veh/h	3375	1553	3563	1553	0	3654
Grp Volume(v), veh/h	226	11	774	0	0	785
Grp Sat Flow(s),veh/h/ln	1688	1553	1736	1553	0	1736
Q Serve(g_s), s	6.2	0.6	4.9	0.0	0.0	5.0
Cycle Q Clear(g_c), s	6.2	0.6	4.9	0.0	0.0	5.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	317	146	2856	1423	0	2856
V/C Ratio(X)	0.71	0.08	0.27	0.00	0.00	0.27
Avail Cap(c_a), veh/h	1160	534	2856	1423	0	2856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	42.2	39.7	1.9	0.0	0.0	1.9
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.3	2.4	0.0	0.0	2.4
LnGrp Delay(d), s/veh	45.2	39.9	2.2	0.0	0.0	2.2
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	237		774			785
Approach Delay, s/veh	45.0		2.2			2.2
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		13.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		6.9				7.0		8.2
Green Ext Time (p_c), s		6.0				6.1		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.8
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Future Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	8	251	29	458	618	13	205	8	330	15	13	12
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	14	1617	500	502	3036	64	382	15	353	54	27	25
Arrive On Green	0.01	0.31	0.31	0.28	0.59	0.59	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1792	5136	1589	1792	5174	109	1727	67	1595	1792	894	826
Grp Volume(v), veh/h	8	251	29	458	408	223	213	0	330	15	0	25
Grp Sat Flow(s),veh/h/ln	1792	1712	1589	1792	1712	1859	1795	0	1595	1792	0	1720
Q Serve(g_s), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Cycle Q Clear(g_c), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.06	0.96		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	14	1617	500	502	2009	1091	397	0	353	54	0	52
V/C Ratio(X)	0.56	0.16	0.06	0.91	0.20	0.20	0.54	0.00	0.94	0.28	0.00	0.48
Avail Cap(c_a), veh/h	69	1617	500	793	2009	1091	397	0	353	276	0	265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	25.7	24.9	36.2	10.1	10.1	35.8	0.0	39.7	49.3	0.0	49.6
Incr Delay (d2), s/veh	30.5	0.2	0.2	10.1	0.2	0.4	1.4	0.0	31.7	2.8	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.6	14.1	2.8	3.1	5.5	0.0	12.4	0.5	0.0	0.8
LnGrp Delay(d), s/veh	81.8	25.9	25.1	46.3	10.3	10.5	37.2	0.0	71.5	52.1	0.0	56.5
LnGrp LOS	F	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		288			1089			543			40	
Approach Delay, s/veh		27.3			25.5			58.0			54.8	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	65.0		27.0	33.1	36.7		7.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	61.0		23.0	46.0	19.0		16.0
Max Q Clear Time (g_c+I1), s	2.5	7.8		23.1	27.7	5.7		3.5
Green Ext Time (p_c), s	0.0	4.7		0.0	1.4	1.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	640	300	320	440	380	10	900	360	120	970	60
Future Volume (veh/h)	40	640	300	320	440	380	10	900	360	120	970	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	42	667	312	333	458	396	10	938	375	125	1010	62
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	53	1055	459	400	1361	736	39	1135	511	153	1609	706
Arrive On Green	0.03	0.30	0.30	0.12	0.39	0.39	0.34	0.34	0.34	0.09	0.46	0.46
Sat Flow, veh/h	1740	3471	1510	3375	3471	1529	12	3362	1513	1740	3471	1522
Grp Volume(v), veh/h	42	667	312	333	458	396	505	443	375	125	1010	62
Grp Sat Flow(s),veh/h/ln	1740	1736	1510	1688	1736	1529	1795	1579	1513	1740	1736	1522
Q Serve(g_s), s	2.5	17.4	19.1	10.2	9.7	19.1	4.3	27.2	23.0	7.4	23.2	2.4
Cycle Q Clear(g_c), s	2.5	17.4	19.1	10.2	9.7	19.1	26.9	27.2	23.0	7.4	23.2	2.4
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	1055	459	400	1361	736	641	533	511	153	1609	706
V/C Ratio(X)	0.79	0.63	0.68	0.83	0.34	0.54	0.79	0.83	0.73	0.82	0.63	0.09
Avail Cap(c_a), veh/h	99	1055	459	481	1361	736	780	660	632	215	2010	881
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	31.6	32.2	45.4	22.4	19.2	32.0	32.1	30.7	47.2	21.4	15.8
Incr Delay (d2), s/veh	22.6	2.9	7.9	10.2	0.7	2.8	4.5	7.3	3.4	15.2	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	8.8	9.0	5.3	4.8	8.6	14.3	12.9	10.0	4.2	11.2	1.0
LnGrp Delay(d), s/veh	73.4	34.5	40.1	55.5	23.1	22.0	36.4	39.4	34.1	62.4	21.8	15.8
LnGrp LOS	E	C	D	E	C	C	D	D	C	E	C	B
Approach Vol, veh/h		1021			1187			1323			1197	
Approach Delay, s/veh		37.8			31.8			36.8			25.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	45.3	13.3	39.6	16.5	36.0		52.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	41.0	13.0	44.0	15.0	32.0		61.0
Max Q Clear Time (g_c+I1), s	4.5	21.1	9.4	29.2	12.2	21.1		25.2
Green Ext Time (p_c), s	0.0	4.1	0.1	6.4	0.3	4.0		8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.0
HCM 2010 LOS	C

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	424	290	69	407	1072	266
Future Volume (veh/h)	424	290	69	407	1072	266
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	433	0	70	415	1094	271
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	850	391	288	2383	2383	1064
Arrive On Green	0.24	0.00	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3476	1599	401	3668	3668	1595
Grp Volume(v), veh/h	433	0	70	415	1094	271
Grp Sat Flow(s),veh/h/ln	1738	1599	401	1787	1787	1595
Q Serve(g_s), s	9.7	0.0	9.2	3.9	13.2	6.1
Cycle Q Clear(g_c), s	9.7	0.0	22.4	3.9	13.2	6.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	850	391	288	2383	2383	1064
V/C Ratio(X)	0.51	0.00	0.24	0.17	0.46	0.25
Avail Cap(c_a), veh/h	850	391	288	2383	2383	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	12.6	5.7	7.2	6.0
Incr Delay (d2), s/veh	2.2	0.0	0.4	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	1.0	1.9	6.6	2.8
LnGrp Delay(d), s/veh	31.5	0.0	13.0	5.7	7.8	6.6
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	433			485	1365	
Approach Delay, s/veh	31.5			6.7	7.6	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		64.0				64.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		60.0				60.0
Max Q Clear Time (g_c+I1), s		11.7		24.4				15.2
Green Ext Time (p_c), s		1.1		4.0				10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Future Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1706	1706	1706	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	147	1242	526	137	979	242	189	1032	0	316	453	32
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	1243	690	132	1238	742	218	1081	483	341	942	66
Arrive On Green	0.10	0.38	0.38	0.08	0.35	0.35	0.12	0.31	0.00	0.10	0.28	0.28
Sat Flow, veh/h	1625	3242	1422	1757	3505	1550	1757	3505	1568	3408	3316	233
Grp Volume(v), veh/h	147	1242	526	137	979	242	189	1032	0	316	239	246
Grp Sat Flow(s),veh/h/ln	1625	1621	1422	1757	1752	1550	1757	1752	1568	1704	1752	1797
Q Serve(g_s), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Cycle Q Clear(g_c), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	171	1243	690	132	1238	742	218	1081	483	341	498	511
V/C Ratio(X)	0.86	1.00	0.76	1.04	0.79	0.33	0.87	0.95	0.00	0.93	0.48	0.48
Avail Cap(c_a), veh/h	176	1243	690	132	1238	742	307	1081	483	341	498	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	37.0	25.4	55.5	34.8	19.4	51.6	40.7	0.0	53.6	35.6	35.6
Incr Delay (d2), s/veh	32.1	25.4	5.0	89.4	3.5	0.3	16.6	18.5	0.0	30.7	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	24.9	15.1	7.6	15.2	5.0	7.1	19.5	0.0	6.6	7.0	7.2
LnGrp Delay(d), s/veh	85.0	62.4	30.4	145.3	38.4	19.7	68.2	59.2	0.0	84.3	38.9	38.9
LnGrp LOS	F	E	C	F	D	B	E	E		F	D	D
Approach Vol, veh/h		1915			1358			1221			801	
Approach Delay, s/veh		55.3			45.8			60.6			56.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	38.1	13.0	50.0	16.0	41.0	16.6	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	28.0	9.0	46.0	12.0	37.0	13.0	42.0
Max Q Clear Time (g_c+I1), s	14.7	15.6	11.0	48.0	13.0	36.6	12.7	32.1
Green Ext Time (p_c), s	0.3	2.3	0.0	0.0	0.0	0.2	0.0	5.1

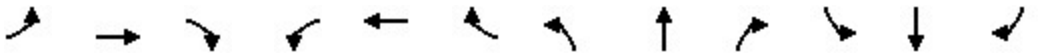
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.3
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	110	600	50	400	920
Future Volume (veh/h)	80	110	600	50	400	920
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	82	113	619	52	412	948
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	158	141	2912	1297	664	2912
Arrive On Green	0.09	0.09	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1740	1553	3563	1546	748	3563
Grp Volume(v), veh/h	82	113	619	52	412	948
Grp Sat Flow(s),veh/h/ln	1740	1553	1736	1546	748	1736
Q Serve(g_s), s	5.1	8.2	4.0	0.6	27.5	6.9
Cycle Q Clear(g_c), s	5.1	8.2	4.0	0.6	31.5	6.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	158	141	2912	1297	664	2912
V/C Ratio(X)	0.52	0.80	0.21	0.04	0.62	0.33
Avail Cap(c_a), veh/h	243	217	2912	1297	664	2912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	51.0	1.8	1.5	4.9	2.0
Incr Delay (d2), s/veh	2.6	11.2	0.2	0.1	4.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.0	2.0	0.3	6.3	3.4
LnGrp Delay(d), s/veh	52.2	62.2	2.0	1.6	9.2	2.3
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	195		671			1360
Approach Delay, s/veh	58.0		1.9			4.4
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		100.0				100.0		14.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		96.0				96.0		16.0
Max Q Clear Time (g_c+I1), s		6.0				33.5		10.2
Green Ext Time (p_c), s		4.7				14.2		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.4
HCM 2010 LOS	A

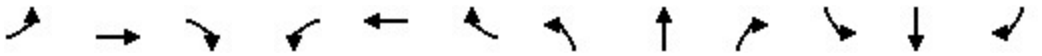


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	550	0	0	520	480	0	0	0	110	0	90
Future Volume (vph)	150	550	0	0	520	480	0	0	0	110	0	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0					4.0	4.0	4.0
Lane Util. Factor		0.95			0.95					0.95	0.91	0.95
Frt		1.00			0.93					1.00	0.94	0.85
Flt Protected		0.99			1.00					0.95	0.97	1.00
Satd. Flow (prot)		3502			3284					1681	1547	1504
Flt Permitted		0.51			1.00					0.95	0.89	1.00
Satd. Flow (perm)		1821			3284					1681	1419	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	598	0	0	565	522	0	0	0	120	0	98
RTOR Reduction (vph)	0	0	0	0	218	0	0	0	0	0	40	38
Lane Group Flow (vph)	0	761	0	0	869	0	0	0	0	76	33	31
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		35.5			35.5					7.7	35.4	35.4
Effective Green, g (s)		35.5			35.5					7.7	35.4	35.4
Actuated g/C Ratio		0.45			0.45					0.10	0.45	0.45
Clearance Time (s)		4.0			4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		819			1477					164	649	674
v/s Ratio Prot					0.26					c0.05	0.00	0.02
v/s Ratio Perm		c0.42									c0.02	
v/c Ratio		1.36dl			0.59					0.46	0.05	0.05
Uniform Delay, d1		20.5			16.2					33.6	12.3	12.2
Progression Factor		1.00			1.00					1.00	1.00	1.00
Incremental Delay, d2		16.6			0.6					2.1	0.0	0.1
Delay (s)		37.1			16.8					35.7	12.3	12.4
Level of Service		D			B					D	B	B
Approach Delay (s/veh)		37.1			16.8			0.0			20.5	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		

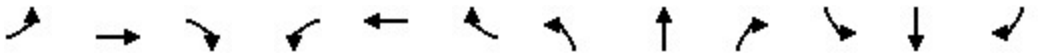
dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	550	10	10	730	1330	10	10	10	180	10	90
Future Volume (vph)	190	550	10	10	730	1330	10	10	10	180	10	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.96		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		1750		1681	1607	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.90		0.81	0.79	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		1608		1436	1327	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	598	11	11	793	1446	11	11	11	196	11	98
RTOR Reduction (vph)	0	0	3	0	0	231	0	9	0	0	3	76
Lane Group Flow (vph)	207	598	8	11	793	1215	0	24	0	108	106	12
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	12.0	93.4	93.4	0.8	82.2	82.2		17.0		17.0	17.0	17.0
Effective Green, g (s)	12.0	93.4	93.4	0.8	82.2	82.2		17.0		17.0	17.0	17.0
Actuated g/C Ratio	0.10	0.76	0.76	0.01	0.67	0.67		0.14		0.14	0.14	0.14
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	172	2682	1200	11	2361	1056		221		198	183	207
v/s Ratio Prot	c0.12	0.17		0.01	0.22							
v/s Ratio Perm			0.01			c0.77		0.01		0.08	c0.08	0.01
v/c Ratio	1.20	0.22	0.01	1.00	0.34	1.15		0.11		0.55	0.58	0.06
Uniform Delay, d1	55.6	4.3	3.6	61.2	8.8	20.5		46.5		49.5	49.7	46.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	133.9	0.0	0.0	271.4	0.1	79.0		1.0		10.4	12.6	0.5
Delay (s)	189.5	4.4	3.6	332.6	8.9	99.5		47.4		59.9	62.3	46.7
Level of Service	F	A	A	F	A	F		D		E	E	D
Approach Delay (s/veh)		51.3			68.7			47.4			56.9	
Approach LOS		D			E			D			E	

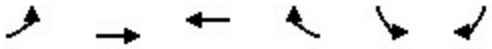
Intersection Summary			
HCM 2000 Control Delay (s/veh)	63.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	106.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Future Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.93			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	1752	5029		1752	4609			3493	1568	1595	3242	1538
Flt Permitted	0.95	1.00		0.95	1.00			0.93	1.00	0.95	0.62	1.00
Satd. Flow (perm)	1752	5029		1752	4609			3271	1568	1595	2089	1538
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	367	1102	10	745	643	612	20	296	867	153	31	10
RTOR Reduction (vph)	0	1	0	0	140	0	0	0	501	0	0	7
Lane Group Flow (vph)	367	1111	0	745	1115	0	0	316	366	76	108	3
Confl. Peds. (#/hr)	6					6	3					3
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Effective Green, g (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Actuated g/C Ratio	0.23	0.19		0.39	0.35			0.23	0.23	0.05	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	407	963		686	1616			763	365	79	719	487
v/s Ratio Prot	0.21	c0.22		c0.43	0.24					c0.05	0.01	
v/s Ratio Perm								0.10	c0.23		0.04	0.00
v/c Ratio	0.90	1.15		1.09	0.90dr			0.41	1.00	0.96	0.93dl	0.01
Uniform Delay, d1	44.7	48.5		36.5	33.4			39.0	46.0	56.9	29.4	28.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	22.6	81.2		60.1	1.3			1.7	47.5	87.9	0.1	0.0
Delay (s)	67.3	129.7		96.6	34.7			40.7	93.5	144.8	29.5	28.1
Level of Service	E	F		F	C			D	F	F	C	C
Approach Delay (s/veh)		114.2			57.7			79.4			74.6	
Approach LOS		F			E			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	80.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	1360	1130	40	320	190
Future Volume (veh/h)	50	1360	1130	40	320	190
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1827	1827	1827	1827
Adj Flow Rate, veh/h	53	1447	1202	43	340	202
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	190	1734	1875	838	664	593
Arrive On Green	0.54	0.54	0.54	0.54	0.38	0.38
Sat Flow, veh/h	404	3295	3563	1551	1740	1553
Grp Volume(v), veh/h	53	1447	1202	43	340	202
Grp Sat Flow(s),veh/h/ln	404	1605	1736	1551	1740	1553
Q Serve(g_s), s	10.9	38.6	24.9	1.3	15.4	9.5
Cycle Q Clear(g_c), s	35.8	38.6	24.9	1.3	15.4	9.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	190	1734	1875	838	664	593
V/C Ratio(X)	0.28	0.83	0.64	0.05	0.51	0.34
Avail Cap(c_a), veh/h	260	2293	2479	1108	664	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	19.7	16.5	11.1	24.3	22.5
Incr Delay (d2), s/veh	0.8	2.1	0.4	0.0	2.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	17.4	11.9	0.6	7.9	4.3
LnGrp Delay(d), s/veh	29.9	21.8	16.9	11.1	27.1	24.0
LnGrp LOS	C	C	B	B	C	C
Approach Vol, veh/h		1500	1245		542	
Approach Delay, s/veh		22.1	16.7		26.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.2		43.0		59.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				73.0		39.0		73.0
Max Q Clear Time (g_c+I1), s				40.6		17.4		26.9
Green Ext Time (p_c), s				14.7		1.8		11.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Future Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	266	1394	170	170	787	117	43	1074	170	191	915	287
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	1413	172	177	1087	160	55	1209	535	207	1512	661
Arrive On Green	0.17	0.31	0.31	0.10	0.24	0.24	0.03	0.34	0.34	0.12	0.43	0.43
Sat Flow, veh/h	1774	4583	559	1774	4472	660	1774	3539	1565	1774	3539	1548
Grp Volume(v), veh/h	266	1031	533	170	595	309	43	1074	170	191	915	287
Grp Sat Flow(s),veh/h/ln	1774	1695	1752	1774	1695	1742	1774	1770	1565	1774	1770	1548
Q Serve(g_s), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Cycle Q Clear(g_c), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Prop In Lane	1.00		0.32	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	1045	540	177	824	423	55	1209	535	207	1512	661
V/C Ratio(X)	0.91	0.99	0.99	0.96	0.72	0.73	0.78	0.89	0.32	0.92	0.61	0.43
Avail Cap(c_a), veh/h	325	1045	540	177	824	423	103	1209	535	207	1512	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	41.2	41.3	53.8	41.7	41.8	57.7	37.3	29.2	52.5	26.5	24.2
Incr Delay (d2), s/veh	26.2	24.4	35.2	55.2	3.1	6.3	20.7	9.9	1.6	41.6	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	20.4	22.7	8.3	9.5	10.2	1.7	18.4	4.4	8.7	12.1	7.1
LnGrp Delay(d), s/veh	75.4	65.7	76.4	109.0	44.9	48.1	78.4	47.2	30.7	94.1	28.4	26.2
LnGrp LOS	E	E	E	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1830			1074			1287			1393	
Approach Delay, s/veh		70.2			55.9			46.1			36.9	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	45.0	16.0	41.0	7.7	55.3	23.8	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	41.0	12.0	37.0	7.0	48.0	22.0	27.0
Max Q Clear Time (g_c+I1), s	14.8	36.4	13.4	38.3	4.9	26.0	19.7	21.6
Green Ext Time (p_c), s	0.0	2.8	0.0	0.0	0.0	7.2	0.2	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Future Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	216	1340	175	227	845	134	93	938	124	134	1072	103
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	1360	178	237	1298	204	103	1098	145	148	1327	795
Arrive On Green	0.14	0.30	0.30	0.13	0.30	0.30	0.06	0.35	0.35	0.08	0.38	0.38
Sat Flow, veh/h	1774	4535	592	1774	4397	692	1774	3137	415	1774	3539	1537
Grp Volume(v), veh/h	216	1002	513	227	650	329	93	529	533	134	1072	103
Grp Sat Flow(s),veh/h/ln	1774	1695	1736	1774	1695	1699	1774	1770	1782	1774	1770	1537
Q Serve(g_s), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Cycle Q Clear(g_c), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Prop In Lane	1.00		0.34	1.00		0.41	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	245	1017	521	237	1001	502	103	619	624	148	1327	795
V/C Ratio(X)	0.88	0.99	0.99	0.96	0.65	0.66	0.90	0.85	0.85	0.91	0.81	0.13
Avail Cap(c_a), veh/h	310	1017	521	237	1001	502	103	619	624	148	1327	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	41.7	41.7	51.7	36.9	37.0	56.1	36.2	36.2	54.5	33.6	15.2
Incr Delay (d2), s/veh	20.7	24.5	35.5	47.1	1.5	3.1	57.4	14.0	14.0	47.4	5.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	19.9	22.0	10.6	9.6	9.9	4.7	18.6	18.7	6.3	16.9	1.9
LnGrp Delay(d), s/veh	71.4	66.2	77.2	98.8	38.4	40.0	113.6	50.2	50.1	101.9	39.0	15.6
LnGrp LOS	E	E	E	F	D	D	F	D	D	F	D	B
Approach Vol, veh/h		1731			1206			1155			1309	
Approach Delay, s/veh		70.1			50.2			55.3			43.6	
Approach LOS		E			D			E			D	

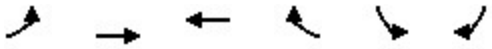
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	46.0	20.0	40.0	11.0	49.0	20.6	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	42.0	16.0	36.0	7.0	45.0	21.0	31.0
Max Q Clear Time (g_c+I1), s	11.0	35.3	17.3	37.2	8.3	34.6	16.3	22.3
Green Ext Time (p_c), s	0.0	3.5	0.0	0.0	0.0	5.3	0.2	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Future Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	153	1367	500	806	918	184	235	224	163	133	510	153
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1034	374	591	2171	433	178	649	274	303	486	145
Arrive On Green	0.10	0.28	0.28	0.33	0.51	0.51	0.07	0.18	0.18	0.07	0.18	0.18
Sat Flow, veh/h	1774	3649	1320	1774	4221	842	1774	3539	1494	1774	2649	789
Grp Volume(v), veh/h	153	1269	598	806	736	366	235	224	163	133	339	324
Grp Sat Flow(s),veh/h/ln	1774	1695	1578	1774	1695	1672	1774	1770	1494	1774	1770	1669
Q Serve(g_s), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Cycle Q Clear(g_c), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Prop In Lane	1.00		0.84	1.00		0.50	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	181	961	447	591	1744	860	178	649	274	303	324	306
V/C Ratio(X)	0.84	1.32	1.34	1.36	0.42	0.42	1.32	0.35	0.60	0.44	1.05	1.06
Avail Cap(c_a), veh/h	266	961	447	591	1744	860	178	649	274	303	324	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	43.0	43.0	40.0	18.1	18.1	42.8	42.7	44.9	36.7	49.0	49.0
Incr Delay (d2), s/veh	14.8	151.9	166.3	174.1	0.2	0.3	177.0	1.5	9.2	1.0	62.6	67.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	36.1	35.4	48.1	7.6	7.6	8.8	3.4	5.6	3.6	16.4	15.8
LnGrp Delay(d), s/veh	67.7	194.9	209.3	214.1	18.2	18.4	219.8	44.2	54.1	37.7	111.6	116.4
LnGrp LOS	E	F	F	F	B	B	F	D	D	D	F	F
Approach Vol, veh/h		2020			1908			622			796	
Approach Delay, s/veh		189.5			101.0			113.1			101.2	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	26.0	44.0	38.0	12.0	26.0	16.3	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	22.0	40.0	34.0	8.0	22.0	18.0	56.0
Max Q Clear Time (g_c+I1), s	9.3	14.0	42.0	36.0	10.0	24.0	12.2	18.3
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.0	0.2	8.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		135.9
HCM 2010 LOS		F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Traffic Volume (veh/h)	0	1490	1200	0	340	270
Future Volume (veh/h)	0	1490	1200	0	340	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1723	1723
Adj Flow Rate, veh/h	0	1568	1263	0	358	284
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1847	1847	0	661	590
Arrive On Green	0.00	0.52	0.52	0.00	0.40	0.40
Sat Flow, veh/h	0	3725	3725	0	1641	1465
Grp Volume(v), veh/h	0	1568	1263	0	358	284
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1641	1465
Q Serve(g_s), s	0.0	40.6	28.3	0.0	17.8	15.3
Cycle Q Clear(g_c), s	0.0	40.6	28.3	0.0	17.8	15.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1847	1847	0	661	590
V/C Ratio(X)	0.00	0.85	0.68	0.00	0.54	0.48
Avail Cap(c_a), veh/h	0	2289	2289	0	661	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	19.0	0.0	24.3	23.6
Incr Delay (d2), s/veh	0.0	2.7	0.6	0.0	3.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.3	13.8	0.0	8.6	6.6
LnGrp Delay(d), s/veh	0.0	24.6	19.6	0.0	27.5	26.4
LnGrp LOS		C	B		C	C
Approach Vol, veh/h		1568	1263		642	
Approach Delay, s/veh		24.6	19.6		27.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.7		47.0		59.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				69.0		43.0		69.0
Max Q Clear Time (g_c+I1), s				42.6		19.8		30.3
Green Ext Time (p_c), s				13.1		2.1		11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Future Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	235	1214	398	214	959	276	204	561	153	408	551	296
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1199	392	222	1062	458	232	678	294	414	1042	455
Arrive On Green	0.14	0.32	0.32	0.13	0.30	0.30	0.13	0.19	0.19	0.23	0.29	0.29
Sat Flow, veh/h	1774	3785	1239	1774	3539	1526	1774	3539	1535	1774	3539	1547
Grp Volume(v), veh/h	235	1087	525	214	959	276	204	561	153	408	551	296
Grp Sat Flow(s),veh/h/ln	1774	1695	1634	1774	1770	1526	1774	1770	1535	1774	1770	1547
Q Serve(g_s), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Cycle Q Clear(g_c), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	1074	518	222	1062	458	232	678	294	414	1042	455
V/C Ratio(X)	0.94	1.01	1.01	0.97	0.90	0.60	0.88	0.83	0.52	0.99	0.53	0.65
Avail Cap(c_a), veh/h	251	1074	518	222	1062	458	266	678	294	414	1042	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	41.0	41.0	52.2	40.3	35.9	51.2	46.6	43.5	45.8	35.4	36.9
Incr Delay (d2), s/veh	39.4	30.6	43.1	50.4	10.8	2.2	24.8	11.1	6.4	40.3	1.9	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.3	23.3	10.2	16.8	8.1	8.2	10.0	5.1	18.1	7.9	9.4
LnGrp Delay(d), s/veh	90.4	71.6	84.1	102.6	51.1	38.1	76.0	57.7	50.0	86.1	37.3	44.0
LnGrp LOS	F	F	F	F	D	D	E	E	D	F	D	D
Approach Vol, veh/h		1847			1449			918			1255	
Approach Delay, s/veh		77.6			56.2			60.5			54.7	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	27.0	19.0	42.0	19.7	39.3	21.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	23.0	15.0	38.0	18.0	33.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	29.5	20.3	16.4	40.0	15.6	22.0	17.7	33.2
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.1	3.5	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Future Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	177	1031	125	177	812	302	115	885	94	198	865	156
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	208	1214	147	208	963	356	284	1338	581	315	1443	626
Arrive On Green	0.12	0.27	0.27	0.12	0.27	0.27	0.06	0.38	0.38	0.09	0.41	0.41
Sat Flow, veh/h	1757	4543	550	1757	3604	1330	1757	3505	1520	1757	3505	1522
Grp Volume(v), veh/h	177	761	395	177	756	358	115	885	94	198	865	156
Grp Sat Flow(s),veh/h/ln	1757	1679	1736	1757	1679	1577	1757	1752	1520	1757	1752	1522
Q Serve(g_s), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Cycle Q Clear(g_c), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Prop In Lane	1.00		0.32	1.00		0.84	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	897	464	208	897	421	284	1338	581	315	1443	626
V/C Ratio(X)	0.85	0.85	0.85	0.85	0.84	0.85	0.40	0.66	0.16	0.63	0.60	0.25
Avail Cap(c_a), veh/h	289	983	508	289	983	462	330	1338	581	389	1443	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	38.0	38.0	47.2	37.9	38.0	20.3	27.9	22.3	20.8	25.1	21.1
Incr Delay (d2), s/veh	15.7	6.6	12.2	15.7	6.3	13.1	0.9	2.6	0.6	2.2	1.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.7	12.9	6.2	11.6	11.8	2.1	11.5	2.0	3.6	10.6	3.3
LnGrp Delay(d), s/veh	63.0	44.6	50.2	63.0	44.2	51.1	21.2	30.5	22.9	23.0	27.0	22.0
LnGrp LOS	E	D	D	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1333			1291			1094			1219	
Approach Delay, s/veh		48.7			48.7			28.9			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	45.7	16.9	33.2	10.2	49.0	16.9	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	40.0	18.0	32.0	9.0	45.0	18.0	32.0
Max Q Clear Time (g_c+I1), s	9.2	24.8	12.8	25.6	6.3	23.1	12.8	25.5
Green Ext Time (p_c), s	0.2	5.5	0.2	3.6	0.1	6.5	0.2	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Future Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	276	1163	71	41	816	265	133	367	31	327	255	214
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1853	113	52	896	289	475	1615	136	479	1731	774
Arrive On Green	0.17	0.38	0.38	0.03	0.24	0.24	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	4897	299	1774	3794	1223	920	3301	277	982	3539	1582
Grp Volume(v), veh/h	276	805	429	41	729	352	133	196	202	327	255	214
Grp Sat Flow(s),veh/h/ln	1774	1695	1805	1774	1695	1626	920	1770	1809	982	1770	1582
Q Serve(g_s), s	17.8	22.6	22.6	2.7	24.4	24.6	10.8	7.4	7.5	33.5	4.6	9.3
Cycle Q Clear(g_c), s	17.8	22.6	22.6	2.7	24.4	24.6	15.5	7.4	7.5	40.9	4.6	9.3
Prop In Lane	1.00		0.17	1.00		0.75	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	305	1283	683	52	800	384	475	865	885	479	1731	774
V/C Ratio(X)	0.91	0.63	0.63	0.78	0.91	0.92	0.28	0.23	0.23	0.68	0.15	0.28
Avail Cap(c_a), veh/h	350	1283	683	107	814	391	475	865	885	479	1731	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	29.5	29.5	56.2	43.3	43.4	20.7	17.1	17.1	28.9	16.4	17.6
Incr Delay (d2), s/veh	24.1	1.0	1.8	21.8	14.1	26.0	1.5	0.6	0.6	7.7	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	10.7	11.5	1.6	13.0	13.8	2.9	3.7	3.9	10.1	2.3	4.3
LnGrp Delay(d), s/veh	71.4	30.5	31.4	78.0	57.4	69.4	22.1	17.7	17.7	36.6	16.6	18.5
LnGrp LOS	E	C	C	E	E	E	C	B	B	D	B	B
Approach Vol, veh/h		1510			1122			531			796	
Approach Delay, s/veh		38.2			61.9			18.8			25.3	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		61.0	7.4	48.1		61.0	24.0	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		57.0	7.0	44.0		57.0	23.0	28.0
Max Q Clear Time (g_c+I1), s		17.5	4.7	24.6		42.9	19.8	26.6
Green Ext Time (p_c), s		3.1	0.0	7.9		3.4	0.3	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Future Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5078		1787	5051		1784	3574	1576	1786	3574	1574
Flt Permitted	0.95	1.00		0.95	1.00		0.44	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1787	5078		1787	5051		823	3574	1576	725	3574	1574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	177	1302	94	73	844	104	125	583	177	135	490	135
RTOR Reduction (vph)	0	8	0	0	13	0	0	0	21	0	0	63
Lane Group Flow (vph)	177	1388	0	73	935	0	125	583	156	135	490	72
Confl. Peds. (#/hr)			1	1			2		1	1		2
Confl. Bikes (#/hr)			4						1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4!			7!	8!			2			6	
Permitted Phases		4!					2		2	6		6
Actuated Green, G (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Effective Green, g (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Actuated g/C Ratio	0.39	0.39		0.08	0.27		0.54	0.54	0.54	0.54	0.54	0.54
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	694	1974		140	1373		440	1912	843	387	1912	842
v/s Ratio Prot	0.10			0.04	0.19			0.16			0.14	
v/s Ratio Perm		c0.27					0.15		0.10	c0.19		0.05
v/c Ratio	0.26	0.70		0.52	0.68		0.28	0.30	0.19	0.35	0.26	0.09
Uniform Delay, d1	21.8	27.0		46.5	34.2		13.4	13.6	12.6	14.0	13.2	11.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.2		3.5	1.4		1.6	0.4	0.5	2.5	0.3	0.2
Delay (s)	22.0	28.2		50.0	35.6		15.0	14.0	13.1	16.4	13.5	12.1
Level of Service	C	C		D	D		B	B	B	B	B	B
Approach Delay (s/veh)		27.5			36.7			14.0			13.8	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Future Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	11	11	359	0	250	11	707	87	250	1011	11
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	162	141	460	532	444	339	2269	1001	441	2269	1014
Arrive On Green	0.29	0.29	0.29	0.29	0.00	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	419	568	493	1361	1863	1553	550	3539	1562	681	3539	1581
Grp Volume(v), veh/h	33	0	0	359	0	250	11	707	87	250	1011	11
Grp Sat Flow(s),veh/h/ln	1480	0	0	1361	1863	1553	550	1770	1562	681	1770	1581
Q Serve(g_s), s	0.0	0.0	0.0	25.9	0.0	15.0	1.1	9.8	2.3	28.4	15.7	0.3
Cycle Q Clear(g_c), s	1.5	0.0	0.0	27.4	0.0	15.0	16.8	9.8	2.3	38.2	15.7	0.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	467	0	0	460	532	444	339	2269	1001	441	2269	1014
V/C Ratio(X)	0.07	0.00	0.00	0.78	0.00	0.56	0.03	0.31	0.09	0.57	0.45	0.01
Avail Cap(c_a), veh/h	609	0	0	595	717	597	339	2269	1001	441	2269	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	0.0	37.5	0.0	33.2	14.1	8.8	7.4	17.4	9.8	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	5.0	0.0	1.1	0.2	0.4	0.2	5.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	11.0	0.0	6.5	0.2	4.8	1.0	5.9	7.8	0.1
LnGrp Delay(d), s/veh	28.5	0.0	0.0	42.5	0.0	34.3	14.2	9.1	7.6	22.5	10.5	7.1
LnGrp LOS	C			D		C	B	A	A	C	B	A
Approach Vol, veh/h		33			609			805			1272	
Approach Delay, s/veh		28.5			39.1			9.1			12.8	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		35.2		74.0		35.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		18.8		3.5		40.2		29.4
Green Ext Time (p_c), s		6.1		0.2		11.3		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Future Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	57	1307	193	148	1523	125	193	159	114	148	239	114
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	1680	248	182	2094	172	231	888	396	182	792	348
Arrive On Green	0.04	0.38	0.38	0.10	0.44	0.44	0.13	0.25	0.25	0.10	0.22	0.22
Sat Flow, veh/h	1774	4464	659	1774	4784	392	1774	3539	1578	1774	3539	1553
Grp Volume(v), veh/h	57	993	507	148	1079	569	193	159	114	148	239	114
Grp Sat Flow(s),veh/h/ln	1774	1695	1733	1774	1695	1786	1774	1770	1578	1774	1770	1553
Q Serve(g_s), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Cycle Q Clear(g_c), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Prop In Lane	1.00		0.38	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	1276	652	182	1484	782	231	888	396	182	792	348
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.73	0.73	0.84	0.18	0.29	0.81	0.30	0.33
Avail Cap(c_a), veh/h	167	1560	797	334	1879	990	408	888	396	334	792	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	26.3	26.3	42.0	22.2	22.2	40.6	28.1	28.9	42.0	30.9	31.1
Incr Delay (d2), s/veh	15.9	2.1	4.0	8.4	1.1	2.0	7.8	0.4	1.8	8.4	1.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.9	12.6	4.2	11.9	12.8	5.5	1.7	2.6	4.2	2.7	2.8
LnGrp Delay(d), s/veh	61.3	28.4	30.3	50.4	23.2	24.2	48.5	28.5	30.8	50.4	31.9	33.6
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1557			1796			466			501	
Approach Delay, s/veh		30.2			25.8			37.3			37.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	28.0	13.8	40.0	16.4	25.4	8.0	45.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	24.0	18.0	44.0	22.0	20.0	9.0	53.0
Max Q Clear Time (g_c+I1), s	9.8	7.6	9.8	26.7	12.2	7.9	5.0	27.1
Green Ext Time (p_c), s	0.2	1.1	0.2	9.3	0.3	1.4	0.0	13.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Future Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	174	87	141	424	293	130	891	130	207	772	130
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	55	425	202	172	498	341	392	1714	764	377	1798	792
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.05	0.49	0.49	0.08	0.51	0.51
Sat Flow, veh/h	1757	2292	1091	1757	1978	1354	1757	3505	1562	1757	3505	1544
Grp Volume(v), veh/h	43	131	130	141	375	342	130	891	130	207	772	130
Grp Sat Flow(s),veh/h/ln	1757	1752	1631	1757	1752	1580	1757	1752	1562	1757	1752	1544
Q Serve(g_s), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	14.7	4.8
Cycle Q Clear(g_c), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	14.7	4.8
Prop In Lane	1.00		0.67	1.00		0.86	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	55	325	302	172	442	398	392	1714	764	377	1798	792
V/C Ratio(X)	0.79	0.40	0.43	0.82	0.85	0.86	0.33	0.52	0.17	0.55	0.43	0.16
Avail Cap(c_a), veh/h	115	360	335	295	539	486	443	1714	764	501	1798	792
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	38.4	38.7	47.5	38.2	38.3	12.9	18.8	15.3	13.9	16.3	13.9
Incr Delay (d2), s/veh	21.5	0.8	1.0	9.4	10.5	12.3	0.5	1.1	0.5	1.2	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.5	3.5	4.6	11.8	11.0	1.9	9.3	2.2	3.0	7.3	2.1
LnGrp Delay(d), s/veh	73.1	39.3	39.6	56.8	48.6	50.6	13.4	19.9	15.8	15.1	17.1	14.3
LnGrp LOS	E	D	D	E	D	D	B	B	B	B	B	B
Approach Vol, veh/h		304			858			1151			1109	
Approach Delay, s/veh		44.2			50.8			18.7			16.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	56.4	14.5	23.9	9.9	59.0	7.3	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	48.0	18.0	22.0	9.0	55.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	8.1	20.7	10.4	9.6	5.9	16.7	4.6	24.1
Green Ext Time (p_c), s	0.3	7.7	0.2	1.1	0.1	6.9	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Future Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	746	1845	1546	898	1845	1533	691	3505	1567	601	3505	1567
Grp Volume(v), veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Grp Sat Flow(s),veh/h/ln	746	1845	1546	898	1845	1533	691	1752	1567	601	1752	1567
Q Serve(g_s), s	16.6	22.4	3.9	9.0	25.4	13.9	11.1	15.8	2.5	38.2	11.7	3.6
Cycle Q Clear(g_c), s	42.0	22.4	3.9	31.4	25.4	13.9	22.7	15.8	2.5	54.1	11.7	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
V/C Ratio(X)	0.64	0.64	0.14	0.36	0.70	0.43	0.27	0.41	0.08	0.67	0.32	0.11
Avail Cap(c_a), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	32.6	26.6	45.7	33.6	29.9	18.7	13.7	10.9	28.5	12.8	11.2
Incr Delay (d2), s/veh	8.3	2.1	0.1	1.0	3.4	0.6	1.6	0.6	0.2	10.2	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	11.8	1.7	2.3	13.6	5.9	2.3	7.8	1.1	7.3	5.7	1.6
LnGrp Delay(d), s/veh	60.1	34.7	26.7	46.8	37.0	30.4	20.3	14.3	11.1	38.7	13.3	11.4
LnGrp LOS	E	C	C	D	D	C	C	B	B	D	B	B
Approach Vol, veh/h		590			759			1021			989	
Approach Delay, s/veh		38.2			35.9			14.7			18.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		46.0		74.0		46.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		24.7		44.0		56.1		33.4
Green Ext Time (p_c), s		7.9		0.0		5.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Future Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	111	949	273	253	556	71	263	980	192	81	747	61
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1031	296	282	1576	198	292	1348	590	103	970	420
Arrive On Green	0.08	0.26	0.26	0.16	0.35	0.35	0.16	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	1774	3908	1121	1774	4565	574	1774	3539	1549	1774	3539	1533
Grp Volume(v), veh/h	111	823	399	253	411	216	263	980	192	81	747	61
Grp Sat Flow(s),veh/h/ln	1774	1695	1638	1774	1695	1749	1774	1770	1549	1774	1770	1533
Q Serve(g_s), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Cycle Q Clear(g_c), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Prop In Lane	1.00		0.68	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	895	432	282	1171	604	292	1348	590	103	970	420
V/C Ratio(X)	0.81	0.92	0.92	0.90	0.35	0.36	0.90	0.73	0.33	0.79	0.77	0.15
Avail Cap(c_a), veh/h	230	910	440	322	1171	604	338	1348	590	123	970	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	41.3	41.4	47.7	28.2	28.3	47.3	30.6	25.3	53.7	38.6	31.7
Incr Delay (d2), s/veh	10.5	14.1	24.8	24.3	0.2	0.4	23.7	3.5	1.5	24.4	5.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.6	15.4	9.8	4.9	5.2	10.2	14.0	4.5	3.3	11.8	1.6
LnGrp Delay(d), s/veh	63.0	55.4	66.2	71.9	28.4	28.6	71.0	34.1	26.7	78.1	44.5	32.4
LnGrp LOS	E	E	E	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		1333			880			1435			889	
Approach Delay, s/veh		59.3			40.9			39.9			46.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	48.0	22.4	34.5	23.0	35.7	13.0	43.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	21.0	31.0	22.0	30.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.2	29.4	18.2	29.4	18.8	24.4	9.1	12.7
Green Ext Time (p_c), s	0.0	6.3	0.2	1.1	0.2	2.3	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Future Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	83	188	52	94	62	125	1365	52	42	1167	83
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	0	570	42	58	562	153	1792	781	54	1595	695
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.09	0.51	0.51	0.03	0.45	0.45
Sat Flow, veh/h	0	0	1582	0	160	1559	1774	3539	1543	1774	3539	1542
Grp Volume(v), veh/h	281	0	188	146	0	62	125	1365	52	42	1167	83
Grp Sat Flow(s),veh/h/ln	0	0	1582	160	0	1559	1774	1770	1543	1774	1770	1542
Q Serve(g_s), s	0.0	0.0	10.1	0.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Cycle Q Clear(g_c), s	42.0	0.0	10.1	42.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Prop In Lane	0.70		1.00	0.36		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	0	570	100	0	562	153	1792	781	54	1595	695
V/C Ratio(X)	5.34	0.00	0.33	1.46	0.00	0.11	0.82	0.76	0.07	0.78	0.73	0.12
Avail Cap(c_a), veh/h	53	0	570	100	0	562	244	1792	781	107	1595	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	27.0	35.0	0.0	24.8	52.4	23.1	14.7	56.1	26.2	18.6
Incr Delay (d2), s/veh	1992.4	0.0	0.3	255.6	0.0	0.1	11.1	3.1	0.2	21.3	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.8	0.0	4.4	10.3	0.0	1.3	4.4	18.4	0.9	1.7	16.1	1.6
LnGrp Delay(d), s/veh	2050.6	0.0	27.4	290.6	0.0	24.9	63.5	26.2	14.9	77.4	29.2	18.9
LnGrp LOS	F		C	F		C	E	C	B	E	C	B
Approach Vol, veh/h		469			208			1542			1292	
Approach Delay, s/veh		1239.6			211.4			28.9			30.1	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	63.0		46.0	14.0	56.5		46.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	59.0		42.0	16.0	50.0		42.0
Max Q Clear Time (g_c+I1), s	4.7	38.1		44.0	10.1	33.5		44.0
Green Ext Time (p_c), s	0.0	9.9		0.0	0.1	7.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		201.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Future Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
Arrive On Green	0.10	0.27	0.27	0.12	0.29	0.29	0.07	0.35	0.35	0.12	0.40	0.40
Sat Flow, veh/h	1774	3539	1548	1774	3539	1554	1774	3539	1551	1774	3539	1555
Grp Volume(v), veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Grp Sat Flow(s),veh/h/ln	1774	1770	1548	1774	1770	1554	1774	1770	1551	1774	1770	1555
Q Serve(g_s), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Cycle Q Clear(g_c), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
V/C Ratio(X)	0.85	0.95	0.22	0.89	0.74	0.43	0.81	0.93	0.11	0.88	0.74	0.08
Avail Cap(c_a), veh/h	208	976	427	208	1025	450	148	1243	545	222	1430	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	42.6	33.5	52.0	38.4	34.5	54.8	37.4	26.2	51.5	30.3	22.0
Incr Delay (d2), s/veh	24.5	17.3	0.3	33.5	2.8	0.7	24.1	13.2	0.4	30.7	3.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	17.1	2.4	7.9	11.6	5.3	4.2	20.5	1.4	8.2	15.6	1.1
LnGrp Delay(d), s/veh	77.3	59.9	33.8	85.6	41.2	35.1	78.8	50.6	26.6	82.3	33.8	22.2
LnGrp LOS	E	E	C	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1163			1133			1316			1306	
Approach Delay, s/veh		60.1			47.4			51.7			40.6	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	46.0	18.0	36.8	12.5	52.3	16.1	38.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	42.0	14.0	33.0	10.0	47.0	14.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	39.5	14.2	32.4	8.8	32.5	12.1	25.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.4	0.0	6.1	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Future Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	146	167	83	125	115	94	1219	0	115	1219	21
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	230	201	106	327	276	119	1996	893	143	2973	51
Arrive On Green	0.01	0.13	0.13	0.06	0.18	0.18	0.07	0.58	0.00	0.08	0.59	0.59
Sat Flow, veh/h	1740	1736	1514	1740	1782	1501	1740	3471	1553	1740	5049	87
Grp Volume(v), veh/h	10	146	167	83	121	119	94	1219	0	115	803	437
Grp Sat Flow(s),veh/h/ln	1740	1736	1514	1740	1736	1548	1740	1736	1553	1740	1663	1811
Q Serve(g_s), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Cycle Q Clear(g_c), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Prop In Lane	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	17	230	201	106	319	284	119	1996	893	143	1958	1067
V/C Ratio(X)	0.60	0.63	0.83	0.79	0.38	0.42	0.79	0.61	0.00	0.81	0.41	0.41
Avail Cap(c_a), veh/h	65	260	227	195	389	347	211	1996	893	244	1958	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	43.9	45.2	49.6	38.3	38.6	49.1	14.9	0.0	48.3	11.9	11.9
Incr Delay (d2), s/veh	29.7	4.1	20.4	12.0	0.7	1.0	11.2	1.4	0.0	10.2	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.4	6.0	2.8	3.2	3.2	3.1	12.1	0.0	3.8	6.5	7.3
LnGrp Delay(d), s/veh	82.5	48.1	65.6	61.6	39.1	39.6	60.3	16.3	0.0	58.4	12.6	13.1
LnGrp LOS	F	D	E	E	D	D	E	B		E	B	B
Approach Vol, veh/h		323			323			1313			1355	
Approach Delay, s/veh		58.2			45.0			19.4			16.6	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	65.5	10.5	18.2	11.3	67.0	5.0	23.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	61.0	12.0	16.0	13.0	63.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	9.0	26.6	7.0	13.5	7.7	16.0	2.6	9.2
Green Ext Time (p_c), s	0.1	10.2	0.1	0.4	0.1	9.8	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Future Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	42	0	94	42	0	21	52	1365	21	10	1417	31
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	63	0	264	63	0	268	67	2473	1079	17	3433	75
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.04	0.71	0.71	0.01	0.68	0.68
Sat Flow, veh/h	0	0	1519	0	0	1539	1740	3471	1514	1740	5022	110
Grp Volume(v), veh/h	42	0	94	42	0	21	52	1365	21	10	938	510
Grp Sat Flow(s),veh/h/ln	0	0	1519	0	0	1539	1740	1736	1514	1740	1663	1807
Q Serve(g_s), s	0.0	0.0	6.3	0.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Cycle Q Clear(g_c), s	20.0	0.0	6.3	20.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	63	0	264	63	0	268	67	2473	1079	17	2273	1235
V/C Ratio(X)	0.67	0.00	0.36	0.67	0.00	0.08	0.78	0.55	0.02	0.60	0.41	0.41
Avail Cap(c_a), veh/h	63	0	264	63	0	268	197	2473	1079	91	2273	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	41.9	57.5	0.0	39.8	54.9	7.8	4.8	56.8	8.0	8.0
Incr Delay (d2), s/veh	24.5	0.0	0.8	24.5	0.0	0.1	17.4	0.9	0.0	30.6	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.7	1.8	0.0	0.6	2.0	10.4	0.2	0.5	6.7	7.4
LnGrp Delay(d), s/veh	82.0	0.0	42.7	82.0	0.0	40.0	72.3	8.7	4.9	87.4	8.6	9.0
LnGrp LOS	F		D	F		D	E	A	A	F	A	A
Approach Vol, veh/h		136			63			1438			1458	
Approach Delay, s/veh		54.8			68.0			11.0			9.3	
Approach LOS		D			E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	86.0		24.0	8.4	82.7		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	82.0		20.0	13.0	75.0		20.0
Max Q Clear Time (g_c+I1), s	2.7	23.4		22.0	5.4	16.3		22.0
Green Ext Time (p_c), s	0.0	13.7		0.0	0.0	12.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	970	140	70	830	170	190
Future Volume (veh/h)	970	140	70	830	170	190
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1900	1845	1845	1845	1845
Adj Flow Rate, veh/h	1102	159	80	943	193	216
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1589	229	104	2353	762	680
Arrive On Green	0.36	0.36	0.06	0.47	0.43	0.43
Sat Flow, veh/h	4598	639	1757	5202	1757	1568
Grp Volume(v), veh/h	835	426	80	943	193	216
Grp Sat Flow(s),veh/h/ln	1679	1713	1757	1679	1757	1568
Q Serve(g_s), s	17.1	17.2	3.6	9.9	5.6	7.3
Cycle Q Clear(g_c), s	17.1	17.2	3.6	9.9	5.6	7.3
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1204	614	104	2353	762	680
V/C Ratio(X)	0.69	0.69	0.77	0.40	0.25	0.32
Avail Cap(c_a), veh/h	2287	1167	392	4804	762	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.1	37.4	14.1	14.5	15.0
Incr Delay (d2), s/veh	0.7	1.4	11.2	0.1	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	8.3	2.1	4.6	2.9	3.4
LnGrp Delay(d), s/veh	22.8	23.5	48.6	14.2	15.3	16.2
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	1261			1023	409	
Approach Delay, s/veh	23.1			16.9	15.8	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		39.0	8.8	32.9				41.7
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		35.0	18.0	55.0				77.0
Max Q Clear Time (g_c+I1), s		9.3	5.6	19.2				11.9
Green Ext Time (p_c), s		1.2	0.1	9.8				7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Future Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	260	21	63	156	115	31	135	52	156	167	31
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

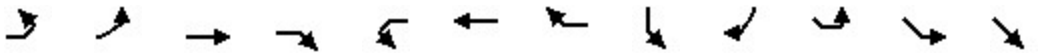
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	21.5	26.2	13.8	15.3
HCM LOS	C	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	19%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	93%	47%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	7%	34%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	130	50	20	270	320	150	160	30
LT Vol	30	0	0	20	0	60	150	0	0
Through Vol	0	130	0	0	250	150	0	160	0
RT Vol	0	0	50	0	20	110	0	0	30
Lane Flow Rate	31	135	52	21	281	333	156	167	31
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.077	0.316	0.111	0.048	0.61	0.699	0.368	0.369	0.063
Departure Headway (Hd)	8.908	8.388	7.66	8.375	7.814	7.55	8.486	7.968	7.243
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	400	427	465	426	458	477	422	448	491
Service Time	6.708	6.187	5.458	6.166	5.604	5.333	6.279	5.76	5.034
HCM Lane V/C Ratio	0.078	0.316	0.112	0.049	0.614	0.698	0.37	0.373	0.063
HCM Control Delay, s/veh	12.5	15.1	11.4	11.6	22.2	26.2	16.2	15.4	10.5
HCM Lane LOS	B	C	B	B	C	D	C	C	B
HCM 95th-tile Q	0.2	1.3	0.4	0.2	4	5.4	1.7	1.7	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Future Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	83	1073	52	10	958	83	62	42	31	94	21	73
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	108	1469	641	18	1289	563	76	33	645	87	11	637
Arrive On Green	0.06	0.42	0.42	0.01	0.37	0.37	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1757	3505	1530	1757	3505	1531	0	81	1567	0	27	1547
Grp Volume(v), veh/h	83	1073	52	10	958	83	104	0	31	115	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1530	1757	1752	1531	81	0	1567	27	0	1547
Q Serve(g_s), s	3.5	19.3	1.5	0.4	17.9	2.7	0.0	0.0	0.9	0.0	0.0	2.2
Cycle Q Clear(g_c), s	3.5	19.3	1.5	0.4	17.9	2.7	31.0	0.0	0.9	31.0	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	0.60		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	108	1469	641	18	1289	563	109	0	645	98	0	637
V/C Ratio(X)	0.77	0.73	0.08	0.57	0.74	0.15	0.95	0.00	0.05	1.18	0.00	0.11
Avail Cap(c_a), veh/h	396	3303	1442	140	2791	1219	109	0	645	98	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.8	18.3	13.2	37.1	20.7	15.9	28.0	0.0	13.3	34.2	0.0	13.7
Incr Delay (d2), s/veh	10.8	0.7	0.1	25.6	0.9	0.1	73.4	0.0	0.1	146.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.4	0.7	0.3	8.8	1.2	4.4	0.0	0.4	6.0	0.0	1.0
LnGrp Delay(d), s/veh	45.7	19.0	13.2	62.8	21.6	16.0	101.4	0.0	13.5	180.2	0.0	14.1
LnGrp LOS	D	B	B	E	C	B	F		B	F		B
Approach Vol, veh/h		1208			1051			135			188	
Approach Delay, s/veh		20.6			21.5			81.2			115.7	
Approach LOS		C			C			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	4.8	35.6		35.0	8.6	31.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	6.0	71.0		31.0	17.0	60.0
Max Q Clear Time (g_c+I1), s		33.0	2.4	21.3		33.0	5.5	19.9
Green Ext Time (p_c), s		0.0	0.0	9.2		0.0	0.1	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL	SBR	SEL2	SEL	SET
Lane Configurations												
Traffic Volume (vph)	280	170	1400	240	10	520	50	0	0	10	60	220
Future Volume (vph)	280	170	1400	240	10	520	50	0	0	10	60	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%		15%				0%
Total Lost time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Lane Util. Factor		1.00	0.91		1.00	0.91					1.00	1.00
Frpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00					1.00	1.00
Frt		1.00	0.98		1.00	0.99					1.00	1.00
Flt Protected		0.95	1.00		0.95	1.00					0.95	1.00
Satd. Flow (prot)		1805	5055		1805	5118					1805	1900
Flt Permitted		0.95	1.00		0.21	1.00					0.50	1.00
Satd. Flow (perm)		1805	5055		404	5118					941	1900
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	301	183	1505	258	11	559	54	0	0	11	65	237
RTOR Reduction (vph)	0	0	16	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	484	1747	0	11	613	0	0	0	0	76	237
Confl. Peds. (#/hr)				1	1			5				
Confl. Bikes (#/hr)				2								
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Perm	Perm	Perm	NA
Protected Phases	7	7	4		3	8		9				6
Permitted Phases					8				10	6	6	
Actuated Green, G (s)		28.3	46.4		19.5	18.8					26.2	26.2
Effective Green, g (s)		28.3	46.4		19.5	18.8					26.2	26.2
Actuated g/C Ratio		0.33	0.54		0.23	0.22					0.31	0.31
Clearance Time (s)		4.0	4.0		4.0	4.0					4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0					3.0	3.0
Lane Grp Cap (vph)		598	2749		103	1128					289	583
v/s Ratio Prot		c0.27	c0.35		0.00	0.12						0.12
v/s Ratio Perm					0.02						0.08	
v/c Ratio		0.81	0.64		0.11	0.54					0.26	0.41
Uniform Delay, d1		26.0	13.6		25.5	29.4					22.3	23.4
Progression Factor		1.00	1.00		1.00	1.00					1.00	1.00
Incremental Delay, d2		8.0	0.5		0.5	0.5					0.5	0.5
Delay (s)		34.0	14.0		26.0	30.0					22.8	23.9
Level of Service		C	B		C	C					C	C
Approach Delay (s/veh)			18.3			29.9		0.0				23.1
Approach LOS			B			C		A				C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	85.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	67.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	250	2510	50	30	1970	90	200	30	280	100	40	20
Future Volume (vph)	250	2510	50	30	1970	90	200	30	280	100	40	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	0.99	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5116		1787	5136	1579	1769	1881	1568	1776	1881	1547
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.73	1.00	1.00	0.74	1.00	1.00
Satd. Flow (perm)	3467	5116		1787	5136	1579	1358	1881	1568	1377	1881	1547
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	269	2699	54	32	2118	97	215	32	301	108	43	22
RTOR Reduction (vph)	0	2	0	0	0	37	0	0	131	0	0	18
Lane Group Flow (vph)	269	2751	0	32	2118	60	215	32	170	108	43	4
Confl. Peds. (#/hr)			7	7			5		3	3		5
Confl. Bikes (#/hr)			2			1			1			9
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	13.1	78.1		2.3	67.3	67.3	22.1	22.1	22.1	22.1	22.1	22.1
Effective Green, g (s)	13.1	78.1		2.3	67.3	67.3	22.1	22.1	22.1	22.1	22.1	22.1
Actuated g/C Ratio	0.11	0.68		0.02	0.59	0.59	0.19	0.19	0.19	0.19	0.19	0.19
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	396	3489		35	3018	928	262	363	302	265	363	298
v/s Ratio Prot	c0.08	c0.54		0.02	0.41			0.02			0.02	
v/s Ratio Perm						0.04	c0.16		0.11	0.08		0.00
v/c Ratio	0.68	0.79		0.91	0.70	0.06	0.82	0.09	0.56	0.41	0.12	0.01
Uniform Delay, d1	48.7	12.5		56.0	16.6	10.1	44.3	37.9	41.8	40.5	38.2	37.4
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.6	1.9		116.7	1.4	0.1	18.3	0.1	2.4	1.0	0.1	0.0
Delay (s)	53.3	14.4		172.7	17.9	10.2	62.5	38.0	44.2	41.5	38.3	37.4
Level of Service	D	B		F	B	B	E	D	D	D	D	D
Approach Delay (s/veh)		17.9			19.8			51.1			40.2	
Approach LOS		B			B			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	114.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	200	380	40	50	10	300	1070	0	10	830	170
Future Volume (veh/h)	730	200	380	40	50	10	300	1070	0	10	830	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	760	208	396	42	52	10	312	1115	0	10	865	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	887	539	457	54	94	18	395	1852	828	18	1481	663
Arrive On Green	0.25	0.28	0.28	0.03	0.06	0.06	0.11	0.51	0.00	0.01	0.41	0.00
Sat Flow, veh/h	3510	1900	1612	1810	1547	297	3510	3610	1615	1810	3610	1615
Grp Volume(v), veh/h	760	208	396	42	0	62	312	1115	0	10	865	0
Grp Sat Flow(s),veh/h/ln	1755	1900	1612	1810	0	1844	1755	1805	1615	1810	1805	1615
Q Serve(g_s), s	20.1	8.6	22.8	2.2	0.0	3.2	8.4	21.2	0.0	0.5	18.1	0.0
Cycle Q Clear(g_c), s	20.1	8.6	22.8	2.2	0.0	3.2	8.4	21.2	0.0	0.5	18.1	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	887	539	457	54	0	112	395	1852	828	18	1481	663
V/C Ratio(X)	0.86	0.39	0.87	0.78	0.00	0.55	0.79	0.60	0.00	0.57	0.58	0.00
Avail Cap(c_a), veh/h	1224	838	711	130	0	303	576	1852	828	74	1481	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.8	28.1	33.2	47.0	0.0	44.5	42.1	16.7	0.0	48.1	22.3	0.0
Incr Delay (d2), s/veh	4.6	0.5	7.0	21.3	0.0	4.2	4.6	1.5	0.0	25.6	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	4.6	11.0	1.4	0.0	1.8	4.3	10.9	0.0	0.4	9.4	0.0
LnGrp Delay(d), s/veh	39.4	28.5	40.2	68.3	0.0	48.7	46.8	18.2	0.0	73.7	24.0	0.0
LnGrp LOS	D	C	D	E		D	D	B		E	C	
Approach Vol, veh/h		1364			104			1427			875	
Approach Delay, s/veh		37.9			56.6			24.4			24.6	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	54.0	6.9	31.6	15.0	44.0	28.6	9.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	50.0	7.0	43.0	16.0	38.0	34.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	23.2	4.2	24.8	10.4	20.1	22.1	5.2
Green Ext Time (p_c), s	0.0	8.6	0.0	2.6	0.5	5.4	2.5	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.2
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	660	1900	220	190	1400	100	290	590	300	250	710	160
Future Volume (veh/h)	660	1900	220	190	1400	100	290	590	300	250	710	160
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	688	1979	229	198	1458	104	302	615	312	260	740	167
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	752	2256	689	226	1794	712	359	740	667	316	814	181
Arrive On Green	0.22	0.44	0.44	0.13	0.35	0.35	0.10	0.21	0.21	0.09	0.19	0.19
Sat Flow, veh/h	3476	5136	1569	1792	5136	1566	3476	3574	1548	3476	4180	932
Grp Volume(v), veh/h	688	1979	229	198	1458	104	302	615	312	260	604	303
Grp Sat Flow(s),veh/h/ln	1738	1712	1569	1792	1712	1566	1738	1787	1548	1738	1712	1688
Q Serve(g_s), s	22.7	41.2	11.2	12.7	30.3	4.6	10.0	19.3	17.1	8.6	20.3	20.6
Cycle Q Clear(g_c), s	22.7	41.2	11.2	12.7	30.3	4.6	10.0	19.3	17.1	8.6	20.3	20.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	752	2256	689	226	1794	712	359	740	667	316	666	329
V/C Ratio(X)	0.92	0.88	0.33	0.87	0.81	0.15	0.84	0.83	0.47	0.82	0.91	0.92
Avail Cap(c_a), veh/h	800	2256	689	260	1794	712	385	761	676	326	671	331
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.9	30.0	21.6	50.3	34.7	18.8	51.7	44.5	24.4	52.4	46.2	46.4
Incr Delay (d2), s/veh	14.6	5.2	1.3	24.3	4.1	0.4	14.6	7.6	0.5	15.2	16.1	29.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	20.5	5.1	7.9	15.0	2.1	5.6	10.3	7.3	4.8	11.1	12.3
LnGrp Delay(d), s/veh	59.5	35.2	22.9	74.7	38.8	19.3	66.2	52.1	24.9	67.7	62.3	76.2
LnGrp LOS	E	D	C	E	D	B	E	D	C	E	E	E
Approach Vol, veh/h		2896			1760			1229			1167	
Approach Delay, s/veh		40.0			41.7			48.7			67.1	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	55.5	14.7	28.3	29.4	45.0	16.1	26.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	51.0	11.0	25.0	27.0	41.0	13.0	23.0
Max Q Clear Time (g_c+I1), s	14.7	43.2	10.6	21.3	24.7	32.3	12.0	22.6
Green Ext Time (p_c), s	0.1	6.4	0.0	1.7	0.7	5.9	0.1	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	20	30	20	20	110	20	2490	10	80	2030	140
Future Volume (veh/h)	140	20	30	20	20	110	20	2490	10	80	2030	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	141	20	30	20	20	111	20	2515	10	81	2051	141
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	58	0	320	46	32	320	29	3349	13	103	3311	226
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.63	0.63	0.06	0.68	0.68
Sat Flow, veh/h	0	0	1560	0	157	1558	1792	5280	21	1792	4900	335
Grp Volume(v), veh/h	161	0	30	40	0	111	20	1630	895	81	1429	763
Grp Sat Flow(s),veh/h/ln	0	0	1560	157	0	1558	1792	1712	1877	1792	1712	1811
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	7.1	1.3	38.9	38.9	5.2	27.2	27.6
Cycle Q Clear(g_c), s	24.0	0.0	1.8	24.0	0.0	7.1	1.3	38.9	38.9	5.2	27.2	27.6
Prop In Lane	0.88		1.00	0.50		1.00	1.00		0.01	1.00		0.18
Lane Grp Cap(c), veh/h	58	0	320	78	0	320	29	2172	1191	103	2314	1224
V/C Ratio(X)	2.79	0.00	0.09	0.51	0.00	0.35	0.68	0.75	0.75	0.78	0.62	0.62
Avail Cap(c_a), veh/h	58	0	320	78	0	320	77	2172	1191	184	2314	1224
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	0.0	37.6	40.0	0.0	39.8	57.2	14.9	14.9	54.4	10.5	10.6
Incr Delay (d2), s/veh	850.3	0.0	0.1	5.4	0.0	0.6	24.4	2.4	4.4	12.1	1.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	0.0	0.8	1.2	0.0	3.1	0.8	18.8	21.3	2.9	13.1	14.4
LnGrp Delay(d), s/veh	908.7	0.0	37.8	45.4	0.0	40.4	81.6	17.4	19.3	66.4	11.8	13.0
LnGrp LOS	F		D	D		D	F	B	B	E	B	B
Approach Vol, veh/h		191			151			2545			2273	
Approach Delay, s/veh		771.9			41.7			18.6			14.2	
Approach LOS		F			D			B			B	

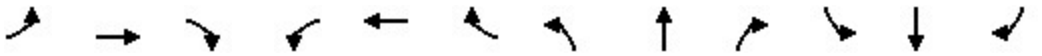
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	78.2		28.0	5.9	83.0		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	72.0		24.0	5.0	79.0		24.0
Max Q Clear Time (g_c+I1), s	7.2	40.9		26.0	3.3	29.6		26.0
Green Ext Time (p_c), s	0.1	23.7		0.0	0.0	28.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	780	80	110	480	230	80	1700	60	160	1640	320
Future Volume (veh/h)	580	780	80	110	480	230	80	1700	60	160	1640	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	617	830	85	117	511	245	85	1809	64	170	1745	340
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	682	1131	492	172	607	261	134	2204	78	226	1979	380
Arrive On Green	0.20	0.32	0.32	0.05	0.17	0.17	0.04	0.43	0.43	0.06	0.46	0.46
Sat Flow, veh/h	3476	3574	1556	3476	3574	1537	3476	5088	180	3476	4306	828
Grp Volume(v), veh/h	617	830	85	117	511	245	85	1217	656	170	1383	702
Grp Sat Flow(s),veh/h/ln	1738	1787	1556	1738	1787	1537	1738	1712	1844	1738	1712	1710
Q Serve(g_s), s	20.4	24.3	4.7	3.9	16.3	18.5	2.8	36.8	36.9	5.7	43.1	44.3
Cycle Q Clear(g_c), s	20.4	24.3	4.7	3.9	16.3	18.5	2.8	36.8	36.9	5.7	43.1	44.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.10	1.00		0.48
Lane Grp Cap(c), veh/h	682	1131	492	172	607	261	134	1483	799	226	1573	786
V/C Ratio(X)	0.90	0.73	0.17	0.68	0.84	0.94	0.63	0.82	0.82	0.75	0.88	0.89
Avail Cap(c_a), veh/h	738	1131	492	236	607	261	148	1483	799	236	1573	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	35.8	29.1	55.0	47.3	48.3	55.8	29.4	29.4	54.1	28.8	29.2
Incr Delay (d2), s/veh	14.0	2.5	0.2	4.7	10.4	39.3	7.5	5.2	9.3	12.3	7.3	14.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	12.4	2.0	2.0	8.9	10.7	1.5	18.5	20.8	3.1	22.0	24.1
LnGrp Delay(d), s/veh	60.3	38.3	29.3	59.7	57.7	87.5	63.3	34.6	38.7	66.4	36.2	43.9
LnGrp LOS	E	D	C	E	E	F	E	C	D	E	D	D
Approach Vol, veh/h		1532			873			1958			2255	
Approach Delay, s/veh		46.7			66.3			37.2			40.9	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	55.0	9.8	41.3	8.5	58.1	27.1	24.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	51.0	8.0	37.0	5.0	54.0	25.0	20.0
Max Q Clear Time (g_c+I1), s	7.7	38.9	5.9	26.3	4.8	46.3	22.4	20.5
Green Ext Time (p_c), s	0.0	8.8	0.1	4.2	0.0	6.5	0.7	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		44.5
HCM 2010 LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	760	260	380	810	30	430	120	550	30	60	10
Future Volume (vph)	10	760	260	380	810	30	430	120	550	30	60	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00		0.99	
Satd. Flow (prot)	1805	3610	1586	3502	3588		1715	1754	1588		1844	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.69	0.77	1.00		0.86	
Satd. Flow (perm)	1805	3610	1586	3502	3588		1251	1387	1588		1606	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	800	274	400	853	32	453	126	579	32	63	11
RTOR Reduction (vph)	0	0	190	0	2	0	0	0	196	0	3	0
Lane Group Flow (vph)	11	800	84	400	883	0	281	298	383	0	103	0
Confl. Peds. (#/hr)			2	2					2	2		
Confl. Bikes (#/hr)			2			2			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	0.8	35.4	35.4	17.3	51.9		51.3	51.3	51.3		51.3	
Effective Green, g (s)	0.8	35.4	35.4	17.3	51.9		51.3	51.3	51.3		51.3	
Actuated g/C Ratio	0.01	0.31	0.31	0.15	0.45		0.44	0.44	0.44		0.44	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	12	1101	484	522	1605		553	613	702		710	
v/s Ratio Prot	0.01	c0.22		c0.11	0.25							
v/s Ratio Perm			0.05				0.22	0.21	c0.24		0.06	
v/c Ratio	0.92	0.73	0.17	0.77	0.55		0.51	0.49	0.55		0.14	
Uniform Delay, d1	57.6	36.0	29.6	47.4	23.5		23.3	23.0	23.8		19.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	212.2	2.4	0.2	6.6	0.4		3.3	2.7	3.0		0.4	
Delay (s)	269.7	38.4	29.7	54.0	23.9		26.6	25.7	26.8		19.7	
Level of Service	F	D	C	D	C		C	C	C		B	
Approach Delay (s/veh)		38.6			33.3			26.5			19.7	
Approach LOS		D			C			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	0	100	30	10	30	50	970	70	20	580	80
Future Volume (veh/h)	130	0	100	30	10	30	50	970	70	20	580	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	143	0	110	33	11	33	55	1066	77	22	637	88
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	255	0	317	77	34	46	71	2366	1036	33	2288	1001
Arrive On Green	0.20	0.00	0.20	0.20	0.20	0.20	0.04	0.66	0.66	0.02	0.64	0.64
Sat Flow, veh/h	909	0	1560	132	170	226	1792	3574	1564	1792	3574	1563
Grp Volume(v), veh/h	143	0	110	77	0	0	55	1066	77	22	637	88
Grp Sat Flow(s),veh/h/ln	909	0	1560	528	0	0	1792	1787	1564	1792	1787	1563
Q Serve(g_s), s	0.0	0.0	6.2	2.1	0.0	0.0	3.1	14.8	1.8	1.3	8.0	2.2
Cycle Q Clear(g_c), s	16.5	0.0	6.2	18.6	0.0	0.0	3.1	14.8	1.8	1.3	8.0	2.2
Prop In Lane	1.00		1.00	0.43		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	0	317	157	0	0	71	2366	1036	33	2288	1001
V/C Ratio(X)	0.56	0.00	0.35	0.49	0.00	0.00	0.77	0.45	0.07	0.68	0.28	0.09
Avail Cap(c_a), veh/h	403	0	486	316	0	0	227	2366	1036	140	2288	1001
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	35.1	38.7	0.0	0.0	48.8	8.4	6.2	50.1	8.1	7.0
Incr Delay (d2), s/veh	1.9	0.0	0.7	2.3	0.0	0.0	15.8	0.6	0.1	21.7	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	2.7	2.2	0.0	0.0	1.9	7.5	0.8	0.8	4.0	1.0
LnGrp Delay(d), s/veh	41.1	0.0	35.7	41.0	0.0	0.0	64.7	9.0	6.3	71.9	8.4	7.2
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		253			77			1198			747	
Approach Delay, s/veh		38.8			41.0			11.4			10.1	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	72.0		24.9	8.1	69.8		24.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	68.0		32.0	13.0	63.0		32.0
Max Q Clear Time (g_c+I1), s	3.3	16.8		18.5	5.1	10.0		20.6
Green Ext Time (p_c), s	0.0	9.7		1.0	0.0	5.0		0.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	460	350	110	50	230	40	100	600	40	20	350	330
Future Volume (veh/h)	460	350	110	50	230	40	100	600	40	20	350	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	489	372	117	53	245	43	106	638	43	21	372	351
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	603	929	288	256	357	62	389	1698	739	361	1698	746
Arrive On Green	0.26	0.35	0.35	0.04	0.12	0.12	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1792	2677	830	1792	3038	525	734	3574	1555	763	3574	1570
Grp Volume(v), veh/h	489	247	242	53	142	146	106	638	43	21	372	351
Grp Sat Flow(s),veh/h/ln	1792	1787	1720	1792	1787	1776	734	1787	1555	763	1787	1570
Q Serve(g_s), s	18.8	8.8	9.0	2.2	6.4	6.6	8.3	9.6	1.3	1.5	5.1	12.7
Cycle Q Clear(g_c), s	18.8	8.8	9.0	2.2	6.4	6.6	13.5	9.6	1.3	11.1	5.1	12.7
Prop In Lane	1.00		0.48	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	603	620	597	256	210	209	389	1698	739	361	1698	746
V/C Ratio(X)	0.81	0.40	0.41	0.21	0.68	0.70	0.27	0.38	0.06	0.06	0.22	0.47
Avail Cap(c_a), veh/h	1149	1295	1246	341	425	422	389	1698	739	361	1698	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	20.8	20.9	31.1	35.6	35.7	16.9	14.1	11.9	17.7	12.9	14.9
Incr Delay (d2), s/veh	2.7	0.4	0.4	0.4	3.8	4.2	1.7	0.6	0.2	0.3	0.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	4.4	4.3	1.1	3.4	3.5	1.9	4.8	0.6	0.4	2.6	5.9
LnGrp Delay(d), s/veh	23.8	21.2	21.3	31.5	39.4	39.9	18.6	14.8	12.1	18.0	13.2	17.1
LnGrp LOS	C	C	C	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		978			341			787			744	
Approach Delay, s/veh		22.5			38.4			15.1			15.2	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	7.0	33.2		44.0	26.3	13.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	7.0	61.0		40.0	48.0	20.0
Max Q Clear Time (g_c+I1), s		15.5	4.2	11.0		14.7	20.8	8.6
Green Ext Time (p_c), s		5.3	0.0	3.0		3.8	1.5	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	760	170	130	490	10	300	100	230	30	50	10
Future Volume (veh/h)	20	760	170	130	490	10	300	100	230	30	50	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	809	181	138	521	11	319	106	245	32	53	11
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	356	986	220	245	1396	29	707	776	649	417	860	173
Arrive On Green	0.02	0.34	0.34	0.07	0.39	0.39	0.14	0.41	0.41	0.02	0.29	0.29
Sat Flow, veh/h	1810	2931	656	1810	3613	76	1810	1900	1589	1810	2987	600
Grp Volume(v), veh/h	21	498	492	138	260	272	319	106	245	32	31	33
Grp Sat Flow(s),veh/h/ln	1810	1805	1782	1810	1805	1884	1810	1900	1589	1810	1805	1782
Q Serve(g_s), s	0.7	24.8	24.8	4.7	10.1	10.1	11.5	3.4	10.6	1.2	1.2	1.3
Cycle Q Clear(g_c), s	0.7	24.8	24.8	4.7	10.1	10.1	11.5	3.4	10.6	1.2	1.2	1.3
Prop In Lane	1.00		0.37	1.00		0.04	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	356	607	599	245	697	728	707	776	649	417	519	513
V/C Ratio(X)	0.06	0.82	0.82	0.56	0.37	0.37	0.45	0.14	0.38	0.08	0.06	0.06
Avail Cap(c_a), veh/h	398	867	855	362	1033	1078	889	776	649	448	519	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	29.8	29.8	22.4	21.5	21.5	17.9	18.1	20.2	23.6	25.3	25.3
Incr Delay (d2), s/veh	0.1	4.3	4.4	2.0	0.3	0.3	0.5	0.4	1.7	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	13.0	12.9	2.4	5.1	5.4	5.8	1.9	4.9	0.6	0.6	0.7
LnGrp Delay(d), s/veh	20.9	34.1	34.1	24.4	21.9	21.9	18.3	18.5	21.9	23.7	25.5	25.5
LnGrp LOS	C	C	C	C	C	C	B	B	C	C	C	C
Approach Vol, veh/h		1011			670			670			96	
Approach Delay, s/veh		33.8			22.4			19.7			24.9	
Approach LOS		C			C			B			C	

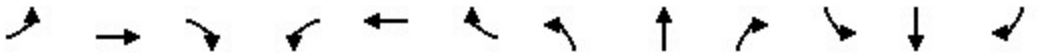
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	44.0	10.6	36.9	18.2	32.2	5.7	41.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	40.0	13.0	47.0	24.0	20.0	4.0	56.0
Max Q Clear Time (g_c+I1), s	3.2	12.6	6.7	26.8	13.5	3.3	2.7	12.1
Green Ext Time (p_c), s	0.0	1.4	0.2	6.1	0.7	0.2	0.0	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	350	140	70	470	250	80	390	50	150	320	80
Future Volume (veh/h)	130	350	140	70	470	250	80	390	50	150	320	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	133	357	143	71	480	255	82	398	51	153	327	82
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	168	1114	490	92	606	320	107	1112	141	191	1121	277
Arrive On Green	0.09	0.31	0.31	0.05	0.27	0.27	0.06	0.35	0.35	0.11	0.40	0.40
Sat Flow, veh/h	1792	3574	1570	1792	2248	1187	1792	3184	405	1792	2831	699
Grp Volume(v), veh/h	133	357	143	71	381	354	82	222	227	153	205	204
Grp Sat Flow(s),veh/h/ln	1792	1787	1570	1792	1787	1647	1792	1787	1802	1792	1787	1743
Q Serve(g_s), s	6.4	6.7	6.1	3.5	17.5	17.7	4.0	8.2	8.3	7.4	6.9	7.1
Cycle Q Clear(g_c), s	6.4	6.7	6.1	3.5	17.5	17.7	4.0	8.2	8.3	7.4	6.9	7.1
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.22	1.00		0.40
Lane Grp Cap(c), veh/h	168	1114	490	92	481	444	107	624	629	191	708	690
V/C Ratio(X)	0.79	0.32	0.29	0.77	0.79	0.80	0.77	0.36	0.36	0.80	0.29	0.30
Avail Cap(c_a), veh/h	365	1739	764	243	748	690	284	624	629	406	708	690
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	23.2	23.0	41.4	30.0	30.0	41.0	21.4	21.4	38.6	18.2	18.3
Incr Delay (d2), s/veh	8.1	0.2	0.3	12.5	3.2	3.6	11.0	1.6	1.6	7.6	1.0	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.3	2.7	2.0	9.0	8.5	2.3	4.3	4.4	4.1	3.6	3.6
LnGrp Delay(d), s/veh	47.2	23.4	23.4	53.9	33.1	33.7	51.9	23.0	23.0	46.2	19.2	19.3
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		633			806			531			562	
Approach Delay, s/veh		28.4			35.2			27.5			26.6	
Approach LOS		C			D			C			C	

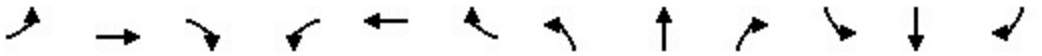
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	34.9	8.6	31.5	9.3	39.0	12.3	27.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	29.0	12.0	43.0	14.0	35.0	18.0	37.0
Max Q Clear Time (g_c+I1), s	9.4	10.3	5.5	8.7	6.0	9.1	8.4	19.7
Green Ext Time (p_c), s	0.3	2.3	0.1	2.8	0.1	2.3	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C



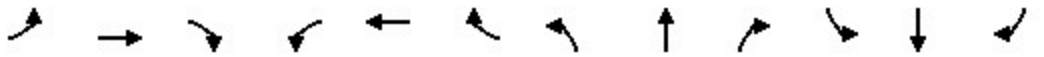
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Future Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.98		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1626	3330		1787	3574	1584		3457		1698	1775	2745
Flt Permitted	0.95	0.55		0.95	1.00	1.00		0.88		0.95	0.91	1.00
Satd. Flow (perm)	1626	1856		1787	3574	1584		3067		1698	1629	2745
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	573	375	31	94	458	375	42	354	73	375	302	656
RTOR Reduction (vph)	0	3	0	0	0	49	0	13	0	0	0	19
Lane Group Flow (vph)	321	655	0	94	458	326	0	456	0	330	347	637
Confl. Peds. (#/hr)	3		2	2		3	5		7	7		5
Confl. Bikes (#/hr)			2			2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Effective Green, g (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Actuated g/C Ratio	0.24	0.47		0.06	0.20	0.41		0.21		0.21	0.46	0.70
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	392	1232		110	701	697		655		355	776	2015
v/s Ratio Prot	c0.20	0.13		0.05	c0.13	0.10				c0.19	0.09	0.08
v/s Ratio Perm		0.12				0.11		c0.15			0.11	0.16
v/c Ratio	0.82	0.53		0.85	0.65	0.47		0.70		0.93	0.45	0.32
Uniform Delay, d1	41.1	21.3		53.3	42.5	25.0		41.7		44.5	21.2	6.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	12.5	0.4		43.8	2.2	0.5		6.0		30.0	0.4	0.1
Delay (s)	53.7	21.8		97.1	44.7	25.5		47.7		74.5	21.6	6.8
Level of Service	D	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		32.2			42.3			47.7			27.4	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Future Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1765	3574	1575	1785	3558		1698	1705	1562	1756	1740	
Flt Permitted	0.47	1.00	1.00	0.25	1.00		0.95	0.62	1.00	0.95	1.00	
Satd. Flow (perm)	867	3574	1575	460	3558		1698	1101	1562	1756	1740	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	433	433	485	495	10	464	10	423	10	10	10
RTOR Reduction (vph)	0	0	272	0	1	0	0	0	51	0	8	0
Lane Group Flow (vph)	10	433	161	485	504	0	237	237	372	10	12	0
Confl. Peds. (#/hr)	17		8	8		17			13	13		
Confl. Bikes (#/hr)			2			3			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Effective Green, g (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Actuated g/C Ratio	0.20	0.19	0.37	0.48	0.44		0.18	0.44	0.65	0.01	0.22	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	178	685	644	559	1563		304	593	1074	11	388	
v/s Ratio Prot	0.00	0.12	0.04	c0.22	0.14		c0.14	0.07	0.09	0.01	0.01	
v/s Ratio Perm	0.01		0.06	c0.20				c0.10	0.15			
v/c Ratio	0.06	0.63	0.25	0.87	0.32		0.78	0.40	0.35	0.91	0.03	
Uniform Delay, d1	34.2	39.3	23.0	21.7	19.4		41.4	20.1	8.3	52.5	32.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	1.9	0.2	13.4	0.1		11.9	0.4	0.2	217.6	0.2	
Delay (s)	34.3	41.2	23.2	35.1	19.5		53.3	20.5	8.5	270.1	32.3	
Level of Service	C	D	C	D	B		D	C	A	F	C	
Approach Delay (s/veh)		32.3			27.1			23.5			111.6	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Future Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	73	594	104	156	229	115	94	740	292	188	802	52
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	332	692	121	244	616	296	373	1189	469	337	1727	112
Arrive On Green	0.04	0.23	0.23	0.08	0.27	0.27	0.04	0.47	0.47	0.07	0.50	0.50
Sat Flow, veh/h	1810	3055	533	1810	2326	1115	1810	2514	992	1810	3437	223
Grp Volume(v), veh/h	73	350	348	156	175	169	94	531	501	188	421	433
Grp Sat Flow(s),veh/h/ln	1810	1805	1783	1810	1805	1636	1810	1805	1701	1810	1805	1855
Q Serve(g_s), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Cycle Q Clear(g_c), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Prop In Lane	1.00		0.30	1.00		0.68	1.00		0.58	1.00		0.12
Lane Grp Cap(c), veh/h	332	409	404	244	478	434	373	854	805	337	907	932
V/C Ratio(X)	0.22	0.86	0.86	0.64	0.37	0.39	0.25	0.62	0.62	0.56	0.46	0.46
Avail Cap(c_a), veh/h	336	478	473	310	610	553	412	854	805	454	907	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	40.6	40.7	30.0	32.7	33.0	14.5	21.5	21.5	16.4	17.7	17.7
Incr Delay (d2), s/veh	0.3	12.8	13.4	2.8	0.5	0.6	0.4	3.4	3.6	1.4	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	11.6	11.5	3.7	4.4	4.2	1.5	12.8	12.1	2.9	8.6	8.8
LnGrp Delay(d), s/veh	30.8	53.4	54.0	32.8	33.2	33.5	14.8	24.9	25.1	17.9	19.4	19.3
LnGrp LOS	C	D	D	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		771			500			1126			1042	
Approach Delay, s/veh		51.6			33.2			24.2			19.1	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	55.8	13.0	28.8	8.7	59.0	8.8	33.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	47.0	13.0	29.0	7.0	55.0	5.0	37.0
Max Q Clear Time (g_c+I1), s	7.6	26.1	8.9	22.5	4.9	18.6	5.4	11.2
Green Ext Time (p_c), s	0.3	7.0	0.1	2.3	0.0	6.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Future Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	412	979	113	577	979	144	206	990	536	93	526	216
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	580	2669	307	581	2939	899	151	1324	582	104	624	255
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.08	0.37	0.37	0.25	0.25	0.25
Sat Flow, veh/h	988	4709	542	1018	5187	1587	1810	3610	1587	347	2496	1021
Grp Volume(v), veh/h	412	718	374	577	979	144	206	990	536	93	380	362
Grp Sat Flow(s),veh/h/ln	494	1729	1793	509	1729	1587	1810	1805	1587	347	1805	1711
Q Serve(g_s), s	45.8	13.6	13.7	54.3	12.1	5.2	10.0	28.7	38.8	15.3	24.0	24.2
Cycle Q Clear(g_c), s	57.9	13.6	13.7	68.0	12.1	5.2	10.0	28.7	38.8	30.0	24.0	24.2
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
V/C Ratio(X)	0.71	0.37	0.37	0.99	0.33	0.16	1.37	0.75	0.92	0.89	0.84	0.85
Avail Cap(c_a), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	14.2	14.2	38.3	13.9	12.4	55.0	33.2	36.3	56.4	42.7	42.8
Incr Delay (d2), s/veh	4.0	0.1	0.2	35.7	0.1	0.1	201.2	3.9	22.2	62.7	17.1	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.5	6.8	12.4	5.7	2.3	13.4	15.0	20.6	4.9	14.1	13.5
LnGrp Delay(d), s/veh	33.4	14.3	14.5	74.0	14.0	12.5	256.2	37.1	58.6	119.0	59.9	61.1
LnGrp LOS	C	B	B	E	B	B	F	D	E	F	E	E
Approach Vol, veh/h		1504			1700			1732			835	
Approach Delay, s/veh		19.6			34.2			69.8			67.0	
Approach LOS		B			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		48.0		72.0	14.0	34.0		72.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		44.0		68.0	10.0	30.0		68.0
Max Q Clear Time (g_c+I1), s		40.8		59.9	12.0	32.0		70.0
Green Ext Time (p_c), s		2.3		6.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.8
HCM 2010 LOS	D

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	260	80	70	1230	1270	210
Future Volume (veh/h)	260	80	70	1230	1270	210
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	260	80	70	1230	1270	210
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	300	268	90	2711	2054	337
Arrive On Green	0.17	0.17	0.05	0.76	0.67	0.67
Sat Flow, veh/h	1792	1599	1792	3668	3155	502
Grp Volume(v), veh/h	260	80	70	1230	737	743
Grp Sat Flow(s),veh/h/ln	1792	1599	1792	1787	1787	1776
Q Serve(g_s), s	15.3	4.7	4.2	13.7	24.9	25.6
Cycle Q Clear(g_c), s	15.3	4.7	4.2	13.7	24.9	25.6
Prop In Lane	1.00	1.00	1.00			0.28
Lane Grp Cap(c), veh/h	300	268	90	2711	1199	1192
V/C Ratio(X)	0.87	0.30	0.77	0.45	0.61	0.62
Avail Cap(c_a), veh/h	497	444	166	2711	1199	1192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	39.4	50.7	4.8	9.9	10.1
Incr Delay (d2), s/veh	8.6	0.6	13.1	0.5	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	4.4	2.4	6.9	12.9	13.2
LnGrp Delay(d), s/veh	52.4	40.1	63.8	5.4	12.3	12.5
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	340			1300	1480	
Approach Delay, s/veh	49.5			8.5	12.4	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		86.0		22.1	9.5	76.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		82.0		30.0	10.0	68.0		
Max Q Clear Time (g_c+I1), s		15.7		17.3	6.2	27.6		
Green Ext Time (p_c), s		11.9		0.8	0.0	13.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Future Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1900	1881	1900	1881	0	1881
Adj Flow Rate, veh/h	758	611	0	0	874	0	11	189	21	853	0	547
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1	1	0	1
Cap, veh/h	794	2512	0	0	977	437	19	323	36	0	0	0
Arrive On Green	0.38	0.70	0.00	0.00	0.27	0.00	0.21	0.21	0.21	0.00	0.00	0.00
Sat Flow, veh/h	1792	3668	0	0	3668	1599	91	1572	175		0	
Grp Volume(v), veh/h	758	611	0	0	874	0	221	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1792	1787	0	0	1787	1599	1838	0	0			
Q Serve(g_s), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Cycle Q Clear(g_c), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.05		0.10			
Lane Grp Cap(c), veh/h	794	2512	0	0	977	437	378	0	0			
V/C Ratio(X)	0.95	0.24	0.00	0.00	0.89	0.00	0.58	0.00	0.00			
Avail Cap(c_a), veh/h	844	2655	0	0	1021	457	378	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	19.9	4.7	0.0	0.0	30.6	0.0	31.4	0.0	0.0			
Incr Delay (d2), s/veh	20.1	0.0	0.0	0.0	10.0	0.0	6.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	21.9	2.6	0.0	0.0	11.4	0.0	5.5	0.0	0.0			
LnGrp Delay(d), s/veh	40.0	4.7	0.0	0.0	40.6	0.0	37.9	0.0	0.0			
LnGrp LOS	D	A			D		D					
Approach Vol, veh/h		1369			874			221				
Approach Delay, s/veh		24.2			40.6			37.9				
Approach LOS		C			D			D				

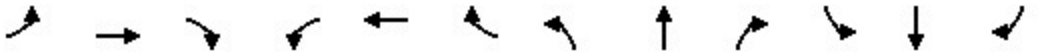
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.0		65.5			37.6	27.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		18.0		65.0			36.0	25.0
Max Q Clear Time (g_c+I1), s		11.5		7.4			32.5	22.6
Green Ext Time (p_c), s		0.6		4.6			1.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Future Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	163	1245	255	173	755	122	306	959	163	173	827	122
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1343	275	201	1424	228	362	1295	565	228	1010	149
Arrive On Green	0.11	0.32	0.32	0.11	0.32	0.32	0.11	0.37	0.37	0.07	0.33	0.33
Sat Flow, veh/h	1774	4213	863	1774	4403	705	3442	3539	1544	3442	3089	456
Grp Volume(v), veh/h	163	1002	498	173	580	297	306	959	163	173	474	475
Grp Sat Flow(s),veh/h/ln	1774	1695	1686	1774	1695	1718	1721	1770	1544	1721	1770	1775
Q Serve(g_s), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Cycle Q Clear(g_c), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Prop In Lane	1.00		0.51	1.00		0.41	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	192	1080	537	201	1096	555	362	1295	565	228	579	581
V/C Ratio(X)	0.85	0.93	0.93	0.86	0.53	0.54	0.85	0.74	0.29	0.76	0.82	0.82
Avail Cap(c_a), veh/h	287	1096	545	226	1096	555	381	1295	565	234	579	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	38.7	38.7	51.2	32.5	32.5	51.7	32.4	26.4	53.9	36.3	36.3
Incr Delay (d2), s/veh	14.0	13.1	22.1	25.2	0.5	1.0	15.5	3.8	1.3	13.0	12.2	12.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	17.7	18.9	6.9	7.7	8.1	5.7	14.1	3.9	3.2	16.0	16.1
LnGrp Delay(d), s/veh	65.4	51.8	60.8	76.4	32.9	33.6	67.2	36.3	27.7	67.0	48.6	48.5
LnGrp LOS	E	D	E	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1663			1050			1428			1122	
Approach Delay, s/veh		55.9			40.3			41.9			51.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	47.0	17.3	41.5	16.4	42.4	16.7	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	15.0	38.0	13.0	38.0	19.0	34.0
Max Q Clear Time (g_c+I1), s	7.8	29.7	13.3	35.6	12.3	30.9	12.6	18.7
Green Ext Time (p_c), s	0.0	5.6	0.1	1.9	0.1	3.1	0.2	4.9

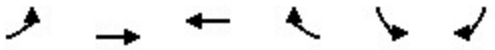
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Future Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	226	1204	237	183	796	204	183	925	258	269	957	161
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	1332	577	211	950	241	211	1110	674	298	1282	797
Arrive On Green	0.14	0.26	0.26	0.12	0.24	0.24	0.12	0.31	0.31	0.17	0.36	0.36
Sat Flow, veh/h	1774	5085	1484	1774	4006	1016	1774	3539	1550	1774	3539	1572
Grp Volume(v), veh/h	226	1204	237	183	672	328	183	925	258	269	957	161
Grp Sat Flow(s),veh/h/ln	1774	1695	1484	1774	1695	1631	1774	1770	1550	1774	1770	1572
Q Serve(g_s), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Cycle Q Clear(g_c), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	1332	577	211	804	387	211	1110	674	298	1282	797
V/C Ratio(X)	0.89	0.90	0.41	0.87	0.84	0.85	0.87	0.83	0.38	0.90	0.75	0.20
Avail Cap(c_a), veh/h	291	1360	585	230	804	387	245	1110	674	337	1282	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	41.4	26.4	50.2	42.1	42.2	50.2	37.0	22.4	47.3	32.3	15.8
Incr Delay (d2), s/veh	24.5	8.7	0.5	26.5	7.7	15.9	23.8	7.4	1.6	24.7	4.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	13.4	5.7	7.3	11.1	11.7	7.1	14.9	5.9	10.5	14.1	3.0
LnGrp Delay(d), s/veh	73.2	50.1	26.9	76.7	49.8	58.1	74.0	44.4	24.1	72.0	36.3	16.3
LnGrp LOS	E	D	C	E	D	E	E	D	C	E	D	B
Approach Vol, veh/h		1667			1183			1366			1387	
Approach Delay, s/veh		49.9			56.3			44.5			40.9	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.5	40.4	17.8	34.4	17.8	46.0	20.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	36.0	15.0	31.0	16.0	42.0	19.0	27.0
Max Q Clear Time (g_c+I1), s	19.2	30.2	13.8	28.5	13.7	29.4	16.5	24.2
Green Ext Time (p_c), s	0.2	3.3	0.1	1.8	0.1	5.5	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.7
HCM 2010 LOS	D



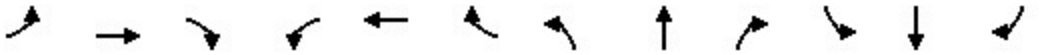
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	1020	1260	230	680	200
Future Volume (vph)	30	1020	1260	230	680	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1686	3374	3374	1469	3271	1374
Flt Permitted	0.25	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	444	3374	3374	1469	3271	1374
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	31	1041	1286	235	694	204
RTOR Reduction (vph)	0	0	0	141	5	8
Lane Group Flow (vph)	31	1041	1286	94	709	176
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				2		
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	16.0	16.0	16.0	16.0	16.0	16.0
Effective Green, g (s)	16.0	16.0	16.0	16.0	16.0	16.0
Actuated g/C Ratio	0.40	0.40	0.40	0.40	0.40	0.40
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	177	1349	1349	587	1308	549
v/s Ratio Prot		0.31	c0.38		c0.22	
v/s Ratio Perm	0.07			0.06		0.13
v/c Ratio	0.18	0.77	0.95	0.16	0.54	0.32
Uniform Delay, d1	7.7	10.4	11.6	7.7	9.2	8.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.5	2.8	14.7	0.1	1.6	1.5
Delay (s)	8.2	13.2	26.4	7.8	10.8	9.8
Level of Service	A	B	C	A	B	A
Approach Delay (s/veh)		13.1	23.5		10.6	
Approach LOS		B	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	40.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Future Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	1444	91	71	1061	51	111	51	91	81	71	30
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	2646	167	212	2692	129	514	658	555	507	658	548
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	504	4880	307	337	4963	238	1281	1863	1571	1234	1863	1551
Grp Volume(v), veh/h	30	1003	532	71	724	388	111	51	91	81	71	30
Grp Sat Flow(s),veh/h/ln	504	1695	1797	337	1695	1811	1281	1863	1571	1234	1863	1551
Q Serve(g_s), s	2.8	14.7	14.7	13.3	9.5	9.5	4.9	1.4	3.0	3.6	2.0	1.0
Cycle Q Clear(g_c), s	12.3	14.7	14.7	28.0	9.5	9.5	6.8	1.4	3.0	5.0	2.0	1.0
Prop In Lane	1.00		0.17	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1838	974	212	1838	982	514	658	555	507	658	548
V/C Ratio(X)	0.10	0.55	0.55	0.33	0.39	0.39	0.22	0.08	0.16	0.16	0.11	0.05
Avail Cap(c_a), veh/h	592	3769	1997	404	3769	2014	514	658	555	507	658	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	11.4	11.4	20.5	10.2	10.2	18.9	16.4	17.0	18.1	16.6	16.3
Incr Delay (d2), s/veh	0.1	0.3	0.5	0.9	0.1	0.3	1.0	0.2	0.6	0.7	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.9	7.4	1.3	4.5	4.8	1.9	0.8	1.4	1.3	1.1	0.4
LnGrp Delay(d), s/veh	13.9	11.6	11.9	21.4	10.3	10.4	19.9	16.7	17.6	18.8	17.0	16.5
LnGrp LOS	B	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1565			1183			253			182	
Approach Delay, s/veh		11.8			11.0			18.4			17.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		45.5		31.0		45.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		27.0		85.0		27.0		85.0
Max Q Clear Time (g_c+I1), s		8.8		16.7		7.0		30.0
Green Ext Time (p_c), s		0.9		16.3		0.7		11.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Future Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	0	61	41	10	10	71	398	71	10	439	10
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	301	54	8	289	195	1076	1150	42	1372	1152
Arrive On Green	0.19	0.00	0.19	0.19	0.19	0.19	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	0	0	1571	0	40	1507	217	1451	1550	15	1850	1553
Grp Volume(v), veh/h	10	0	61	51	0	10	469	0	71	449	0	10
Grp Sat Flow(s),veh/h/ln	0	0	1571	40	0	1507	1667	0	1550	1865	0	1553
Q Serve(g_s), s	0.0	0.0	3.9	0.0	0.0	0.6	0.0	0.0	1.5	0.0	0.0	0.2
Cycle Q Clear(g_c), s	23.0	0.0	3.9	23.0	0.0	0.6	10.3	0.0	1.5	9.7	0.0	0.2
Prop In Lane	1.00		1.00	0.80		1.00	0.15		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
V/C Ratio(X)	0.17	0.00	0.20	0.83	0.00	0.03	0.37	0.00	0.06	0.32	0.00	0.01
Avail Cap(c_a), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	40.8	56.6	0.0	39.5	5.3	0.0	4.2	5.3	0.0	4.0
Incr Delay (d2), s/veh	1.3	0.0	0.3	57.7	0.0	0.0	0.8	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.7	2.7	0.0	0.3	5.5	0.0	0.7	5.2	0.0	0.1
LnGrp Delay(d), s/veh	61.3	0.0	41.1	114.3	0.0	39.5	6.2	0.0	4.3	5.9	0.0	4.0
LnGrp LOS	E		D	F		D	A		A	A		A
Approach Vol, veh/h		71			61			540			459	
Approach Delay, s/veh		44.0			102.0			5.9			5.8	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		93.0		27.0		93.0		27.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		89.0		23.0		89.0		23.0
Max Q Clear Time (g_c+I1), s		12.3		25.0		11.7		25.0
Green Ext Time (p_c), s		4.2		0.0		3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Future Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	137	105	105	63	53	74	53	1200	84	84	1189	53
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	300	296	81	77	108	103	1953	137	107	2169	956
Arrive On Green	0.09	0.16	0.16	0.05	0.11	0.11	0.03	0.58	0.58	0.06	0.61	0.61
Sat Flow, veh/h	1774	1863	1548	1774	691	964	3442	3356	235	1774	3539	1560
Grp Volume(v), veh/h	137	105	105	63	0	127	53	632	652	84	1189	53
Grp Sat Flow(s),veh/h/ln	1774	1863	1548	1774	0	1655	1721	1770	1821	1774	1770	1560
Q Serve(g_s), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Cycle Q Clear(g_c), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Prop In Lane	1.00		1.00	1.00		0.58	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	168	300	296	81	0	185	103	1030	1060	107	2169	956
V/C Ratio(X)	0.82	0.35	0.35	0.78	0.00	0.68	0.52	0.61	0.62	0.78	0.55	0.06
Avail Cap(c_a), veh/h	284	421	397	151	0	250	195	1030	1060	201	2169	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	39.6	37.3	50.1	0.0	45.3	50.7	14.4	14.4	49.1	12.0	8.2
Incr Delay (d2), s/veh	9.3	0.7	0.7	14.5	0.0	4.7	4.0	2.7	2.7	11.6	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	2.8	2.7	2.1	0.0	3.8	0.8	12.7	13.1	2.8	10.4	0.6
LnGrp Delay(d), s/veh	56.4	40.3	38.0	64.6	0.0	50.0	54.7	17.2	17.1	60.7	13.0	8.3
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	A
Approach Vol, veh/h		347			190			1337			1326	
Approach Delay, s/veh		46.0			54.8			18.6			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	65.7	8.9	21.1	7.2	69.0	14.0	15.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	59.0	9.0	24.0	6.0	65.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	7.0	26.7	5.7	8.2	3.6	22.8	10.0	9.8
Green Ext Time (p_c), s	0.1	10.2	0.0	0.7	0.0	11.0	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Future Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	33	43	98	54	33	11	76	293	54	11	370	43
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	10.9	11.7	17.5	17.9
HCM LOS	B	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	21%	0%	43%	0%	63%	0%	3%	0%
Vol Thru, %	79%	0%	57%	0%	38%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	340	50	70	90	80	10	350	40
LT Vol	70	0	30	0	50	0	10	0
Through Vol	270	0	40	0	30	0	340	0
RT Vol	0	50	0	90	0	10	0	40
Lane Flow Rate	370	54	76	98	87	11	380	43
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.63	0.08	0.154	0.172	0.182	0.02	0.639	0.064
Departure Headway (Hd)	6.133	5.319	7.279	6.344	7.54	6.503	6.047	5.323
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	588	670	490	562	473	546	593	670
Service Time	3.892	3.078	5.061	4.126	5.329	4.291	3.807	3.083
HCM Lane V/C Ratio	0.629	0.081	0.155	0.174	0.184	0.02	0.641	0.064
HCM Control Delay, s/veh	18.8	8.5	11.4	10.5	12	9.4	19	8.5
HCM Lane LOS	C	A	B	B	B	A	C	A
HCM 95th-tile Q	4.4	0.3	0.5	0.6	0.7	0.1	4.5	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Future Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	211	937	179	53	726	221	168	905	63	284	663	221
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	188	1340	577	138	1340	586	349	1891	132	292	1996	878
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	596	3574	1540	508	3574	1563	632	3386	236	584	3574	1573
Grp Volume(v), veh/h	211	937	179	53	726	221	168	478	490	284	663	221
Grp Sat Flow(s),veh/h/ln	596	1787	1540	508	1787	1563	632	1787	1835	584	1787	1573
Q Serve(g_s), s	25.9	26.6	9.9	11.8	19.1	12.4	23.6	19.3	19.3	47.7	12.1	8.7
Cycle Q Clear(g_c), s	45.0	26.6	9.9	38.5	19.1	12.4	35.6	19.3	19.3	67.0	12.1	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
V/C Ratio(X)	1.12	0.70	0.31	0.39	0.54	0.38	0.48	0.48	0.48	0.97	0.33	0.25
Avail Cap(c_a), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	31.8	26.5	48.1	29.4	27.3	24.0	16.0	16.0	40.5	14.4	13.6
Incr Delay (d2), s/veh	101.3	1.6	0.3	1.8	0.4	0.4	4.7	1.6	1.6	46.2	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	13.4	4.2	1.7	9.5	5.4	4.6	9.9	10.1	13.1	6.0	3.9
LnGrp Delay(d), s/veh	152.5	33.4	26.8	49.8	29.9	27.7	28.7	17.6	17.6	86.7	14.8	14.3
LnGrp LOS	F	C	C	D	C	C	C	B	B	F	B	B
Approach Vol, veh/h		1327			1000			1136			1168	
Approach Delay, s/veh		51.4			30.4			19.2			32.2	
Approach LOS		D			C			B			C	

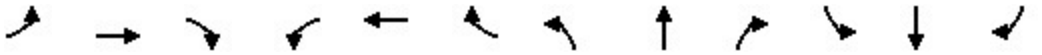
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		49.0		71.0		49.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		45.0		67.0		45.0
Max Q Clear Time (g_c+I1), s		37.6		47.0		69.0		40.5
Green Ext Time (p_c), s		8.7		0.0		0.0		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	900	130	140	820	240	110	930	220	90	1030	330
Future Volume (veh/h)	230	900	130	140	820	240	110	930	220	90	1030	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	240	938	135	146	854	250	115	969	229	94	1073	344
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	268	1293	185	173	914	266	168	1143	270	117	1490	654
Arrive On Green	0.15	0.29	0.29	0.10	0.24	0.24	0.05	0.41	0.41	0.07	0.43	0.43
Sat Flow, veh/h	1757	4437	636	1757	3851	1120	3408	2803	661	1757	3505	1539
Grp Volume(v), veh/h	240	709	364	146	744	360	115	605	593	94	1073	344
Grp Sat Flow(s),veh/h/ln	1757	1679	1716	1757	1679	1613	1704	1752	1712	1757	1752	1539
Q Serve(g_s), s	15.8	22.3	22.5	9.6	25.5	25.8	3.9	36.7	37.0	6.2	29.9	19.5
Cycle Q Clear(g_c), s	15.8	22.3	22.5	9.6	25.5	25.8	3.9	36.7	37.0	6.2	29.9	19.5
Prop In Lane	1.00		0.37	1.00		0.69	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	268	978	500	173	797	383	168	715	698	117	1490	654
V/C Ratio(X)	0.90	0.72	0.73	0.85	0.93	0.94	0.68	0.85	0.85	0.80	0.72	0.53
Avail Cap(c_a), veh/h	299	998	510	194	799	384	203	715	698	119	1490	654
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	37.5	37.5	52.2	44.0	44.1	55.0	31.5	31.6	54.2	28.0	25.0
Incr Delay (d2), s/veh	26.0	2.6	5.1	25.5	17.8	31.1	7.1	11.8	12.3	31.1	3.0	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	10.7	11.3	5.9	13.8	14.8	2.0	20.0	19.9	4.0	15.1	8.8
LnGrp Delay(d), s/veh	74.9	40.0	42.6	77.7	61.7	75.1	62.2	43.4	43.9	85.3	31.1	28.1
LnGrp LOS	E	D	D	E	E	E	E	D	D	F	C	C
Approach Vol, veh/h		1313			1250			1313			1511	
Approach Delay, s/veh		47.1			67.5			45.2			33.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	52.0	15.6	38.3	9.8	54.0	21.9	31.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	48.0	13.0	35.0	7.0	49.0	20.0	28.0
Max Q Clear Time (g_c+I1), s	8.2	39.0	11.6	24.5	5.9	31.9	17.8	27.8
Green Ext Time (p_c), s	0.0	4.8	0.0	4.7	0.0	8.6	0.1	0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.6
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Future Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	110	396	77	308	275	132	33	1769	231	154	1835	77
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	137	495	246	375	397	184	42	2325	302	184	2961	124
Arrive On Green	0.08	0.14	0.14	0.11	0.17	0.17	0.02	0.51	0.51	0.10	0.59	0.59
Sat Flow, veh/h	1792	3574	1506	3476	2337	1084	1792	4589	595	1792	5051	212
Grp Volume(v), veh/h	110	396	77	308	208	199	33	1317	683	154	1243	669
Grp Sat Flow(s),veh/h/ln	1792	1787	1506	1738	1787	1634	1792	1712	1761	1792	1712	1839
Q Serve(g_s), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Cycle Q Clear(g_c), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Prop In Lane	1.00		1.00	1.00		0.66	1.00		0.34	1.00		0.12
Lane Grp Cap(c), veh/h	137	495	246	375	303	277	42	1734	892	184	2007	1078
V/C Ratio(X)	0.80	0.80	0.31	0.82	0.69	0.72	0.79	0.76	0.77	0.84	0.62	0.62
Avail Cap(c_a), veh/h	210	580	282	470	322	295	97	1734	892	259	2007	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	46.3	41.1	48.4	43.2	43.5	53.9	21.9	22.1	48.8	14.9	14.9
Incr Delay (d2), s/veh	11.9	6.8	0.7	9.1	5.5	7.6	27.6	3.2	6.2	15.1	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	6.4	2.1	5.1	6.5	6.3	1.3	16.9	18.2	5.4	12.7	14.0
LnGrp Delay(d), s/veh	62.3	53.1	41.8	57.5	48.8	51.1	81.4	25.1	28.3	63.9	16.4	17.6
LnGrp LOS	E	D	D	E	D	D	F	C	C	E	B	B
Approach Vol, veh/h		583			715			2033			2066	
Approach Delay, s/veh		53.3			53.2			27.1			20.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	60.2	16.0	19.3	6.6	69.0	12.5	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	55.0	15.0	18.0	6.0	65.0	13.0	20.0
Max Q Clear Time (g_c+I1), s	11.4	36.7	11.6	13.9	4.0	28.2	8.7	14.8
Green Ext Time (p_c), s	0.1	13.2	0.3	1.0	0.0	19.5	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1050	30	10	350	70	10	0	20	60	0	60
Future Volume (veh/h)	60	1050	30	10	350	70	10	0	20	60	0	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	65	1141	33	11	380	76	11	0	22	65	0	65
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	117	1549	44	67	1361	266	661	0	632	353	25	298
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.40	0.00	0.40	0.40	0.00	0.40
Sat Flow, veh/h	121	3208	92	23	2820	551	1390	0	1583	684	63	747
Grp Volume(v), veh/h	634	0	605	247	0	220	11	0	22	130	0	0
Grp Sat Flow(s),veh/h/ln	1742	0	1679	1796	0	1598	1390	0	1583	1494	0	0
Q Serve(g_s), s	9.6	0.0	19.7	0.0	0.0	5.6	0.0	0.0	0.6	1.6	0.0	0.0
Cycle Q Clear(g_c), s	19.4	0.0	19.7	5.3	0.0	5.6	0.3	0.0	0.6	3.6	0.0	0.0
Prop In Lane	0.10		0.05	0.04		0.35	1.00		1.00	0.50		0.50
Lane Grp Cap(c), veh/h	900	0	811	923	0	771	661	0	632	676	0	0
V/C Ratio(X)	0.71	0.00	0.75	0.27	0.00	0.29	0.02	0.00	0.03	0.19	0.00	0.00
Avail Cap(c_a), veh/h	2206	0	2109	2197	0	2007	661	0	632	676	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.9	0.0	14.1	10.4	0.0	10.5	12.3	0.0	12.4	13.3	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	1.4	0.2	0.0	0.2	0.0	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	0.0	9.4	2.8	0.0	2.5	0.1	0.0	0.3	1.7	0.0	0.0
LnGrp Delay(d), s/veh	14.9	0.0	15.5	10.6	0.0	10.7	12.3	0.0	12.5	13.9	0.0	0.0
LnGrp LOS	B		B	B		B	B		B	B		
Approach Vol, veh/h		1239			467			33			130	
Approach Delay, s/veh		15.2			10.6			12.4			13.9	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		36.7		31.0		36.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		27.0		85.0		27.0		85.0
Max Q Clear Time (g_c+I1), s		2.6		21.7		5.6		7.6
Green Ext Time (p_c), s		0.1		11.0		0.7		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	760	10	10	440	10	10	0	10	20	0	10
Future Volume (veh/h)	10	760	10	10	440	10	10	0	10	20	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	826	11	11	478	11	11	0	11	22	0	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	1239	16	81	1213	28	438	33	366	571	23	238
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.49	0.00	0.49	0.49	0.00	0.49
Sat Flow, veh/h	14	3474	46	23	3401	77	683	68	751	931	47	489
Grp Volume(v), veh/h	444	0	404	261	0	239	22	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	1848	0	1687	1820	0	1681	1503	0	0	1467	0	0
Q Serve(g_s), s	0.0	0.0	10.4	0.0	0.0	5.5	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.3	0.0	10.4	5.4	0.0	5.5	0.3	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.02		0.03	0.04		0.05	0.50		0.50	0.67		0.33
Lane Grp Cap(c), veh/h	731	0	602	722	0	600	838	0	0	832	0	0
V/C Ratio(X)	0.61	0.00	0.67	0.36	0.00	0.40	0.03	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	3162	0	2861	3037	0	2852	838	0	0	832	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	13.9	0.0	14.0	12.3	0.0	12.4	6.8	0.0	0.0	6.9	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.3	0.3	0.0	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	0.0	5.0	2.8	0.0	2.6	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	14.8	0.0	15.3	12.6	0.0	12.8	6.9	0.0	0.0	7.0	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		848			500			22			33	
Approach Delay, s/veh		15.0			12.7			6.9			7.0	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		22.3		29.0		22.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		87.0		25.0		87.0
Max Q Clear Time (g_c+I1), s		2.3		12.4		2.5		7.5
Green Ext Time (p_c), s		0.1		5.9		0.1		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	730	90	10	440	20	40	10	10	20	0	10
Future Volume (veh/h)	10	730	90	10	440	20	40	10	10	20	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	793	98	11	478	22	43	11	11	22	0	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	69	1141	140	74	1225	56	570	146	125	561	21	238
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.49	0.49	0.49	0.49	0.00	0.49
Sat Flow, veh/h	13	3085	378	23	3313	151	950	298	254	930	42	486
Grp Volume(v), veh/h	480	0	422	267	0	244	65	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	1848	0	1628	1818	0	1669	1502	0	0	1457	0	0
Q Serve(g_s), s	0.0	0.0	12.6	0.0	0.0	6.2	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.5	0.0	12.6	6.0	0.0	6.2	1.1	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.02		0.23	0.04		0.09	0.66		0.17	0.67		0.33
Lane Grp Cap(c), veh/h	748	0	602	738	0	617	841	0	0	819	0	0
V/C Ratio(X)	0.64	0.00	0.70	0.36	0.00	0.40	0.08	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	2748	0	2394	2632	0	2453	841	0	0	819	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.3	0.0	15.3	13.2	0.0	13.3	7.7	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5	0.3	0.0	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	0.0	5.9	3.1	0.0	2.8	0.6	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	16.2	0.0	16.8	13.5	0.0	13.7	7.9	0.0	0.0	7.7	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		902			511			65			33	
Approach Delay, s/veh		16.5			13.6			7.9			7.7	
Approach LOS		B			B			A			A	

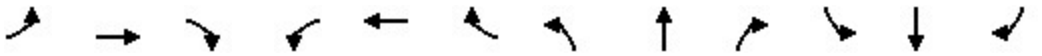
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		25.1		32.0		25.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		3.1		14.6		2.6		8.2
Green Ext Time (p_c), s		0.3		6.5		0.1		3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	710	30	50	460	10	20	10	40	30	10	10
Future Volume (veh/h)	10	710	30	50	460	10	20	10	40	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	772	33	54	500	11	22	11	43	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	1131	48	115	919	21	278	161	464	541	180	154
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	15	3358	142	111	2729	63	374	311	892	842	347	297
Grp Volume(v), veh/h	429	0	387	273	0	292	76	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1846	0	1670	1219	0	1684	1576	0	0	1486	0	0
Q Serve(g_s), s	0.0	0.0	11.2	1.1	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.1	0.0	11.2	12.3	0.0	7.8	1.3	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.03		0.09	0.20		0.04	0.29		0.57	0.60		0.20
Lane Grp Cap(c), veh/h	688	0	562	488	0	567	903	0	0	876	0	0
V/C Ratio(X)	0.62	0.00	0.69	0.56	0.00	0.51	0.08	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2773	0	2485	2078	0	2506	903	0	0	876	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.9	0.0	16.0	14.6	0.0	14.8	6.7	0.0	0.0	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5	1.0	0.0	0.7	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	5.3	3.4	0.0	3.7	0.6	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	16.9	0.0	17.5	15.6	0.0	15.6	6.9	0.0	0.0	6.8	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		816			565			76			55	
Approach Delay, s/veh		17.2			15.6			6.9			6.8	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.0		22.8		33.0		22.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		29.0		83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s		3.3		13.2		2.8		14.3
Green Ext Time (p_c), s		0.4		5.6		0.2		3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.7
HCM 2010 LOS	B

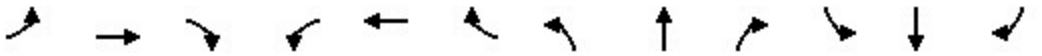


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	550	0	0	520	480	0	0	0	110	0	90
Future Volume (vph)	150	550	0	0	520	480	0	0	0	110	0	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0			4.0					4.0	4.0	4.0
Lane Util. Factor		0.95			0.95					0.95	0.91	0.95
Frt		1.00			0.93					1.00	0.94	0.85
Flt Protected		0.99			1.00					0.95	0.97	1.00
Satd. Flow (prot)		3502			3284					1681	1547	1504
Flt Permitted		0.51			1.00					0.95	0.89	1.00
Satd. Flow (perm)		1821			3284					1681	1419	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	598	0	0	565	522	0	0	0	120	0	98
RTOR Reduction (vph)	0	0	0	0	218	0	0	0	0	0	40	38
Lane Group Flow (vph)	0	761	0	0	869	0	0	0	0	76	33	31
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		35.5			35.5					7.7	35.4	35.4
Effective Green, g (s)		35.5			35.5					7.7	35.4	35.4
Actuated g/C Ratio		0.45			0.45					0.10	0.45	0.45
Clearance Time (s)		4.0			4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0			3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		819			1477					164	649	674
v/s Ratio Prot					0.26					c0.05	0.00	0.02
v/s Ratio Perm		c0.42									c0.02	
v/c Ratio		1.36dl			0.59					0.46	0.05	0.05
Uniform Delay, d1		20.5			16.2					33.6	12.3	12.2
Progression Factor		1.00			1.00					1.00	1.00	1.00
Incremental Delay, d2		16.6			0.6					2.1	0.0	0.1
Delay (s)		37.1			16.8					35.7	12.3	12.4
Level of Service		D			B					D	B	B
Approach Delay (s/veh)		37.1			16.8			0.0			20.5	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.3%	ICU Level of Service	B
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	550	10	10	730	1330	10	10	10	180	10	90
Future Volume (vph)	190	550	10	10	730	1330	10	10	10	180	10	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.96		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		1750		1681	1607	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.90		0.81	0.79	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		1608		1436	1327	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	598	11	11	793	1446	11	11	11	196	11	98
RTOR Reduction (vph)	0	0	3	0	0	231	0	9	0	0	3	76
Lane Group Flow (vph)	207	598	8	11	793	1215	0	24	0	108	106	12
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	12.0	93.4	93.4	0.8	82.2	82.2		17.0		17.0	17.0	17.0
Effective Green, g (s)	12.0	93.4	93.4	0.8	82.2	82.2		17.0		17.0	17.0	17.0
Actuated g/C Ratio	0.10	0.76	0.76	0.01	0.67	0.67		0.14		0.14	0.14	0.14
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	172	2682	1200	11	2361	1056		221		198	183	207
v/s Ratio Prot	c0.12	0.17		0.01	0.22							
v/s Ratio Perm			0.01			c0.77		0.01		0.08	c0.08	0.01
v/c Ratio	1.20	0.22	0.01	1.00	0.34	1.15		0.11		0.55	0.58	0.06
Uniform Delay, d1	55.6	4.3	3.6	61.2	8.8	20.5		46.5		49.5	49.7	46.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	133.9	0.0	0.0	271.4	0.1	79.0		1.0		10.4	12.6	0.5
Delay (s)	189.5	4.4	3.6	332.6	8.9	99.5		47.4		59.9	62.3	46.7
Level of Service	F	A	A	F	A	F		D		E	E	D
Approach Delay (s/veh)		51.3			68.7			47.4			56.9	
Approach LOS		D			E			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	63.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	106.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	130	80	230	110	20	180	730	150	10	1270	80
Future Volume (veh/h)	40	130	80	230	110	20	180	730	150	10	1270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	43	141	87	250	120	22	196	793	163	11	1380	87
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	37	101	435	50	0	435	212	2330	1042	387	2227	140
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	0	366	1583	0	0	1583	360	3539	1583	585	3382	213
Grp Volume(v), veh/h	184	0	87	370	0	22	196	793	163	11	720	747
Grp Sat Flow(s),veh/h/ln	366	0	1583	0	0	1583	360	1770	1583	585	1770	1825
Q Serve(g_s), s	0.0	0.0	5.1	0.0	0.0	1.2	50.6	11.8	4.7	1.0	28.1	28.4
Cycle Q Clear(g_c), s	33.0	0.0	5.1	33.0	0.0	1.2	79.0	11.8	4.7	12.9	28.1	28.4
Prop In Lane	0.23		1.00	0.68		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	138	0	435	50	0	435	212	2330	1042	387	1165	1202
V/C Ratio(X)	1.34	0.00	0.20	7.36	0.00	0.05	0.93	0.34	0.16	0.03	0.62	0.62
Avail Cap(c_a), veh/h	138	0	435	50	0	435	212	2330	1042	387	1165	1202
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.2	0.0	33.4	60.0	0.0	32.0	40.4	9.0	7.8	11.9	11.8	11.9
Incr Delay (d2), s/veh	192.8	0.0	0.2	2902.9	0.0	0.0	45.1	0.4	0.3	0.1	2.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	0.0	2.3	42.2	0.0	0.5	9.1	5.9	2.1	0.2	14.4	14.9
LnGrp Delay(d), s/veh	231.1	0.0	33.6	2962.9	0.0	32.0	85.5	9.4	8.1	12.0	14.3	14.3
LnGrp LOS	F		C	F		C	F	A	A	B	B	B
Approach Vol, veh/h		271			392			1152			1478	
Approach Delay, s/veh		167.7			2798.5			22.2			14.3	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		37.0		83.0		37.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		81.0		35.0		30.4		35.0
Green Ext Time (p_c), s		0.0		0.0		16.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	361.1
HCM 2010 LOS	F

ANAHEIM STATION-
NO PROJECT AM

HCM 2010 Signalized Intersection Summary
1: Manchester Ave & Katella Ave

03/25/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	780	470	300	1250	0	20	0	540	60	200	10
Future Volume (veh/h)	0	780	470	300	1250	0	20	0	540	60	200	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1827	1827	1827	0	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	0	886	534	341	1420	0	15	0	622	68	227	11
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	4	4	4	4	0	4	4	4	4	4	4
Cap, veh/h	0	2120	651	427	3733	0	24	0	757	119	920	412
Arrive On Green	0.00	0.43	0.43	0.13	0.59	0.00	0.01	0.00	0.24	0.04	0.27	0.27
Sat Flow, veh/h	0	5152	1532	3375	6540	0	1740	0	3106	3375	3471	1553
Grp Volume(v), veh/h	0	886	534	341	1420	0	15	0	622	68	227	11
Grp Sat Flow(s),veh/h/ln	0	1663	1532	1688	1571	0	1740	0	1553	1688	1736	1553
Q Serve(g_s), s	0.0	11.7	29.0	9.3	11.2	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Cycle Q Clear(g_c), s	0.0	11.7	29.0	9.3	11.2	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2120	651	427	3733	0	24	0	757	119	920	412
V/C Ratio(X)	0.00	0.42	0.82	0.80	0.38	0.00	0.63	0.00	0.82	0.57	0.25	0.03
Avail Cap(c_a), veh/h	0	3065	942	644	5327	0	111	0	757	179	920	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.0	23.9	40.1	10.1	0.0	46.3	0.0	33.8	44.8	27.3	25.7
Incr Delay (d2), s/veh	0.0	0.1	3.9	4.2	0.1	0.0	23.8	0.0	9.8	4.3	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	12.9	4.6	4.8	0.0	0.5	0.0	8.7	0.9	2.4	0.2
LnGrp Delay(d), s/veh	0.0	19.1	27.8	44.3	10.1	0.0	70.1	0.0	43.5	49.1	27.9	25.8
LnGrp LOS		B	C	D	B		E		D	D	C	C
Approach Vol, veh/h		1420			1761			637			306	
Approach Delay, s/veh		22.4			16.7			44.2			32.5	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	27.0	15.9	44.1	5.3	29.0		60.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	23.0	18.0	58.0	6.0	22.0		80.0
Max Q Clear Time (g_c+I1), s	3.9	19.9	11.3	31.0	2.8	6.9		13.2
Green Ext Time (p_c), s	0.0	0.9	0.7	9.1	0.0	1.1		14.6

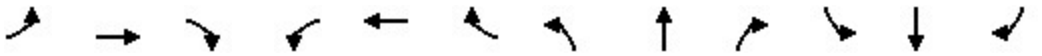
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	1440	0	0	1110	90	0	0	0	320	360	350
Future Volume (vph)	70	1440	0	0	1110	90	0	0	0	320	360	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	0.99				1.00	0.99	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.94	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3367	6285			5912	1240				1406	5472	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3367	6285			5912	1240				1406	5472	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	80	1655	0	0	1276	103	0	0	0	368	414	402
RTOR Reduction (vph)	0	0	0	0	1	62	0	0	0	0	7	0
Lane Group Flow (vph)	80	1655	0	0	1285	31	0	0	0	243	934	0
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	6.5	45.0			34.5	34.5				51.4	51.4	
Effective Green, g (s)	6.5	45.0			34.5	34.5				51.4	51.4	
Actuated g/C Ratio	0.06	0.43			0.33	0.33				0.49	0.49	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	209	2709			1953	409				692	2694	
v/s Ratio Prot	0.02	c0.26			c0.22					c0.17	0.17	
v/s Ratio Perm						0.02						
v/c Ratio	0.38	0.61			0.66	0.08				0.35	0.35	
Uniform Delay, d1	47.0	22.9			29.9	24.0				16.3	16.2	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	1.2	0.4			0.8	0.1				0.3	0.1	
Delay (s)	48.2	23.4			30.7	24.1				16.6	16.3	
Level of Service	D	C			C	C				B	B	
Approach Delay (s/veh)		24.5			30.3			0.0			16.4	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	104.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	1220	50	40	790	60	60	70	20	80	10	360
Future Volume (vph)	440	1220	50	40	790	60	60	70	20	80	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	4988	1504	1736	4988	1515	1736	1758		1730	1827	1531
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00		0.67	1.00	1.00
Satd. Flow (perm)	1736	4988	1504	1736	4988	1515	1370	1758		1227	1827	1531
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	518	1435	59	47	929	71	71	82	24	94	12	424
RTOR Reduction (vph)	0	0	27	0	0	53	0	9	0	0	0	303
Lane Group Flow (vph)	518	1435	32	47	929	18	71	97	0	94	12	121
Confl. Peds. (#/hr)	5		3	3		5			2	2		
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	35.7	56.1	56.1	5.9	26.3	26.3	29.5	29.5		29.5	29.5	29.5
Effective Green, g (s)	35.7	56.1	56.1	5.9	26.3	26.3	29.5	29.5		29.5	29.5	29.5
Actuated g/C Ratio	0.34	0.54	0.54	0.06	0.25	0.25	0.29	0.29		0.29	0.29	0.29
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	598	2703	815	98	1267	384	390	501		349	520	436
v/s Ratio Prot	c0.30	0.29		0.03	c0.19			0.06			0.01	
v/s Ratio Perm			0.02			0.01	0.05			0.08		c0.08
v/c Ratio	0.87	0.53	0.04	0.48	0.73	0.05	0.18	0.19		0.27	0.02	0.28
Uniform Delay, d1	31.7	15.2	11.1	47.3	35.4	29.1	27.9	28.0		28.7	26.6	28.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	12.5	0.2	0.0	3.7	2.2	0.1	1.0	0.9		1.9	0.1	1.6
Delay (s)	44.2	15.4	11.1	51.0	37.6	29.2	28.9	28.9		30.5	26.7	30.3
Level of Service	D	B	B	D	D	C	C	C		C	C	C
Approach Delay (s/veh)		22.7			37.6			28.9			30.3	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	103.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Future Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.98		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1770	4932		3433	4956		1770		2787	1770		2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1770	4932		3433	4956		1770		2787	1770		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	43	204	43	22	129	22	183	0	97	43	0	11
RTOR Reduction (vph)	0	34	0	0	20	0	0	0	29	0	0	3
Lane Group Flow (vph)	43	213	0	22	131	0	183	0	68	43	0	8
Confl. Peds. (#/hr)	4		4	4		4						
Confl. Bikes (#/hr)			3			3						
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Effective Green, g (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Actuated g/C Ratio	0.06	0.13		0.03	0.10		0.70		0.70	0.70		0.70
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	100	639		99	504		1243		1957	1243		1957
v/s Ratio Prot	c0.02	c0.04		0.01	0.03							
v/s Ratio Perm							c0.10		0.02	0.02		0.00
v/c Ratio	0.43	0.33		0.22	0.26		0.15		0.03	0.03		0.00
Uniform Delay, d1	39.4	34.2		41.0	35.8		4.3		3.9	3.9		3.8
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0	0.3		1.1	0.3		0.2		0.0	0.1		0.0
Delay (s)	42.4	34.5		42.1	36.1		4.5		4.0	4.0		3.8
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		35.7			36.8			4.3			3.9	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Future Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	278	1072	464	392	948	134	124	557	134	320	1206	247
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1034	447	399	1574	222	143	1171	349	383	1260	258
Arrive On Green	0.17	0.30	0.30	0.22	0.35	0.35	0.04	0.23	0.23	0.11	0.30	0.30
Sat Flow, veh/h	1774	3448	1492	1774	4489	632	3442	5085	1513	3442	4199	860
Grp Volume(v), veh/h	278	1054	482	392	715	367	124	557	134	320	974	479
Grp Sat Flow(s),veh/h/ln	1774	1695	1549	1774	1695	1732	1721	1695	1513	1721	1695	1669
Q Serve(g_s), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Cycle Q Clear(g_c), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Prop In Lane	1.00		0.96	1.00		0.37	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	309	1017	465	399	1189	607	143	1171	349	383	1017	501
V/C Ratio(X)	0.90	1.04	1.04	0.98	0.60	0.60	0.86	0.48	0.38	0.84	0.96	0.96
Avail Cap(c_a), veh/h	429	1017	465	399	1189	607	143	1171	349	488	1017	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	42.0	42.0	46.3	32.1	32.1	57.2	39.9	39.0	52.2	41.2	41.2
Incr Delay (d2), s/veh	16.9	38.1	51.6	40.2	0.9	1.7	38.7	1.4	3.2	9.7	19.6	30.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.2	22.0	17.4	9.9	10.3	2.8	5.5	4.0	5.7	18.6	19.9
LnGrp Delay(d), s/veh	65.4	80.1	93.6	86.4	32.9	33.8	95.8	41.3	42.2	62.0	60.9	72.1
LnGrp LOS	E	F	F	F	C	C	F	D	D	E	E	E
Approach Vol, veh/h		1814			1474			815			1773	
Approach Delay, s/veh		81.4			47.4			49.7			64.1	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	31.6	31.0	40.0	9.0	40.0	24.9	46.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	24.0	27.0	36.0	5.0	36.0	29.0	34.0
Max Q Clear Time (g_c+I1), s	12.9	13.4	28.4	38.0	6.3	35.8	20.4	23.0
Green Ext Time (p_c), s	0.4	3.0	0.0	0.0	0.0	0.1	0.5	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Future Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	21	31	31	83	115	52	604	73	260	1438	312
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	136	201	299	143	198	222	3704	1127	587	3034	656
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1178	672	992	1339	705	977	274	5085	1547	759	4166	901
Grp Volume(v), veh/h	94	0	52	31	0	198	52	604	73	260	1169	581
Grp Sat Flow(s),veh/h/ln	1178	0	1664	1339	0	1682	274	1695	1547	759	1695	1677
Q Serve(g_s), s	9.1	0.0	3.0	2.3	0.0	12.4	11.4	4.3	1.6	18.8	16.7	16.8
Cycle Q Clear(g_c), s	21.6	0.0	3.0	5.3	0.0	12.4	28.2	4.3	1.6	23.0	16.7	16.8
Prop In Lane	1.00		0.60	1.00		0.58	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	176	0	338	299	0	342	222	3704	1127	587	2469	1221
V/C Ratio(X)	0.53	0.00	0.15	0.10	0.00	0.58	0.23	0.16	0.06	0.44	0.47	0.48
Avail Cap(c_a), veh/h	209	0	385	337	0	389	222	3704	1127	587	2469	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	38.2	40.4	0.0	42.0	12.4	4.9	4.5	8.4	6.6	6.6
Incr Delay (d2), s/veh	2.5	0.0	0.2	0.2	0.0	1.7	2.5	0.1	0.1	2.4	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.4	0.9	0.0	5.9	1.0	2.0	0.7	4.3	8.0	8.2
LnGrp Delay(d), s/veh	54.2	0.0	38.5	40.6	0.0	43.7	14.9	5.0	4.6	10.9	7.2	7.9
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		146			229			729			2010	
Approach Delay, s/veh		48.6			43.2			5.7			7.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		27.7		89.0		27.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		30.2		23.6		25.0		14.4
Green Ext Time (p_c), s		6.6		0.2		25.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Future Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	290	86	54	344	161	75	677	32	333	1247	215
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	933	271	336	811	372	97	1621	76	373	2097	362
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.05	0.33	0.33	0.21	0.48	0.48
Sat Flow, veh/h	890	2696	783	1002	2345	1076	1774	4973	234	1774	4354	751
Grp Volume(v), veh/h	172	188	188	54	258	247	75	461	248	333	971	491
Grp Sat Flow(s),veh/h/ln	890	1770	1710	1002	1770	1651	1774	1695	1816	1774	1695	1714
Q Serve(g_s), s	18.7	7.9	8.2	4.3	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Cycle Q Clear(g_c), s	30.5	7.9	8.2	12.5	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Prop In Lane	1.00		0.46	1.00		0.65	1.00		0.13	1.00		0.44
Lane Grp Cap(c), veh/h	276	612	591	336	612	571	97	1105	592	373	1633	826
V/C Ratio(X)	0.62	0.31	0.32	0.16	0.42	0.43	0.78	0.42	0.42	0.89	0.59	0.59
Avail Cap(c_a), veh/h	388	835	807	463	835	779	192	1105	592	593	1633	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	24.4	24.4	29.0	25.5	25.6	47.5	26.7	26.8	39.1	19.2	19.2
Incr Delay (d2), s/veh	2.3	0.3	0.3	0.2	0.5	0.5	12.4	1.2	2.2	10.4	1.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	3.9	3.9	1.2	5.6	5.4	2.4	5.2	5.8	10.1	10.2	10.7
LnGrp Delay(d), s/veh	39.6	24.6	24.8	29.2	25.9	26.1	59.9	27.9	29.0	49.4	20.8	22.3
LnGrp LOS	D	C	C	C	C	C	E	C	C	D	C	C
Approach Vol, veh/h		548			559			784			1795	
Approach Delay, s/veh		29.4			26.3			31.3			26.5	
Approach LOS		C			C			C			C	

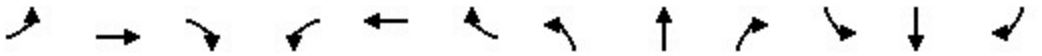
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.4	37.2		39.2	9.5	53.0		39.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	34.0	26.0		48.0	11.0	49.0		48.0
Max Q Clear Time (g_c+I1), s	20.6	12.9		32.5	6.2	23.2		14.5
Green Ext Time (p_c), s	0.8	3.5		2.7	0.0	11.2		3.4

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		27.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Future Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	11	0	622	11	100	56	722	478	122	1289	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	45	32	0	570	9	872	72	922	421	148	1637	14
Arrive On Green	0.55	0.55	0.00	0.55	0.55	0.55	0.04	0.27	0.27	0.08	0.31	0.31
Sat Flow, veh/h	0	58	0	932	16	1595	1792	3424	1562	1792	5252	45
Grp Volume(v), veh/h	22	0	0	633	0	100	56	722	478	122	840	460
Grp Sat Flow(s),veh/h/ln	58	0	0	949	0	1595	1792	1712	1562	1792	1712	1873
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Cycle Q Clear(g_c), s	65.0	0.0	0.0	65.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Prop In Lane	0.50		0.00	0.98		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	77	0	0	579	0	872	72	922	421	148	1067	584
V/C Ratio(X)	0.29	0.00	0.00	1.09	0.00	0.11	0.78	0.78	1.14	0.82	0.79	0.79
Avail Cap(c_a), veh/h	77	0	0	579	0	872	90	922	421	166	1067	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	30.3	0.0	13.0	56.5	40.2	43.4	53.7	37.3	37.3
Incr Delay (d2), s/veh	2.0	0.0	0.0	65.3	0.0	0.1	27.3	6.6	86.6	25.3	5.9	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	29.3	0.0	1.6	2.4	11.8	23.8	5.0	13.5	15.5
LnGrp Delay(d), s/veh	31.0	0.0	0.0	95.5	0.0	13.1	83.8	46.8	130.0	79.0	43.2	47.6
LnGrp LOS	C			F		B	F	D	F	E	D	D
Approach Vol, veh/h		22			733			1256			1422	
Approach Delay, s/veh		31.0			84.3			80.1			47.7	
Approach LOS		C			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	36.0		69.0	8.8	41.0		69.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	32.0		65.0	6.0	37.0		65.0
Max Q Clear Time (g_c+I1), s	10.0	34.0		67.0	5.7	28.6		67.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		67.3
HCM 2010 LOS		E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	510	200	450	590	40	160	650	260	140	1310	270
Future Volume (vph)	320	510	200	450	590	40	160	650	260	140	1310	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5893	1235	3433	5085	1541	3433	5085	1537	3433	5085	1549
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5893	1235	3433	5085	1541	3433	5085	1537	3433	5085	1549
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	337	537	211	474	621	42	168	684	274	147	1379	284
RTOR Reduction (vph)	0	21	114	0	0	34	0	0	150	0	0	158
Lane Group Flow (vph)	337	594	19	474	621	8	168	684	124	147	1379	126
Confl. Peds. (#/hr)	7		12	12		7	4		8	8		4
Confl. Bikes (#/hr)									1			3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	16.0	16.4	16.4	20.5	20.9	20.9	10.0	51.2	51.2	8.7	49.9	49.9
Effective Green, g (s)	16.0	16.4	16.4	20.5	20.9	20.9	10.0	51.2	51.2	8.7	49.9	49.9
Actuated g/C Ratio	0.14	0.15	0.15	0.18	0.19	0.19	0.09	0.45	0.45	0.08	0.44	0.44
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	486	856	179	623	942	285	304	2308	697	264	2249	685
v/s Ratio Prot	0.10	0.10		c0.14	c0.12		c0.05	0.13		0.04	c0.27	
v/s Ratio Perm			0.02			0.01			0.08			0.08
v/c Ratio	0.69	0.69	0.11	0.76	0.66	0.03	0.55	0.30	0.18	0.56	0.61	0.18
Uniform Delay, d1	46.1	45.8	41.8	43.8	42.6	37.6	49.3	19.4	18.3	50.2	24.1	19.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.3	2.4	0.3	5.5	1.7	0.0	2.2	0.3	0.6	2.5	1.3	0.6
Delay (s)	50.3	48.3	42.1	49.3	44.3	37.7	51.4	19.8	18.9	52.7	25.3	19.7
Level of Service	D	D	D	D	D	D	D	B	B	D	C	B
Approach Delay (s/veh)		48.1			46.1			24.3			26.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	112.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	20	300	0	0	0	130	830	10	10	1430	510
Future Volume (veh/h)	390	20	300	0	0	0	130	830	10	10	1430	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	429	22	330	0	0	0	143	912	11	11	1571	560
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	566	497	437	69	994	0	204	3076	37	36	2024	703
Arrive On Green	0.28	0.28	0.28	0.00	0.00	0.00	0.06	0.59	0.59	0.01	0.55	0.55
Sat Flow, veh/h	1768	1770	1554	1025	3632	0	3442	5179	62	3442	3714	1289
Grp Volume(v), veh/h	429	22	330	0	0	0	143	597	326	11	1431	700
Grp Sat Flow(s),veh/h/ln	1768	1770	1554	1025	1770	0	1721	1695	1852	1721	1695	1613
Q Serve(g_s), s	24.1	0.9	20.3	0.0	0.0	0.0	4.3	9.1	9.1	0.3	34.7	36.5
Cycle Q Clear(g_c), s	24.1	0.9	20.3	0.0	0.0	0.0	4.3	9.1	9.1	0.3	34.7	36.5
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.03	1.00		0.80
Lane Grp Cap(c), veh/h	566	497	437	69	994	0	204	2013	1100	36	1848	879
V/C Ratio(X)	0.76	0.04	0.76	0.00	0.00	0.00	0.70	0.30	0.30	0.31	0.77	0.80
Avail Cap(c_a), veh/h	813	745	654	212	1489	0	230	2013	1100	132	1848	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.7	27.4	34.3	0.0	0.0	0.0	48.3	10.5	10.5	51.4	18.7	19.1
Incr Delay (d2), s/veh	2.5	0.0	2.8	0.0	0.0	0.0	7.9	0.4	0.7	4.7	3.2	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	0.5	9.0	0.0	0.0	0.0	2.3	4.3	4.8	0.2	16.9	18.0
LnGrp Delay(d), s/veh	38.2	27.4	37.1	0.0	0.0	0.0	56.2	10.8	11.2	56.0	22.0	26.6
LnGrp LOS	D	C	D				E	B	B	E	C	C
Approach Vol, veh/h		781			0			1066			2142	
Approach Delay, s/veh		37.4			0.0			17.0			23.6	
Approach LOS		D						B			C	

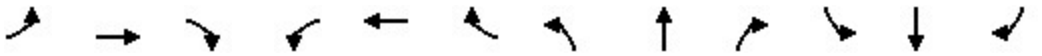
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	66.1		33.4	10.2	61.0		33.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	60.0		44.0	7.0	57.0		44.0
Max Q Clear Time (g_c+I1), s	2.3	11.1		26.1	6.3	38.5		0.0
Green Ext Time (p_c), s	0.0	6.8		3.3	0.0	13.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		24.6
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1470	80	180	620	50	360	620	630	260	1310	280
Future Volume (veh/h)	210	1470	80	180	620	50	360	620	630	260	1310	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	1598	87	196	674	54	391	674	685	283	1424	304
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	289	1741	95	252	1641	131	447	1664	536	346	1681	358
Arrive On Green	0.08	0.35	0.35	0.07	0.34	0.34	0.13	0.34	0.34	0.10	0.31	0.31
Sat Flow, veh/h	3476	4980	271	3476	4843	385	3476	4853	1564	3476	5361	1143
Grp Volume(v), veh/h	228	1098	587	196	475	253	391	674	685	283	1289	439
Grp Sat Flow(s),veh/h/ln	1738	1712	1827	1738	1712	1805	1738	1618	1564	1738	1618	1651
Q Serve(g_s), s	7.6	36.2	36.3	6.5	12.6	12.7	13.0	12.5	40.4	9.4	29.3	29.3
Cycle Q Clear(g_c), s	7.6	36.2	36.3	6.5	12.6	12.7	13.0	12.5	40.4	9.4	29.3	29.3
Prop In Lane	1.00		0.15	1.00		0.21	1.00		1.00	1.00		0.69
Lane Grp Cap(c), veh/h	289	1197	639	252	1160	611	447	1664	536	346	1522	518
V/C Ratio(X)	0.79	0.92	0.92	0.78	0.41	0.41	0.87	0.41	1.28	0.82	0.85	0.85
Avail Cap(c_a), veh/h	383	1219	650	265	1160	611	471	1664	536	442	1522	518
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	36.7	36.8	53.8	29.9	30.0	50.5	29.6	38.8	52.1	37.8	37.9
Incr Delay (d2), s/veh	7.8	10.9	18.0	13.1	0.2	0.4	15.9	0.7	138.9	9.2	6.0	15.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	18.9	21.4	3.6	6.0	6.4	7.2	5.7	38.1	5.0	13.9	15.6
LnGrp Delay(d), s/veh	60.9	47.7	54.8	66.9	30.2	30.4	66.4	30.3	177.7	61.3	43.9	53.6
LnGrp LOS	E	D	D	E	C	C	E	C	F	E	D	D
Approach Vol, veh/h		1913			924			1750			2011	
Approach Delay, s/veh		51.4			38.0			96.1			48.4	
Approach LOS		D			D			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.7	44.4	12.6	45.2	19.2	41.0	13.8	44.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	38.0	9.0	42.0	16.0	37.0	13.0	38.0
Max Q Clear Time (g_c+I1), s	11.4	42.4	8.5	38.3	15.0	31.3	9.6	14.7
Green Ext Time (p_c), s	0.3	0.0	0.0	3.0	0.2	4.4	0.2	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.5
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1020	10	40	1130	70	10	0	140	100	0	30
Future Volume (vph)	10	1020	10	40	1130	70	10	0	140	100	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.97	1.00	0.98	0.98	1.00		0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	0.99	1.00	1.00	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1751	5036	1547	1752	5036	1523	1736	1456	1456	1752		1533
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1751	5036	1547	1752	5036	1523	1736	1456	1456	1752		1533
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1109	11	43	1228	76	11	0	152	109	0	33
RTOR Reduction (vph)	0	0	7	0	0	48	0	50	50	0	0	19
Lane Group Flow (vph)	11	1109	4	43	1228	28	11	26	26	109	0	14
Confl. Peds. (#/hr)	2		1	1		2	6		6	6		6
Confl. Bikes (#/hr)						3			1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	0.9	29.5	29.5	4.8	33.4	33.4	0.9	31.1	31.1	9.2		39.4
Effective Green, g (s)	0.9	29.5	29.5	4.8	33.4	33.4	0.9	31.1	31.1	9.2		39.4
Actuated g/C Ratio	0.01	0.33	0.33	0.05	0.37	0.37	0.01	0.34	0.34	0.10		0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	17	1639	503	92	1856	561	17	499	499	177		666
v/s Ratio Prot	0.01	0.22		c0.02	c0.24		0.01	c0.02		c0.06		
v/s Ratio Perm			0.00			0.02			0.02			0.01
v/c Ratio	0.65	0.68	0.01	0.47	0.66	0.05	0.65	0.05	0.05	0.62		0.02
Uniform Delay, d1	44.7	26.4	20.7	41.7	23.9	18.4	44.7	19.9	19.9	39.0		14.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	62.0	1.1	0.0	3.7	0.9	0.0	62.0	0.2	0.2	6.2		0.1
Delay (s)	106.7	27.5	20.7	45.4	24.8	18.4	106.7	20.1	20.1	45.2		14.7
Level of Service	F	C	C	D	C	B	F	C	C	D		B
Approach Delay (s/veh)		28.2			25.1			25.9			38.1	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	90.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	48.6%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Future Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	1283	40	556	1424	182	40	91	152	859	556	222
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1224	38	488	1239	544	203	251	214	717	1120	446
Arrive On Green	0.03	0.24	0.24	0.14	0.35	0.35	0.03	0.14	0.14	0.34	0.46	0.46
Sat Flow, veh/h	3442	5063	158	3442	3539	1555	1774	1770	1510	1774	2452	976
Grp Volume(v), veh/h	91	859	464	556	1424	182	40	91	152	859	401	377
Grp Sat Flow(s),veh/h/ln	1721	1695	1831	1721	1770	1555	1774	1770	1510	1774	1770	1658
Q Serve(g_s), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Cycle Q Clear(g_c), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	115	819	443	488	1239	544	203	251	214	717	809	758
V/C Ratio(X)	0.79	1.05	1.05	1.14	1.15	0.33	0.20	0.36	0.71	1.20	0.50	0.50
Avail Cap(c_a), veh/h	115	819	443	488	1239	544	230	251	214	717	809	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	45.5	45.5	51.5	39.0	28.7	42.5	46.6	49.2	26.8	22.9	22.9
Incr Delay (d2), s/veh	30.6	44.9	56.1	85.4	77.1	0.4	0.5	4.0	18.2	102.2	2.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	18.6	21.5	13.8	33.7	4.5	1.1	3.0	5.9	44.1	9.7	9.3
LnGrp Delay(d), s/veh	88.2	90.4	101.6	136.9	116.1	29.1	43.0	50.6	67.3	129.0	25.0	25.2
LnGrp LOS	F	F	F	F	F	C	D	D	E	F	C	C
Approach Vol, veh/h		1414			2162			283			1637	
Approach Delay, s/veh		93.9			114.1			58.5			79.6	
Approach LOS		F			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	45.0	21.0	21.0	33.0	7.2	58.8	8.0	46.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	41.0	17.0	17.0	29.0	5.0	53.0	4.0	42.0
Max Q Clear Time (g_c+I1), s	43.0	13.5	19.0	31.0	4.3	21.2	5.2	44.0
Green Ext Time (p_c), s	0.0	0.4	0.0	0.0	0.0	5.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	95.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Future Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	77	505	44	11	330	44	22	99	55	626	473	264
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	171	669	58	112	638	84	426	1658	864	945	754	421
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1014	3324	289	863	3168	419	725	2274	1185	1211	1034	578
Grp Volume(v), veh/h	77	271	278	11	185	189	22	76	78	631	0	732
Grp Sat Flow(s),veh/h/ln	1014	1787	1826	863	1787	1800	725	1787	1672	1221	0	1601
Q Serve(g_s), s	8.4	16.4	16.5	1.4	10.6	10.8	1.8	1.4	1.5	33.7	0.0	26.2
Cycle Q Clear(g_c), s	19.3	16.4	16.5	17.9	10.6	10.8	28.0	1.4	1.5	35.2	0.0	26.2
Prop In Lane	1.00		0.16	1.00		0.23	1.00		0.71	0.99		0.36
Lane Grp Cap(c), veh/h	171	360	367	112	360	362	426	1303	1219	953	0	1168
V/C Ratio(X)	0.45	0.75	0.76	0.10	0.51	0.52	0.05	0.06	0.06	0.66	0.00	0.63
Avail Cap(c_a), veh/h	214	434	444	148	434	437	426	1303	1219	953	0	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.7	43.3	43.3	51.8	41.0	41.1	14.8	4.4	4.4	9.4	0.0	7.8
Incr Delay (d2), s/veh	1.8	5.9	6.0	0.4	1.1	1.2	0.2	0.1	0.1	3.6	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	8.7	9.0	0.3	5.3	5.5	0.4	0.7	0.7	12.4	0.0	12.2
LnGrp Delay(d), s/veh	51.5	49.2	49.4	52.2	42.1	42.2	15.0	4.5	4.5	13.1	0.0	10.3
LnGrp LOS	D	D	D	D	D	D	B	A	A	B		B
Approach Vol, veh/h		626			385			176			1363	
Approach Delay, s/veh		49.6			42.5			5.8			11.6	
Approach LOS		D			D			A			B	

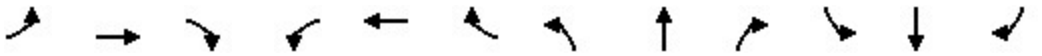
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		88.0		27.2		88.0		27.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		84.0		28.0		84.0		28.0
Max Q Clear Time (g_c+I1), s		30.0		21.3		37.2		19.9
Green Ext Time (p_c), s		1.1		1.9		13.6		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	280	890	90	150	890	550	570	100	350	10	20	20
Future Volume (vph)	280	890	90	150	890	550	570	100	350	10	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91	1.00	0.97	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.88		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1752	4966		3400	5036	1568	3400	1612		1752	1845	1568
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1752	4966		3400	5036	1568	3400	1612		1752	1845	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	295	937	95	158	937	579	600	105	368	11	21	21
RTOR Reduction (vph)	0	10	0	0	0	449	0	108	0	0	0	17
Lane Group Flow (vph)	295	1022	0	158	937	130	600	365	0	11	21	4
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases						8						2
Actuated Green, G (s)	22.3	38.4		9.3	25.4	25.4	29.9	29.9		19.2	19.2	19.2
Effective Green, g (s)	22.3	38.4		9.3	25.4	25.4	29.9	29.9		19.2	19.2	19.2
Actuated g/C Ratio	0.20	0.34		0.08	0.23	0.23	0.27	0.27		0.17	0.17	0.17
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	346	1690		280	1133	353	901	427		298	314	266
v/s Ratio Prot	c0.17	0.21		0.05	c0.19		0.18	c0.23		0.01	c0.01	
v/s Ratio Perm						0.08						0.00
v/c Ratio	0.85	0.60		0.56	0.83	0.37	0.67	0.85		0.04	0.07	0.01
Uniform Delay, d1	43.7	30.9		49.8	41.6	36.9	37.0	39.4		39.1	39.3	38.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	18.0	0.6		2.6	5.1	0.7	1.9	15.3		0.2	0.4	0.1
Delay (s)	61.7	31.5		52.4	46.7	37.6	38.9	54.7		39.3	39.7	39.0
Level of Service	E	C		D	D	D	D	D		D	D	D
Approach Delay (s/veh)		38.2			44.1			45.8			39.3	
Approach LOS		D			D			D			D	

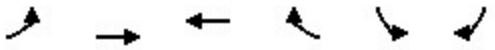
Intersection Summary			
HCM 2000 Control Delay (s/veh)	42.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	112.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



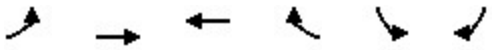
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Future Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frt		0.99		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3554		1787	3574		1626	2916				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3554		1787	3574		1626	2916				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1913	76	196	1000	0	22	0	120	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	102	0	0	0	0
Lane Group Flow (vph)	0	1987	0	196	1000	0	20	20	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		60.0		12.0	76.0		16.0	16.0				
Effective Green, g (s)		60.0		12.0	76.0		16.0	16.0				
Actuated g/C Ratio		0.60		0.12	0.76		0.16	0.16				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		2132		214	2716		260	466				
v/s Ratio Prot		c0.56		c0.11	0.28		c0.01	0.01				
v/s Ratio Perm												
v/c Ratio		0.93		0.92	0.37		0.08	0.04				
Uniform Delay, d1		18.1		43.5	4.0		35.7	35.5				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		8.1		38.7	0.1		0.6	0.2				
Delay (s)		26.3		82.2	4.1		36.3	35.7				
Level of Service		C		F	A		D	D				
Approach Delay (s/veh)		26.3			16.9			35.8			0.0	
Approach LOS		C			B			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



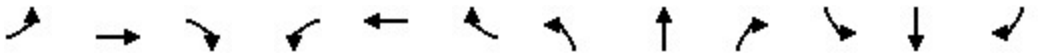
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		⅄	↱
Traffic Volume (vph)	0	1490	1030	0	980	750
Future Volume (vph)	0	1490	1030	0	980	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5036	5036		1744	1490
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5036	5036		1744	1490
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1536	1062	0	1010	773
RTOR Reduction (vph)	0	0	0	0	2	3
Lane Group Flow (vph)	0	1536	1062	0	1085	693
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		37.0	37.0		75.0	75.0
Effective Green, g (s)		37.0	37.0		75.0	75.0
Actuated g/C Ratio		0.31	0.31		0.63	0.63
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1552	1552		1090	931
v/s Ratio Prot		c0.31	0.21		c0.62	
v/s Ratio Perm						0.46
v/c Ratio		0.99	0.68		1.00	0.74
Uniform Delay, d1		41.3	36.4		22.3	15.8
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		20.2	1.3		26.1	5.4
Delay (s)		61.5	37.6		48.5	21.1
Level of Service		E	D		D	C
Approach Delay (s/veh)		61.5	37.6		37.8	
Approach LOS		E	D		D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰↱	↱
Traffic Volume (vph)	0	1160	980	0	200	320
Future Volume (vph)	0	1160	980	0	200	320
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.93	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5036	5036		3253	1427
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5036	5036		3253	1427
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1221	1032	0	211	337
RTOR Reduction (vph)	0	0	0	0	45	45
Lane Group Flow (vph)	0	1221	1032	0	328	130
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				7		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		27.7	27.7		43.2	43.2
Effective Green, g (s)		27.7	27.7		43.2	43.2
Actuated g/C Ratio		0.35	0.35		0.55	0.55
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1768	1768		1781	781
v/s Ratio Prot		c0.24	0.20		c0.10	
v/s Ratio Perm						0.09
v/c Ratio		0.69	0.58		0.18	0.17
Uniform Delay, d1		21.9	20.9		9.0	8.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.2	0.5		0.2	0.5
Delay (s)		23.1	21.4		9.2	9.3
Level of Service		C	C		A	A
Approach Delay (s/veh)		23.1	21.4		9.3	
Approach LOS		C	C		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	78.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	38.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Future Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.92	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3413	1436	1787	3574					1698	1558	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3413	1436	1787	3574					1698	1558	1519
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	2011	409	409	557	0	0	0	0	330	68	398
RTOR Reduction (vph)	0	1	148	0	0	0	0	0	0	0	35	215
Lane Group Flow (vph)	0	2051	220	409	557	0	0	0	0	274	232	40
Confl. Peds. (#/hr)	5					5						
Confl. Bikes (#/hr)			3			9						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Effective Green, g (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Actuated g/C Ratio		0.53	0.53	0.21	0.78					0.16	0.16	0.16
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1820	765	372	2769					268	246	240
v/s Ratio Prot		c0.60		c0.23	0.16							
v/s Ratio Perm			0.15							c0.16	0.15	0.03
v/c Ratio		1.13	0.29	1.10	0.20					1.02	0.95	0.17
Uniform Delay, d1		28.0	15.4	47.5	3.6					50.5	50.0	43.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		64.9	0.2	76.2	0.0					60.9	44.8	1.5
Delay (s)		92.9	15.6	123.7	3.6					111.4	94.8	45.2
Level of Service		F	B	F	A					F	F	D
Approach Delay (s/veh)		81.1			54.5			0.0			84.6	
Approach LOS		F			D			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Future Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	22	1587	174	87	685	0	22	11	11	174	54	185
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	34	2180	239	113	1821	0	153	76	200	224	70	254
Arrive On Green	0.02	0.47	0.47	0.06	0.51	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	1792	4683	512	1792	3668	0	1214	607	1584	1383	429	1564
Grp Volume(v), veh/h	22	1160	601	87	685	0	33	0	11	228	0	185
Grp Sat Flow(s),veh/h/ln	1792	1712	1771	1792	1787	0	1821	0	1584	1812	0	1564
Q Serve(g_s), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Cycle Q Clear(g_c), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Prop In Lane	1.00		0.29	1.00		0.00	0.67		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	34	1594	825	113	1821	0	229	0	200	294	0	254
V/C Ratio(X)	0.65	0.73	0.73	0.77	0.38	0.00	0.14	0.00	0.06	0.78	0.00	0.73
Avail Cap(c_a), veh/h	103	2117	1095	246	2497	0	229	0	200	560	0	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.5	18.9	18.9	40.3	13.0	0.0	34.0	0.0	33.6	35.0	0.0	34.7
Incr Delay (d2), s/veh	18.9	0.9	1.7	10.6	0.1	0.0	1.3	0.0	0.5	4.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	11.5	12.1	2.4	5.0	0.0	0.8	0.0	0.3	5.6	0.0	4.5
LnGrp Delay(d), s/veh	61.4	19.7	20.6	50.9	13.1	0.0	35.3	0.0	34.1	39.4	0.0	38.7
LnGrp LOS	E	B	C	D	B		D		C	D		D
Approach Vol, veh/h		1783			772			44			413	
Approach Delay, s/veh		20.5			17.4			35.0			39.1	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	9.5	44.7		18.2	5.7	48.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		11.0	12.0	54.0		27.0	5.0	61.0
Max Q Clear Time (g_c+I1), s		3.4	6.2	26.0		12.5	3.1	12.2
Green Ext Time (p_c), s		0.1	0.1	14.7		1.5	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1380	0	0	660	520	690
Future Volume (veh/h)	1380	0	0	660	520	690
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	0	0	1845	1845	1845
Adj Flow Rate, veh/h	1516	0	0	725	571	758
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	1713	0	0	1713	1040	929
Arrive On Green	0.34	0.00	0.00	0.34	0.59	0.59
Sat Flow, veh/h	5368	0	0	5368	1757	1568
Grp Volume(v), veh/h	1516	0	0	725	571	758
Grp Sat Flow(s),veh/h/ln	1679	0	0	1679	1757	1568
Q Serve(g_s), s	33.6	0.0	0.0	13.1	23.2	45.1
Cycle Q Clear(g_c), s	33.6	0.0	0.0	13.1	23.2	45.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1713	0	0	1713	1040	929
V/C Ratio(X)	0.89	0.00	0.00	0.42	0.55	0.82
Avail Cap(c_a), veh/h	1789	0	0	1789	1040	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	0.0	30.1	14.6	19.0
Incr Delay (d2), s/veh	5.6	0.0	0.0	0.2	2.1	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.5	0.0	0.0	6.1	11.7	21.4
LnGrp Delay(d), s/veh	42.4	0.0	0.0	30.2	16.6	26.9
LnGrp LOS	D			C	B	C
Approach Vol, veh/h	1516			725	1329	
Approach Delay, s/veh	42.4			30.2	22.5	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		44.2				44.2
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		47.1		35.6				15.1
Green Ext Time (p_c), s		5.3		4.6				5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	680	0	0	750	780	960
Future Volume (vph)	680	0	0	750	780	960
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.95	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7471			6346	3287	1427
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7471			6346	3287	1427
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	731	0	0	806	839	1032
RTOR Reduction (vph)	0	0	0	0	3	3
Lane Group Flow (vph)	731	0	0	806	1269	596
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	21.6			21.6	86.1	86.1
Effective Green, g (s)	21.6			21.6	86.1	86.1
Actuated g/C Ratio	0.19			0.19	0.74	0.74
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1394			1184	2446	1061
v/s Ratio Prot	0.10			c0.13	0.39	
v/s Ratio Perm						c0.42
v/c Ratio	0.52			0.68	0.52	0.56
Uniform Delay, d1	42.4			43.8	6.2	6.5
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.4			1.6	0.8	2.2
Delay (s)	42.8			45.5	7.0	8.7
Level of Service	D			D	A	A
Approach Delay (s/veh)	42.8			45.5	7.5	
Approach LOS	D			D	A	

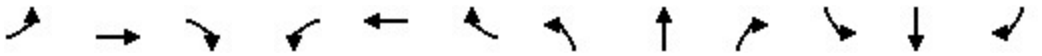
Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	115.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



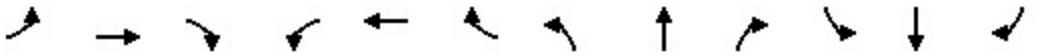
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1870	0	0	930	70	470
Future Volume (vph)	1870	0	0	930	70	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.88	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3574			3574	3191	1455
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3574			3574	3191	1455
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2101	0	0	1045	79	528
RTOR Reduction (vph)	0	0	0	0	11	11
Lane Group Flow (vph)	2101	0	0	1045	332	253
Confl. Peds. (#/hr)		1	1			
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	75.3			75.3	31.2	31.2
Effective Green, g (s)	75.3			75.3	31.2	31.2
Actuated g/C Ratio	0.66			0.66	0.27	0.27
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2350			2350	869	396
v/s Ratio Prot	c0.59			0.29	0.10	
v/s Ratio Perm						c0.17
v/c Ratio	0.89			0.44	0.38	0.64
Uniform Delay, d1	16.3			9.5	33.8	36.7
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	4.8			0.1	1.3	7.7
Delay (s)	21.1			9.6	35.1	44.4
Level of Service	C			A	D	D
Approach Delay (s/veh)	21.1			9.6	39.1	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	114.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Future Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00		0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			
Frt	1.00	1.00			0.97		1.00		0.85			
Flt Protected	0.95	1.00			1.00		0.95		1.00			
Satd. Flow (prot)	1787	3574			4966		1787		1579			
Flt Permitted	0.18	1.00			1.00		0.95		1.00			
Satd. Flow (perm)	346	3574			4966		1787		1579			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1380	0	0	957	228	76	0	163	0	0	0
RTOR Reduction (vph)	0	0	0	0	47	0	0	0	72	0	0	0
Lane Group Flow (vph)	11	1380	0	0	1138	0	76	0	91	0	0	0
Confl. Peds. (#/hr)	1		7	7		1						
Confl. Bikes (#/hr)			7			1			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			1
Actuated Green, G (s)	35.2	35.2			35.2		25.3		25.3			
Effective Green, g (s)	35.2	35.2			35.2		25.3		25.3			
Actuated g/C Ratio	0.51	0.51			0.51		0.37		0.37			
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	177	1836			2551		660		583			
v/s Ratio Prot		c0.39			0.23		0.04					
v/s Ratio Perm	0.03								c0.06			
v/c Ratio	0.06	0.75			0.45		0.12		0.16			
Uniform Delay, d1	8.4	13.2			10.5		14.2		14.5			
Progression Factor	1.00	1.00			1.00		1.00		1.00			
Incremental Delay, d2	0.1	1.8			0.1		0.4		0.6			
Delay (s)	8.5	15.0			10.6		14.6		15.0			
Level of Service	A	B			B		B		B			
Approach Delay (s/veh)		14.9			10.6			14.9			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



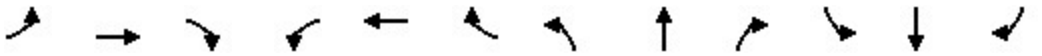
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	790	220	120	630	310	210	90	60	400	110	190
Future Volume (vph)	620	790	220	120	630	310	210	90	60	400	110	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1546	3400	5036	1543	3400	1845	1514	1752	1673	1490
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1546	3400	5036	1543	3400	1845	1514	1752	1673	1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	859	239	130	685	337	228	98	65	435	120	207
RTOR Reduction (vph)	0	0	160	0	0	278	0	0	55	0	14	30
Lane Group Flow (vph)	674	859	79	130	685	59	228	98	10	435	158	125
Confl. Peds. (#/hr)	2		1	1		2			9	9		
Confl. Bikes (#/hr)									3			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	25.8	36.5	36.5	8.5	19.2	19.2	17.2	17.2	17.2	31.8	31.8	57.6
Effective Green, g (s)	25.8	36.5	36.5	8.5	19.2	19.2	17.2	17.2	17.2	31.8	31.8	57.6
Actuated g/C Ratio	0.23	0.33	0.33	0.08	0.17	0.17	0.16	0.16	0.16	0.29	0.29	0.52
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	797	1671	512	262	879	269	531	288	236	506	483	834
v/s Ratio Prot	c0.20	0.17		0.04	c0.14		c0.07	0.05		c0.25	0.09	0.04
v/s Ratio Perm			0.05			0.04			0.01			0.05
v/c Ratio	0.85	0.51	0.15	0.50	0.78	0.22	0.43	0.34	0.04	0.86	0.33	0.15
Uniform Delay, d1	40.2	29.6	25.9	48.7	43.4	39.0	42.0	41.3	39.4	37.0	30.7	13.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	8.2	0.3	0.1	1.5	4.4	0.4	2.5	3.2	0.3	13.6	0.4	0.1
Delay (s)	48.4	29.9	26.0	50.2	47.8	39.4	44.5	44.5	39.8	50.6	31.1	13.6
Level of Service	D	C	C	D	D	D	D	D	D	D	C	B
Approach Delay (s/veh)		36.4			45.6			43.7			38.7	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	110.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	200	0	0	20	0	0
Future Volume (vph)	200	0	0	20	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.98		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3400			1536		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3400			1536		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	213	0	0	21	0	0
RTOR Reduction (vph)	0	0	0	19	0	0
Lane Group Flow (vph)	213	0	0	2	0	0
Confl. Peds. (#/hr)	4			1	1	
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	2.6			0.9		
Effective Green, g (s)	2.6			0.9		
Actuated g/C Ratio	0.23			0.08		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	768			120		
v/s Ratio Prot	c0.06					
v/s Ratio Perm				c0.00		
v/c Ratio	0.28			0.01		
Uniform Delay, d1	3.7			4.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	3.9			4.9		
Level of Service	A			A		
Approach Delay (s/veh)	3.9		4.9			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-1.47		
Actuated Cycle Length (s)	11.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	16.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Future Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (perm)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	103	1247	474	464	742	21	206	41	175	21	93	93
RTOR Reduction (vph)	0	0	193	0	0	10	0	0	150	0	31	0
Lane Group Flow (vph)	103	1247	281	464	742	11	122	125	25	21	155	0
Confl. Peds. (#/hr)	3		3	3		3			2	2		
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Effective Green, g (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Actuated g/C Ratio	0.09	0.35	0.35	0.25	0.51	0.51	0.14	0.14	0.14	0.12	0.12	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	164	1203	528	440	1756	761	237	241	219	208	203	
v/s Ratio Prot	0.06	c0.36		c0.27	0.21		0.07	c0.07		0.01	c0.09	
v/s Ratio Perm			0.18			0.01			0.02			
v/c Ratio	0.63	1.04	0.53	1.05	0.42	0.01	0.51	0.52	0.11	0.10	0.76	
Uniform Delay, d1	51.5	38.6	30.9	44.1	18.3	14.5	46.8	46.8	44.1	46.3	50.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.3	35.9	1.0	58.0	0.2	0.0	7.8	7.8	1.1	0.2	15.7	
Delay (s)	58.8	74.5	31.9	102.1	18.5	14.5	54.6	54.6	45.1	46.5	66.0	
Level of Service	E	E	C	F	B	B	D	D	D	D	E	
Approach Delay (s/veh)		62.6			50.1			50.7			64.1	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	118.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Future Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
Arrive On Green	0.10	0.18	0.18	0.18	0.27	0.27	0.06	0.42	0.42	0.05	0.42	0.42
Sat Flow, veh/h	1774	5085	1532	1774	5085	1542	3442	3539	1537	1774	3539	1535
Grp Volume(v), veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Grp Sat Flow(s),veh/h/ln	1774	1695	1532	1774	1695	1542	1721	1770	1537	1774	1770	1535
Q Serve(g_s), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Cycle Q Clear(g_c), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
V/C Ratio(X)	0.81	0.71	0.79	0.88	0.56	0.19	0.68	0.16	0.25	0.78	0.55	0.26
Avail Cap(c_a), veh/h	301	1115	336	548	1824	638	309	1500	651	177	1481	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	38.4	39.0	40.1	31.7	24.7	46.3	17.8	18.6	46.9	22.1	19.1
Incr Delay (d2), s/veh	8.9	1.8	10.1	7.9	0.4	0.2	4.0	0.2	0.9	12.6	1.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.0	6.7	8.2	6.1	1.9	2.0	2.0	3.0	2.4	8.8	3.3
LnGrp Delay(d), s/veh	53.4	40.2	49.1	48.0	32.1	24.9	50.3	18.1	19.5	59.5	23.6	20.1
LnGrp LOS	D	D	D	D	C	C	D	B	B	E	C	C
Approach Vol, veh/h		1031			1139			532			1063	
Approach Delay, s/veh		43.9			35.4			26.8			25.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	46.5	21.9	22.5	9.9	46.0	13.6	30.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	31.0	22.0	9.0	42.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	6.1	8.7	17.3	15.9	5.9	19.6	9.7	15.0
Green Ext Time (p_c), s	0.0	2.0	0.7	2.6	0.1	6.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Future Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.80	0.80	0.80	0.80	0.80	0.80
Sat Flow, veh/h	1325	1863	1530	1077	1863	1559	449	3539	1580	912	3539	1562
Grp Volume(v), veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Grp Sat Flow(s),veh/h/ln	1325	1863	1530	1077	1863	1559	449	1770	1580	912	1770	1562
Q Serve(g_s), s	1.7	6.4	13.3	2.2	1.8	1.4	19.0	3.5	0.3	1.8	11.9	0.9
Cycle Q Clear(g_c), s	3.6	6.4	13.3	8.6	1.8	1.4	30.8	3.5	0.3	5.3	11.9	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
V/C Ratio(X)	0.10	0.44	0.86	0.15	0.13	0.10	0.42	0.16	0.02	0.07	0.42	0.05
Avail Cap(c_a), veh/h	257	303	249	178	303	254	374	2818	1258	760	2818	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	46.4	49.4	50.4	44.5	44.3	8.3	2.8	2.5	3.4	3.6	2.5
Incr Delay (d2), s/veh	0.2	1.2	22.0	0.5	0.2	0.2	3.4	0.1	0.0	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.4	6.9	0.7	1.0	0.6	2.7	1.8	0.2	0.5	5.9	0.4
LnGrp Delay(d), s/veh	46.2	47.7	71.4	50.9	44.7	44.5	11.7	2.9	2.5	3.6	4.1	2.6
LnGrp LOS	D	D	E	D	D	D	B	A	A	A	A	A
Approach Vol, veh/h		311			77			634			1290	
Approach Delay, s/veh		61.1			46.4			5.1			4.0	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		19.8		97.0		19.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		19.0		93.0		19.0
Max Q Clear Time (g_c+I1), s		32.8		15.3		13.9		10.6
Green Ext Time (p_c), s		6.4		0.4		12.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Future Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	72	113	21	258	340	113	41	454	186	72	969	237
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	243	107	301	659	289	52	1307	531	93	1973	882
Arrive On Green	0.05	0.07	0.07	0.17	0.19	0.19	0.03	0.53	0.53	0.05	0.56	0.56
Sat Flow, veh/h	1774	3539	1556	1774	3539	1551	1774	2447	994	1774	3539	1582
Grp Volume(v), veh/h	72	113	21	258	340	113	41	327	313	72	969	237
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1774	1770	1551	1774	1770	1671	1774	1770	1582
Q Serve(g_s), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Cycle Q Clear(g_c), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	93	243	107	301	659	289	52	945	893	93	1973	882
V/C Ratio(X)	0.77	0.46	0.20	0.86	0.52	0.39	0.79	0.35	0.35	0.77	0.49	0.27
Avail Cap(c_a), veh/h	194	619	272	582	1393	610	136	945	893	194	1973	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	41.0	40.2	36.9	33.5	32.7	44.1	12.2	12.2	42.8	12.3	10.5
Incr Delay (d2), s/veh	12.8	1.4	0.9	7.0	0.6	0.9	23.2	1.0	1.1	12.8	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.4	0.5	6.9	3.9	2.6	1.4	5.0	4.8	2.1	7.6	3.2
LnGrp Delay(d), s/veh	55.6	42.3	41.1	43.9	34.1	33.5	67.4	13.2	13.3	55.6	13.2	11.3
LnGrp LOS	E	D	D	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		206			711			681			1278	
Approach Delay, s/veh		46.8			37.6			16.5			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	52.9	19.5	10.3	6.7	55.0	8.8	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	48.0	30.0	16.0	7.0	51.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	5.7	11.8	14.9	4.8	4.1	17.3	5.7	9.9
Green Ext Time (p_c), s	0.0	4.1	0.6	0.4	0.0	8.8	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Future Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	356	494	839	161	322	23	287	517	92	23	1080	218
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	413	434	641	275	266	19	317	1648	717	32	1081	481
Arrive On Green	0.23	0.23	0.23	0.15	0.15	0.15	0.18	0.46	0.46	0.02	0.30	0.30
Sat Flow, veh/h	1792	1881	1553	1792	1730	124	1792	3574	1556	1792	3574	1589
Grp Volume(v), veh/h	356	494	839	161	0	345	287	517	92	23	1080	218
Grp Sat Flow(s),veh/h/ln	1792	1881	1553	1792	0	1854	1792	1787	1556	1792	1787	1589
Q Serve(g_s), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Cycle Q Clear(g_c), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	434	641	275	0	285	317	1648	717	32	1081	481
V/C Ratio(X)	0.86	1.14	1.31	0.58	0.00	1.21	0.91	0.31	0.13	0.71	1.00	0.45
Avail Cap(c_a), veh/h	413	434	641	275	0	285	367	1648	717	76	1081	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	45.1	34.9	46.1	0.0	49.6	47.3	19.9	18.1	57.2	40.8	33.0
Incr Delay (d2), s/veh	16.8	87.0	150.5	3.2	0.0	122.9	23.4	0.5	0.4	25.1	27.2	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	24.5	47.5	5.1	0.0	18.9	11.1	5.4	1.8	1.0	21.5	6.1
LnGrp Delay(d), s/veh	60.0	132.0	185.3	49.2	0.0	172.4	70.6	20.4	18.4	82.3	68.0	36.1
LnGrp LOS	E	F	F	D		F	E	C	B	F	E	D
Approach Vol, veh/h		1689			506			896			1321	
Approach Delay, s/veh		143.3			133.2			36.3			63.0	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	58.0		31.0	24.7	39.4		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	54.0		27.0	24.0	35.0		18.0
Max Q Clear Time (g_c+I1), s	3.5	12.7		29.0	20.4	37.4		20.0
Green Ext Time (p_c), s	0.0	4.1		0.0	0.3	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		96.4
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Future Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	184	1184	214	122	878	61	194	541	194	245	1082	194
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	218	1477	267	152	1555	463	263	1111	474	317	1677	497
Arrive On Green	0.12	0.35	0.35	0.09	0.31	0.31	0.08	0.32	0.32	0.09	0.33	0.33
Sat Flow, veh/h	1757	4260	770	1757	5036	1499	3408	3505	1495	3408	5036	1494
Grp Volume(v), veh/h	184	933	465	122	878	61	194	541	194	245	1082	194
Grp Sat Flow(s),veh/h/ln	1757	1679	1672	1757	1679	1499	1704	1752	1495	1704	1679	1494
Q Serve(g_s), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Cycle Q Clear(g_c), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	1164	580	152	1555	463	263	1111	474	317	1677	497
V/C Ratio(X)	0.84	0.80	0.80	0.80	0.56	0.13	0.74	0.49	0.41	0.77	0.65	0.39
Avail Cap(c_a), veh/h	361	1381	688	275	1825	543	401	1111	474	467	1677	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	30.2	30.2	45.8	29.5	25.4	46.1	28.2	27.4	45.2	28.9	26.1
Incr Delay (d2), s/veh	9.0	3.0	5.8	9.5	0.3	0.1	4.0	1.5	2.6	4.7	1.9	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	12.4	12.8	3.8	7.0	1.2	2.8	6.4	4.6	3.6	8.9	4.5
LnGrp Delay(d), s/veh	52.8	33.1	36.0	55.3	29.9	25.5	50.1	29.7	30.0	49.9	30.9	28.4
LnGrp LOS	D	C	D	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1582			1061			929			1521	
Approach Delay, s/veh		36.3			32.5			34.0			33.6	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	36.4	12.8	39.4	11.9	38.0	16.7	35.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	32.0	16.0	42.0	12.0	34.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	9.2	14.7	9.0	27.7	7.7	20.6	12.5	16.9
Green Ext Time (p_c), s	0.3	3.8	0.1	7.7	0.2	6.7	0.3	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.3
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	170	1150	1130	190	550	480
Future Volume (veh/h)	170	1150	1130	190	550	480
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	177	1198	1177	198	573	500
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	211	2518	1477	248	1442	663
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4489	727	3408	1568
Grp Volume(v), veh/h	177	1198	914	461	573	500
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1693	1704	1568
Q Serve(g_s), s	10.3	16.2	25.6	25.6	12.1	28.1
Cycle Q Clear(g_c), s	10.3	16.2	25.6	25.6	12.1	28.1
Prop In Lane	1.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	211	2518	1147	579	1442	663
V/C Ratio(X)	0.84	0.48	0.80	0.80	0.40	0.75
Avail Cap(c_a), veh/h	355	3292	1388	700	1442	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	17.1	31.0	31.0	20.8	25.4
Incr Delay (d2), s/veh	8.7	0.1	2.8	5.4	0.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	7.5	12.2	12.8	5.9	24.2
LnGrp Delay(d), s/veh	53.5	17.2	33.7	36.3	21.6	33.2
LnGrp LOS	D	B	C	D	C	C
Approach Vol, veh/h		1375	1375		1073	
Approach Delay, s/veh		21.9	34.6		27.0	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				56.0		48.0	16.5	39.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				68.0		44.0	21.0	43.0
Max Q Clear Time (g_c+I1), s				18.2		30.1	12.3	27.6
Green Ext Time (p_c), s				10.7		3.6	0.3	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Future Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	77	1703	264	297	1505	44	209	55	286	77	198	110
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	98	1724	266	323	2614	76	268	630	533	388	378	210
Arrive On Green	0.05	0.38	0.38	0.18	0.51	0.51	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1792	4480	690	1792	5124	150	1078	1881	1592	1043	1129	627
Grp Volume(v), veh/h	77	1299	668	297	1006	543	209	55	286	77	0	308
Grp Sat Flow(s),veh/h/ln	1792	1712	1746	1792	1712	1850	1078	1881	1592	1043	0	1757
Q Serve(g_s), s	5.1	44.9	45.6	19.5	24.4	24.4	23.1	2.4	17.4	6.5	0.0	16.9
Cycle Q Clear(g_c), s	5.1	44.9	45.6	19.5	24.4	24.4	40.0	2.4	17.4	8.9	0.0	16.9
Prop In Lane	1.00		0.40	1.00		0.08	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	98	1318	672	323	1746	944	268	630	533	388	0	588
V/C Ratio(X)	0.78	0.99	0.99	0.92	0.58	0.58	0.78	0.09	0.54	0.20	0.00	0.52
Avail Cap(c_a), veh/h	165	1318	672	330	1746	944	268	630	533	388	0	588
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.8	36.4	36.6	48.2	20.3	20.3	48.3	27.3	32.3	30.3	0.0	32.1
Incr Delay (d2), s/veh	12.6	21.3	33.2	29.8	0.5	0.9	19.7	0.3	3.8	1.1	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	25.0	28.1	12.3	11.6	12.6	8.3	1.3	8.2	2.0	0.0	8.8
LnGrp Delay(d), s/veh	68.4	57.8	69.8	77.9	20.8	21.2	68.0	27.5	36.1	31.5	0.0	35.4
LnGrp LOS	E	E	E	E	C	C	E	C	D	C		D
Approach Vol, veh/h		2044			1846			550			385	
Approach Delay, s/veh		62.1			30.1			47.3			34.6	
Approach LOS		E			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	25.5	50.0		44.0	10.6	65.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	22.0	46.0		40.0	11.0	57.0
Max Q Clear Time (g_c+I1), s		42.0	21.5	47.6		18.9	7.1	26.4
Green Ext Time (p_c), s		0.0	0.1	0.0		2.2	0.0	12.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Future Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	77	615	66	99	440	33	33	220	77	110	407	88
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	311	1111	119	231	1149	86	46	1520	679	143	1401	300
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.03	0.43	0.43	0.08	0.48	0.48
Sat Flow, veh/h	916	3224	345	756	3334	249	1774	3539	1581	1774	2893	620
Grp Volume(v), veh/h	77	337	344	99	233	240	33	220	77	110	247	248
Grp Sat Flow(s),veh/h/ln	916	1770	1800	756	1770	1814	1774	1770	1581	1774	1770	1743
Q Serve(g_s), s	5.7	12.7	12.8	10.1	8.2	8.3	1.5	3.1	2.4	5.0	6.9	7.0
Cycle Q Clear(g_c), s	14.0	12.7	12.8	22.9	8.2	8.3	1.5	3.1	2.4	5.0	6.9	7.0
Prop In Lane	1.00		0.19	1.00		0.14	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	311	610	620	231	610	625	46	1520	679	143	857	844
V/C Ratio(X)	0.25	0.55	0.55	0.43	0.38	0.38	0.72	0.14	0.11	0.77	0.29	0.29
Avail Cap(c_a), veh/h	639	1243	1264	501	1243	1274	215	1520	679	494	857	844
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	21.9	21.9	31.2	20.4	20.4	39.9	14.3	14.1	37.2	12.8	12.8
Incr Delay (d2), s/veh	0.4	0.8	0.8	1.3	0.4	0.4	19.3	0.2	0.3	8.4	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	6.3	6.4	2.2	4.1	4.2	1.0	1.6	1.1	2.8	3.6	3.6
LnGrp Delay(d), s/veh	26.1	22.7	22.7	32.5	20.8	20.8	59.2	14.5	14.5	45.7	13.6	13.7
LnGrp LOS	C	C	C	C	C	C	E	B	B	D	B	B
Approach Vol, veh/h		758			572			330			605	
Approach Delay, s/veh		23.0			22.8			19.0			19.5	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.6	39.5		32.5	6.1	44.0		32.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	23.0	27.0		58.0	10.0	40.0		58.0
Max Q Clear Time (g_c+I1), s	7.0	5.1		16.0	3.5	9.0		24.9
Green Ext Time (p_c), s	0.2	1.4		4.9	0.0	2.8		3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Future Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1699	140	462	430	0	140	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	2183	178	145	2336	0	456	0	412	0	2	0
Arrive On Green	0.00	0.66	0.66	0.66	0.66	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	954	3308	269	251	3632	0	1756	0	1583	0	1863	0
Grp Volume(v), veh/h	0	899	940	462	430	0	140	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	954	1770	1807	251	1770	0	1756	0	1583	0	1863	0
Q Serve(g_s), s	0.0	35.1	36.9	29.1	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.1	36.9	66.0	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1168	1193	145	2336	0	456	0	412	0	2	0
V/C Ratio(X)	0.00	0.77	0.79	3.18	0.18	0.00	0.31	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1168	1193	145	2336	0	456	0	412	0	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.7	12.0	42.7	6.6	0.0	29.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.2	3.6	1000.3	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.0	19.2	44.3	2.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	14.9	15.7	1043.0	6.6	0.0	31.5	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		B	B	F	A		C					
Approach Vol, veh/h		1839			892			140			0	
Approach Delay, s/veh		15.3			543.4			31.5			0.0	
Approach LOS		B			F			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		70.0		0.0		70.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		26.0		66.0		16.0		66.0
Max Q Clear Time (g_c+I1), s		8.4		38.9		0.0		68.0
Green Ext Time (p_c), s		0.6		16.4		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	180.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Future Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	206	1371	175	423	567	155	62	392	237	72	639	31
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1415	181	448	1522	671	80	469	387	89	884	43
Arrive On Green	0.13	0.31	0.31	0.25	0.43	0.43	0.04	0.25	0.25	0.05	0.26	0.26
Sat Flow, veh/h	1774	4553	581	1774	3539	1561	1774	1863	1537	1774	3431	166
Grp Volume(v), veh/h	206	1021	525	423	567	155	62	392	237	72	329	341
Grp Sat Flow(s),veh/h/ln	1774	1695	1743	1774	1770	1561	1774	1863	1537	1774	1770	1827
Q Serve(g_s), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Cycle Q Clear(g_c), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	236	1054	542	448	1522	671	80	469	387	89	456	471
V/C Ratio(X)	0.87	0.97	0.97	0.94	0.37	0.23	0.78	0.84	0.61	0.81	0.72	0.72
Avail Cap(c_a), veh/h	343	1054	542	462	1522	671	104	469	387	89	456	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	40.5	40.5	43.7	23.0	21.5	56.3	42.2	39.4	55.9	40.3	40.3
Incr Delay (d2), s/veh	15.3	20.5	30.8	28.0	0.2	0.2	23.5	16.0	7.0	39.8	9.6	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	19.6	21.7	17.1	6.3	3.3	2.5	14.3	7.7	3.3	11.1	11.4
LnGrp Delay(d), s/veh	65.9	61.0	71.3	71.7	23.2	21.6	79.8	58.2	46.4	95.7	49.9	49.7
LnGrp LOS	E	E	E	E	C	C	E	E	D	F	D	D
Approach Vol, veh/h		1752			1145			691			742	
Approach Delay, s/veh		64.7			40.9			56.1			54.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	34.0	34.1	41.0	9.3	34.7	19.9	55.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	30.0	31.0	37.0	7.0	29.0	23.0	45.0
Max Q Clear Time (g_c+I1), s	6.8	25.7	29.9	37.4	6.1	22.3	15.6	14.9
Green Ext Time (p_c), s	0.0	1.3	0.2	0.0	0.0	2.1	0.3	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Future Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1516	495	74	611	0	1095	1389	379			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2069	630	122	2432	0	1582	1829	497			
Arrive On Green	0.00	0.40	0.40	0.04	0.47	0.00	0.46	0.46	0.46			
Sat Flow, veh/h	0	5305	1563	3476	5305	0	3476	4020	1093			
Grp Volume(v), veh/h	0	1516	495	74	611	0	1095	1182	586			
Grp Sat Flow(s),veh/h/ln	0	1712	1563	1738	1712	0	1738	1712	1688			
Q Serve(g_s), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Cycle Q Clear(g_c), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.65			
Lane Grp Cap(c), veh/h	0	2069	630	122	2432	0	1582	1558	768			
V/C Ratio(X)	0.00	0.73	0.79	0.61	0.25	0.00	0.69	0.76	0.76			
Avail Cap(c_a), veh/h	0	2383	726	155	2796	0	1582	1558	768			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	28.4	29.2	53.3	17.6	0.0	24.3	25.4	25.5			
Incr Delay (d2), s/veh	0.0	1.0	5.0	4.8	0.1	0.0	2.5	3.5	7.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	13.4	14.2	1.2	3.7	0.0	13.9	15.9	16.6			
LnGrp Delay(d), s/veh	0.0	29.4	34.3	58.1	17.7	0.0	26.8	28.9	32.5			
LnGrp LOS		C	C	E	B		C	C	C			
Approach Vol, veh/h		2011			685			2863				
Approach Delay, s/veh		30.6			22.1			28.9				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			7.9	49.1		55.0		57.1
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			5.0	52.0		51.0		61.0
Max Q Clear Time (g_c+I1), s			4.4	33.0		34.4		10.0
Green Ext Time (p_c), s			0.0	12.1		13.6		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1670	290	340	710	80	100	720	380	240	1510	420
Future Volume (veh/h)	230	1670	290	340	710	80	100	720	380	240	1510	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.85	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	247	1796	312	366	763	86	108	774	409	258	1624	452
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
Arrive On Green	0.09	0.36	0.36	0.11	0.37	0.37	0.03	0.31	0.31	0.09	0.37	0.37
Sat Flow, veh/h	3442	5085	1475	3442	5085	1501	3442	5085	2381	3442	5085	1388
Grp Volume(v), veh/h	247	1796	312	366	763	86	108	774	409	258	1624	452
Grp Sat Flow(s),veh/h/ln	1721	1695	1475	1721	1695	1501	1721	1695	1190	1721	1695	1388
Q Serve(g_s), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	14.9	14.6	8.8	35.7	31.4
Cycle Q Clear(g_c), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	14.9	14.6	8.8	35.7	31.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
V/C Ratio(X)	0.78	0.99	0.54	0.98	0.40	0.15	0.94	0.50	0.40	0.81	0.87	0.69
Avail Cap(c_a), veh/h	631	1822	581	373	1905	562	115	1562	1033	430	1865	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	38.2	28.2	53.4	27.6	24.9	57.9	34.0	24.8	53.4	35.4	26.1
Incr Delay (d2), s/veh	4.2	17.7	1.0	41.6	0.1	0.1	65.6	1.1	1.1	8.0	5.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	22.6	8.1	8.2	6.2	1.9	2.8	7.1	4.9	4.5	17.7	13.0
LnGrp Delay(d), s/veh	57.5	55.9	29.1	94.9	27.7	25.0	123.5	35.1	25.9	61.4	41.3	32.0
LnGrp LOS	E	E	C	F	C	C	F	D	C	E	D	C
Approach Vol, veh/h		2355			1215			1291			2334	
Approach Delay, s/veh		52.5			47.8			39.6			41.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	40.9	17.0	47.0	8.0	48.0	15.0	49.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	33.0	13.0	43.0	4.0	44.0	22.0	34.0
Max Q Clear Time (g_c+I1), s	10.8	16.9	14.7	44.0	5.8	37.7	10.4	15.2
Green Ext Time (p_c), s	0.3	6.6	0.0	0.0	0.0	5.2	0.6	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Future Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	333	2280	0	0	667	237				86	86	43
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	479	4047	0	0	3022	926				159	205	97
Arrive On Green	0.14	0.79	0.00	0.00	0.59	0.59				0.09	0.09	0.09
Sat Flow, veh/h	3476	5305	0	0	5305	1573				1792	2308	1089
Grp Volume(v), veh/h	333	2280	0	0	667	237				86	62	67
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1573				1792	1712	1685
Q Serve(g_s), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Cycle Q Clear(g_c), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Prop In Lane	1.00		0.00	0.00		1.00				1.00		0.65
Lane Grp Cap(c), veh/h	479	4047	0	0	3022	926				159	152	149
V/C Ratio(X)	0.69	0.56	0.00	0.00	0.22	0.26				0.54	0.41	0.45
Avail Cap(c_a), veh/h	1393	7204	0	0	4829	1479				580	554	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	2.6	0.0	0.0	6.3	6.5				28.3	28.0	28.0
Incr Delay (d2), s/veh	1.8	0.1	0.0	0.0	0.0	0.1				2.8	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	5.1	0.0	0.0	1.9	2.1				1.6	1.1	1.2
LnGrp Delay(d), s/veh	28.5	2.7	0.0	0.0	6.3	6.6				31.1	29.7	30.1
LnGrp LOS	C	A			A	A				C	C	C
Approach Vol, veh/h		2613			904						215	
Approach Delay, s/veh		6.0			6.4						30.4	
Approach LOS		A			A						C	

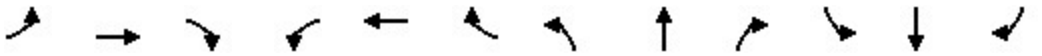
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		9.8		55.1			12.9	42.2
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		91.0			26.0	61.0
Max Q Clear Time (g_c+I1), s		5.0		13.0			7.9	6.7
Green Ext Time (p_c), s		0.9		38.1			1.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Future Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	34	2079	67	663	1067	90	45	11	180	764	438	34
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1472	47	459	2038	600	251	264	747	532	997	77
Arrive On Green	0.02	0.29	0.29	0.13	0.40	0.40	0.14	0.14	0.14	0.30	0.30	0.30
Sat Flow, veh/h	1774	5048	162	3442	5085	1496	1774	1863	2651	1774	3323	257
Grp Volume(v), veh/h	34	1394	752	663	1067	90	45	11	180	764	232	240
Grp Sat Flow(s),veh/h/ln	1774	1695	1820	1721	1695	1496	1774	1863	1325	1774	1770	1810
Q Serve(g_s), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Cycle Q Clear(g_c), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	43	989	531	459	2038	600	251	264	747	532	531	543
V/C Ratio(X)	0.79	1.41	1.42	1.44	0.52	0.15	0.18	0.04	0.24	1.44	0.44	0.44
Avail Cap(c_a), veh/h	89	989	531	459	2038	600	251	264	747	532	531	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	42.5	42.5	52.0	27.3	22.9	45.4	44.5	33.8	42.0	33.8	33.9
Incr Delay (d2), s/veh	26.5	190.5	198.6	212.2	0.2	0.1	1.6	0.3	0.8	206.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	42.5	46.8	21.1	8.9	1.9	1.4	0.3	2.4	48.1	6.3	6.5
LnGrp Delay(d), s/veh	84.8	233.0	241.1	264.2	27.5	23.0	46.9	44.8	34.6	248.6	34.4	34.4
LnGrp LOS	F	F	F	F	C	C	D	D	C	F	C	C
Approach Vol, veh/h		2180			1820			236			1236	
Approach Delay, s/veh		233.4			113.5			37.4			166.8	
Approach LOS		F			F			D			F	

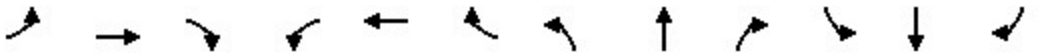
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.0	20.0	39.0		40.0	6.9	52.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		17.0	16.0	35.0		36.0	6.0	45.0
Max Q Clear Time (g_c+I1), s		8.3	18.0	37.0		38.0	4.3	21.1
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	170.0
HCM 2010 LOS	F



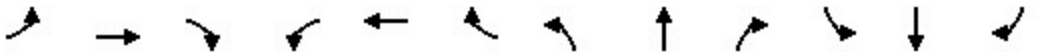
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	450	480	0	0	0	0	810	40	0	2230	0
Future Volume (vph)	40	450	480	0	0	0	0	810	40	0	2230	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1786	2814					7540			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1786	2814					7540			6471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	489	522	0	0	0	0	880	43	0	2424	0
RTOR Reduction (vph)	0	0	6	0	0	0	0	6	0	0	0	0
Lane Group Flow (vph)	39	493	516	0	0	0	0	917	0	0	2424	0
Confl. Peds. (#/hr)							6		16	16		6
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	36.3	36.3	36.3					61.5			61.5	
Effective Green, g (s)	36.3	36.3	36.3					61.5			61.5	
Actuated g/C Ratio	0.34	0.34	0.34					0.58			0.58	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	582	612	965					4382			3761	
v/s Ratio Prot	0.02	c0.28						0.12			c0.37	
v/s Ratio Perm			0.18									
v/c Ratio	0.07	0.81	0.53					0.21			0.64	
Uniform Delay, d1	23.4	31.5	28.0					10.6			14.8	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.0	7.6	0.6					0.1			0.9	
Delay (s)	23.4	39.2	28.5					10.7			15.7	
Level of Service	C	D	C					B			B	
Approach Delay (s/veh)		33.3			0.0			10.7			15.7	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Future Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.98	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5900	1229	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5900	1229	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1613	731	151	645	0	602	0	65	376	0	11
RTOR Reduction (vph)	0	29	226	0	0	0	0	0	43	0	0	7
Lane Group Flow (vph)	0	1891	198	151	645	0	602	0	22	376	0	4
Confl. Peds. (#/hr)			18	18								
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Effective Green, g (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Actuated g/C Ratio		0.47	0.47	0.09	0.59		0.34		0.34	0.34		0.34
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2760	574	304	3032		1178		543	1178		543
v/s Ratio Prot		c0.32		c0.04	0.13							
v/s Ratio Perm			0.16				c0.17		0.01	0.11		0.00
v/c Ratio		0.69	0.35	0.50	0.21		0.51		0.04	0.32		0.01
Uniform Delay, d1		24.0	19.4	50.0	11.0		30.3		25.4	28.1		25.1
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.7	0.4	1.3	0.0		1.6		0.1	0.7		0.0
Delay (s)		24.7	19.8	51.3	11.1		31.9		25.5	28.8		25.1
Level of Service		C	B	D	B		C		C	C		C
Approach Delay (s/veh)		23.8			18.7			31.3			28.7	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	120	620	40	720	0	50	2090	30
Future Volume (vph)	0	0	0	210	120	620	40	720	0	50	2090	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3346	2814	3467	6471		1787	6471	1553
Flt Permitted				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3346	2814	3467	6471		1787	6471	1553
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	228	130	674	43	783	0	54	2272	33
RTOR Reduction (vph)	0	0	0	0	0	313	0	0	0	0	0	12
Lane Group Flow (vph)	0	0	0	116	242	361	43	783	0	54	2272	21
Confl. Peds. (#/hr)							8		15	15		8
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				23.6	23.6	23.6	2.3	63.9		7.0	68.6	68.6
Effective Green, g (s)				23.6	23.6	23.6	2.3	63.9		7.0	68.6	68.6
Actuated g/C Ratio				0.22	0.22	0.22	0.02	0.60		0.07	0.64	0.64
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				360	741	623	74	3882		117	4168	1000
v/s Ratio Prot				0.07	0.07		0.01	0.12		c0.03	c0.35	
v/s Ratio Perm						c0.13						0.01
v/c Ratio				0.32	0.33	0.58	0.58	0.20		0.46	0.55	0.02
Uniform Delay, d1				34.7	34.8	37.0	51.6	9.7		47.9	10.4	6.8
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.5	0.3	1.3	11.1	0.1		2.9	0.5	0.0
Delay (s)				35.3	35.0	38.3	62.7	9.8		50.8	10.9	6.9
Level of Service				D	D	D	E	A		D	B	A
Approach Delay (s/veh)		0.0			37.2			12.6			11.8	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	106.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	49.9%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	160	1830	750	210	60	200
Future Volume (veh/h)	160	1830	750	210	60	200
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	176	2011	824	231	66	220
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	217	3363	1807	493	704	628
Arrive On Green	0.12	0.52	0.36	0.36	0.39	0.39
Sat Flow, veh/h	1792	6735	5352	1387	1792	1599
Grp Volume(v), veh/h	176	2011	785	270	66	220
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1622	1792	1599
Q Serve(g_s), s	8.8	19.8	11.4	11.8	2.1	8.9
Cycle Q Clear(g_c), s	8.8	19.8	11.4	11.8	2.1	8.9
Prop In Lane	1.00			0.86	1.00	1.00
Lane Grp Cap(c), veh/h	217	3363	1723	576	704	628
V/C Ratio(X)	0.81	0.60	0.46	0.47	0.09	0.35
Avail Cap(c_a), veh/h	626	5369	2119	709	704	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	15.3	22.7	22.9	17.5	19.6
Incr Delay (d2), s/veh	7.2	0.2	0.2	0.6	0.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	8.8	5.1	5.3	1.1	9.2
LnGrp Delay(d), s/veh	46.4	15.5	22.9	23.5	17.8	21.1
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		2187	1055		286	
Approach Delay, s/veh		18.0	23.1		20.3	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.6		40.0	15.1	36.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				76.0		36.0	32.0	40.0
Max Q Clear Time (g_c+I1), s				21.8		10.9	10.8	13.8
Green Ext Time (p_c), s				25.8		0.9	0.4	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.7
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	SBR	NWL2	NWR
Lane Configurations											
Traffic Volume (vph)	10	10	10	70	40	20	90	90	10	10	10
Future Volume (vph)	10	10	10	70	40	20	90	90	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.95		1.00	0.99		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1641	1468	1641	2584	3095		1641	3234		1641	1468
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1641	1468	1641	2584	3095		1641	3234		1641	1468
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	13	13	13	93	53	27	120	120	13	13	13
RTOR Reduction (vph)	0	13	0	0	0	0	0	3	0	0	0
Lane Group Flow (vph)	13	0	13	93	80	0	120	130	0	13	13
Confl. Peds. (#/hr)			2			5					
Confl. Bikes (#/hr)						1					
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA		Prot	Prot
Protected Phases	4	4	8	1	2		1	6		7	7
Permitted Phases				8							
Actuated Green, G (s)	2.4	2.4	1.2	12.2	44.6		11.0	59.6		2.5	2.5
Effective Green, g (s)	2.4	2.4	1.2	12.2	44.6		11.0	59.6		2.5	2.5
Actuated g/C Ratio	0.03	0.03	0.01	0.15	0.55		0.13	0.73		0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	48	43	24	512	1689		220	2359		50	44
v/s Ratio Prot	c0.01	0.00	c0.01	0.02	0.03		c0.07	c0.04		0.01	c0.01
v/s Ratio Perm				0.01							
v/c Ratio	0.27	0.01	0.54	0.18	0.05		0.55	0.06		0.26	0.30
Uniform Delay, d1	38.8	38.5	40.0	30.4	8.6		33.0	3.1		38.7	38.7
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	3.0	0.1	22.7	0.2	0.1		2.8	0.0		2.8	3.7
Delay (s)	41.8	38.6	62.7	30.6	8.7		35.8	3.2		41.5	42.5
Level of Service	D	D	E	C	A		D	A		D	D
Approach Delay (s/veh)					8.7			18.6			
Approach LOS					A			B			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.17		
Actuated Cycle Length (s)	81.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	36.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	0	10	0	0	0	0	50	0	20	70	10
Future Volume (veh/h)	10	0	10	0	0	0	0	50	0	20	70	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	0	1681				0	1681	0	1681	1681	1900
Adj Flow Rate, veh/h	15	0	15				0	74	0	29	103	15
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.68	0.68	0.68				0.68	0.68	0.68	0.68	0.68	0.68
Percent Heavy Veh, %	13	0	13				0	13	0	13	13	13
Cap, veh/h	38	0	34				0	2616	0	37	2488	356
Arrive On Green	0.02	0.00	0.02				0.00	0.82	0.00	0.02	0.89	0.89
Sat Flow, veh/h	1601	0	1429				0	3363	0	1601	2806	401
Grp Volume(v), veh/h	15	0	15				0	74	0	29	58	60
Grp Sat Flow(s),veh/h/ln	1601	0	1429				0	1597	0	1601	1597	1610
Q Serve(g_s), s	0.8	0.0	0.9				0.0	0.4	0.0	1.6	0.4	0.4
Cycle Q Clear(g_c), s	0.8	0.0	0.9				0.0	0.4	0.0	1.6	0.4	0.4
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.25
Lane Grp Cap(c), veh/h	38	0	34				0	2616	0	37	1416	1427
V/C Ratio(X)	0.40	0.00	0.45				0.00	0.03	0.00	0.79	0.04	0.04
Avail Cap(c_a), veh/h	593	0	529				0	2616	0	683	1416	1427
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	42.9				0.0	1.5	0.0	43.3	0.6	0.6
Incr Delay (d2), s/veh	6.7	0.0	9.0				0.0	0.0	0.0	29.9	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.4				0.0	0.2	0.0	1.0	0.2	0.2
LnGrp Delay(d), s/veh	49.5	0.0	51.9				0.0	1.5	0.0	73.2	0.6	0.6
LnGrp LOS	D		D					A		E	A	A
Approach Vol, veh/h		30						74			147	
Approach Delay, s/veh		50.7						1.5			15.0	
Approach LOS		D						A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	6.0	77.0		6.1		83.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	38.0	37.0		33.0		79.0		
Max Q Clear Time (g_c+I1), s	3.6	2.4		2.9		2.4		
Green Ext Time (p_c), s	0.1	0.4		0.1		0.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	10	40	10	10	60	20
Future Vol, veh/h	10	40	10	10	60	20
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	56	14	14	85	28

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	206	16	0	0	29	0
Stage 1	22	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	769	1066	-	-	1597	-
Stage 1	1003	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	727	1064	-	-	1596	-
Mov Cap-2 Maneuver	727	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	9	0	5.5
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	974	1596	-
HCM Lane V/C Ratio	-	-	0.072	0.053	-
HCM Control Delay (s/veh)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	1410	30	0	910	0	10
Future Vol, veh/h	1410	30	0	910	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1533	33	0	989	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	767
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	-	-	0	-	0	294
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	294
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	294	-	-	-
HCM Lane V/C Ratio	0.037	-	-	-
HCM Control Delay (s/veh)	17.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	390	250	1020	150	610	660	290	190	1010	420
Future Volume (veh/h)	190	1190	390	250	1020	150	610	660	290	190	1010	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	209	1308	429	275	1121	165	670	725	319	209	1110	462
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	260	1409	430	318	1310	193	726	2128	654	268	1451	437
Arrive On Green	0.08	0.28	0.28	0.09	0.29	0.29	0.21	0.42	0.42	0.08	0.29	0.29
Sat Flow, veh/h	3442	5085	1554	3442	4458	656	3442	5085	1562	3442	5085	1531
Grp Volume(v), veh/h	209	1308	429	275	852	434	670	725	319	209	1110	462
Grp Sat Flow(s),veh/h/ln	1721	1695	1554	1721	1695	1723	1721	1695	1562	1721	1695	1531
Q Serve(g_s), s	7.1	29.8	32.8	9.4	28.3	28.3	22.7	11.5	17.8	7.1	23.8	34.0
Cycle Q Clear(g_c), s	7.1	29.8	32.8	9.4	28.3	28.3	22.7	11.5	17.8	7.1	23.8	34.0
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	260	1409	430	318	996	506	726	2128	654	268	1451	437
V/C Ratio(X)	0.80	0.93	1.00	0.87	0.86	0.86	0.92	0.34	0.49	0.78	0.76	1.06
Avail Cap(c_a), veh/h	260	1409	430	318	996	506	751	2128	654	347	1451	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	41.9	43.0	53.3	39.7	39.7	46.0	23.5	25.3	53.9	38.9	42.6
Incr Delay (d2), s/veh	16.5	11.0	42.4	21.3	7.4	13.6	16.6	0.4	2.6	8.3	3.9	59.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	15.4	19.1	5.4	14.3	15.4	12.5	5.5	8.1	3.7	11.6	21.5
LnGrp Delay(d), s/veh	70.7	52.9	85.4	74.6	47.1	53.3	62.7	23.9	27.9	62.2	42.8	101.6
LnGrp LOS	E	D	F	E	D	D	E	C	C	E	D	F
Approach Vol, veh/h		1946			1561			1714			1781	
Approach Delay, s/veh		62.0			53.7			39.8			60.3	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	53.9	15.0	37.0	29.1	38.0	13.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	48.0	11.0	33.0	26.0	34.0	9.0	35.0
Max Q Clear Time (g_c+I1), s	9.1	19.8	11.4	34.8	24.7	36.0	9.1	30.3
Green Ext Time (p_c), s	0.2	7.3	0.0	0.0	0.4	0.0	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.3
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	90	1360	680	0	30	1550
Future Volume (vph)	90	1360	680	0	30	1550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.87	0.85	1.00		1.00	1.00
Flt Protected	0.99	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3087	1427	5036		1752	6346
Flt Permitted	0.99	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3087	1427	5036		1752	6346
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	93	1402	701	0	31	1598
RTOR Reduction (vph)	106	106	0	0	0	0
Lane Group Flow (vph)	688	595	701	0	31	1598
Confl. Peds. (#/hr)				17	17	
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	44.5	44.5	34.8		3.3	42.1
Effective Green, g (s)	44.5	44.5	34.8		3.3	42.1
Actuated g/C Ratio	0.47	0.47	0.37		0.03	0.45
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1452	671	1852		61	2824
v/s Ratio Prot	0.22		0.14		0.02	c0.25
v/s Ratio Perm		c0.42				
v/c Ratio	0.47	0.89	0.38		0.51	0.57
Uniform Delay, d1	17.1	22.7	22.0		44.9	19.5
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	13.4	0.6		6.5	0.8
Delay (s)	17.3	36.1	22.5		51.4	20.3
Level of Service	B	D	C		D	C
Approach Delay (s/veh)	26.1		22.5			20.9
Approach LOS	C		C			C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	94.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	480	40	630	1450	0
Future Volume (veh/h)	210	480	40	630	1450	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	221	505	42	663	1526	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	682	314	54	4653	3371	0
Arrive On Green	0.20	0.20	0.03	0.73	0.67	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	221	505	42	663	1526	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	6.7	24.0	2.8	3.7	17.2	0.0
Cycle Q Clear(g_c), s	6.7	24.0	2.8	3.7	17.2	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	682	314	54	4653	3371	0
V/C Ratio(X)	0.32	1.61	0.78	0.14	0.45	0.00
Avail Cap(c_a), veh/h	682	314	176	4653	3371	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.1	48.0	57.8	4.8	9.4	0.0
Incr Delay (d2), s/veh	0.3	289.1	21.2	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	43.9	1.7	1.6	8.1	0.0
LnGrp Delay(d), s/veh	41.3	337.1	78.9	4.8	9.9	0.0
LnGrp LOS	D	F	E	A	A	
Approach Vol, veh/h	726			705	1526	
Approach Delay, s/veh	247.0			9.2	9.9	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		92.0		28.0	7.7	84.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		88.0		24.0	12.0	72.0		
Max Q Clear Time (g_c+I1), s		5.7		26.0	4.8	19.2		
Green Ext Time (p_c), s		5.2		0.0	0.0	16.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	930	90	300	580	100	80	440	270	90	500	120
Future Volume (veh/h)	100	930	90	300	580	100	80	440	270	90	500	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.88	1.00		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	108	1000	97	323	624	108	86	473	290	97	538	129
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	165	1315	347	403	1667	455	138	1984	532	152	2004	539
Arrive On Green	0.05	0.27	0.27	0.12	0.34	0.34	0.04	0.41	0.41	0.05	0.41	0.41
Sat Flow, veh/h	3312	4893	1291	3312	4893	1337	3312	4893	1312	3312	4893	1315
Grp Volume(v), veh/h	108	1000	97	323	624	108	86	473	290	97	538	129
Grp Sat Flow(s),veh/h/ln	1656	1631	1291	1656	1631	1337	1656	1631	1312	1656	1631	1315
Q Serve(g_s), s	3.2	19.0	6.0	9.6	9.7	5.9	2.6	6.4	17.1	2.9	7.4	6.5
Cycle Q Clear(g_c), s	3.2	19.0	6.0	9.6	9.7	5.9	2.6	6.4	17.1	2.9	7.4	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	1315	347	403	1667	455	138	1984	532	152	2004	539
V/C Ratio(X)	0.65	0.76	0.28	0.80	0.37	0.24	0.62	0.24	0.55	0.64	0.27	0.24
Avail Cap(c_a), veh/h	262	1742	460	655	2323	634	229	1984	532	229	2004	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	34.0	29.2	43.2	25.2	23.9	47.7	19.8	22.9	47.4	19.8	19.5
Incr Delay (d2), s/veh	4.3	1.4	0.4	3.7	0.1	0.3	4.6	0.3	4.0	4.4	0.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.7	2.2	4.6	4.4	2.2	1.3	2.9	6.7	1.4	3.4	2.5
LnGrp Delay(d), s/veh	51.5	35.4	29.7	46.9	25.3	24.2	52.2	20.1	26.9	51.9	20.1	20.6
LnGrp LOS	D	D	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1205			1055			849			764	
Approach Delay, s/veh		36.4			31.8			25.7			24.2	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	45.0	16.3	31.2	8.2	45.4	9.0	38.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	41.0	20.0	36.0	7.0	41.0	8.0	48.0
Max Q Clear Time (g_c+I1), s	4.9	19.1	11.6	21.0	4.6	9.4	5.2	11.7
Green Ext Time (p_c), s	0.0	4.3	0.7	6.2	0.0	4.5	0.1	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Future Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	21	11	32	372	21	106	85	1000	574	223	1362	53
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	462	134	388	478	593	501	108	2024	615	259	2420	94
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.41	0.41	0.15	0.49	0.49
Sat Flow, veh/h	1228	411	1196	1325	1827	1543	1740	4988	1517	1740	4916	191
Grp Volume(v), veh/h	21	0	43	372	21	106	85	1000	574	223	921	494
Grp Sat Flow(s),veh/h/ln	1228	0	1607	1325	1827	1543	1740	1663	1517	1740	1663	1783
Q Serve(g_s), s	1.2	0.0	1.8	27.0	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Cycle Q Clear(g_c), s	2.0	0.0	1.8	28.8	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Prop In Lane	1.00		0.74	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	462	0	522	478	593	501	108	2024	615	259	1637	878
V/C Ratio(X)	0.05	0.00	0.08	0.78	0.04	0.21	0.78	0.49	0.93	0.86	0.56	0.56
Avail Cap(c_a), veh/h	642	0	759	673	863	729	210	2024	615	402	1637	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	23.3	33.3	23.0	24.4	46.0	22.0	28.3	41.4	17.7	17.7
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.8	0.0	0.2	11.6	0.9	23.0	11.0	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.8	10.3	0.4	2.1	2.7	6.9	18.9	6.8	9.1	10.1
LnGrp Delay(d), s/veh	23.7	0.0	23.4	37.1	23.0	24.6	57.6	22.8	51.3	52.4	19.2	20.4
LnGrp LOS	C		C	D	C	C	E	C	D	D	B	C
Approach Vol, veh/h		64			499			1659			1638	
Approach Delay, s/veh		23.5			33.8			34.5			24.0	
Approach LOS		C			C			C			C	

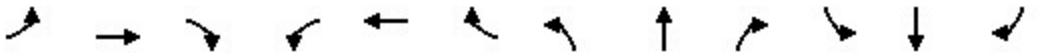
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.8	44.4		36.3	10.2	53.0		36.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	23.0	38.0		47.0	12.0	49.0		47.0
Max Q Clear Time (g_c+I1), s	14.5	38.0		4.0	6.8	21.4		30.8
Green Ext Time (p_c), s	0.4	0.0		0.3	0.1	11.4		1.5

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		29.8
HCM 2010 LOS		C

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	90	0	0	420	1060	60
Future Volume (veh/h)	90	0	0	420	1060	60
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	93	0	0	433	1093	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2155	0	0	2155	1465	464
Arrive On Green	0.60	0.00	0.00	0.60	0.29	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	93	0	0	433	1093	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	0.8	0.0	0.0	4.1	14.6	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.1	14.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2155	0	0	2155	1465	464
V/C Ratio(X)	0.04	0.00	0.00	0.20	0.75	0.00
Avail Cap(c_a), veh/h	2155	0	0	2155	4534	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	0.0	6.7	24.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.0	6.9	0.0
LnGrp Delay(d), s/veh	6.1	0.0	0.0	6.9	24.8	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	93			433	1093	
Approach Delay, s/veh	6.1			6.9	24.8	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		49.0				49.0		25.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		45.0				45.0		67.0
Max Q Clear Time (g_c+I1), s		2.8				6.1		16.6
Green Ext Time (p_c), s		0.5				2.8		5.0

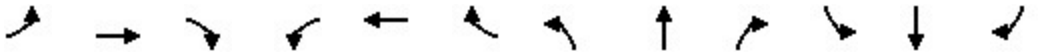
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	1070	120	330	700	110	130	320	230	580	480	120
Future Volume (vph)	290	1070	120	330	700	110	130	320	230	580	480	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	0.99		1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	3433	5085	1368	3433	4942		1610	3113	1419	1522	4585	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.73	
Satd. Flow (perm)	3433	5085	1368	3433	4942		1610	2919	1419	1522	3386	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	299	1103	124	340	722	113	134	330	237	598	495	124
RTOR Reduction (vph)	0	0	93	0	17	0	0	11	51	0	16	0
Lane Group Flow (vph)	299	1103	31	340	818	0	121	394	124	305	896	0
Confl. Peds. (#/hr)	21		58	58		21	26		5	5		26
Confl. Bikes (#/hr)			1			3						
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	14.3	29.2	29.2	14.4	29.3		13.1	42.2	43.5	27.1	60.2	
Effective Green, g (s)	14.3	29.2	29.2	14.4	29.3		13.1	42.2	43.5	27.1	60.2	
Actuated g/C Ratio	0.12	0.25	0.25	0.12	0.25		0.11	0.36	0.38	0.23	0.52	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	423	1282	344	426	1250		182	1085	582	356	2040	
v/s Ratio Prot	0.09	c0.22		c0.10	0.17		0.08	0.04	0.03	c0.20	0.10	
v/s Ratio Perm			0.02					0.09	0.06		c0.13	
v/c Ratio	0.71	0.86	0.09	0.80	0.65		0.66	0.36	0.21	0.86	0.44	
Uniform Delay, d1	48.7	41.4	33.1	49.3	38.7		49.2	27.0	24.5	42.5	17.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.3	6.1	0.1	10.0	1.2		8.8	0.2	0.2	18.0	0.2	
Delay (s)	54.1	47.5	33.3	59.3	40.0		58.1	27.2	24.7	60.5	17.4	
Level of Service	D	D	C	E	D		E	C	C	E	B	
Approach Delay (s/veh)		47.6			45.6			31.9			28.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	115.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Future Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
Arrive On Green	0.12	0.27	0.27	0.20	0.35	0.35	0.07	0.27	0.27	0.13	0.32	0.32
Sat Flow, veh/h	1792	3574	1571	1792	3574	1550	3476	3574	1555	1792	3574	1553
Grp Volume(v), veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1550	1738	1787	1555	1792	1787	1553
Q Serve(g_s), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Cycle Q Clear(g_c), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
V/C Ratio(X)	0.85	0.91	0.63	0.92	0.61	0.17	0.76	0.70	0.16	0.87	0.79	0.34
Avail Cap(c_a), veh/h	312	995	551	405	1254	748	272	947	730	265	1150	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.6	31.8	45.1	30.9	17.0	52.5	38.1	17.9	49.2	35.4	29.6
Incr Delay (d2), s/veh	13.7	11.7	2.2	23.6	0.9	0.1	11.2	4.3	0.5	23.6	5.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	14.9	9.3	12.5	10.2	2.3	3.3	10.0	2.2	7.7	13.9	4.3
LnGrp Delay(d), s/veh	63.5	52.3	34.0	68.7	31.7	17.1	63.6	42.4	18.3	72.8	40.9	31.5
LnGrp LOS	E	D	C	E	C	B	E	D	B	E	D	C
Approach Vol, veh/h		1390			1220			968			1273	
Approach Delay, s/veh		49.3			40.1			43.7			44.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	34.5	26.8	35.0	12.2	41.0	17.5	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	26.0	32.0	9.0	37.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	14.6	21.2	22.5	29.2	8.1	28.4	13.3	22.4
Green Ext Time (p_c), s	0.1	2.9	0.3	1.8	0.1	4.1	0.2	4.9

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		44.6	
HCM 2010 LOS		D	

ANAHEIM STATION- NO PROJECT PM

HCM 2010 Signalized Intersection Summary
1: Manchester Ave & Katella Ave

03/25/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	860	440	580	2710	0	30	0	310	80	70	10
Future Volume (veh/h)	0	860	440	580	2710	0	30	0	310	80	70	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	0	896	458	604	2823	0	21	0	334	83	73	10
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	0	2223	689	700	4347	0	31	0	567	135	711	318
Arrive On Green	0.00	0.43	0.43	0.20	0.67	0.00	0.02	0.00	0.18	0.04	0.20	0.20
Sat Flow, veh/h	0	5305	1592	3476	6735	0	1792	0	3198	3476	3574	1599
Grp Volume(v), veh/h	0	896	458	604	2823	0	21	0	334	83	73	10
Grp Sat Flow(s),veh/h/ln	0	1712	1592	1738	1618	0	1792	0	1599	1738	1787	1599
Q Serve(g_s), s	0.0	12.8	24.5	18.0	27.2	0.0	1.2	0.0	10.3	2.5	1.8	0.5
Cycle Q Clear(g_c), s	0.0	12.8	24.5	18.0	27.2	0.0	1.2	0.0	10.3	2.5	1.8	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2223	689	700	4347	0	31	0	567	135	711	318
V/C Ratio(X)	0.00	0.40	0.66	0.86	0.65	0.00	0.68	0.00	0.59	0.62	0.10	0.03
Avail Cap(c_a), veh/h	0	2398	744	941	5016	0	100	0	567	195	711	318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.9	24.2	41.3	10.2	0.0	52.3	0.0	40.5	50.7	35.1	34.6
Incr Delay (d2), s/veh	0.0	0.1	2.0	6.4	0.2	0.0	22.6	0.0	4.4	4.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	11.2	9.3	12.0	0.0	0.8	0.0	4.9	1.3	0.9	0.3
LnGrp Delay(d), s/veh	0.0	21.0	26.2	47.7	10.5	0.0	74.9	0.0	44.9	55.2	35.4	34.8
LnGrp LOS		C	C	D	B		E		D	E	D	C
Approach Vol, veh/h		1354			3427			355			166	
Approach Delay, s/veh		22.7			17.0			46.7			45.2	
Approach LOS		C			B			D			D	

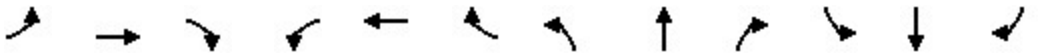
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	23.0	25.6	50.4	5.9	25.3		75.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	19.0	29.0	50.0	6.0	19.0		83.0
Max Q Clear Time (g_c+I1), s	4.5	12.3	20.0	26.5	3.2	3.8		29.2
Green Ext Time (p_c), s	0.0	0.7	1.6	8.3	0.0	0.3		42.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	60	1270	0	0	2400	160	0	0	0	830	1170	180
Future Volume (vph)	60	1270	0	0	2400	160	0	0	0	830	1170	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.98	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3467	6471			6089	1295				1448	5925	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3467	6471			6089	1295				1448	5925	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	66	1396	0	0	2637	176	0	0	0	912	1286	198
RTOR Reduction (vph)	0	0	0	0	1	25	0	0	0	0	15	0
Lane Group Flow (vph)	66	1396	0	0	2654	133	0	0	0	474	1907	0
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	3.2	61.2			54.0	54.0				50.0	50.0	
Effective Green, g (s)	3.2	61.2			54.0	54.0				50.0	50.0	
Actuated g/C Ratio	0.03	0.51			0.45	0.45				0.42	0.42	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	93	3322			2758	586				607	2485	
v/s Ratio Prot	c0.02	0.22			c0.44					c0.33	0.32	
v/s Ratio Perm						0.10						
v/c Ratio	0.71	0.42			0.96	0.23				0.78	0.77	
Uniform Delay, d1	57.5	18.0			31.6	19.9				29.9	29.6	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	21.9	0.1			9.9	0.2				6.5	1.5	
Delay (s)	79.4	18.1			41.5	20.1				36.3	31.1	
Level of Service	E	B			D	C				D	C	
Approach Delay (s/veh)		20.8			40.3			0.0			32.1	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1160	20	40	1890	60	150	180	30	70	10	660
Future Volume (vph)	180	1160	20	40	1890	60	150	180	30	70	10	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	5136	1529	1787	5136	1569	1787	1837		1785	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00		0.52	1.00	1.00
Satd. Flow (perm)	1787	5136	1529	1787	5136	1569	1412	1837		971	1881	1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	198	1275	22	44	2077	66	165	198	33	77	11	725
RTOR Reduction (vph)	0	0	11	0	0	39	0	5	0	0	0	117
Lane Group Flow (vph)	198	1275	11	44	2077	27	165	226	0	77	11	608
Confl. Peds. (#/hr)	3		6	6		3			1	1		
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Effective Green, g (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Actuated g/C Ratio	0.12	0.48	0.48	0.05	0.41	0.41	0.37	0.37		0.37	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	207	2474	736	82	2117	646	525	684		361	700	595
v/s Ratio Prot	c0.11	0.25		0.02	c0.40			0.12			0.01	
v/s Ratio Perm			0.01			0.02	0.12			0.08		c0.38
v/c Ratio	0.96	0.52	0.01	0.54	0.98	0.04	0.31	0.33		0.21	0.02	1.02
Uniform Delay, d1	53.1	21.6	16.3	56.3	35.0	21.2	26.9	27.1		25.8	23.9	37.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	49.7	0.2	0.0	6.6	15.3	0.0	1.6	1.3		1.3	0.0	42.7
Delay (s)	102.8	21.8	16.3	62.9	50.3	21.3	28.5	28.4		27.2	24.0	80.6
Level of Service	F	C	B	E	D	C	C	C		C	C	F
Approach Delay (s/veh)		32.4			49.7			28.4			74.7	
Approach LOS		C			D			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	46.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Future Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.93		1.00	0.97		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1805	4845		3502	5042		1805		2804	1802		2842
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1805	4845		3502	5042		1805		2804	1802		2842
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	80	102	80	34	386	80	23	0	91	284	0	23
RTOR Reduction (vph)	0	64	0	0	30	0	0	0	34	0	0	9
Lane Group Flow (vph)	80	118	0	34	436	0	23	0	57	284	0	14
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Effective Green, g (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Actuated g/C Ratio	0.09	0.20		0.04	0.15		0.63		0.63	0.63		0.63
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	157	959		151	775		1130		1755	1128		1779
v/s Ratio Prot	c0.04	c0.02		0.01	c0.09							
v/s Ratio Perm							0.01		0.02	c0.16		0.01
v/c Ratio	0.51	0.12		0.23	0.56		0.02		0.03	0.25		0.01
Uniform Delay, d1	39.4	29.8		41.8	35.4		6.4		6.4	7.5		6.4
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	2.6	0.1		0.8	0.9		0.0		0.0	0.5		0.0
Delay (s)	42.0	29.9		42.6	36.4		6.4		6.5	8.0		6.4
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		33.6			36.8			6.5			7.9	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Future Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	281	1198	271	198	1115	229	469	1312	219	292	760	240
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	311	1398	316	227	1227	252	531	1523	462	352	942	294
Arrive On Green	0.17	0.34	0.34	0.13	0.29	0.29	0.15	0.30	0.30	0.10	0.25	0.25
Sat Flow, veh/h	1792	4161	941	1792	4242	871	3476	5136	1557	3476	3843	1199
Grp Volume(v), veh/h	281	986	483	198	900	444	469	1312	219	292	676	324
Grp Sat Flow(s),veh/h/ln	1792	1712	1679	1792	1712	1689	1738	1712	1557	1738	1712	1618
Q Serve(g_s), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Cycle Q Clear(g_c), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Prop In Lane	1.00		0.56	1.00		0.52	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	311	1150	564	227	990	488	531	1523	462	352	839	396
V/C Ratio(X)	0.90	0.86	0.86	0.87	0.91	0.91	0.88	0.86	0.47	0.83	0.81	0.82
Avail Cap(c_a), veh/h	359	1194	586	266	1015	501	576	1523	462	394	839	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	35.5	35.5	49.2	39.3	39.3	47.6	38.1	33.0	50.6	40.7	40.9
Incr Delay (d2), s/veh	23.3	6.2	11.8	23.1	11.6	20.3	14.3	6.7	3.5	12.7	8.1	16.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	15.5	16.1	7.6	15.3	16.3	8.4	14.1	6.1	5.2	11.0	11.6
LnGrp Delay(d), s/veh	69.8	41.7	47.3	72.2	50.9	59.6	61.9	44.8	36.5	63.2	48.9	57.7
LnGrp LOS	E	D	D	E	D	E	E	D	D	E	D	E
Approach Vol, veh/h		1750			1542			2000			1292	
Approach Delay, s/veh		47.8			56.1			47.9			54.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	38.0	18.5	42.5	21.5	32.1	23.9	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	34.0	17.0	40.0	19.0	28.0	23.0	34.0
Max Q Clear Time (g_c+I1), s	11.5	29.7	14.4	32.8	17.2	23.7	19.6	31.1
Green Ext Time (p_c), s	0.2	3.1	0.1	4.9	0.4	2.4	0.3	2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Future Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	149	34	34	92	57	310	46	1529	46	138	1149	207
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	156	259	259	424	75	410	263	3253	989	216	2761	497
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1021	864	864	1340	251	1366	404	5136	1562	327	4360	785
Grp Volume(v), veh/h	149	0	68	92	0	367	46	1529	46	138	902	454
Grp Sat Flow(s),veh/h/ln	1021	0	1728	1340	0	1617	404	1712	1562	327	1712	1721
Q Serve(g_s), s	11.3	0.0	3.4	6.4	0.0	24.7	7.7	18.7	1.3	45.6	15.7	15.8
Cycle Q Clear(g_c), s	36.0	0.0	3.4	9.9	0.0	24.7	23.4	18.7	1.3	64.3	15.7	15.8
Prop In Lane	1.00		0.50	1.00		0.84	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
V/C Ratio(X)	0.95	0.00	0.13	0.22	0.00	0.76	0.17	0.47	0.05	0.64	0.42	0.42
Avail Cap(c_a), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	30.6	34.2	0.0	38.0	16.8	11.5	8.3	28.3	11.0	11.0
Incr Delay (d2), s/veh	57.8	0.0	0.1	0.3	0.0	6.7	1.4	0.5	0.1	13.5	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.7	2.4	0.0	11.9	1.0	8.9	0.6	4.9	7.6	7.8
LnGrp Delay(d), s/veh	114.1	0.0	30.7	34.5	0.0	44.8	18.2	12.0	8.4	41.8	11.5	12.1
LnGrp LOS	F		C	C		D	B	B	A	D	B	B
Approach Vol, veh/h		217			459			1621			1494	
Approach Delay, s/veh		88.0			42.7			12.1			14.5	
Approach LOS		F			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		25.4		38.0		66.3		26.7
Green Ext Time (p_c), s		17.6		0.0		6.9		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Future Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	667	871	151	86	484	366	108	1118	43	75	1043	118
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	282	1538	267	231	974	735	133	1724	66	97	1494	169
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.07	0.34	0.34	0.05	0.32	0.32
Sat Flow, veh/h	652	3046	528	555	1929	1456	1792	5071	195	1792	4671	528
Grp Volume(v), veh/h	667	511	511	86	448	402	108	755	406	75	764	397
Grp Sat Flow(s),veh/h/ln	652	1787	1787	555	1787	1598	1792	1712	1842	1792	1712	1775
Q Serve(g_s), s	40.2	23.6	23.6	15.1	19.7	19.8	7.1	22.2	22.2	4.9	23.2	23.3
Cycle Q Clear(g_c), s	60.0	23.6	23.6	38.7	19.7	19.8	7.1	22.2	22.2	4.9	23.2	23.3
Prop In Lane	1.00		0.30	1.00		0.91	1.00		0.11	1.00		0.30
Lane Grp Cap(c), veh/h	282	902	902	231	902	807	133	1164	626	97	1095	568
V/C Ratio(X)	2.37	0.57	0.57	0.37	0.50	0.50	0.81	0.65	0.65	0.77	0.70	0.70
Avail Cap(c_a), veh/h	282	902	902	231	902	807	151	1164	626	271	1095	568
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.6	20.4	20.4	33.8	19.4	19.4	54.2	33.2	33.2	55.5	35.4	35.4
Incr Delay (d2), s/veh	626.9	0.8	0.8	1.0	0.4	0.5	25.1	2.8	5.1	12.3	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	58.2	11.8	11.8	2.4	9.8	8.8	4.4	10.9	12.2	2.8	11.5	12.5
LnGrp Delay(d), s/veh	670.5	21.2	21.2	34.8	19.9	19.9	79.2	36.0	38.3	67.8	39.1	42.4
LnGrp LOS	F	C	C	C	B	B	E	D	D	E	D	D
Approach Vol, veh/h		1689			936			1269			1236	
Approach Delay, s/veh		277.6			21.3			40.4			41.9	
Approach LOS		F			C			D			D	

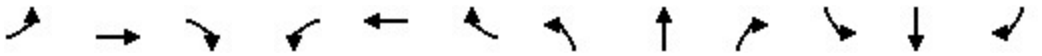
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.4	44.4		64.0	12.8	42.0		64.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	18.0	30.0		60.0	10.0	38.0		60.0
Max Q Clear Time (g_c+I1), s	6.9	24.2		62.0	9.1	25.3		40.7
Green Ext Time (p_c), s	0.1	3.3		0.0	0.0	5.9		6.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		115.4
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Future Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	21	11	716	11	168	21	1168	358	74	1179	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	38	65	22	324	4	877	30	1195	366	75	1748	16
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.02	0.31	0.31	0.04	0.33	0.33
Sat Flow, veh/h	0	118	41	481	7	1594	1792	3877	1188	1792	5246	49
Grp Volume(v), veh/h	43	0	0	727	0	168	21	1031	495	74	769	421
Grp Sat Flow(s),veh/h/ln	159	0	0	489	0	1594	1792	1712	1641	1792	1712	1871
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Cycle Q Clear(g_c), s	66.0	0.0	0.0	66.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Prop In Lane	0.26		0.26	0.98		1.00	1.00		0.72	1.00		0.03
Lane Grp Cap(c), veh/h	125	0	0	328	0	877	30	1056	506	75	1141	624
V/C Ratio(X)	0.34	0.00	0.00	2.21	0.00	0.19	0.70	0.98	0.98	0.99	0.67	0.67
Avail Cap(c_a), veh/h	125	0	0	328	0	877	60	1056	506	75	1141	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	0.0	33.0	0.0	13.6	58.7	41.1	41.1	57.5	34.4	34.4
Incr Delay (d2), s/veh	1.6	0.0	0.0	555.9	0.0	0.1	25.3	22.7	34.8	101.1	3.2	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	61.6	0.0	2.8	0.9	20.2	21.1	4.5	11.5	13.0
LnGrp Delay(d), s/veh	29.2	0.0	0.0	588.9	0.0	13.7	84.0	63.8	75.9	158.5	37.6	40.2
LnGrp LOS	C			F		B	F	E	E	F	D	D
Approach Vol, veh/h		43			895			1547			1264	
Approach Delay, s/veh		29.2			480.9			67.9			45.5	
Approach LOS		C			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	41.0		70.0	6.0	44.0		70.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0		66.0	4.0	38.0		66.0
Max Q Clear Time (g_c+I1), s	7.0	37.8		68.0	3.4	25.2		68.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		158.5
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	510	100	400	980	70	290	680	230	160	1020	520
Future Volume (vph)	290	510	100	400	980	70	290	680	230	160	1020	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.93	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	6068	1206	3467	5136	1558	3467	5136	1494	3467	5136	1556
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	6068	1206	3467	5136	1558	3467	5136	1494	3467	5136	1556
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	537	105	421	1032	74	305	716	242	168	1074	547
RTOR Reduction (vph)	0	2	75	0	0	56	0	0	139	0	0	203
Lane Group Flow (vph)	305	546	19	421	1032	18	305	716	103	168	1074	344
Confl. Peds. (#/hr)	6		26	26		6	7		25	25		7
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	14.0	23.3	23.3	18.6	27.9	27.9	14.0	50.1	50.1	9.5	45.6	45.6
Effective Green, g (s)	14.0	23.3	23.3	18.6	27.9	27.9	14.0	50.1	50.1	9.5	45.6	45.6
Actuated g/C Ratio	0.12	0.20	0.20	0.16	0.24	0.24	0.12	0.43	0.43	0.08	0.39	0.39
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	413	1203	239	548	1219	369	413	2189	637	280	1993	603
v/s Ratio Prot	0.09	0.09		c0.12	c0.20		c0.09	0.14		0.05	0.21	
v/s Ratio Perm			0.02			0.01			0.07			c0.22
v/c Ratio	0.74	0.45	0.08	0.77	0.85	0.05	0.74	0.33	0.16	0.60	0.54	0.57
Uniform Delay, d1	50.0	41.5	38.4	47.4	42.8	34.6	50.0	22.5	20.8	52.2	27.8	28.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	0.3	0.1	6.4	5.6	0.1	6.8	0.4	0.5	3.6	1.1	3.9
Delay (s)	56.8	41.8	38.5	53.8	48.4	34.6	56.8	22.9	21.3	55.8	28.9	32.2
Level of Service	E	D	D	D	D	C	E	C	C	E	C	C
Approach Delay (s/veh)		46.3			49.2			30.8			32.4	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	117.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	0	240	10	10	10	420	980	10	10	1170	970
Future Volume (veh/h)	340	0	240	10	10	10	420	980	10	10	1170	970
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	347	0	245	10	10	10	429	1000	10	10	1194	990
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	437	489	436	224	498	428	486	3217	32	33	1654	757
Arrive On Green	0.27	0.00	0.27	0.27	0.27	0.27	0.14	0.61	0.61	0.01	0.48	0.48
Sat Flow, veh/h	1396	1787	1594	1141	1822	1565	3476	5243	52	3476	3424	1567
Grp Volume(v), veh/h	347	0	245	10	10	10	429	653	357	10	1194	990
Grp Sat Flow(s),veh/h/ln	1396	1787	1594	1141	1787	1599	1738	1712	1872	1738	1712	1567
Q Serve(g_s), s	28.0	0.0	15.3	0.9	0.5	0.5	14.0	10.6	10.6	0.3	32.1	56.0
Cycle Q Clear(g_c), s	28.6	0.0	15.3	16.2	0.5	0.5	14.0	10.6	10.6	0.3	32.1	56.0
Prop In Lane	1.00		1.00	1.00		0.98	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	437	489	436	224	489	437	486	2101	1148	33	1654	757
V/C Ratio(X)	0.79	0.00	0.56	0.04	0.02	0.02	0.88	0.31	0.31	0.30	0.72	1.31
Avail Cap(c_a), veh/h	477	540	481	256	540	483	510	2101	1148	120	1654	757
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.2	0.0	36.2	43.1	30.8	30.8	48.9	10.7	10.7	57.0	23.8	30.0
Incr Delay (d2), s/veh	8.3	0.0	1.2	0.1	0.0	0.0	16.0	0.4	0.7	5.0	2.8	147.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	0.0	6.9	0.3	0.2	0.2	7.8	5.1	5.7	0.2	15.7	55.1
LnGrp Delay(d), s/veh	49.6	0.0	37.4	43.2	30.8	30.8	64.9	11.1	11.4	62.1	26.5	177.7
LnGrp LOS	D		D	D	C	C	E	B	B	E	C	F
Approach Vol, veh/h		592			30			1439			2194	
Approach Delay, s/veh		44.5			34.9			27.2			94.9	
Approach LOS		D			C			C			F	

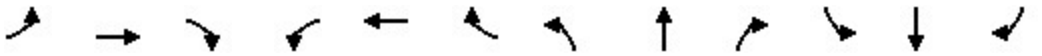
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	75.1		35.7	20.2	60.0		35.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	69.0		35.0	17.0	56.0		35.0
Max Q Clear Time (g_c+I1), s	2.3	12.6		30.6	16.0	58.0		18.2
Green Ext Time (p_c), s	0.0	7.7		1.1	0.2	0.0		0.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh	64.6	
HCM 2010 LOS	E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	730	430	870	1560	170	280	770	210	140	1110	210
Future Volume (veh/h)	230	730	430	870	1560	170	280	770	210	140	1110	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	256	811	478	967	1733	189	311	856	233	156	1233	233
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	310	856	393	985	2084	226	319	1388	368	213	1330	250
Arrive On Green	0.09	0.25	0.25	0.28	0.44	0.44	0.09	0.27	0.27	0.06	0.24	0.24
Sat Flow, veh/h	3476	3424	1571	3476	4694	510	3476	5104	1351	3476	5502	1034
Grp Volume(v), veh/h	256	811	478	967	1262	660	311	813	276	156	1087	379
Grp Sat Flow(s),veh/h/ln	1738	1712	1571	1738	1712	1781	1738	1618	1602	1738	1618	1682
Q Serve(g_s), s	8.7	27.9	30.0	33.1	39.0	39.3	10.7	17.6	18.2	5.3	26.3	26.5
Cycle Q Clear(g_c), s	8.7	27.9	30.0	33.1	39.0	39.3	10.7	17.6	18.2	5.3	26.3	26.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		0.84	1.00		0.61
Lane Grp Cap(c), veh/h	310	856	393	985	1520	791	319	1320	436	213	1173	406
V/C Ratio(X)	0.82	0.95	1.22	0.98	0.83	0.83	0.98	0.62	0.63	0.73	0.93	0.93
Avail Cap(c_a), veh/h	319	856	393	985	1520	791	319	1320	436	290	1173	406
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	44.2	45.0	42.7	29.4	29.5	54.4	38.2	38.4	55.3	44.5	44.5
Incr Delay (d2), s/veh	15.7	19.2	118.7	24.2	4.0	7.7	43.8	2.2	6.9	6.1	13.7	30.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	15.5	25.9	19.2	19.3	20.9	7.1	8.1	8.9	2.7	13.2	15.8
LnGrp Delay(d), s/veh	69.5	63.4	163.7	66.9	33.4	37.2	98.2	40.4	45.3	61.4	58.2	75.1
LnGrp LOS	E	E	F	E	C	D	F	D	D	E	E	E
Approach Vol, veh/h		1545			2889			1400			1622	
Approach Delay, s/veh		95.5			45.5			54.2			62.4	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	36.6	38.0	34.0	15.0	33.0	14.7	57.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	30.0	34.0	30.0	11.0	29.0	11.0	53.0
Max Q Clear Time (g_c+I1), s	7.3	20.2	35.1	32.0	12.7	28.5	10.7	41.3
Green Ext Time (p_c), s	0.1	4.8	0.0	0.0	0.0	0.4	0.0	8.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		61.2
HCM 2010 LOS		E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	860	20	140	1650	130	20	0	70	80	0	30
Future Volume (vph)	20	860	20	140	1650	130	20	0	70	80	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.95	1.00	0.97	0.97	1.00		0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	1787	5136	1577	1787	5136	1515	1787	1470	1470	1787		1551
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	1787	5136	1577	1787	5136	1515	1787	1470	1470	1787		1551
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	22	956	22	156	1833	144	22	0	78	89	0	33
RTOR Reduction (vph)	0	0	14	0	0	60	0	30	30	0	0	23
Lane Group Flow (vph)	22	956	8	156	1833	84	22	9	9	89	0	10
Confl. Peds. (#/hr)	10		1	1		10	8		11	11		8
Confl. Bikes (#/hr)						2						4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	2.3	38.3	38.3	14.5	50.5	50.5	2.3	24.5	24.5	8.7		30.9
Effective Green, g (s)	2.3	38.3	38.3	14.5	50.5	50.5	2.3	24.5	24.5	8.7		30.9
Actuated g/C Ratio	0.02	0.38	0.38	0.14	0.50	0.50	0.02	0.24	0.24	0.09		0.30
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	40	1928	592	254	2542	750	40	353	353	152		469
v/s Ratio Prot	0.01	0.19		c0.09	c0.36		0.01	c0.01		c0.05		
v/s Ratio Perm			0.01			0.06			0.01			0.01
v/c Ratio	0.55	0.50	0.01	0.61	0.72	0.11	0.55	0.03	0.03	0.59		0.02
Uniform Delay, d1	49.3	24.4	20.0	41.1	20.2	13.8	49.3	29.6	29.6	44.9		24.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	15.3	0.2	0.0	4.4	1.0	0.1	15.3	0.1	0.1	5.7		0.1
Delay (s)	64.7	24.6	20.0	45.5	21.3	13.8	64.7	29.8	29.8	50.6		25.0
Level of Service	E	C	C	D	C	B	E	C	C	D		C
Approach Delay (s/veh)		25.4			22.5			37.4			43.7	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.5%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Future Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	232	1379	32	453	1421	1116	105	484	442	368	295	189
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	174	1865	43	511	1638	721	324	402	350	299	647	402
Arrive On Green	0.05	0.36	0.36	0.15	0.46	0.46	0.05	0.22	0.22	0.13	0.31	0.31
Sat Flow, veh/h	3476	5162	120	3476	3574	1574	1792	1787	1556	1792	2099	1304
Grp Volume(v), veh/h	232	915	496	453	1421	1116	105	484	442	368	250	234
Grp Sat Flow(s),veh/h/ln	1738	1712	1858	1738	1787	1574	1792	1787	1556	1792	1787	1616
Q Serve(g_s), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Cycle Q Clear(g_c), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	174	1237	671	511	1638	721	324	402	350	299	551	498
V/C Ratio(X)	1.33	0.74	0.74	0.89	0.87	1.55	0.32	1.20	1.26	1.23	0.45	0.47
Avail Cap(c_a), veh/h	174	1237	671	550	1638	721	324	402	350	299	551	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	33.4	33.4	50.2	29.2	32.5	33.6	46.5	46.5	35.3	33.4	33.6
Incr Delay (d2), s/veh	184.5	2.4	4.3	15.2	5.2	253.0	0.6	113.1	139.0	129.8	2.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	13.6	15.1	8.4	22.3	74.5	2.7	25.9	25.1	20.7	7.1	6.7
LnGrp Delay(d), s/veh	241.5	35.8	37.8	65.4	34.5	285.5	34.2	159.6	185.5	165.1	36.0	36.7
LnGrp LOS	F	D	D	E	C	F	C	F	F	F	D	D
Approach Vol, veh/h		1643			2990			1031			852	
Approach Delay, s/veh		65.4			132.9			157.9			92.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	31.0	21.7	47.3	10.0	41.0	10.0	59.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	27.0	19.0	42.0	6.0	37.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	18.0	29.0	17.3	29.9	7.4	16.1	8.0	57.0
Green Ext Time (p_c), s	0.0	0.0	0.3	6.8	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	114.5
HCM 2010 LOS	F

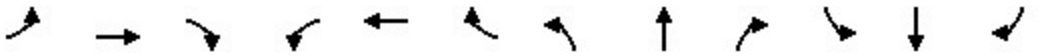
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Future Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	217	735	36	120	1313	795	36	277	241	458	277	157
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	60	1927	94	365	1235	673	212	709	597	303	396	224
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	197	3503	172	709	2246	1224	970	1851	1556	633	1032	585
Grp Volume(v), veh/h	217	379	392	120	1027	1081	36	270	248	458	0	434
Grp Sat Flow(s),veh/h/ln	197	1805	1870	709	1805	1665	970	1805	1602	633	0	1617
Q Serve(g_s), s	0.0	14.3	14.3	13.9	66.0	66.0	3.9	13.0	13.6	32.4	0.0	27.2
Cycle Q Clear(g_c), s	66.0	14.3	14.3	28.3	66.0	66.0	31.1	13.0	13.6	46.0	0.0	27.2
Prop In Lane	1.00		0.09	1.00		0.74	1.00		0.97	1.00		0.36
Lane Grp Cap(c), veh/h	60	993	1028	365	993	916	212	692	614	303	0	620
V/C Ratio(X)	3.62	0.38	0.38	0.33	1.03	1.18	0.17	0.39	0.40	1.51	0.00	0.70
Avail Cap(c_a), veh/h	60	993	1028	365	993	916	212	692	614	303	0	620
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	15.4	15.4	23.4	27.0	27.0	44.3	26.8	27.0	47.0	0.0	31.2
Incr Delay (d2), s/veh	1217.6	0.2	0.2	0.5	37.8	92.5	1.7	1.7	2.0	247.5	0.0	6.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.3	7.2	7.5	2.8	43.0	53.5	1.2	6.8	6.3	30.8	0.0	13.2
LnGrp Delay(d), s/veh	1277.6	15.6	15.6	23.9	64.8	119.5	46.0	28.5	29.0	294.5	0.0	37.7
LnGrp LOS	F	B	B	C	F	F	D	C	C	F		D
Approach Vol, veh/h		988			2228			554			892	
Approach Delay, s/veh		292.8			89.1			29.8			169.5	
Approach LOS		F			F			C			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		50.0		70.0		50.0		70.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		46.0		66.0		46.0		66.0
Max Q Clear Time (g_c+I1), s		33.1		68.0		48.0		68.0
Green Ext Time (p_c), s		2.6		0.0		0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		140.6
HCM 2010 LOS		F

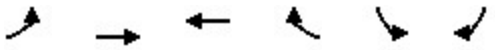
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	400	890	40	80	1120	710	1560	110	1570	110	170	190
Future Volume (vph)	400	890	40	80	1120	710	1560	110	1570	110	170	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		0.97	0.91	1.00	0.97	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	0.98		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85	1.00	0.86		1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	5103		3467	5136	1599	3467	1592		1787	1881	1599
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)	1787	5103		3467	5136	1599	3467	1592		1787	1881	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	967	43	87	1217	772	1696	120	1707	120	185	207
RTOR Reduction (vph)	0	4	0	0	0	633	0	211	0	0	0	100
Lane Group Flow (vph)	435	1006	0	87	1217	140	1696	1616	0	120	185	107
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases						8						2
Actuated Green, G (s)	14.0	29.0		5.0	20.0	20.0	52.0	52.0		18.0	18.0	18.0
Effective Green, g (s)	14.0	29.0		5.0	20.0	20.0	52.0	52.0		18.0	18.0	18.0
Actuated g/C Ratio	0.12	0.24		0.04	0.17	0.17	0.43	0.43		0.15	0.15	0.15
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	208	1233		144	856	266	1502	689		268	282	239
v/s Ratio Prot	c0.24	0.20		0.03	c0.24		0.49	c1.01		0.07	c0.10	
v/s Ratio Perm						0.09						0.07
v/c Ratio	2.09	0.82		0.60	1.42	0.52	1.13	2.34		0.45	0.66	0.45
Uniform Delay, d1	53.0	43.0		56.5	50.0	45.7	34.0	34.0		46.5	48.1	46.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	507.2	4.3		7.0	196.6	1.9	67.2	609.7		5.3	11.3	5.9
Delay (s)	560.2	47.3		63.5	246.6	47.5	101.2	643.7		51.8	59.4	52.4
Level of Service	F	D		E	F	D	F	F		D	E	D
Approach Delay (s/veh)		201.7			164.9			382.5			54.8	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	265.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	166.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



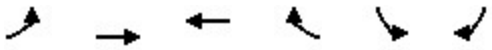
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Future Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Frt		0.99		1.00	1.00		1.00	0.86				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3567		1805	3610		1643	2953				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3567		1805	3610		1643	2953				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	978	67	191	2360	0	79	0	213	0	0	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	176	0	0	0	0
Lane Group Flow (vph)	0	1042	0	191	2360	0	71	45	0	0	0	0
Confl. Peds. (#/hr)			5	5								
Confl. Bikes (#/hr)			3									
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		49.1		14.9	68.0		16.0	16.0				
Effective Green, g (s)		49.1		14.9	68.0		16.0	16.0				
Actuated g/C Ratio		0.53		0.16	0.74		0.17	0.17				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1903		292	2668		285	513				
v/s Ratio Prot		0.29		0.11	c0.65		c0.04	0.02				
v/s Ratio Perm												
v/c Ratio		0.55		0.65	0.88		0.25	0.09				
Uniform Delay, d1		14.1		36.1	9.0		32.8	31.9				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.3		5.2	3.9		2.1	0.3				
Delay (s)		14.5		41.3	12.9		34.9	32.2				
Level of Service		B		D	B		C	C				
Approach Delay (s/veh)		14.5			15.1			32.9			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	92.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	0	1890	1460	0	900	730
Future Volume (vph)	0	1890	1460	0	900	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5136	5136		1778	1519
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5136	5136		1778	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1969	1521	0	938	760
RTOR Reduction (vph)	0	0	0	0	2	2
Lane Group Flow (vph)	0	1969	1521	0	1012	682
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		45.0	45.0		67.0	67.0
Effective Green, g (s)		45.0	45.0		67.0	67.0
Actuated g/C Ratio		0.38	0.38		0.56	0.56
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1926	1926		992	848
v/s Ratio Prot		c0.38	0.30		c0.57	
v/s Ratio Perm						0.45
v/c Ratio		1.02	0.79		1.02	0.80
Uniform Delay, d1		37.5	33.3		26.5	21.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		26.4	2.2		33.8	8.0
Delay (s)		63.9	35.5		60.3	29.3
Level of Service		E	D		E	C
Approach Delay (s/veh)		63.9	35.5		47.8	
Approach LOS		E	D		D	

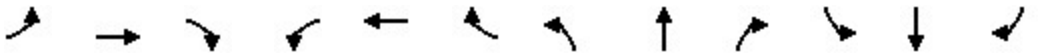
Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	1000	1300	0	140	580
Future Volume (vph)	0	1000	1300	0	140	580
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.90	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5136	5136		3228	1455
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5136	5136		3228	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1075	1398	0	151	624
RTOR Reduction (vph)	0	0	0	0	9	9
Lane Group Flow (vph)	0	1075	1398	0	454	303
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		37.3	37.3		55.3	55.3
Effective Green, g (s)		37.3	37.3		55.3	55.3
Actuated g/C Ratio		0.37	0.37		0.55	0.55
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1904	1904		1774	799
v/s Ratio Prot		0.21	c0.27		0.14	
v/s Ratio Perm						c0.21
v/c Ratio		0.56	0.73		0.26	0.38
Uniform Delay, d1		25.2	27.4		11.9	12.9
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.4	1.5		0.3	1.4
Delay (s)		25.6	28.9		12.2	14.3
Level of Service		C	C		B	B
Approach Delay (s/veh)		25.6	28.9		13.0	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	100.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Future Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.89	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3409	1436	1787	3574					1698	1511	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3409	1436	1787	3574					1698	1511	1519
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	912	253	1066	1527	0	0	0	0	253	77	747
RTOR Reduction (vph)	0	2	177	0	0	0	0	0	0	0	52	52
Lane Group Flow (vph)	0	935	51	1066	1527	0	0	0	0	228	379	366
Confl. Bikes (#/hr)			1			14						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Effective Green, g (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Actuated g/C Ratio		0.23	0.23	0.47	0.73					0.21	0.21	0.21
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		767	323	833	2591					353	314	316
v/s Ratio Prot		c0.27		c0.60	0.43							
v/s Ratio Perm			0.04							0.13	0.25	0.24
v/c Ratio		1.22	0.16	1.28	0.59					0.65	1.21	1.16
Uniform Delay, d1		46.5	37.4	32.0	7.9					43.5	47.5	47.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		110.5	0.2	135.1	0.3					8.8	119.0	100.4
Delay (s)		157.0	37.6	167.1	8.3					52.3	166.5	147.9
Level of Service		F	D	F	A					D	F	F
Approach Delay (s/veh)		133.6			73.6			0.0			135.1	
Approach LOS		F			E			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	101.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Future Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	1464	41	31	1216	0	165	31	103	134	10	258
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	17	2020	57	41	1455	0	379	71	398	301	22	287
Arrive On Green	0.01	0.39	0.39	0.02	0.41	0.00	0.25	0.25	0.25	0.18	0.18	0.18
Sat Flow, veh/h	1792	5126	144	1792	3668	0	1520	286	1595	1673	125	1594
Grp Volume(v), veh/h	10	978	527	31	1216	0	196	0	103	144	0	258
Grp Sat Flow(s),veh/h/ln	1792	1712	1845	1792	1787	0	1805	0	1595	1798	0	1594
Q Serve(g_s), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Cycle Q Clear(g_c), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Prop In Lane	1.00		0.08	1.00		0.00	0.84		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	17	1349	727	41	1455	0	450	0	398	324	0	287
V/C Ratio(X)	0.58	0.72	0.72	0.76	0.84	0.00	0.44	0.00	0.26	0.44	0.00	0.90
Avail Cap(c_a), veh/h	69	1709	921	103	1852	0	450	0	398	345	0	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	26.8	26.8	50.6	27.8	0.0	32.9	0.0	31.4	38.1	0.0	41.8
Incr Delay (d2), s/veh	27.0	1.1	2.1	24.7	2.8	0.0	3.0	0.0	1.6	1.0	0.0	26.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	12.2	13.3	1.2	16.3	0.0	5.1	0.0	2.6	3.8	0.0	9.4
LnGrp Delay(d), s/veh	78.4	27.9	28.9	75.3	30.6	0.0	36.0	0.0	32.9	39.0	0.0	68.3
LnGrp LOS	E	C	C	E	C		D		C	D		E
Approach Vol, veh/h		1515			1247			299			402	
Approach Delay, s/veh		28.6			31.7			34.9			57.8	
Approach LOS		C			C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.4	45.1		22.8	5.0	46.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	52.0		20.0	4.0	54.0
Max Q Clear Time (g_c+I1), s		11.5	3.8	27.2		18.5	2.6	33.9
Green Ext Time (p_c), s		1.2	0.0	11.2		0.3	0.0	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.6
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1140	0	0	1530	860	360
Future Volume (veh/h)	1140	0	0	1530	860	360
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863
Adj Flow Rate, veh/h	1239	0	0	1663	935	391
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1770	0	0	1770	1038	926
Arrive On Green	0.35	0.00	0.00	0.35	0.59	0.59
Sat Flow, veh/h	5421	0	0	5421	1774	1583
Grp Volume(v), veh/h	1239	0	0	1663	935	391
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1774	1583
Q Serve(g_s), s	25.1	0.0	0.0	37.9	55.3	16.3
Cycle Q Clear(g_c), s	25.1	0.0	0.0	37.9	55.3	16.3
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1770	0	0	1770	1038	926
V/C Ratio(X)	0.70	0.00	0.00	0.94	0.90	0.42
Avail Cap(c_a), veh/h	1785	0	0	1785	1038	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	0.0	37.8	21.8	13.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	10.2	12.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	0.0	0.0	19.4	30.3	7.4
LnGrp Delay(d), s/veh	34.8	0.0	0.0	48.0	34.1	15.1
LnGrp LOS	C			D	C	B
Approach Vol, veh/h	1239			1663	1326	
Approach Delay, s/veh	34.8			48.0	28.5	
Approach LOS	C			D	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		45.7				45.7
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		57.3		27.1				39.9
Green Ext Time (p_c), s		4.4		7.2				1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.0
HCM 2010 LOS	D



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	600	0	0	1260	990	760
Future Volume (vph)	600	0	0	1260	990	760
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.97	0.85
Flt Protected	1.00			1.00	0.96	1.00
Satd. Flow (prot)	7544			6408	3379	1441
Flt Permitted	1.00			1.00	0.96	1.00
Satd. Flow (perm)	7544			6408	3379	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	638	0	0	1340	1053	809
RTOR Reduction (vph)	0	0	0	0	15	24
Lane Group Flow (vph)	638	0	0	1340	1265	558
Confl. Bikes (#/hr)		1				
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	33.3			33.3	75.1	75.1
Effective Green, g (s)	33.3			33.3	75.1	75.1
Actuated g/C Ratio	0.29			0.29	0.65	0.65
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2158			1833	2180	929
v/s Ratio Prot	0.08			c0.21	0.37	
v/s Ratio Perm						c0.39
v/c Ratio	0.30			0.73	0.58	0.60
Uniform Delay, d1	32.4			37.5	11.7	12.0
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			1.5	1.1	2.9
Delay (s)	32.5			39.0	12.8	14.8
Level of Service	C			D	B	B
Approach Delay (s/veh)	32.5			39.0	13.5	
Approach LOS	C			D	B	

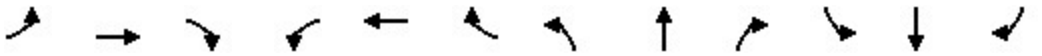
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	116.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	61.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	940	0	0	2000	230	470
Future Volume (vph)	940	0	0	2000	230	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.92	0.85
Flt Protected	1.00			1.00	0.98	1.00
Satd. Flow (prot)	3574			3574	3291	1455
Flt Permitted	1.00			1.00	0.98	1.00
Satd. Flow (perm)	3574			3574	3291	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1011	0	0	2151	247	505
RTOR Reduction (vph)	0	0	0	0	135	135
Lane Group Flow (vph)	1011	0	0	2151	365	117
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	76.2			76.2	25.3	25.3
Effective Green, g (s)	76.2			76.2	25.3	25.3
Actuated g/C Ratio	0.70			0.70	0.23	0.23
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2487			2487	760	336
v/s Ratio Prot	0.28			c0.60	c0.11	
v/s Ratio Perm						0.08
v/c Ratio	0.41			0.86	0.48	0.35
Uniform Delay, d1	7.1			12.7	36.4	35.2
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			3.4	2.2	2.9
Delay (s)	7.2			16.1	38.6	38.1
Level of Service	A			B	D	D
Approach Delay (s/veh)	7.2			16.1	38.4	
Approach LOS	A			B	D	

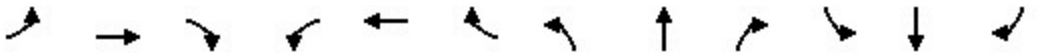
Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	109.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Future Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Frt	1.00	1.00			0.97		1.00		0.85			0.87
Flt Protected	0.95	1.00			1.00		0.95		1.00			1.00
Satd. Flow (prot)	1787	3574			4983		1787		1599			1627
Flt Permitted	0.09	1.00			1.00		0.95		1.00			1.00
Satd. Flow (perm)	175	3574			4983		1787		1599			1627
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	1165	0	0	1629	330	41	0	113	0	0	10
RTOR Reduction (vph)	0	0	0	0	28	0	0	0	85	0	0	10
Lane Group Flow (vph)	10	1165	0	0	1931	0	41	0	28	0	0	0
Confl. Peds. (#/hr)	3		17	17		3						
Confl. Bikes (#/hr)			22			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			6
Actuated Green, G (s)	43.0	43.0			43.0		18.7		18.7			0.8
Effective Green, g (s)	43.0	43.0			43.0		18.7		18.7			0.8
Actuated g/C Ratio	0.58	0.58			0.58		0.25		0.25			0.01
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	101	2062			2876		448		401			17
v/s Ratio Prot		0.33			c0.39		c0.02					
v/s Ratio Perm	0.06								0.02			c0.00
v/c Ratio	0.10	0.56			0.67		0.09		0.07			0.01
Uniform Delay, d1	7.1	9.9			10.9		21.4		21.3			36.5
Progression Factor	1.00	1.00			1.00		1.00		1.00			1.00
Incremental Delay, d2	0.4	0.4			0.6		0.4		0.3			0.1
Delay (s)	7.5	10.2			11.5		21.8		21.6			36.6
Level of Service	A	B			B		C		C			D
Approach Delay (s/veh)		10.2			11.5			21.7			36.6	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	710	140	80	830	580	300	580	170	1070	560	1590
Future Volume (vph)	350	710	140	80	830	580	300	580	170	1070	560	1590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1527	3433	5085	1562	3433	1863	1538	1770	1637	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1527	3433	5085	1562	3433	1863	1538	1770	1637	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	365	740	146	83	865	604	312	604	177	1115	583	1656
RTOR Reduction (vph)	0	0	118	0	0	515	0	0	73	0	30	66
Lane Group Flow (vph)	365	740	28	83	865	89	313	604	104	1115	1133	1010
Confl. Peds. (#/hr)			9	9					7	7		
Confl. Bikes (#/hr)			3			1			1			
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.0	22.8	22.8	4.0	17.8	17.8	29.0	29.0	29.0	49.0	49.0	58.0
Effective Green, g (s)	9.0	22.8	22.8	4.0	17.8	17.8	29.0	29.0	29.0	49.0	49.0	58.0
Actuated g/C Ratio	0.07	0.19	0.19	0.03	0.15	0.15	0.24	0.24	0.24	0.41	0.41	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	255	959	288	113	749	230	824	447	369	717	664	771
v/s Ratio Prot	c0.11	0.15		0.02	c0.17		0.09	c0.32		0.63	c0.69	c0.10
v/s Ratio Perm			0.02			0.06			0.07			0.57
v/c Ratio	1.43	0.77	0.10	0.73	1.15	0.39	0.38	1.35	0.28	1.56	1.71	1.31
Uniform Delay, d1	55.9	46.5	40.5	57.9	51.5	46.6	38.4	45.9	37.4	35.9	35.9	31.4
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	215.2	3.9	0.1	21.7	84.5	1.1	1.3	172.3	1.9	256.6	324.5	149.0
Delay (s)	271.1	50.4	40.6	79.6	136.0	47.6	39.7	218.2	39.3	292.5	360.4	180.4
Level of Service	F	D	D	E	F	D	D	F	D	F	F	F
Approach Delay (s/veh)		113.7			98.6			138.2			280.1	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	191.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	129.2%	ICU Level of Service	H
Analysis Period (min)	15		

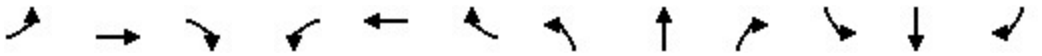
c Critical Lane Group



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	310	0	0	1330	0	0
Future Volume (vph)	310	0	0	1330	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.97		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3433			1529		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3433			1529		
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	352	0	0	1511	0	0
RTOR Reduction (vph)	0	0	0	227	0	0
Lane Group Flow (vph)	352	0	0	1284	0	0
Confl. Peds. (#/hr)	5			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	15.1			88.0		
Effective Green, g (s)	15.1			88.0		
Actuated g/C Ratio	0.14			0.79		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	466			1211		
v/s Ratio Prot	c0.10					
v/s Ratio Perm				c0.84		
v/c Ratio	0.76			1.06		
Uniform Delay, d1	46.2			11.5		
Progression Factor	1.00			1.00		
Incremental Delay, d2	6.8			43.5		
Delay (s)	53.1			55.0		
Level of Service	D			E		
Approach Delay (s/veh)	53.1		55.0			0.0
Approach LOS	D		E			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

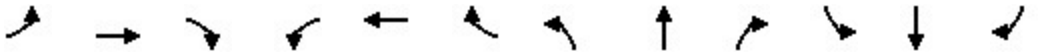
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Future Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	77	1176	330	253	1341	11	396	33	264	22	44	165
RTOR Reduction (vph)	0	0	141	0	0	6	0	0	211	0	117	0
Lane Group Flow (vph)	77	1176	189	253	1341	5	214	215	53	22	92	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Confl. Bikes (#/hr)			3									1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Effective Green, g (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Actuated g/C Ratio	0.06	0.39	0.39	0.17	0.50	0.50	0.20	0.20	0.20	0.10	0.10	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	107	1374	603	303	1764	770	334	338	310	173	158	
v/s Ratio Prot	0.04	c0.33		c0.14	0.38		c0.13	0.13		0.01	c0.06	
v/s Ratio Perm			0.12			0.00			0.03			
v/c Ratio	0.72	0.86	0.31	0.83	0.76	0.01	0.64	0.64	0.17	0.13	0.58	
Uniform Delay, d1	51.4	31.2	23.8	44.7	22.6	14.1	41.0	40.9	37.0	46.0	48.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	20.6	5.5	0.3	17.7	2.0	0.0	9.1	8.8	1.2	0.3	5.3	
Delay (s)	72.0	36.7	24.1	62.4	24.5	14.1	50.1	49.8	38.2	46.3	53.4	
Level of Service	E	D	C	E	C	B	D	D	D	D	D	
Approach Delay (s/veh)		35.8			30.4			45.5			52.8	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	111.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Future Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
Arrive On Green	0.07	0.27	0.27	0.17	0.37	0.37	0.12	0.32	0.32	0.07	0.26	0.26
Sat Flow, veh/h	1774	5085	1538	1774	5085	1567	3442	3539	1544	1774	3539	1532
Grp Volume(v), veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Grp Sat Flow(s),veh/h/ln	1774	1695	1538	1774	1695	1567	1721	1770	1544	1774	1770	1532
Q Serve(g_s), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Cycle Q Clear(g_c), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
V/C Ratio(X)	0.78	0.73	0.24	0.86	0.49	0.20	0.78	0.35	0.66	0.78	0.40	0.39
Avail Cap(c_a), veh/h	235	1852	560	587	2862	985	684	1133	494	235	934	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	30.2	26.0	36.5	21.8	15.7	38.6	23.6	26.6	41.7	27.4	27.4
Incr Delay (d2), s/veh	10.6	1.0	0.3	6.9	0.2	0.1	3.2	0.8	6.8	10.6	1.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.7	2.0	6.8	5.9	2.1	4.1	3.9	8.0	2.6	4.0	3.5
LnGrp Delay(d), s/veh	52.3	31.2	26.3	43.4	22.0	15.8	41.8	24.4	33.3	52.3	28.7	30.2
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1191			1314			1045			618	
Approach Delay, s/veh		32.4			25.5			32.6			32.5	
Approach LOS		C			C			C			C	

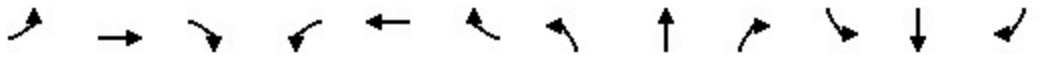
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	33.0	19.4	28.3	15.0	27.9	9.9	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	29.0	30.0	33.0	18.0	23.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	6.5	18.5	14.8	18.2	10.3	9.8	6.5	14.6
Green Ext Time (p_c), s	0.1	2.7	0.6	6.1	0.7	2.3	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Future Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1227	1863	1560	907	1863	1558	697	3539	1580	603	3539	1560
Grp Volume(v), veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Grp Sat Flow(s),veh/h/ln	1227	1863	1560	907	1863	1558	697	1770	1580	603	1770	1560
Q Serve(g_s), s	4.0	2.9	29.3	2.1	5.0	2.3	18.7	14.1	0.3	3.2	10.3	1.5
Cycle Q Clear(g_c), s	9.0	2.9	29.3	5.0	5.0	2.3	29.0	14.1	0.3	17.3	10.3	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
V/C Ratio(X)	0.15	0.12	0.92	0.07	0.20	0.10	0.42	0.40	0.01	0.09	0.32	0.06
Avail Cap(c_a), veh/h	444	661	553	362	661	553	445	2260	1009	373	2260	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	29.4	38.8	31.3	30.2	29.2	15.8	9.9	7.4	14.1	9.2	7.6
Incr Delay (d2), s/veh	0.2	0.1	18.9	0.1	0.2	0.1	2.9	0.5	0.0	0.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.5	14.9	0.5	2.6	1.0	3.9	7.0	0.1	0.6	5.1	0.7
LnGrp Delay(d), s/veh	33.8	29.5	57.7	31.4	30.3	29.3	18.7	10.5	7.4	14.6	9.6	7.7
LnGrp LOS	C	C	E	C	C	C	B	B	A	B	A	A
Approach Vol, veh/h		539			176			1110			802	
Approach Delay, s/veh		51.8			30.2			11.8			9.7	
Approach LOS		D			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		36.7		76.0		36.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		31.0		31.3		19.3		7.0
Green Ext Time (p_c), s		9.7		1.5		6.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Future Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	109	239	43	228	196	141	33	815	283	152	978	109
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	340	149	263	592	260	42	1254	435	183	2011	886
Arrive On Green	0.08	0.10	0.10	0.15	0.17	0.17	0.02	0.49	0.49	0.10	0.57	0.57
Sat Flow, veh/h	1757	3505	1533	1757	3505	1542	1757	2542	882	1757	3505	1545
Grp Volume(v), veh/h	109	239	43	228	196	141	33	561	537	152	978	109
Grp Sat Flow(s),veh/h/ln	1757	1752	1533	1757	1752	1542	1757	1752	1672	1757	1752	1545
Q Serve(g_s), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Cycle Q Clear(g_c), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	137	340	149	263	592	260	42	864	824	183	2011	886
V/C Ratio(X)	0.80	0.70	0.29	0.87	0.33	0.54	0.79	0.65	0.65	0.83	0.49	0.12
Avail Cap(c_a), veh/h	256	545	238	393	818	360	103	864	824	273	2011	886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	45.0	43.1	42.7	37.6	39.1	49.9	19.4	19.5	45.1	13.0	10.0
Incr Delay (d2), s/veh	10.0	2.6	1.1	12.6	0.3	1.8	27.3	3.8	4.0	12.4	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.4	1.2	7.3	2.5	3.8	1.2	12.8	12.2	4.9	8.4	1.5
LnGrp Delay(d), s/veh	56.6	47.6	44.2	55.3	37.9	40.8	77.3	23.2	23.4	57.5	13.8	10.3
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	B	B
Approach Vol, veh/h		391			565			1131			1239	
Approach Delay, s/veh		49.7			45.7			24.9			18.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	54.7	19.4	14.0	6.4	63.0	12.0	21.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	49.0	23.0	16.0	6.0	59.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	10.7	26.6	15.0	8.8	3.9	19.0	8.3	10.6
Green Ext Time (p_c), s	0.2	7.4	0.4	0.8	0.0	8.5	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Future Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	216	320	567	82	464	21	443	845	82	31	918	309
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	284	298	604	418	416	19	403	1620	706	39	894	391
Arrive On Green	0.16	0.16	0.16	0.23	0.23	0.23	0.22	0.45	0.45	0.02	0.25	0.25
Sat Flow, veh/h	1792	1881	1541	1792	1784	81	1792	3574	1559	1792	3574	1565
Grp Volume(v), veh/h	216	320	567	82	0	485	443	845	82	31	918	309
Grp Sat Flow(s),veh/h/ln	1792	1881	1541	1792	0	1864	1792	1787	1559	1792	1787	1565
Q Serve(g_s), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Cycle Q Clear(g_c), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	298	604	418	0	435	403	1620	706	39	894	391
V/C Ratio(X)	0.76	1.07	0.94	0.20	0.00	1.11	1.10	0.52	0.12	0.79	1.03	0.79
Avail Cap(c_a), veh/h	284	298	604	418	0	435	403	1620	706	90	894	391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	50.5	35.9	37.0	0.0	46.0	46.5	23.5	18.9	58.4	45.0	42.1
Incr Delay (d2), s/veh	11.5	73.3	22.7	0.2	0.0	78.2	74.3	1.2	0.3	28.9	37.3	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	15.9	21.9	2.2	0.0	23.8	21.6	10.2	1.6	1.3	19.4	11.1
LnGrp Delay(d), s/veh	59.8	123.8	58.6	37.2	0.0	124.2	120.8	24.7	19.3	87.3	82.3	57.0
LnGrp LOS	E	F	E	D		F	F	C	B	F	F	E
Approach Vol, veh/h		1103			567			1370			1258	
Approach Delay, s/veh		77.7			111.6			55.4			76.2	
Approach LOS		E			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	58.4		23.0	31.0	34.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	51.0		19.0	27.0	30.0		28.0
Max Q Clear Time (g_c+I1), s	4.1	22.3		21.0	29.0	32.0		30.0
Green Ext Time (p_c), s	0.0	6.8		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	74.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Future Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.94	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	264	1121	154	231	1813	231	374	1209	132	110	956	242
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1553	213	259	1737	513	430	1209	510	115	1272	365
Arrive On Green	0.15	0.35	0.35	0.15	0.34	0.34	0.12	0.34	0.34	0.03	0.25	0.25
Sat Flow, veh/h	1774	4490	616	1774	5085	1501	3442	3539	1493	3442	5085	1460
Grp Volume(v), veh/h	264	846	429	231	1813	231	374	1209	132	110	956	242
Grp Sat Flow(s),veh/h/ln	1774	1695	1717	1774	1695	1501	1721	1770	1493	1721	1695	1460
Q Serve(g_s), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Cycle Q Clear(g_c), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1172	594	259	1737	513	430	1209	510	115	1272	365
V/C Ratio(X)	0.99	0.72	0.72	0.89	1.04	0.45	0.87	1.00	0.26	0.96	0.75	0.66
Avail Cap(c_a), veh/h	266	1172	594	296	1737	513	459	1209	510	115	1272	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	34.2	34.2	50.3	39.5	30.7	51.6	39.5	28.5	57.9	41.5	40.4
Incr Delay (d2), s/veh	52.9	2.2	4.3	25.0	33.9	0.6	15.7	25.8	1.2	70.9	4.1	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	12.6	13.1	9.3	24.6	6.1	7.0	24.3	3.3	2.9	10.2	8.1
LnGrp Delay(d), s/veh	103.8	36.4	38.5	75.4	73.4	31.4	67.3	65.3	29.8	128.8	45.7	49.6
LnGrp LOS	F	D	D	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1539			2275			1715			1308	
Approach Delay, s/veh		48.6			69.3			63.0			53.4	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	45.0	21.5	45.5	19.0	34.0	22.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	41.0	20.0	39.0	16.0	29.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	5.8	43.0	17.3	28.2	14.8	22.8	19.8	43.0
Green Ext Time (p_c), s	0.0	0.0	0.2	5.9	0.2	3.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.0
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	1290	1280	410	400	270
Future Volume (veh/h)	390	1290	1280	410	400	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	411	1358	1347	432	421	284
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	451	3659	1618	516	733	337
Arrive On Green	0.25	0.71	0.42	0.42	0.21	0.21
Sat Flow, veh/h	1792	5305	4001	1222	3476	1599
Grp Volume(v), veh/h	411	1358	1203	576	421	284
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1630	1738	1599
Q Serve(g_s), s	23.2	10.8	32.6	33.0	11.3	17.8
Cycle Q Clear(g_c), s	23.2	10.8	32.6	33.0	11.3	17.8
Prop In Lane	1.00			0.75	1.00	1.00
Lane Grp Cap(c), veh/h	451	3659	1446	688	733	337
V/C Ratio(X)	0.91	0.37	0.83	0.84	0.57	0.84
Avail Cap(c_a), veh/h	653	4431	1575	750	733	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	5.9	26.8	26.9	37.0	39.5
Incr Delay (d2), s/veh	12.9	0.1	3.7	7.8	3.3	21.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	5.1	16.1	16.2	5.8	16.7
LnGrp Delay(d), s/veh	50.8	5.9	30.5	34.7	40.2	61.3
LnGrp LOS	D	A	C	C	D	E
Approach Vol, veh/h		1769	1779		705	
Approach Delay, s/veh		16.4	31.9		48.7	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				78.3		26.0	30.3	48.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	38.0	48.0
Max Q Clear Time (g_c+I1), s				12.8		19.8	25.2	35.0
Green Ext Time (p_c), s				13.5		0.7	1.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Future Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	77	1703	264	297	1505	44	209	55	286	77	198	110
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	98	1724	266	323	2614	76	268	630	533	388	378	210
Arrive On Green	0.05	0.38	0.38	0.18	0.51	0.51	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1792	4480	690	1792	5124	150	1078	1881	1592	1043	1129	627
Grp Volume(v), veh/h	77	1299	668	297	1006	543	209	55	286	77	0	308
Grp Sat Flow(s),veh/h/ln	1792	1712	1746	1792	1712	1850	1078	1881	1592	1043	0	1757
Q Serve(g_s), s	5.1	44.9	45.6	19.5	24.4	24.4	23.1	2.4	17.4	6.5	0.0	16.9
Cycle Q Clear(g_c), s	5.1	44.9	45.6	19.5	24.4	24.4	40.0	2.4	17.4	8.9	0.0	16.9
Prop In Lane	1.00		0.40	1.00		0.08	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	98	1318	672	323	1746	944	268	630	533	388	0	588
V/C Ratio(X)	0.78	0.99	0.99	0.92	0.58	0.58	0.78	0.09	0.54	0.20	0.00	0.52
Avail Cap(c_a), veh/h	165	1318	672	330	1746	944	268	630	533	388	0	588
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	55.8	36.4	36.6	48.2	20.3	20.3	48.3	27.3	32.3	30.3	0.0	32.1
Incr Delay (d2), s/veh	12.6	21.3	33.2	29.8	0.5	0.9	19.7	0.3	3.8	1.1	0.0	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	25.0	28.1	12.3	11.6	12.6	8.3	1.3	8.2	2.0	0.0	8.8
LnGrp Delay(d), s/veh	68.4	57.8	69.8	77.9	20.8	21.2	68.0	27.5	36.1	31.5	0.0	35.4
LnGrp LOS	E	E	E	E	C	C	E	C	D	C		D
Approach Vol, veh/h		2044			1846			550			385	
Approach Delay, s/veh		62.1			30.1			47.3			34.6	
Approach LOS		E			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	25.5	50.0		44.0	10.6	65.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	22.0	46.0		40.0	11.0	57.0
Max Q Clear Time (g_c+I1), s		42.0	21.5	47.6		18.9	7.1	26.4
Green Ext Time (p_c), s		0.0	0.1	0.0		2.2	0.0	12.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Future Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	202	1483	112	90	629	56	45	315	11	135	629	101
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	389	1812	136	117	1785	159	58	932	411	162	982	157
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.03	0.26	0.26	0.09	0.32	0.32
Sat Flow, veh/h	753	3334	250	318	3284	292	1774	3539	1561	1774	3049	489
Grp Volume(v), veh/h	202	783	812	90	339	346	45	315	11	135	365	365
Grp Sat Flow(s),veh/h/ln	753	1770	1815	318	1770	1807	1774	1770	1561	1774	1770	1769
Q Serve(g_s), s	24.4	42.7	43.5	20.5	12.7	12.8	3.0	8.5	0.6	8.8	20.7	20.8
Cycle Q Clear(g_c), s	37.1	42.7	43.5	64.0	12.7	12.8	3.0	8.5	0.6	8.8	20.7	20.8
Prop In Lane	1.00		0.14	1.00		0.16	1.00		1.00	1.00		0.28
Lane Grp Cap(c), veh/h	389	962	986	117	962	982	58	932	411	162	570	569
V/C Ratio(X)	0.52	0.81	0.82	0.77	0.35	0.35	0.78	0.34	0.03	0.83	0.64	0.64
Avail Cap(c_a), veh/h	389	962	986	117	962	982	166	932	411	196	570	569
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.7	22.0	22.2	52.6	15.2	15.2	56.5	35.1	32.2	52.6	34.1	34.1
Incr Delay (d2), s/veh	1.2	5.5	5.7	26.8	0.2	0.2	19.5	1.0	0.1	22.1	5.4	5.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	22.1	23.2	3.8	6.3	6.4	1.8	4.3	0.3	5.3	11.0	11.0
LnGrp Delay(d), s/veh	26.9	27.5	27.9	79.3	15.4	15.4	76.1	36.1	32.3	74.7	39.5	39.6
LnGrp LOS	C	C	C	E	B	B	E	D	C	E	D	D
Approach Vol, veh/h		1797			775			371			865	
Approach Delay, s/veh		27.6			22.8			40.8			45.1	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.7	35.0		68.0	7.8	41.9		68.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	31.0		64.0	11.0	33.0		64.0
Max Q Clear Time (g_c+I1), s	10.8	10.5		45.5	5.0	22.8		66.0
Green Ext Time (p_c), s	0.1	1.8		11.9	0.0	3.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		31.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Future Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	0	854	202	607	1000	0	326	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	72	1911	452	356	2395	0	441	0	400	0	2	0
Arrive On Green	0.00	0.67	0.67	0.67	0.67	0.00	0.25	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	567	2852	674	537	3668	0	1764	0	1599	0	1881	0
Grp Volume(v), veh/h	0	535	521	607	1000	0	326	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	567	1787	1739	537	1787	0	1764	0	1599	0	1881	0
Q Serve(g_s), s	0.0	14.1	14.1	52.9	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.1	14.1	67.0	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.39	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1197	1165	356	2395	0	441	0	400	0	2	0
V/C Ratio(X)	0.00	0.45	0.45	1.70	0.42	0.00	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1197	1165	356	2395	0	441	0	400	0	301	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.8	7.8	28.9	7.6	0.0	34.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	328.6	0.1	0.0	10.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.9	6.7	42.3	6.3	0.0	9.5	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	8.0	8.0	357.5	7.7	0.0	45.1	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	F	A		D					
Approach Vol, veh/h		1056			1607			326			0	
Approach Delay, s/veh		8.0			139.8			45.1			0.0	
Approach LOS		A			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		71.0		0.0		71.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		67.0		16.0		67.0
Max Q Clear Time (g_c+I1), s		19.0		16.1		0.0		69.0
Green Ext Time (p_c), s		0.9		8.3		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	82.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Future Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	206	990	124	299	1371	258	206	598	412	144	567	186
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	1306	163	328	1281	541	234	611	507	134	708	231
Arrive On Green	0.11	0.28	0.28	0.18	0.36	0.36	0.13	0.32	0.32	0.08	0.27	0.27
Sat Flow, veh/h	1792	4602	575	1792	3574	1510	1792	1881	1559	1792	2627	859
Grp Volume(v), veh/h	206	736	378	299	1371	258	206	598	412	144	385	368
Grp Sat Flow(s),veh/h/ln	1792	1712	1754	1792	1787	1510	1792	1881	1559	1792	1787	1698
Q Serve(g_s), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Cycle Q Clear(g_c), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	194	972	498	328	1281	541	234	611	507	134	481	458
V/C Ratio(X)	1.06	0.76	0.76	0.91	1.07	0.48	0.88	0.98	0.81	1.07	0.80	0.80
Avail Cap(c_a), veh/h	194	972	498	373	1281	541	269	611	507	134	481	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.2	39.2	48.1	38.5	29.8	51.2	40.1	37.2	55.5	40.8	40.9
Incr Delay (d2), s/veh	81.8	3.5	6.7	24.4	46.3	0.7	24.7	31.4	13.3	98.1	13.1	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	11.6	12.4	11.9	29.4	6.7	8.3	24.9	14.4	8.1	13.6	13.1
LnGrp Delay(d), s/veh	135.3	42.7	46.0	72.5	84.8	30.4	75.9	71.5	50.5	153.6	53.9	54.8
LnGrp LOS	F	D	D	E	F	C	E	E	D	F	D	D
Approach Vol, veh/h		1320			1928			1216			897	
Approach Delay, s/veh		58.1			75.6			65.1			70.3	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	43.0	25.9	38.1	19.7	36.3	17.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.0	25.0	31.0	18.0	30.0	13.0	43.0
Max Q Clear Time (g_c+I1), s	11.0	39.7	21.6	25.6	15.6	26.2	15.0	45.0
Green Ext Time (p_c), s	0.0	0.0	0.3	3.1	0.1	1.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Future Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1425	345	253	1448	0	460	161	241			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2099	642	344	2832	0	1255	1236	577			
Arrive On Green	0.00	0.41	0.41	0.10	0.55	0.00	0.36	0.36	0.36			
Sat Flow, veh/h	0	5305	1572	3476	5305	0	3476	3424	1599			
Grp Volume(v), veh/h	0	1425	345	253	1448	0	460	161	241			
Grp Sat Flow(s),veh/h/ln	0	1712	1572	1738	1712	0	1738	1712	1599			
Q Serve(g_s), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Cycle Q Clear(g_c), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2099	642	344	2832	0	1255	1236	577			
V/C Ratio(X)	0.00	0.68	0.54	0.74	0.51	0.00	0.37	0.13	0.42			
Avail Cap(c_a), veh/h	0	3147	963	723	4439	0	1255	1236	577			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	22.1	20.5	40.0	12.8	0.0	21.5	19.6	22.0			
Incr Delay (d2), s/veh	0.0	0.4	0.7	3.1	0.1	0.0	0.8	0.2	2.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	9.8	6.7	3.2	7.5	0.0	4.4	1.4	4.9			
LnGrp Delay(d), s/veh	0.0	22.5	21.2	43.1	13.0	0.0	22.3	19.8	24.2			
LnGrp LOS		C	C	D	B		C	B	C			
Approach Vol, veh/h		1770			1701			862				
Approach Delay, s/veh		22.2			17.4			22.4				
Approach LOS		C			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	41.3		37.0		54.4
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			19.0	56.0		33.0		79.0
Max Q Clear Time (g_c+I1), s			8.5	22.8		12.4		18.1
Green Ext Time (p_c), s			0.6	14.6		4.1		14.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	1450	100	310	1120	130	170	1230	830	190	1510	450
Future Volume (veh/h)	420	1450	100	310	1120	130	170	1230	830	190	1510	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	457	1576	109	337	1217	141	185	1337	902	207	1641	489
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	516	1671	588	392	1488	439	204	1810	1237	262	1895	785
Arrive On Green	0.15	0.33	0.33	0.11	0.29	0.29	0.06	0.35	0.35	0.08	0.37	0.37
Sat Flow, veh/h	3476	5136	1520	3476	5136	1516	3476	5136	2610	3476	5136	1485
Grp Volume(v), veh/h	457	1576	109	337	1217	141	185	1337	902	207	1641	489
Grp Sat Flow(s),veh/h/ln	1738	1712	1520	1738	1712	1516	1738	1712	1305	1738	1712	1485
Q Serve(g_s), s	15.4	35.6	5.7	11.4	26.3	8.7	6.3	27.2	33.7	7.0	35.3	28.3
Cycle Q Clear(g_c), s	15.4	35.6	5.7	11.4	26.3	8.7	6.3	27.2	33.7	7.0	35.3	28.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	516	1671	588	392	1488	439	204	1810	1237	262	1895	785
V/C Ratio(X)	0.89	0.94	0.19	0.86	0.82	0.32	0.91	0.74	0.73	0.79	0.87	0.62
Avail Cap(c_a), veh/h	554	1680	591	408	1488	439	204	1810	1237	262	1895	785
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	39.2	24.4	52.0	39.4	33.2	55.8	33.8	26.1	54.2	34.9	20.7
Incr Delay (d2), s/veh	15.2	11.2	0.2	16.3	3.7	0.4	38.3	2.7	3.8	15.0	5.6	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	18.5	2.4	6.4	12.9	3.7	4.1	13.3	12.8	3.9	17.7	12.3
LnGrp Delay(d), s/veh	65.0	50.4	24.5	68.2	43.1	33.6	94.1	36.5	29.9	69.3	40.5	24.4
LnGrp LOS	E	D	C	E	D	C	F	D	C	E	D	C
Approach Vol, veh/h		2142			1695			2424			2337	
Approach Delay, s/veh		52.2			47.3			38.4			39.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	46.0	17.4	42.8	11.0	48.0	21.7	38.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	42.0	14.0	39.0	7.0	44.0	19.0	34.0
Max Q Clear Time (g_c+I1), s	9.0	35.7	13.4	37.6	8.3	37.3	17.4	28.3
Green Ext Time (p_c), s	0.0	5.3	0.1	1.2	0.0	5.5	0.3	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Future Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	506	1333	0	0	1586	816				218	897	23
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	521	3552	0	0	2611	802				235	1043	27
Arrive On Green	0.15	0.69	0.00	0.00	0.51	0.51				0.24	0.24	0.24
Sat Flow, veh/h	3476	5305	0	0	5305	1578				973	4318	113
Grp Volume(v), veh/h	506	1333	0	0	1586	816				411	349	379
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1578				1833	1712	1859
Q Serve(g_s), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Cycle Q Clear(g_c), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Prop In Lane	1.00		0.00	0.00		1.00				0.53		0.06
Lane Grp Cap(c), veh/h	521	3552	0	0	2611	802				443	414	449
V/C Ratio(X)	0.97	0.38	0.00	0.00	0.61	1.02				0.93	0.84	0.84
Avail Cap(c_a), veh/h	521	3552	0	0	2611	802				443	414	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	7.7	0.0	0.0	21.0	29.5				44.5	43.3	43.3
Incr Delay (d2), s/veh	31.9	0.1	0.0	0.0	0.4	36.3				27.9	18.5	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	6.1	0.0	0.0	12.4	34.4				16.7	13.2	14.2
LnGrp Delay(d), s/veh	82.6	7.8	0.0	0.0	21.4	65.8				72.4	61.8	60.6
LnGrp LOS	F	A			C	F				E	E	E
Approach Vol, veh/h		1839			2402						1138	
Approach Delay, s/veh		28.4			36.5						65.2	
Approach LOS		C			D						E	

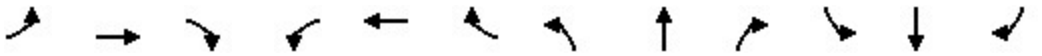
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.0		87.0			22.0	65.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		29.0		83.0			18.0	61.0
Max Q Clear Time (g_c+I1), s		28.3		15.0			19.4	63.0
Green Ext Time (p_c), s		0.5		13.0			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Future Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	93	1330	72	165	1598	72	155	41	505	175	93	93
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	119	2056	111	240	2135	639	388	408	777	244	243	206
Arrive On Green	0.07	0.41	0.41	0.07	0.42	0.42	0.22	0.22	0.22	0.14	0.14	0.14
Sat Flow, veh/h	1792	4976	269	3476	5136	1538	1792	1881	2690	1792	1787	1518
Grp Volume(v), veh/h	93	915	487	165	1598	72	155	41	505	175	93	93
Grp Sat Flow(s),veh/h/ln	1792	1712	1821	1738	1712	1538	1792	1881	1345	1792	1787	1518
Q Serve(g_s), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Cycle Q Clear(g_c), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	1415	752	240	2135	639	388	408	777	244	243	206
V/C Ratio(X)	0.78	0.65	0.65	0.69	0.75	0.11	0.40	0.10	0.65	0.72	0.38	0.45
Avail Cap(c_a), veh/h	222	1696	902	502	2649	793	388	408	777	388	387	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	22.8	22.8	44.1	24.0	17.4	32.6	30.4	30.4	40.1	38.2	38.5
Incr Delay (d2), s/veh	10.4	0.6	1.2	3.5	0.9	0.1	3.0	0.5	4.2	3.9	1.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.9	10.7	2.3	12.2	1.2	3.9	0.9	6.4	4.7	2.3	2.4
LnGrp Delay(d), s/veh	55.0	23.4	24.0	47.6	25.0	17.4	35.6	30.9	34.6	44.0	39.1	40.1
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	D	D
Approach Vol, veh/h		1495			1835			701			361	
Approach Delay, s/veh		25.6			26.7			34.6			41.8	
Approach LOS		C			C			C			D	

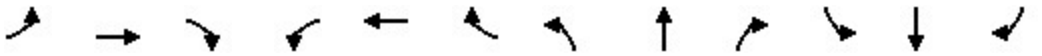
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.0	10.7	44.0		17.2	10.5	44.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	14.0	48.0		21.0	12.0	50.0
Max Q Clear Time (g_c+I1), s		18.0	6.5	22.8		11.1	7.0	27.6
Green Ext Time (p_c), s		0.9	0.3	10.8		1.1	0.1	12.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.8
HCM 2010 LOS	C



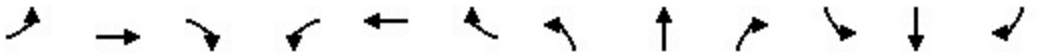
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	290	240	0	0	0	0	1650	70	0	2440	0
Future Volume (vph)	60	290	240	0	0	0	0	1650	70	0	2440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1785	2814					7559			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1785	2814					7559			6471	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	322	267	0	0	0	0	1833	78	0	2711	0
RTOR Reduction (vph)	0	0	7	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	60	329	260	0	0	0	0	1906	0	0	2711	0
Confl. Peds. (#/hr)							5		6	6		5
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	25.5	25.5	25.5					72.3			72.3	
Effective Green, g (s)	25.5	25.5	25.5					72.3			72.3	
Actuated g/C Ratio	0.24	0.24	0.24					0.68			0.68	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	409	430	678					5165			4422	
v/s Ratio Prot	0.04	c0.18						0.25			c0.42	
v/s Ratio Perm			0.09									
v/c Ratio	0.15	0.77	0.38					0.37			0.61	
Uniform Delay, d1	31.6	37.4	33.6					7.1			9.1	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.2	7.9	0.4					0.2			0.6	
Delay (s)	31.8	45.3	33.9					7.3			9.8	
Level of Service	C	D	C					A			A	
Approach Delay (s/veh)		39.4			0.0			7.3			9.8	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Future Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.96	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5772	1236	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5772	1236	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1429	1071	214	1296	0	449	0	61	357	0	31
RTOR Reduction (vph)	0	58	256	0	0	0	0	0	45	0	0	23
Lane Group Flow (vph)	0	1907	279	214	1296	0	449	0	16	357	0	8
Confl. Peds. (#/hr)	2		16	16		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Effective Green, g (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Actuated g/C Ratio		0.52	0.52	0.11	0.66		0.27		0.27	0.27		0.27
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		3006	643	365	3398		927		427	927		427
v/s Ratio Prot		c0.33		c0.06	0.25							
v/s Ratio Perm			0.23				c0.13		0.01	0.10		0.01
v/c Ratio		0.63	0.43	0.59	0.38		0.48		0.04	0.39		0.02
Uniform Delay, d1		19.4	16.7	48.2	8.6		34.8		30.6	33.8		30.4
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.4	0.5	2.4	0.1		1.8		0.2	1.2		0.1
Delay (s)		19.8	17.2	50.6	8.7		36.6		30.8	35.0		30.5
Level of Service		B	B	D	A		D		C	C		C
Approach Delay (s/veh)		19.2			14.6			35.9			34.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	112.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	100	1030	450	230	1360	0	30	2450	30
Future Volume (vph)	0	0	0	100	1030	450	230	1360	0	30	2450	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3422	2814	3467	6471		1787	6471	1567
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3422	2814	3467	6471		1787	6471	1567
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	112	1157	506	258	1528	0	34	2753	34
RTOR Reduction (vph)	0	0	0	0	0	135	0	0	0	0	0	18
Lane Group Flow (vph)	0	0	0	101	1168	371	258	1528	0	34	2753	16
Confl. Peds. (#/hr)							3		5	5		3
Confl. Bikes (#/hr)									4			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				44.0	44.0	44.0	9.0	62.0		3.6	56.6	56.6
Effective Green, g (s)				44.0	44.0	44.0	9.0	62.0		3.6	56.6	56.6
Actuated g/C Ratio				0.36	0.36	0.36	0.07	0.51		0.03	0.47	0.47
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				588	1238	1018	256	3299		52	3011	729
v/s Ratio Prot				0.06	c0.34		c0.07	0.24		0.02	c0.43	
v/s Ratio Perm						0.13						0.01
v/c Ratio				0.17	0.94	0.36	1.01	0.46		0.65	0.91	0.02
Uniform Delay, d1				26.4	37.6	28.5	56.3	19.1		58.4	30.2	17.5
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.1	14.1	0.2	58.3	0.5		25.8	5.6	0.1
Delay (s)				26.5	51.7	28.7	114.6	19.6		84.2	35.8	17.6
Level of Service				C	D	C	F	B		F	D	B
Approach Delay (s/veh)		0.0			43.7			33.3			36.2	
Approach LOS		A			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	210	1620	1780	360	60	180
Future Volume (veh/h)	210	1620	1780	360	60	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	221	1705	1874	379	63	189
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	261	4447	2708	546	411	367
Arrive On Green	0.15	0.69	0.50	0.50	0.23	0.23
Sat Flow, veh/h	1792	6735	5683	1093	1792	1599
Grp Volume(v), veh/h	221	1705	1678	575	63	189
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1659	1792	1599
Q Serve(g_s), s	11.5	10.7	25.4	25.5	2.7	9.9
Cycle Q Clear(g_c), s	11.5	10.7	25.4	25.5	2.7	9.9
Prop In Lane	1.00			0.66	1.00	1.00
Lane Grp Cap(c), veh/h	261	4447	2425	829	411	367
V/C Ratio(X)	0.85	0.38	0.69	0.69	0.15	0.52
Avail Cap(c_a), veh/h	523	6073	2935	1003	411	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	6.4	18.3	18.4	29.5	32.3
Incr Delay (d2), s/veh	7.4	0.1	0.5	1.6	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	4.8	11.3	11.9	1.4	9.4
LnGrp Delay(d), s/veh	47.3	6.4	18.9	20.0	30.3	37.4
LnGrp LOS	D	A	B	B	C	D
Approach Vol, veh/h		1926	2253		252	
Approach Delay, s/veh		11.1	19.2		35.6	
Approach LOS		B	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				69.9		26.0	18.0	51.9
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	28.0	58.0
Max Q Clear Time (g_c+I1), s				12.7		11.9	13.5	27.5
Green Ext Time (p_c), s				20.7		0.6	0.5	20.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.6
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	NWL2	NWR
Lane Configurations										
Traffic Volume (vph)	30	10	10	110	110	10	70	50	10	10
Future Volume (vph)	30	10	10	110	110	10	70	50	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.99		1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (prot)	1671	1495	1671	2632	3296		1671	3343	1671	1495
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00	0.95	1.00
Satd. Flow (perm)	1671	1495	1671	2632	3296		1671	3343	1671	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	11	120	120	11	76	54	11	11
RTOR Reduction (vph)	0	10	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	33	1	11	120	131	0	76	54	11	11
Confl. Peds. (#/hr)			12			2				
Confl. Bikes (#/hr)						1				
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA	Prot	Prot
Protected Phases	4	4	8	1	2		1	6	7	7
Permitted Phases				8						
Actuated Green, G (s)	4.4	4.4	1.1	9.9	41.6		8.8	54.4	2.4	2.4
Effective Green, g (s)	4.4	4.4	1.1	9.9	41.6		8.8	54.4	2.4	2.4
Actuated g/C Ratio	0.06	0.06	0.01	0.13	0.53		0.11	0.69	0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	93	84	23	467	1751		187	2322	51	45
v/s Ratio Prot	c0.02	0.00	0.01	c0.03	c0.04		c0.05	0.02	0.01	c0.01
v/s Ratio Perm				0.02						
v/c Ratio	0.35	0.01	0.48	0.26	0.07		0.41	0.02	0.22	0.24
Uniform Delay, d1	35.6	34.9	38.3	30.9	9.0		32.3	3.7	37.0	37.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2	2.3	0.0	14.8	0.3	0.1		1.4	0.0	2.1	2.8
Delay (s)	37.9	34.9	53.2	31.2	9.0		33.8	3.7	39.2	39.9
Level of Service	D	C	D	C	A		C	A	D	D
Approach Delay (s/veh)					9.0			21.3		
Approach LOS					A			C		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.16		
Actuated Cycle Length (s)	78.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	37.2%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	0	0	0	0	0	0	100	0	20	40	10
Future Volume (veh/h)	10	0	0	0	0	0	0	100	0	20	40	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	0	1712				0	1712	0	1712	1712	1900
Adj Flow Rate, veh/h	11	0	0				0	110	0	22	44	11
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	0	11				0	11	0	11	11	11
Cap, veh/h	17	0	15				0	2747	0	30	2354	567
Arrive On Green	0.01	0.00	0.00				0.00	0.84	0.00	0.02	0.91	0.91
Sat Flow, veh/h	1630	0	1455				0	3423	0	1630	2600	627
Grp Volume(v), veh/h	11	0	0				0	110	0	22	27	28
Grp Sat Flow(s),veh/h/ln	1630	0	1455				0	1626	0	1630	1626	1601
Q Serve(g_s), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.2	0.2
Cycle Q Clear(g_c), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.2	0.2
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.39
Lane Grp Cap(c), veh/h	17	0	15				0	2747	0	30	1472	1449
V/C Ratio(X)	0.64	0.00	0.00				0.00	0.04	0.00	0.73	0.02	0.02
Avail Cap(c_a), veh/h	446	0	398				0	2747	0	618	1472	1449
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	0.0	0.0				0.0	1.2	0.0	46.4	0.4	0.4
Incr Delay (d2), s/veh	32.8	0.0	0.0				0.0	0.0	0.0	28.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0				0.0	0.2	0.0	0.8	0.1	0.1
LnGrp Delay(d), s/veh	79.6	0.0	0.0				0.0	1.2	0.0	74.4	0.5	0.5
LnGrp LOS	E							A		E	A	A
Approach Vol, veh/h		11						110			77	
Approach Delay, s/veh		79.6						1.2			21.6	
Approach LOS		E						A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.8	84.2		5.0		90.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	36.0	46.0		26.0		86.0		
Max Q Clear Time (g_c+I1), s	3.3	2.5		2.6		2.2		
Green Ext Time (p_c), s	0.0	0.7		0.0		0.3		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.5
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	5.9

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	10	40	10	10	60	20
Future Vol, veh/h	10	40	10	10	60	20
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	14	56	14	14	85	28

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	206	16	0	0	29	0
Stage 1	22	-	-	-	-	-
Stage 2	184	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	769	1066	-	-	1597	-
Stage 1	1003	-	-	-	-	-
Stage 2	835	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	727	1064	-	-	1596	-
Mov Cap-2 Maneuver	727	-	-	-	-	-
Stage 1	1002	-	-	-	-	-
Stage 2	790	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	9	0	5.5
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	974	1596	-
HCM Lane V/C Ratio	-	-	0.072	0.053	-
HCM Control Delay (s/veh)	-	-	9	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0.2	0.2	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	1410	30	0	910	0	10
Future Vol, veh/h	1410	30	0	910	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1533	33	0	989	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	767
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	-	-	0	-	0	294
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	294
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	294	-	-	-
HCM Lane V/C Ratio	0.037	-	-	-
HCM Control Delay (s/veh)	17.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	870	430	250	1990	180	660	1110	400	150	830	310
Future Volume (veh/h)	320	870	430	250	1990	180	660	1110	400	150	830	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	333	906	448	260	2073	188	688	1156	417	156	865	323
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	2067	613	322	1931	173	631	1554	468	210	932	274
Arrive On Green	0.09	0.41	0.41	0.09	0.41	0.41	0.18	0.31	0.31	0.06	0.18	0.18
Sat Flow, veh/h	3442	5085	1509	3442	4730	424	3442	5085	1532	3442	5085	1493
Grp Volume(v), veh/h	333	906	448	260	1479	782	688	1156	417	156	865	323
Grp Sat Flow(s),veh/h/ln	1721	1695	1509	1721	1695	1764	1721	1695	1532	1721	1695	1493
Q Serve(g_s), s	11.0	15.4	30.1	8.9	49.0	49.0	22.0	24.5	31.2	5.3	20.1	22.0
Cycle Q Clear(g_c), s	11.0	15.4	30.1	8.9	49.0	49.0	22.0	24.5	31.2	5.3	20.1	22.0
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	2067	613	322	1384	720	631	1554	468	210	932	274
V/C Ratio(X)	1.06	0.44	0.73	0.81	1.07	1.09	1.09	0.74	0.89	0.74	0.93	1.18
Avail Cap(c_a), veh/h	315	2067	613	430	1384	720	631	1554	468	229	932	274
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	25.7	30.1	53.3	35.5	35.5	49.0	37.5	39.8	55.4	48.2	49.0
Incr Delay (d2), s/veh	66.0	0.1	4.4	8.2	44.8	59.2	62.9	3.3	21.7	11.1	16.5	112.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	7.2	13.2	4.6	31.5	35.7	15.9	11.9	16.0	2.9	10.8	17.6
LnGrp Delay(d), s/veh	120.5	25.9	34.5	61.5	80.3	94.7	111.9	40.7	61.5	66.5	64.7	161.1
LnGrp LOS	F	C	C	E	F	F	F	D	E	E	E	F
Approach Vol, veh/h		1687			2521			2261			1344	
Approach Delay, s/veh		46.8			82.8			66.2			88.1	
Approach LOS		D			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	40.7	15.2	52.8	26.0	26.0	15.0	53.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	36.0	15.0	45.0	22.0	22.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	7.3	33.2	10.9	32.1	24.0	24.0	13.0	51.0
Green Ext Time (p_c), s	0.0	2.2	0.3	6.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	71.1
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	810	1300	0	60	1430
Future Volume (vph)	40	810	1300	0	60	1430
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.86	0.85	1.00		1.00	1.00
Flt Protected	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3107	1441	5085		1770	6408
Flt Permitted	1.00	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3107	1441	5085		1770	6408
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	42	844	1354	0	62	1490
RTOR Reduction (vph)	161	161	0	0	0	0
Lane Group Flow (vph)	303	261	1354	0	63	1490
Confl. Peds. (#/hr)				13	13	
Confl. Bikes (#/hr)				4		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	22.2	22.2	54.4		7.2	65.6
Effective Green, g (s)	22.2	22.2	54.4		7.2	65.6
Actuated g/C Ratio	0.23	0.23	0.57		0.08	0.68
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	719	333	2887		133	4387
v/s Ratio Prot	0.10		c0.27		c0.04	0.23
v/s Ratio Perm		c0.18				
v/c Ratio	0.42	0.79	0.47		0.47	0.34
Uniform Delay, d1	31.3	34.6	12.2		42.5	6.2
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	11.5	0.5		2.7	0.2
Delay (s)	31.7	46.1	12.7		45.1	6.4
Level of Service	C	D	B		D	A
Approach Delay (s/veh)	38.6		12.7			8.0
Approach LOS	D		B			A

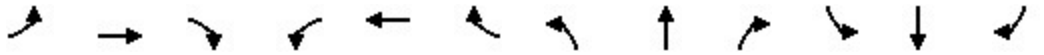
Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.8	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	95.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	270	270	70	1500	690	0
Future Volume (veh/h)	270	270	70	1500	690	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	290	290	75	1613	742	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	726	334	97	4530	3132	0
Arrive On Green	0.21	0.21	0.06	0.71	0.62	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	290	290	75	1613	742	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	8.0	19.5	4.6	10.7	7.1	0.0
Cycle Q Clear(g_c), s	8.0	19.5	4.6	10.7	7.1	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	726	334	97	4530	3132	0
V/C Ratio(X)	0.40	0.87	0.77	0.36	0.24	0.00
Avail Cap(c_a), veh/h	1061	488	402	4530	3132	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	41.5	50.9	6.0	9.2	0.0
Incr Delay (d2), s/veh	0.4	11.0	12.1	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	16.7	2.6	4.7	3.3	0.0
LnGrp Delay(d), s/veh	37.3	52.5	63.0	6.2	9.3	0.0
LnGrp LOS	D	D	E	A	A	
Approach Vol, veh/h	580			1688	742	
Approach Delay, s/veh	44.9			8.7	9.3	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		82.0		27.3	10.0	72.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		78.0		34.0	25.0	49.0		
Max Q Clear Time (g_c+I1), s		12.7		21.5	6.6	9.1		
Green Ext Time (p_c), s		19.2		1.7	0.1	5.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1050	80	310	1750	130	160	780	370	110	730	190
Future Volume (veh/h)	180	1050	80	310	1750	130	160	780	370	110	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	194	1129	86	333	1882	140	172	839	398	118	785	204
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	248	1825	499	398	2046	566	230	1694	442	170	1606	421
Arrive On Green	0.07	0.36	0.36	0.12	0.41	0.41	0.07	0.34	0.34	0.05	0.32	0.32
Sat Flow, veh/h	3408	5036	1376	3408	5036	1393	3408	5036	1314	3408	5036	1320
Grp Volume(v), veh/h	194	1129	86	333	1882	140	172	839	398	118	785	204
Grp Sat Flow(s),veh/h/ln	1704	1679	1376	1704	1679	1393	1704	1679	1314	1704	1679	1320
Q Serve(g_s), s	6.7	21.9	5.1	11.4	42.1	7.9	5.9	15.8	34.3	4.1	15.0	14.8
Cycle Q Clear(g_c), s	6.7	21.9	5.1	11.4	42.1	7.9	5.9	15.8	34.3	4.1	15.0	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1825	499	398	2046	566	230	1694	442	170	1606	421
V/C Ratio(X)	0.78	0.62	0.17	0.84	0.92	0.25	0.75	0.50	0.90	0.69	0.49	0.48
Avail Cap(c_a), veh/h	258	1825	499	516	2076	574	315	1694	442	172	1606	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	31.1	25.8	51.4	33.5	23.3	54.5	31.4	37.5	55.6	32.7	32.6
Incr Delay (d2), s/veh	13.9	0.6	0.2	9.2	7.2	0.2	6.4	1.0	24.0	11.3	1.1	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	10.2	1.9	5.9	20.9	3.1	3.0	7.5	15.3	2.2	7.1	5.8
LnGrp Delay(d), s/veh	68.1	31.8	25.9	60.6	40.7	23.5	60.8	32.4	61.5	66.9	33.7	36.6
LnGrp LOS	E	C	C	E	D	C	E	C	E	E	C	D
Approach Vol, veh/h		1409			2355			1409			1107	
Approach Delay, s/veh		36.4			42.5			44.1			37.8	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	44.0	17.9	47.1	12.0	41.9	12.7	52.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	40.0	18.0	40.0	11.0	35.0	9.0	49.0
Max Q Clear Time (g_c+I1), s	6.1	36.3	13.4	23.9	7.9	17.0	8.7	44.1
Green Ext Time (p_c), s	0.0	2.3	0.5	7.2	0.1	5.9	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Future Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	62	115	583	52	250	62	1208	906	375	1146	31
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	561	282	523	566	900	752	80	1526	461	207	1890	51
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.04	0.30	0.30	0.12	0.37	0.37
Sat Flow, veh/h	1069	583	1082	1200	1863	1555	1774	5085	1537	1774	5083	137
Grp Volume(v), veh/h	31	0	177	583	52	250	62	1208	906	375	764	413
Grp Sat Flow(s),veh/h/ln	1069	0	1665	1200	1863	1555	1774	1695	1537	1774	1695	1830
Q Serve(g_s), s	1.9	0.0	7.4	50.6	1.8	11.9	4.2	26.2	36.0	14.0	21.9	22.0
Cycle Q Clear(g_c), s	3.7	0.0	7.4	58.0	1.8	11.9	4.2	26.2	36.0	14.0	21.9	22.0
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	561	0	805	566	900	752	80	1526	461	207	1260	680
V/C Ratio(X)	0.06	0.00	0.22	1.03	0.06	0.33	0.78	0.79	1.97	1.81	0.61	0.61
Avail Cap(c_a), veh/h	561	0	805	566	900	752	133	1526	461	207	1260	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.5	0.0	17.9	37.4	16.5	19.1	56.7	38.6	42.0	53.0	30.6	30.6
Incr Delay (d2), s/veh	0.0	0.0	0.1	45.6	0.0	0.3	14.9	4.3	442.1	383.8	2.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.4	25.9	0.9	5.1	2.4	12.8	71.9	28.9	10.7	11.9
LnGrp Delay(d), s/veh	17.5	0.0	18.1	83.0	16.5	19.3	71.6	42.9	484.1	436.8	32.7	34.6
LnGrp LOS	B		B	F	B	B	E	D	F	F	C	C
Approach Vol, veh/h		208			885			2176			1552	
Approach Delay, s/veh		18.0			61.1			227.4			130.9	
Approach LOS		B			E			F			F	

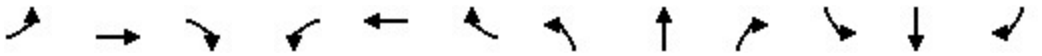
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.0	40.0		62.0	9.4	48.6		62.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	36.0		58.0	9.0	41.0		58.0
Max Q Clear Time (g_c+I1), s	16.0	38.0		9.4	6.2	24.0		60.0
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	7.2		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		156.8
HCM 2010 LOS		F

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	230	0	0	170	770	40
Future Volume (veh/h)	230	0	0	170	770	40
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	240	0	0	177	802	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2302	0	0	2302	1164	368
Arrive On Green	0.64	0.00	0.00	0.64	0.23	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	240	0	0	177	802	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	1.6	0.0	0.0	1.2	9.2	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.2	9.2	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2302	0	0	2302	1164	368
V/C Ratio(X)	0.10	0.00	0.00	0.08	0.69	0.00
Avail Cap(c_a), veh/h	2302	0	0	2302	5635	1783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	4.2	22.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.6	4.4	0.0
LnGrp Delay(d), s/veh	4.4	0.0	0.0	4.3	23.2	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	240			177	802	
Approach Delay, s/veh	4.4			4.3	23.2	
Approach LOS	A			A	C	

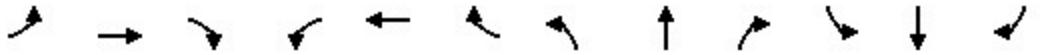
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.0				45.0		18.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		41.0				41.0		71.0
Max Q Clear Time (g_c+I1), s		3.6				3.2		11.2
Green Ext Time (p_c), s		1.4				1.0		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	780	120	500	1290	270	200	840	400	290	590	70
Future Volume (vph)	280	780	120	500	1290	270	200	840	400	290	590	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.99		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3467	5136	1496	3467	4954		1626	3209	1455	1537	4734	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.80	
Satd. Flow (perm)	3467	5136	1496	3467	4954		1626	3015	1455	1537	3813	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	298	830	128	532	1372	287	213	894	426	309	628	74
RTOR Reduction (vph)	0	0	99	0	27	0	0	3	26	0	9	0
Lane Group Flow (vph)	298	830	29	532	1632	0	192	955	357	247	755	0
Confl. Peds. (#/hr)	18		23	23		18	23					23
Confl. Bikes (#/hr)			2			6						1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pt+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	2 3	1	6	
Permitted Phases			4									
Actuated Green, G (s)	11.0	27.1	27.1	22.9	39.0		18.7	52.7	60.9	20.0	55.3	
Effective Green, g (s)	11.0	27.1	27.1	22.9	39.0		18.7	52.7	60.9	20.0	55.3	
Actuated g/C Ratio	0.09	0.23	0.23	0.19	0.33		0.16	0.44	0.51	0.17	0.46	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	317	1159	337	661	1610		253	1354	738	256	1910	
v/s Ratio Prot	c0.09	0.16		0.15	c0.33		0.12	0.11	0.25	c0.16	0.07	
v/s Ratio Perm			0.02					c0.20			0.12	
v/c Ratio	0.94	0.72	0.09	0.80	1.01		0.76	0.71	0.48	0.96	0.40	
Uniform Delay, d1	54.2	42.9	36.7	46.4	40.5		48.5	27.3	19.3	49.7	21.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	35.0	2.1	0.1	7.1	25.9		12.3	1.7	0.5	46.1	0.1	
Delay (s)	89.2	45.0	36.8	53.5	66.4		60.8	29.0	19.8	95.8	21.5	
Level of Service	F	D	D	D	E		E	C	B	F	C	
Approach Delay (s/veh)		54.7			63.2			30.7			39.6	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Future Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
Arrive On Green	0.13	0.37	0.37	0.13	0.37	0.37	0.13	0.28	0.28	0.08	0.24	0.24
Sat Flow, veh/h	1792	3574	1543	1792	3574	1539	3476	3574	1536	1792	3574	1497
Grp Volume(v), veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Grp Sat Flow(s),veh/h/ln	1792	1787	1543	1792	1787	1539	1738	1787	1536	1792	1787	1497
Q Serve(g_s), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Cycle Q Clear(g_c), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
V/C Ratio(X)	1.01	0.56	0.26	0.87	1.01	0.28	0.89	0.91	0.37	1.03	0.80	0.64
Avail Cap(c_a), veh/h	239	1310	765	343	1311	698	434	1013	649	149	864	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	30.3	17.8	51.0	38.0	20.8	51.7	41.5	24.2	55.0	42.8	40.8
Incr Delay (d2), s/veh	61.6	0.6	0.2	15.7	26.4	0.2	19.3	13.6	1.6	82.2	7.7	8.4
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	9.8	3.8	7.8	26.5	4.2	7.4	16.7	5.8	8.3	11.7	7.7
LnGrp Delay(d), s/veh	113.7	30.9	18.0	66.7	64.4	21.1	70.9	55.2	25.9	137.6	50.5	49.2
LnGrp LOS	F	C	B	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1176			1726			1550			1077	
Approach Delay, s/veh		45.8			59.7			54.5			62.7	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	38.0	20.0	48.0	19.0	33.0	20.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	34.0	23.0	37.0	15.0	29.0	16.0	44.0
Max Q Clear Time (g_c+I1), s	12.0	31.9	15.7	21.7	15.1	23.8	18.0	46.0
Green Ext Time (p_c), s	0.0	1.3	0.3	4.9	0.0	2.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.9
HCM 2010 LOS	E

FULLERTON STATION NO PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	720	170	170	500	80	130	1010	120	240	1330	30
Future Volume (veh/h)	50	720	170	170	500	80	130	1010	120	240	1330	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	52	742	175	175	515	82	134	1041	124	247	1371	31
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	269	797	188	212	997	158	200	1347	160	296	1650	37
Arrive On Green	0.03	0.28	0.28	0.08	0.32	0.32	0.05	0.42	0.42	0.09	0.46	0.46
Sat Flow, veh/h	1792	2872	677	1792	3092	490	1792	3217	383	1792	3572	81
Grp Volume(v), veh/h	52	462	455	175	297	300	134	578	587	247	685	717
Grp Sat Flow(s),veh/h/ln	1792	1787	1762	1792	1787	1795	1792	1787	1813	1792	1787	1866
Q Serve(g_s), s	2.5	30.0	30.0	8.1	16.1	16.2	5.1	33.1	33.2	9.0	39.8	39.9
Cycle Q Clear(g_c), s	2.5	30.0	30.0	8.1	16.1	16.2	5.1	33.1	33.2	9.0	39.8	39.9
Prop In Lane	1.00		0.38	1.00		0.27	1.00		0.21	1.00		0.04
Lane Grp Cap(c), veh/h	269	496	489	212	576	579	200	748	759	296	826	862
V/C Ratio(X)	0.19	0.93	0.93	0.83	0.52	0.52	0.67	0.77	0.77	0.83	0.83	0.83
Avail Cap(c_a), veh/h	275	510	503	212	585	588	200	748	759	339	826	862
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.9	41.9	41.9	31.2	32.8	32.8	25.8	29.7	29.8	24.3	27.9	28.0
Incr Delay (d2), s/veh	0.3	23.6	23.9	22.8	0.8	0.8	8.4	7.6	7.6	14.6	9.5	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	18.0	17.8	5.3	8.0	8.1	3.0	17.8	18.2	5.6	21.8	22.7
LnGrp Delay(d), s/veh	30.2	65.5	65.8	54.0	33.5	33.6	34.3	37.3	37.3	38.9	37.4	37.2
LnGrp LOS	C	E	E	D	C	C	C	D	D	D	D	D
Approach Vol, veh/h		969			772			1299			1649	
Approach Delay, s/veh		63.7			38.2			37.0			37.5	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	53.8	13.0	37.0	10.0	59.0	7.7	42.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	47.0	9.0	34.0	6.0	55.0	4.0	39.0
Max Q Clear Time (g_c+I1), s	11.0	35.2	10.1	32.0	7.1	41.9	4.5	18.2
Green Ext Time (p_c), s	0.2	5.8	0.0	1.1	0.0	7.5	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	640	80	200	360	50	60	1020	250	170	1370	160
Future Volume (veh/h)	170	640	80	200	360	50	60	1020	250	170	1370	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	674	84	211	379	53	63	1074	263	179	1442	168
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	345	713	89	249	722	100	146	1671	735	280	1627	188
Arrive On Green	0.09	0.23	0.23	0.10	0.23	0.23	0.03	0.47	0.47	0.07	0.51	0.51
Sat Flow, veh/h	1774	3161	393	1774	3113	432	1774	3539	1557	1774	3192	368
Grp Volume(v), veh/h	179	377	381	211	214	218	63	1074	263	179	793	817
Grp Sat Flow(s),veh/h/ln	1774	1770	1785	1774	1770	1775	1774	1770	1557	1774	1770	1791
Q Serve(g_s), s	9.1	25.1	25.2	10.9	12.6	12.9	2.2	27.5	12.8	5.9	47.7	49.2
Cycle Q Clear(g_c), s	9.1	25.1	25.2	10.9	12.6	12.9	2.2	27.5	12.8	5.9	47.7	49.2
Prop In Lane	1.00		0.22	1.00		0.24	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	345	399	403	249	411	412	146	1671	735	280	902	913
V/C Ratio(X)	0.52	0.94	0.95	0.85	0.52	0.53	0.43	0.64	0.36	0.64	0.88	0.89
Avail Cap(c_a), veh/h	386	399	403	249	411	412	150	1671	735	366	902	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	45.6	45.6	33.9	40.1	40.2	25.8	23.9	20.1	19.5	26.1	26.4
Incr Delay (d2), s/veh	1.2	31.1	31.4	23.0	1.2	1.3	2.0	1.9	1.4	2.4	12.0	13.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	15.7	15.9	6.9	6.3	6.4	1.1	13.9	5.8	3.1	26.1	27.6
LnGrp Delay(d), s/veh	32.8	76.7	77.0	56.8	41.3	41.5	27.8	25.8	21.4	22.0	38.0	39.5
LnGrp LOS	C	E	E	E	D	D	C	C	C	C	D	D
Approach Vol, veh/h		937			643			1400			1789	
Approach Delay, s/veh		68.4			46.5			25.1			37.1	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	60.5	16.0	31.0	7.7	65.0	15.2	31.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	51.0	12.0	27.0	4.0	61.0	14.0	25.0
Max Q Clear Time (g_c+I1), s	7.9	29.5	12.9	27.2	4.2	51.2	11.1	14.9
Green Ext Time (p_c), s	0.2	9.0	0.0	0.0	0.0	7.0	0.1	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Future Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	65	1140	108	129	667	11	97	97	86	32	172	75
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	457	1918	181	245	2096	35	359	611	504	106	521	517
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	765	3292	311	448	3598	59	1137	1881	1553	177	1605	1592
Grp Volume(v), veh/h	65	618	630	129	331	347	97	97	86	204	0	75
Grp Sat Flow(s),veh/h/ln	765	1787	1817	448	1787	1870	1137	1881	1553	1781	0	1592
Q Serve(g_s), s	4.1	19.0	19.1	22.3	8.2	8.2	6.1	3.2	3.4	0.0	0.0	2.9
Cycle Q Clear(g_c), s	12.3	19.0	19.1	41.4	8.2	8.2	13.2	3.2	3.4	7.1	0.0	2.9
Prop In Lane	1.00		0.17	1.00		0.03	1.00		1.00	0.16		1.00
Lane Grp Cap(c), veh/h	457	1041	1058	245	1041	1090	359	611	504	627	0	517
V/C Ratio(X)	0.14	0.59	0.60	0.53	0.32	0.32	0.27	0.16	0.17	0.33	0.00	0.15
Avail Cap(c_a), veh/h	756	1741	1769	421	1741	1822	359	611	504	627	0	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	11.5	11.5	24.7	9.2	9.2	27.0	20.7	20.8	22.1	0.0	20.6
Incr Delay (d2), s/veh	0.1	0.5	0.5	1.7	0.2	0.2	1.8	0.6	0.7	1.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.4	9.6	2.9	4.0	4.2	2.1	1.7	1.6	3.9	0.0	1.4
LnGrp Delay(d), s/veh	12.5	12.0	12.0	26.5	9.4	9.4	28.9	21.3	21.5	23.4	0.0	21.2
LnGrp LOS	B	B	B	C	A	A	C	C	C	C		C
Approach Vol, veh/h		1313			807			280			279	
Approach Delay, s/veh		12.1			12.1			24.0			22.8	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		54.2		32.0		54.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		15.2		21.1		9.1		43.4
Green Ext Time (p_c), s		1.0		11.7		1.4		6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	930	180	110	420	20	200	230	140	40	240	50
Future Volume (veh/h)	100	930	180	110	420	20	200	230	140	40	240	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	109	1011	196	120	457	22	217	250	152	43	261	54
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	460	1790	775	209	1790	773	422	797	662	399	797	662
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	918	3574	1547	466	3574	1544	1068	1881	1562	987	1881	1562
Grp Volume(v), veh/h	109	1011	196	120	457	22	217	250	152	43	261	54
Grp Sat Flow(s),veh/h/ln	918	1787	1547	466	1787	1544	1068	1881	1562	987	1881	1562
Q Serve(g_s), s	8.2	20.9	7.7	25.6	7.8	0.8	18.1	9.4	6.6	3.2	9.9	2.2
Cycle Q Clear(g_c), s	16.0	20.9	7.7	46.6	7.8	0.8	28.0	9.4	6.6	12.6	9.9	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	460	1790	775	209	1790	773	422	797	662	399	797	662
V/C Ratio(X)	0.24	0.56	0.25	0.57	0.26	0.03	0.51	0.31	0.23	0.11	0.33	0.08
Avail Cap(c_a), veh/h	580	2256	976	270	2256	974	422	797	662	399	797	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	18.4	15.1	34.7	15.2	13.4	29.8	20.3	19.5	24.5	20.5	18.2
Incr Delay (d2), s/veh	0.3	0.3	0.2	2.5	0.1	0.0	4.4	1.0	0.8	0.5	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	10.3	3.3	3.4	3.8	0.3	5.8	5.1	3.0	0.9	5.3	1.0
LnGrp Delay(d), s/veh	20.0	18.7	15.3	37.1	15.2	13.4	34.2	21.3	20.3	25.0	21.6	18.5
LnGrp LOS	B	B	B	D	B	B	C	C	C	C	C	B
Approach Vol, veh/h		1316			599			619			358	
Approach Delay, s/veh		18.3			19.6			25.6			21.5	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		57.2		49.0		57.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0		45.0		67.0
Max Q Clear Time (g_c+I1), s		30.0		22.9		14.6		48.6
Green Ext Time (p_c), s		2.7		11.0		2.1		4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.5
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	20	10	560	40	10	380
Future Volume (Veh/h)	20	10	560	40	10	380
Sign Control	Stop		Free			Free
Grade	0%		0%			0%
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Hourly flow rate (vph)	24	12	659	47	12	447
Pedestrians	22					
Lane Width (ft)	12.0					
Walking Speed (ft/s)	4.0					
Percent Blockage	2					
Right turn flare (veh)		1				
Median type			None			None
Median storage veh)						
Upstream signal (ft)			333			381
pX, platoon unblocked	0.90	0.87			0.87	
vC, conflicting volume	1152	681			728	
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	970	556			611	
tC, single (s)	6.4	6.2			4.1	
tC, 2 stage (s)						
tF (s)	3.5	3.3			2.2	
p0 queue free %	90	97			99	
cM capacity (veh/h)	244	453			829	

Direction, Lane #	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	36	659	47	12	447
Volume Left	24	0	0	12	0
Volume Right	12	0	47	0	0
cSH	367	1700	1700	829	1700
Volume to Capacity	0.10	0.39	0.03	0.01	0.26
Queue Length 95th (ft)	8	0	0	1	0
Control Delay (s/veh)	18.6	0.0	0.0	9.4	0.0
Lane LOS	C			A	
Approach Delay (s/veh)	18.6	0.0		0.2	
Approach LOS	C				

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	42.7%	ICU Level of Service	A
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	20	30	20	10	40	400	20	20	260	10
Future Volume (Veh/h)	10	10	20	30	20	10	40	400	20	20	260	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Hourly flow rate (vph)	11	11	22	33	22	11	44	440	22	22	286	11
Pedestrians		22			22			1			3	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		2			2			0			0	
Right turn flare (veh)			1			1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								399			381	
pX, platoon unblocked	0.98	0.98	0.98	0.98	0.98	0.97	0.98			0.97		
vC, conflicting volume	900	924	309	898	913	465	319			484		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	846	871	288	844	860	433	298			452		
tC, single (s)	7.1	6.5	6.2	7.1	6.5	6.2	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	95	96	97	86	92	98	96			98		
cM capacity (veh/h)	230	256	722	236	260	590	1213			1050		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	44	66	44	440	22	22	286	11
Volume Left	11	33	44	0	0	22	0	0
Volume Right	22	11	0	0	22	0	0	11
cSH	487	295	1213	1700	1700	1050	1700	1700
Volume to Capacity	0.09	0.22	0.04	0.26	0.01	0.02	0.17	0.01
Queue Length 95th (ft)	7	21	3	0	0	2	0	0
Control Delay (s/veh)	15.7	21.7	8.1	0.0	0.0	8.5	0.0	0.0
Lane LOS	C	C	A			A		
Approach Delay (s/veh)	15.7	21.7	0.7			0.6		
Approach LOS	C	C						

Intersection Summary				
Average Delay	2.9			
Intersection Capacity Utilization	44.1%	ICU Level of Service		A
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Future Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
Arrive On Green	0.21	0.21	0.00	0.00	0.21	0.21	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Grp Volume(v), veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Grp Sat Flow(s),veh/h/ln	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Q Serve(g_s), s	5.9	13.6	0.0	0.0	5.1	4.6	0.3	4.2	0.6	3.8	1.4	7.2
Cycle Q Clear(g_c), s	11.0	13.6	0.0	0.0	5.1	4.6	1.7	4.2	0.6	8.0	1.4	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
V/C Ratio(X)	0.33	0.80	0.00	0.00	0.34	0.30	0.02	0.20	0.03	0.15	0.07	0.31
Avail Cap(c_a), veh/h	694	1129	959	508	1129	913	733	1302	1070	780	1302	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	32.3	0.0	0.0	29.0	28.7	4.4	4.5	4.0	5.9	4.1	5.0
Incr Delay (d2), s/veh	0.8	3.9	0.0	0.0	0.5	0.5	0.0	0.3	0.1	0.4	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.4	0.0	0.0	2.7	1.9	0.1	2.2	0.3	1.2	0.8	3.2
LnGrp Delay(d), s/veh	34.4	36.2	0.0	0.0	29.5	29.3	4.4	4.9	4.0	6.3	4.2	5.7
LnGrp LOS	C	D			C	C	A	A	A	A	A	A
Approach Vol, veh/h		393			226			310			547	
Approach Delay, s/veh		35.8			29.4			4.8			5.6	
Approach LOS		D			C			A			A	

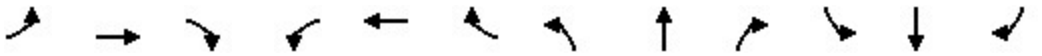
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		21.8		64.0		21.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		6.2		15.6		10.0		7.1
Green Ext Time (p_c), s		1.9		2.3		2.4		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Future Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	129	1452	32	54	839	75	65	86	140	86	43	86
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	2146	47	221	1839	164	561	732	604	505	732	603
Arrive On Green	0.07	0.42	0.42	0.04	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1774	5114	113	1774	4734	421	1240	1863	1537	1138	1863	1534
Grp Volume(v), veh/h	129	963	521	54	600	314	65	86	140	86	43	86
Grp Sat Flow(s),veh/h/ln	1774	1695	1837	1774	1695	1765	1240	1863	1537	1138	1863	1534
Q Serve(g_s), s	3.3	18.1	18.1	1.4	10.4	10.5	2.7	2.3	4.8	4.1	1.1	2.8
Cycle Q Clear(g_c), s	3.3	18.1	18.1	1.4	10.4	10.5	3.8	2.3	4.8	6.4	1.1	2.8
Prop In Lane	1.00		0.06	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	1423	771	221	1317	685	561	732	604	505	732	603
V/C Ratio(X)	0.35	0.68	0.68	0.24	0.46	0.46	0.12	0.12	0.23	0.17	0.06	0.14
Avail Cap(c_a), veh/h	652	2880	1560	383	2536	1320	561	732	604	505	732	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	18.5	18.5	15.4	17.9	17.9	16.1	15.2	16.0	17.3	14.9	15.4
Incr Delay (d2), s/veh	0.6	0.6	1.0	0.6	0.2	0.5	0.4	0.3	0.9	0.7	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.5	9.3	0.7	4.9	5.2	1.0	1.3	2.2	1.4	0.6	1.3
LnGrp Delay(d), s/veh	13.9	19.1	19.6	15.9	18.2	18.4	16.5	15.6	16.9	18.0	15.0	15.9
LnGrp LOS	B	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1613			968			291			215	
Approach Delay, s/veh		18.9			18.1			16.4			16.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	6.8	37.1		35.0	9.2	34.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	18.0	59.0
Max Q Clear Time (g_c+I1), s		6.8	3.4	20.1		8.4	5.3	12.5
Green Ext Time (p_c), s		1.1	0.0	12.9		0.8	0.2	6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	990	100	40	690	10	30	10	60	10	20	110
Future Volume (Veh/h)	60	990	100	40	690	10	30	10	60	10	20	110
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Hourly flow rate (vph)	62	1021	103	41	711	10	31	10	62	10	21	113
Pedestrians		2			3			5			1	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			0			0	
Right turn flare (veh)									2			
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		653			660							
pX, platoon unblocked	0.85			0.75			0.83	0.83	0.75	0.83	0.83	0.85
vC, conflicting volume	722			1129			1765	2006	570	1442	2052	364
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	330			519			709	1000	0	319	1056	0
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	94			95			84	94	92	98	87	88
cM capacity (veh/h)	1051			789			193	179	815	409	166	926

Direction, Lane #	EB 1	EB 2	EB 3	WB 1	WB 2	WB 3	NB 1	SB 1
Volume Total	62	681	443	41	474	247	103	144
Volume Left	62	0	0	41	0	0	31	10
Volume Right	0	0	103	0	0	10	62	113
cSH	1051	1700	1700	789	1700	1700	476	527
Volume to Capacity	0.06	0.40	0.26	0.05	0.28	0.15	0.22	0.27
Queue Length 95th (ft)	5	0	0	4	0	0	20	28
Control Delay (s/veh)	8.6	0.0	0.0	9.8	0.0	0.0	17.5	14.4
Lane LOS	A			A			C	B
Approach Delay (s/veh)	0.5			0.5			17.5	14.4
Approach LOS							C	B

Intersection Summary				
Average Delay	2.2			
Intersection Capacity Utilization	59.2%	ICU Level of Service		B
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	980	120	30	450	20	40	20	20	30	40	70
Future Volume (veh/h)	110	980	120	30	450	20	40	20	20	30	40	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	120	1065	130	33	489	22	43	22	22	33	43	76
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	487	1548	686	244	1421	629	148	59	582	117	125	582
Arrive On Green	0.06	0.43	0.43	0.03	0.40	0.40	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1792	3574	1584	1792	3574	1583	167	162	1595	113	344	1595
Grp Volume(v), veh/h	120	1065	130	33	489	22	65	0	22	76	0	76
Grp Sat Flow(s),veh/h/ln	1792	1787	1584	1792	1787	1583	330	0	1595	457	0	1595
Q Serve(g_s), s	2.6	16.5	3.5	0.7	6.5	0.6	1.6	0.0	0.6	0.9	0.0	2.2
Cycle Q Clear(g_c), s	2.6	16.5	3.5	0.7	6.5	0.6	22.2	0.0	0.6	21.9	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	0.66		1.00	0.43		1.00
Lane Grp Cap(c), veh/h	487	1548	686	244	1421	629	207	0	582	242	0	582
V/C Ratio(X)	0.25	0.69	0.19	0.14	0.34	0.03	0.31	0.00	0.04	0.31	0.00	0.13
Avail Cap(c_a), veh/h	688	3911	1733	405	3702	1640	207	0	582	242	0	582
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	10.9	15.7	12.0	13.1	14.4	12.6	21.7	0.0	14.0	17.0	0.0	14.5
Incr Delay (d2), s/veh	0.3	0.6	0.1	0.2	0.1	0.0	3.9	0.0	0.1	3.4	0.0	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	8.1	1.5	0.4	3.2	0.3	1.4	0.0	0.3	1.2	0.0	1.0
LnGrp Delay(d), s/veh	11.1	16.2	12.1	13.4	14.6	12.6	25.7	0.0	14.1	20.4	0.0	15.0
LnGrp LOS	B	B	B	B	B	B	C		B	C		B
Approach Vol, veh/h		1315			544			87			152	
Approach Delay, s/veh		15.4			14.4			22.7			17.7	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	5.9	33.7		29.0	8.3	31.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	8.0	75.0		25.0	12.0	71.0
Max Q Clear Time (g_c+I1), s		24.2	2.7	18.5		23.9	4.6	8.5
Green Ext Time (p_c), s		0.0	0.0	11.2		0.1	0.2	3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1450	840	480	1470	110	500	620	310	170	1250	190
Future Volume (veh/h)	200	1450	840	480	1470	110	500	620	310	170	1250	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	208	1510	875	500	1531	115	521	646	323	177	1302	198
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1328	610	402	2194	681	430	1477	458	233	1187	367
Arrive On Green	0.08	0.39	0.39	0.12	0.43	0.43	0.13	0.29	0.29	0.07	0.23	0.23
Sat Flow, veh/h	3442	3390	1557	3442	5085	1578	3442	5085	1575	3442	5085	1573
Grp Volume(v), veh/h	208	1510	875	500	1531	115	521	646	323	177	1302	198
Grp Sat Flow(s),veh/h/ln	1721	1695	1557	1721	1695	1578	1721	1695	1575	1721	1695	1573
Q Serve(g_s), s	7.1	47.0	47.0	14.0	29.4	5.4	15.0	12.4	22.0	6.1	28.0	13.2
Cycle Q Clear(g_c), s	7.1	47.0	47.0	14.0	29.4	5.4	15.0	12.4	22.0	6.1	28.0	13.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1328	610	402	2194	681	430	1477	458	233	1187	367
V/C Ratio(X)	0.79	1.14	1.44	1.25	0.70	0.17	1.21	0.44	0.71	0.76	1.10	0.54
Avail Cap(c_a), veh/h	315	1328	610	402	2194	681	430	1477	458	287	1187	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	36.5	36.5	53.0	27.8	20.9	52.5	34.6	38.0	55.0	46.0	40.3
Incr Delay (d2), s/veh	10.4	71.4	205.1	129.7	1.0	0.1	114.8	0.9	8.8	8.9	56.9	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	35.1	54.9	13.9	14.0	2.4	14.0	5.9	10.6	3.2	19.3	6.3
LnGrp Delay(d), s/veh	64.9	107.9	241.6	182.7	28.7	21.0	167.3	35.5	46.8	63.9	102.9	45.9
LnGrp LOS	E	F	F	F	C	C	F	D	D	E	F	D
Approach Vol, veh/h		2593			2146			1490			1677	
Approach Delay, s/veh		149.6			64.2			84.1			92.1	
Approach LOS		F			E			F			F	

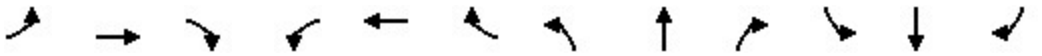
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	38.9	18.0	51.0	19.0	32.0	13.2	55.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	33.0	14.0	47.0	15.0	28.0	11.0	50.0
Max Q Clear Time (g_c+I1), s	8.1	24.0	16.0	49.0	17.0	30.0	9.1	31.4
Green Ext Time (p_c), s	0.1	3.5	0.0	0.0	0.0	0.0	0.1	10.4

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		101.9	
HCM 2010 LOS		F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	1200	250	450	1130	200	310	1280	190	440	1760	290
Future Volume (veh/h)	320	1200	250	450	1130	200	310	1280	190	440	1760	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	333	1250	260	469	1177	208	323	1333	198	458	1833	302
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	314	1131	235	434	1113	338	319	1685	512	511	1701	277
Arrive On Green	0.17	0.27	0.27	0.13	0.22	0.22	0.09	0.33	0.33	0.15	0.38	0.38
Sat Flow, veh/h	1792	4242	882	3476	5136	1559	3476	5136	1560	3476	4437	722
Grp Volume(v), veh/h	333	1009	501	469	1177	208	323	1333	198	458	1409	726
Grp Sat Flow(s),veh/h/ln	1792	1712	1700	1738	1712	1559	1738	1712	1560	1738	1712	1734
Q Serve(g_s), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	28.3	11.7	15.5	46.0	46.0
Cycle Q Clear(g_c), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	28.3	11.7	15.5	46.0	46.0
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	314	913	453	434	1113	338	319	1685	512	511	1312	665
V/C Ratio(X)	1.06	1.11	1.11	1.08	1.06	0.62	1.01	0.79	0.39	0.90	1.07	1.09
Avail Cap(c_a), veh/h	314	913	453	434	1113	338	319	1685	512	521	1312	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	44.0	44.0	52.5	47.0	42.5	54.5	36.6	31.0	50.3	37.0	37.0
Incr Delay (d2), s/veh	68.2	62.9	74.0	66.2	43.6	3.3	54.0	3.9	2.2	17.9	47.2	62.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	23.1	24.3	11.2	16.8	6.6	7.7	13.9	5.4	8.7	30.3	33.5
LnGrp Delay(d), s/veh	117.7	106.9	118.0	118.7	90.6	45.8	108.5	40.5	33.2	68.2	84.2	99.6
LnGrp LOS	F	F	F	F	F	D	F	D	C	E	F	F
Approach Vol, veh/h		1843			1854			1854			2593	
Approach Delay, s/veh		111.8			92.7			51.6			85.7	
Approach LOS		F			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	43.4	19.0	36.0	15.0	50.0	25.0	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	39.0	15.0	32.0	11.0	46.0	21.0	26.0
Max Q Clear Time (g_c+I1), s	17.5	30.3	17.0	34.0	13.0	48.0	23.0	28.0
Green Ext Time (p_c), s	0.1	5.6	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	85.4
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	90	30	710	150	210	40	1040	480	90	1680	90
Future Volume (vph)	50	90	30	710	150	210	40	1040	480	90	1680	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1881	1599	1698	1730	1564	1787	5136	1571	1787	5089	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1881	1599	1698	1730	1564	1787	5136	1571	1787	5089	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	52	94	31	740	156	219	42	1083	500	94	1750	94
RTOR Reduction (vph)	0	0	28	0	0	154	0	0	303	0	4	0
Lane Group Flow (vph)	52	94	3	444	452	65	42	1083	197	94	1840	0
Confl. Peds. (#/hr)	3					3	2		2	2		2
Confl. Bikes (#/hr)						5			3			4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	10.8	10.8	10.8	30.3	30.3	30.3	5.3	43.2	43.2	9.4	47.3	
Effective Green, g (s)	10.8	10.8	10.8	30.3	30.3	30.3	5.3	43.2	43.2	9.4	47.3	
Actuated g/C Ratio	0.10	0.10	0.10	0.28	0.28	0.28	0.05	0.39	0.39	0.09	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	175	185	157	469	477	431	86	2022	618	153	2194	
v/s Ratio Prot	0.03	c0.05		c0.26	0.26		0.02	0.21		c0.05	c0.36	
v/s Ratio Perm			0.00			0.04			0.13			
v/c Ratio	0.30	0.51	0.02	0.95	0.95	0.15	0.49	0.54	0.32	0.61	0.84	
Uniform Delay, d1	45.9	46.9	44.7	38.9	38.9	30.0	50.9	25.5	23.0	48.4	27.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	2.2	0.0	28.3	28.1	0.2	4.3	1.0	1.4	7.1	3.0	
Delay (s)	46.9	49.1	44.7	67.2	67.1	30.1	55.2	26.6	24.4	55.5	30.8	
Level of Service	D	D	D	E	E	C	E	C	C	E	C	
Approach Delay (s/veh)		47.7			59.9			26.6			32.0	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	79.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	200	80	70	160	450	130	910	100	840	1560	70
Future Volume (veh/h)	70	200	80	70	160	450	130	910	100	840	1560	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	78	222	89	78	178	500	144	1011	111	933	1733	78
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	145	366	297	154	366	766	171	1333	146	1017	2175	939
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.41	0.41	0.29	0.61	0.61
Sat Flow, veh/h	763	1881	1525	1070	1881	1534	1792	3239	355	3476	3574	1544
Grp Volume(v), veh/h	78	222	89	78	178	500	144	558	564	933	1733	78
Grp Sat Flow(s),veh/h/ln	763	1881	1525	1070	1881	1534	1792	1787	1808	1738	1787	1544
Q Serve(g_s), s	12.0	12.8	5.9	8.5	10.0	23.0	9.4	31.6	31.6	30.7	43.6	2.5
Cycle Q Clear(g_c), s	22.0	12.8	5.9	21.2	10.0	23.0	9.4	31.6	31.6	30.7	43.6	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.20	1.00		1.00
Lane Grp Cap(c), veh/h	145	366	297	154	366	766	171	736	744	1017	2175	939
V/C Ratio(X)	0.54	0.61	0.30	0.51	0.49	0.65	0.84	0.76	0.76	0.92	0.80	0.08
Avail Cap(c_a), veh/h	145	366	297	154	366	766	197	736	744	1116	2175	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	43.5	40.8	53.2	42.4	23.1	52.6	29.8	29.8	40.5	17.6	9.5
Incr Delay (d2), s/veh	3.9	2.9	0.6	2.7	1.0	2.0	24.1	7.2	7.1	11.2	3.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.0	2.5	2.6	5.3	12.7	5.8	17.0	17.2	16.4	22.4	1.1
LnGrp Delay(d), s/veh	56.1	46.4	41.3	56.0	43.4	25.1	76.7	36.9	36.9	51.7	20.7	9.7
LnGrp LOS	E	D	D	E	D	C	E	D	D	D	C	A
Approach Vol, veh/h		389			756			1266			2744	
Approach Delay, s/veh		47.2			32.6			41.5			30.9	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.6	52.7		27.0	15.3	76.0		27.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	38.0	47.0		23.0	13.0	72.0		23.0
Max Q Clear Time (g_c+I1), s	32.7	33.6		24.0	11.4	45.6		25.0
Green Ext Time (p_c), s	1.9	6.0		0.0	0.1	16.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	840	70	270	590	220	40	820	370	330	1410	90
Future Volume (veh/h)	150	840	70	270	590	220	40	820	370	330	1410	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	158	884	74	284	621	232	42	863	389	347	1484	95
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	294	830	69	269	1019	428	125	827	370	329	1613	103
Arrive On Green	0.08	0.25	0.25	0.12	0.29	0.29	0.03	0.35	0.35	0.15	0.47	0.47
Sat Flow, veh/h	1792	3319	278	1792	3574	1501	1792	2363	1056	1792	3396	216
Grp Volume(v), veh/h	158	476	482	284	621	232	42	651	601	347	777	802
Grp Sat Flow(s),veh/h/ln	1792	1787	1809	1792	1787	1501	1792	1787	1632	1792	1787	1825
Q Serve(g_s), s	7.8	30.0	30.0	14.0	18.0	15.7	1.8	42.0	42.0	18.0	48.4	49.5
Cycle Q Clear(g_c), s	7.8	30.0	30.0	14.0	18.0	15.7	1.8	42.0	42.0	18.0	48.4	49.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		0.65	1.00		0.12
Lane Grp Cap(c), veh/h	294	447	452	269	1019	428	125	625	571	329	849	867
V/C Ratio(X)	0.54	1.07	1.07	1.06	0.61	0.54	0.33	1.04	1.05	1.06	0.92	0.93
Avail Cap(c_a), veh/h	327	447	452	269	1019	428	140	625	571	329	849	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	45.0	45.0	34.9	37.1	36.3	29.7	39.0	39.0	38.8	29.3	29.5
Incr Delay (d2), s/veh	1.5	61.1	60.8	70.3	1.1	1.4	1.6	47.0	52.1	65.0	16.1	17.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	22.4	22.6	14.1	9.0	6.7	0.9	28.8	27.2	16.8	27.5	28.9
LnGrp Delay(d), s/veh	32.0	106.1	105.8	105.2	38.2	37.7	31.2	86.0	91.1	103.8	45.4	46.7
LnGrp LOS	C	F	F	F	D	D	C	F	F	F	D	D
Approach Vol, veh/h		1116			1137			1294			1926	
Approach Delay, s/veh		95.5			54.8			86.6			56.4	
Approach LOS		F			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.0	46.0	18.0	34.0	7.0	61.0	13.8	38.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	42.0	14.0	30.0	4.0	56.0	12.0	32.0
Max Q Clear Time (g_c+I1), s	20.0	44.0	16.0	32.0	3.8	51.5	9.8	20.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.5	0.1	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	71.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1100	90	310	440	60	50	770	540	200	1280	50
Future Volume (veh/h)	150	1100	90	310	440	60	50	770	540	200	1280	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	163	1196	98	337	478	65	54	837	587	217	1391	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	427	1102	480	299	1311	573	114	1221	525	262	1383	54
Arrive On Green	0.08	0.31	0.31	0.13	0.37	0.37	0.03	0.34	0.34	0.08	0.39	0.39
Sat Flow, veh/h	1792	3574	1557	1792	3574	1562	1792	3574	1535	1792	3503	136
Grp Volume(v), veh/h	163	1196	98	337	478	65	54	837	587	217	708	737
Grp Sat Flow(s),veh/h/ln	1792	1787	1557	1792	1787	1562	1792	1787	1535	1792	1787	1852
Q Serve(g_s), s	7.4	37.0	5.6	16.0	11.7	3.3	2.3	24.2	41.0	9.2	47.4	47.4
Cycle Q Clear(g_c), s	7.4	37.0	5.6	16.0	11.7	3.3	2.3	24.2	41.0	9.2	47.4	47.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	427	1102	480	299	1311	573	114	1221	525	262	706	731
V/C Ratio(X)	0.38	1.09	0.20	1.13	0.36	0.11	0.47	0.69	1.12	0.83	1.00	1.01
Avail Cap(c_a), veh/h	427	1102	480	299	1311	573	120	1221	525	262	706	731
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	41.5	30.6	37.3	27.8	25.1	31.4	34.0	39.5	26.9	36.3	36.3
Incr Delay (d2), s/veh	0.6	53.3	0.2	91.0	0.2	0.1	3.0	3.1	76.2	19.2	34.9	35.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	26.4	2.4	17.4	5.8	1.4	1.2	12.4	28.4	5.9	30.2	31.3
LnGrp Delay(d), s/veh	25.8	94.8	30.8	128.3	28.0	25.2	34.4	37.1	115.7	46.1	71.2	71.5
LnGrp LOS	C	F	C	F	C	C	C	D	F	D	F	F
Approach Vol, veh/h		1457			880			1478			1662	
Approach Delay, s/veh		82.8			66.2			68.2			68.1	
Approach LOS		F			E			E			E	

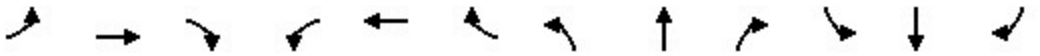
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	45.0	20.0	41.0	7.6	51.4	13.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	16.0	37.0	4.0	47.0	9.0	44.0
Max Q Clear Time (g_c+I1), s	11.2	43.0	18.0	39.0	4.3	49.4	9.4	13.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	71.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	30	60	40	20	70	40	1050	40	110	1550	90
Future Volume (veh/h)	50	30	60	40	20	70	40	1050	40	110	1550	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	54	32	65	43	22	75	43	1129	43	118	1667	97
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	19	244	51	16	244	237	2542	1131	401	2574	1122
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.03	0.71	0.71	0.03	0.72	0.72
Sat Flow, veh/h	0	124	1599	0	107	1599	1792	3574	1591	1792	3574	1558
Grp Volume(v), veh/h	86	0	65	65	0	75	43	1129	43	118	1667	97
Grp Sat Flow(s),veh/h/ln	124	0	1599	107	0	1599	1792	1787	1591	1792	1787	1558
Q Serve(g_s), s	0.0	0.0	4.2	0.0	0.0	4.9	0.8	15.7	0.9	2.1	28.9	2.2
Cycle Q Clear(g_c), s	18.0	0.0	4.2	18.0	0.0	4.9	0.8	15.7	0.9	2.1	28.9	2.2
Prop In Lane	0.63		1.00	0.66		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	69	0	244	67	0	244	237	2542	1131	401	2574	1122
V/C Ratio(X)	1.25	0.00	0.27	0.97	0.00	0.31	0.18	0.44	0.04	0.29	0.65	0.09
Avail Cap(c_a), veh/h	69	0	244	67	0	244	267	2542	1131	445	2574	1122
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	0.0	44.2	54.6	0.0	44.5	8.1	7.2	5.1	5.5	8.7	4.9
Incr Delay (d2), s/veh	191.9	0.0	0.6	99.3	0.0	0.7	0.4	0.6	0.1	0.4	1.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	0.0	1.9	4.0	0.0	2.2	0.4	7.9	0.4	1.1	14.6	1.0
LnGrp Delay(d), s/veh	246.1	0.0	44.8	153.9	0.0	45.2	8.4	7.8	5.1	5.9	9.9	5.1
LnGrp LOS	F		D	F		D	A	A	A	A	A	A
Approach Vol, veh/h		151			140			1215			1882	
Approach Delay, s/veh		159.4			95.7			7.7			9.4	
Approach LOS		F			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.1	87.9		22.0	7.0	89.0		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	83.0		18.0	5.0	85.0		18.0
Max Q Clear Time (g_c+I1), s	4.1	17.7		20.0	2.8	30.9		20.0
Green Ext Time (p_c), s	0.1	11.2		0.0	0.0	22.0		0.0

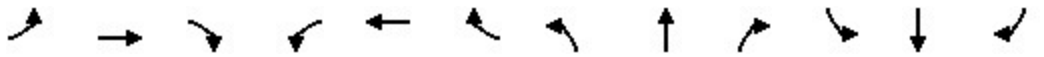
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.1
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	40	0	0	60	0	1170	10	0	1650	10
Future Volume (Veh/h)	0	0	40	0	0	60	0	1170	10	0	1650	10
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Hourly flow rate (vph)	0	0	43	0	0	65	0	1258	11	0	1774	11
Pedestrians		7			5							
Lane Width (ft)		12.0			12.0							
Walking Speed (ft/s)		4.0			4.0							
Percent Blockage		1			0							
Right turn flare (veh)												
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								391			717	
pX, platoon unblocked	0.84	0.84	0.76	0.84	0.84	0.84	0.76			0.84		
vC, conflicting volume	2416	3050	900	2156	3050	640	1781			1263		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1443	2200	228	1133	2200	190	1392			932		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	100	100	93	100	100	91	100			100		
cM capacity (veh/h)	70	37	586	122	37	688	371			616		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	SB 1	SB 2
Volume Total	43	65	839	430	1183	602
Volume Left	0	0	0	0	0	0
Volume Right	43	65	0	11	0	11
cSH	586	688	1700	1700	1700	1700
Volume to Capacity	0.07	0.09	0.49	0.25	0.70	0.35
Queue Length 95th (ft)	6	8	0	0	0	0
Control Delay (s/veh)	11.6	10.8	0.0	0.0	0.0	0.0
Lane LOS	B	B				
Approach Delay (s/veh)	11.6	10.8	0.0		0.0	
Approach LOS	B	B				

Intersection Summary				
Average Delay	0.4			
Intersection Capacity Utilization	55.9%	ICU Level of Service	B	
Analysis Period (min)	15			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1140	300	130	420	130	100	990	210	230	1650	120
Future Volume (veh/h)	240	1140	300	130	420	130	100	990	210	230	1650	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1226	323	140	452	140	108	1065	226	247	1774	129
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	320	1417	423	195	858	368	161	1583	688	308	2367	172
Arrive On Green	0.09	0.28	0.28	0.06	0.24	0.24	0.05	0.44	0.44	0.09	0.49	0.49
Sat Flow, veh/h	3476	5136	1534	3476	3574	1531	3476	3574	1553	3476	4876	354
Grp Volume(v), veh/h	258	1226	323	140	452	140	108	1065	226	247	1244	659
Grp Sat Flow(s),veh/h/ln	1738	1712	1534	1738	1787	1531	1738	1787	1553	1738	1712	1806
Q Serve(g_s), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	27.8	11.1	8.2	34.5	34.7
Cycle Q Clear(g_c), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	27.8	11.1	8.2	34.5	34.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	320	1417	423	195	858	368	161	1583	688	308	1662	877
V/C Ratio(X)	0.81	0.86	0.76	0.72	0.53	0.38	0.67	0.67	0.33	0.80	0.75	0.75
Avail Cap(c_a), veh/h	414	1487	444	207	858	368	178	1583	688	385	1662	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	40.4	39.0	54.5	38.8	37.3	55.1	26.0	21.3	52.5	24.4	24.5
Incr Delay (d2), s/veh	8.6	5.4	7.3	10.6	0.6	0.6	8.3	2.3	1.3	9.4	3.1	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	13.3	10.5	2.5	6.5	3.8	1.9	14.1	5.0	4.3	17.0	18.6
LnGrp Delay(d), s/veh	60.9	45.9	46.3	65.1	39.4	38.0	63.5	28.3	22.6	61.9	27.6	30.4
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1807			732			1399			2150	
Approach Delay, s/veh		48.1			44.1			30.1			32.4	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	56.0	10.6	36.4	9.4	61.0	14.8	32.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	50.0	7.0	34.0	6.0	57.0	14.0	27.0
Max Q Clear Time (g_c+I1), s	10.2	29.8	6.7	28.7	5.6	36.7	10.5	14.9
Green Ext Time (p_c), s	0.2	8.2	0.0	3.8	0.0	13.1	0.3	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	160	320	130	150	1190	0	0	1560	750
Future Volume (veh/h)	0	0	0	160	320	130	150	1190	0	0	1560	750
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				168	337	137	158	1253	0	0	1642	789
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				226	450	201	218	4080	0	0	2409	1076
Arrive On Green				0.13	0.13	0.13	0.06	0.80	0.00	0.00	0.70	0.70
Sat Flow, veh/h				1774	3539	1583	3442	5253	0	0	3591	1529
Grp Volume(v), veh/h				168	337	137	158	1253	0	0	1625	806
Grp Sat Flow(s),veh/h/ln				1774	1770	1583	1721	1695	0	0	1695	1562
Q Serve(g_s), s				10.4	10.4	9.4	5.1	7.3	0.0	0.0	30.9	35.8
Cycle Q Clear(g_c), s				10.4	10.4	9.4	5.1	7.3	0.0	0.0	30.9	35.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		0.98
Lane Grp Cap(c), veh/h				226	450	201	218	4080	0	0	2386	1100
V/C Ratio(X)				0.74	0.75	0.68	0.73	0.31	0.00	0.00	0.68	0.73
Avail Cap(c_a), veh/h				328	655	293	303	4080	0	0	2386	1100
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.7	47.8	47.3	52.2	2.9	0.0	0.0	9.6	10.3
Incr Delay (d2), s/veh				5.2	2.8	4.0	5.2	0.2	0.0	0.0	1.6	4.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.4	5.3	4.3	2.6	3.4	0.0	0.0	14.7	16.6
LnGrp Delay(d), s/veh				52.9	50.5	51.3	57.3	3.1	0.0	0.0	11.2	14.6
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					642			1411			2431	
Approach Delay, s/veh					51.3			9.2			12.3	
Approach LOS					D			A			B	

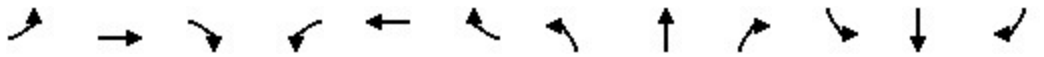
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		95.0			11.2	83.8		18.4
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		91.0			10.0	77.0		21.0
Max Q Clear Time (g_c+I1), s		9.3			7.1	37.8		12.4
Green Ext Time (p_c), s		11.9			0.1	27.8		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	540	260	130	0	0	0	0	850	280	370	1300	0
Future Volume (veh/h)	540	260	130	0	0	0	0	850	280	370	1300	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	600	289	144				0	944	311	411	1444	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	766	414	352				0	2622	800	505	3563	0
Arrive On Green	0.22	0.22	0.22				0.00	0.52	0.52	0.15	0.70	0.00
Sat Flow, veh/h	3442	1863	1583				0	5253	1551	3442	5253	0
Grp Volume(v), veh/h	600	289	144				0	944	311	411	1444	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583				0	1695	1551	1721	1695	0
Q Serve(g_s), s	17.1	14.9	8.1				0.0	11.5	12.7	12.1	12.4	0.0
Cycle Q Clear(g_c), s	17.1	14.9	8.1				0.0	11.5	12.7	12.1	12.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	766	414	352				0	2622	800	505	3563	0
V/C Ratio(X)	0.78	0.70	0.41				0.00	0.36	0.39	0.81	0.41	0.00
Avail Cap(c_a), veh/h	1288	697	593				0	2622	800	925	3563	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	38.1	37.3	34.6				0.0	15.0	15.3	43.1	6.5	0.0
Incr Delay (d2), s/veh	1.8	2.1	0.8				0.0	0.4	1.4	3.2	0.3	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	7.9	3.6				0.0	5.4	5.7	5.9	5.9	0.0
LnGrp Delay(d), s/veh	39.9	39.4	35.4				0.0	15.4	16.7	46.3	6.9	0.0
LnGrp LOS	D	D	D					B	B	D	A	
Approach Vol, veh/h		1033						1255			1855	
Approach Delay, s/veh		39.2						15.7			15.6	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	19.3	57.7		27.2		77.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	28.0	41.0		39.0		73.0		
Max Q Clear Time (g_c+I1), s	14.1	14.7		19.1		14.4		
Green Ext Time (p_c), s	1.2	8.6		4.1		14.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1750	230	460	1100	130	160	480	240	280	1210	380
Future Volume (veh/h)	240	1750	230	460	1100	130	160	480	240	280	1210	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	270	1966	258	517	1236	146	180	539	270	315	1360	427
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
Arrive On Green	0.10	0.32	0.32	0.13	0.35	0.35	0.08	0.32	0.32	0.11	0.34	0.34
Sat Flow, veh/h	3476	5136	1591	3476	5136	1592	1792	3574	1565	3476	3574	1564
Grp Volume(v), veh/h	270	1966	258	517	1236	146	180	539	270	315	1360	427
Grp Sat Flow(s),veh/h/ln	1738	1712	1591	1738	1712	1592	1792	1787	1565	1738	1787	1564
Q Serve(g_s), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	14.6	14.0	10.7	41.0	25.3
Cycle Q Clear(g_c), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	14.6	14.0	10.7	41.0	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
V/C Ratio(X)	0.81	1.21	0.51	1.19	0.70	0.27	1.21	0.48	0.39	0.83	1.11	0.62
Avail Cap(c_a), veh/h	492	1626	504	434	1773	550	149	1129	694	492	1221	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	41.0	33.4	52.5	33.9	28.3	55.0	33.1	22.7	52.4	39.5	26.1
Incr Delay (d2), s/veh	6.1	100.0	0.9	106.3	1.2	0.3	139.4	1.4	1.6	9.1	62.9	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	33.0	7.1	13.6	12.0	3.5	10.7	7.4	6.3	5.6	30.9	11.6
LnGrp Delay(d), s/veh	59.2	141.0	34.3	158.8	35.1	28.6	194.4	34.5	24.3	61.4	102.4	30.2
LnGrp LOS	E	F	C	F	D	C	F	C	C	E	F	C
Approach Vol, veh/h		2494			1899			989			2102	
Approach Delay, s/veh		121.1			68.3			60.8			81.6	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	41.9	19.0	42.0	14.0	45.0	15.6	45.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	34.0	15.0	38.0	10.0	41.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	12.7	16.6	17.0	40.0	12.0	43.0	11.1	26.9
Green Ext Time (p_c), s	0.4	3.9	0.0	0.0	0.0	0.0	0.4	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	88.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1090	180	260	710	150	110	520	190	70	590	90
Future Volume (veh/h)	280	1090	180	260	710	150	110	520	190	70	590	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.84	1.00		0.82	0.99		0.81
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	295	1147	189	274	747	158	116	547	200	74	621	95
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	329	1285	210	332	1214	457	236	1057	387	258	833	127
Arrive On Green	0.18	0.43	0.43	0.10	0.34	0.34	0.06	0.30	0.30	0.04	0.28	0.28
Sat Flow, veh/h	1792	3005	491	3476	3574	1346	1792	3574	1310	1792	3004	457
Grp Volume(v), veh/h	295	679	657	274	747	158	116	547	200	74	368	348
Grp Sat Flow(s),veh/h/ln	1792	1787	1710	1738	1787	1346	1792	1787	1310	1792	1787	1674
Q Serve(g_s), s	18.6	40.4	41.3	8.9	20.1	10.1	5.3	14.7	14.6	3.4	21.6	21.9
Cycle Q Clear(g_c), s	18.6	40.4	41.3	8.9	20.1	10.1	5.3	14.7	14.6	3.4	21.6	21.9
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	329	764	731	332	1214	457	236	1057	387	258	496	464
V/C Ratio(X)	0.90	0.89	0.90	0.82	0.62	0.35	0.49	0.52	0.52	0.29	0.74	0.75
Avail Cap(c_a), veh/h	481	821	785	361	1214	457	236	1057	387	275	496	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	30.5	30.7	51.2	31.8	28.5	29.4	33.8	33.8	28.6	38.0	38.0
Incr Delay (d2), s/veh	14.2	11.1	12.8	13.5	0.9	0.4	1.6	1.8	4.9	0.6	9.7	10.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.2	22.0	4.9	10.1	3.8	2.7	7.5	5.8	1.7	12.0	11.5
LnGrp Delay(d), s/veh	60.2	41.6	43.5	64.7	32.8	29.0	31.0	35.6	38.6	29.2	47.7	48.6
LnGrp LOS	E	D	D	E	C	C	C	D	D	C	D	D
Approach Vol, veh/h		1631			1179			863			790	
Approach Delay, s/veh		45.7			39.7			35.7			46.3	
Approach LOS		D			D			D			D	

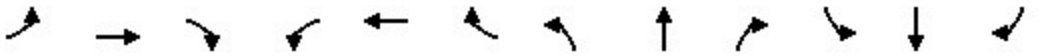
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	38.1	15.0	53.4	11.0	36.0	25.2	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	33.0	12.0	53.0	7.0	32.0	31.0	34.0
Max Q Clear Time (g_c+I1), s	5.4	16.7	10.9	43.3	7.3	23.9	20.6	22.1
Green Ext Time (p_c), s	0.0	4.1	0.1	6.1	0.0	2.9	0.6	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1190	420	190	500	80	310	820	190	70	990	120
Future Volume (veh/h)	130	1190	420	190	500	80	310	820	190	70	990	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	138	1266	447	202	532	85	330	872	202	74	1053	128
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	166	1221	523	203	1098	478	314	1524	678	260	1041	126
Arrive On Green	0.09	0.34	0.34	0.06	0.31	0.31	0.14	0.43	0.43	0.04	0.32	0.32
Sat Flow, veh/h	1792	3574	1532	3476	3574	1556	1792	3574	1590	1792	3202	389
Grp Volume(v), veh/h	138	1266	447	202	532	85	330	872	202	74	587	594
Grp Sat Flow(s),veh/h/ln	1792	1787	1532	1738	1787	1556	1792	1787	1590	1792	1787	1803
Q Serve(g_s), s	9.1	41.0	32.6	7.0	14.5	4.8	17.0	22.2	10.0	3.3	39.0	39.0
Cycle Q Clear(g_c), s	9.1	41.0	32.6	7.0	14.5	4.8	17.0	22.2	10.0	3.3	39.0	39.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.22
Lane Grp Cap(c), veh/h	166	1221	523	203	1098	478	314	1524	678	260	581	586
V/C Ratio(X)	0.83	1.04	0.85	1.00	0.48	0.18	1.05	0.57	0.30	0.29	1.01	1.01
Avail Cap(c_a), veh/h	254	1221	523	203	1098	478	314	1524	678	262	581	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.5	36.7	56.5	33.8	30.5	38.0	26.1	22.6	25.7	40.5	40.5
Incr Delay (d2), s/veh	12.9	35.7	13.0	62.1	0.3	0.2	65.0	1.6	1.1	0.6	40.1	40.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	26.2	15.7	5.1	7.2	2.1	16.0	11.2	4.6	1.6	25.7	26.0
LnGrp Delay(d), s/veh	66.4	75.2	49.7	118.6	34.2	30.6	103.0	27.7	23.7	26.3	80.7	81.0
LnGrp LOS	E	F	D	F	C	C	F	C	C	C	F	F
Approach Vol, veh/h		1851			819			1404			1255	
Approach Delay, s/veh		68.4			54.6			44.8			77.6	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	55.2	11.0	45.0	21.0	43.0	15.1	40.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	51.0	7.0	41.0	17.0	39.0	17.0	31.0
Max Q Clear Time (g_c+I1), s	5.3	24.2	9.0	43.0	19.0	41.0	11.1	16.5
Green Ext Time (p_c), s	0.0	7.1	0.0	0.0	0.0	0.0	0.2	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.2
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	50	10	0	10	70	1570	140	10	1490	30
Future Volume (Veh/h)	10	0	50	10	0	10	70	1570	140	10	1490	30
Sign Control		Stop			Stop			Free			Free	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	11	0	53	11	0	11	74	1653	147	11	1568	32
Pedestrians		11			29			1				
Lane Width (ft)		12.0			12.0			12.0				
Walking Speed (ft/s)		4.0			4.0			4.0				
Percent Blockage		1			2			0				
Right turn flare (veh)			1			1						
Median type								None			None	
Median storage veh)												
Upstream signal (ft)								1123			384	
pX, platoon unblocked	0.80	0.80	0.68	0.80	0.80	0.77	0.68			0.77		
vC, conflicting volume	2592	3594	812	2637	3463	856	1611			1829		
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1169	2422	0	1226	2258	198	966			1470		
tC, single (s)	7.5	6.5	6.9	7.5	6.5	6.9	4.1			4.1		
tC, 2 stage (s)												
tF (s)	3.5	4.0	3.3	3.5	4.0	3.3	2.2			2.2		
p0 queue free %	89	100	93	87	100	98	85			97		
cM capacity (veh/h)	98	20	735	83	26	607	484			343		

Direction, Lane #	EB 1	WB 1	NB 1	NB 2	NB 3	NB 4	SB 1	SB 2	SB 3
Volume Total	64	22	74	827	827	147	11	1045	555
Volume Left	11	11	74	0	0	0	11	0	0
Volume Right	53	11	0	0	0	147	0	0	32
cSH	569	165	484	1700	1700	1700	343	1700	1700
Volume to Capacity	0.11	0.13	0.15	0.49	0.49	0.09	0.03	0.61	0.33
Queue Length 95th (ft)	9	11	13	0	0	0	2	0	0
Control Delay (s/veh)	16.5	33.1	13.8	0.0	0.0	0.0	15.8	0.0	0.0
Lane LOS	C	D	B				C		
Approach Delay (s/veh)	16.5	33.1	0.5				0.1		
Approach LOS	C	D							

Intersection Summary					
Average Delay	0.8				
Intersection Capacity Utilization	64.2%	ICU Level of Service		C	
Analysis Period (min)	15				

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1090	200	90	430	230	110	1010	120	320	1050	100
Future Volume (veh/h)	260	1090	200	90	430	230	110	1010	120	320	1050	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	271	1135	208	94	448	240	115	1052	125	333	1094	104
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	298	1394	255	145	437	232	256	1274	556	362	1588	696
Arrive On Green	0.17	0.32	0.32	0.04	0.20	0.20	0.06	0.36	0.36	0.14	0.44	0.44
Sat Flow, veh/h	1792	4343	796	3476	2222	1179	1792	3574	1561	1792	3574	1567
Grp Volume(v), veh/h	271	895	448	94	359	329	115	1052	125	333	1094	104
Grp Sat Flow(s),veh/h/ln	1792	1712	1715	1738	1787	1614	1792	1787	1561	1792	1787	1567
Q Serve(g_s), s	17.4	28.1	28.1	3.1	23.0	23.0	4.7	31.4	6.6	14.6	28.7	4.6
Cycle Q Clear(g_c), s	17.4	28.1	28.1	3.1	23.0	23.0	4.7	31.4	6.6	14.6	28.7	4.6
Prop In Lane	1.00		0.46	1.00		0.73	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	298	1099	550	145	351	317	256	1274	556	362	1588	696
V/C Ratio(X)	0.91	0.81	0.81	0.65	1.02	1.04	0.45	0.83	0.22	0.92	0.69	0.15
Avail Cap(c_a), veh/h	306	1112	557	148	351	317	293	1274	556	410	1588	696
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	36.5	36.5	55.2	47.0	47.0	23.5	34.4	26.4	28.6	26.0	19.4
Incr Delay (d2), s/veh	29.2	4.7	9.0	9.2	54.2	60.2	1.2	6.2	0.9	24.0	2.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.0	14.0	14.7	1.7	16.6	15.5	2.4	16.6	3.0	13.0	14.7	2.1
LnGrp Delay(d), s/veh	77.2	41.2	45.6	64.5	101.2	107.2	24.7	40.6	27.3	52.6	28.5	19.8
LnGrp LOS	E	D	D	E	F	F	C	D	C	D	C	B
Approach Vol, veh/h		1614			782			1292			1531	
Approach Delay, s/veh		48.5			99.3			37.9			33.2	
Approach LOS		D			F			D			C	

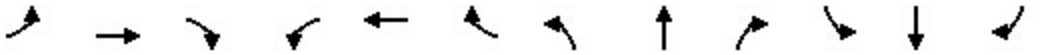
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	45.7	8.9	41.6	10.6	56.0	23.4	27.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	41.0	5.0	38.0	9.0	52.0	20.0	23.0
Max Q Clear Time (g_c+I1), s	16.6	33.4	5.1	30.1	6.7	30.7	19.4	25.0
Green Ext Time (p_c), s	0.3	4.2	0.0	4.8	0.1	8.1	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	250	300	510	60	770	0	0	1250	310
Future Volume (veh/h)	0	0	0	250	300	510	60	770	0	0	1250	310
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				266	319	543	64	819	0	0	1330	330
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				588	766	603	82	2788	0	0	1891	468
Arrive On Green				0.38	0.38	0.38	0.05	0.55	0.00	0.00	0.47	0.47
Sat Flow, veh/h				1543	2012	1583	1774	5253	0	0	4221	1004
Grp Volume(v), veh/h				308	277	543	64	819	0	0	1112	548
Grp Sat Flow(s),veh/h/ln				1786	1770	1583	1774	1695	0	0	1695	1667
Q Serve(g_s), s				14.6	13.0	36.5	4.0	9.8	0.0	0.0	29.4	29.5
Cycle Q Clear(g_c), s				14.6	13.0	36.5	4.0	9.8	0.0	0.0	29.4	29.5
Prop In Lane				0.86		1.00	1.00		0.00	0.00		0.60
Lane Grp Cap(c), veh/h				680	674	603	82	2788	0	0	1582	778
V/C Ratio(X)				0.45	0.41	0.90	0.78	0.29	0.00	0.00	0.70	0.70
Avail Cap(c_a), veh/h				790	783	700	126	2788	0	0	1582	778
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				26.2	25.7	33.0	53.3	13.7	0.0	0.0	23.9	24.0
Incr Delay (d2), s/veh				0.5	0.4	13.4	15.4	0.3	0.0	0.0	2.6	5.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.3	6.4	18.2	2.3	4.6	0.0	0.0	14.3	14.7
LnGrp Delay(d), s/veh				26.7	26.1	46.4	68.7	14.0	0.0	0.0	26.6	29.3
LnGrp LOS				C	C	D	E	B			C	C
Approach Vol, veh/h					1128			883			1660	
Approach Delay, s/veh					36.0			18.0			27.5	
Approach LOS					D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		66.0			9.2	56.8		47.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		62.0			8.0	50.0		50.0
Max Q Clear Time (g_c+I1), s		11.8			6.0	31.5		38.5
Green Ext Time (p_c), s		6.4			0.0	10.8		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	560	150	0	0	0	0	790	740	500	1050	0
Future Volume (veh/h)	200	560	150	0	0	0	0	790	740	500	1050	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	222	622	167				0	878	822	556	1167	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	246	731	431				0	1514	694	618	2336	0
Arrive On Green	0.27	0.27	0.27				0.00	0.45	0.45	0.18	0.66	0.00
Sat Flow, veh/h	902	2686	1583				0	3558	1555	3442	3632	0
Grp Volume(v), veh/h	448	396	167				0	878	822	556	1167	0
Grp Sat Flow(s),veh/h/ln	1818	1770	1583				0	1695	1555	1721	1770	0
Q Serve(g_s), s	28.1	24.8	10.1				0.0	22.9	52.8	18.7	19.8	0.0
Cycle Q Clear(g_c), s	28.1	24.8	10.1				0.0	22.9	52.8	18.7	19.8	0.0
Prop In Lane	0.50		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	495	482	431				0	1514	694	618	2336	0
V/C Ratio(X)	0.90	0.82	0.39				0.00	0.58	1.18	0.90	0.50	0.00
Avail Cap(c_a), veh/h	523	509	455				0	1514	694	670	2336	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.5	40.3	35.0				0.0	24.4	32.7	47.4	10.2	0.0
Incr Delay (d2), s/veh	18.5	10.0	0.6				0.0	1.6	96.9	14.5	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.6	13.5	4.5				0.0	11.1	41.3	10.1	9.8	0.0
LnGrp Delay(d), s/veh	60.1	50.4	35.5				0.0	26.1	129.6	61.9	11.0	0.0
LnGrp LOS	E	D	D					C	F	E	B	
Approach Vol, veh/h		1011						1700			1723	
Approach Delay, s/veh		52.2						76.1			27.4	
Approach LOS		D						E			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	25.2	56.8		36.2		82.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	23.0	51.0		34.0		78.0		
Max Q Clear Time (g_c+I1), s	20.7	54.8		30.1		21.8		
Green Ext Time (p_c), s	0.5	0.0		2.1		10.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1250	70	180	1510	60	60	140	140	150	270	70
Future Volume (veh/h)	50	1250	70	180	1510	60	60	140	140	150	270	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.93	0.94		0.82	0.96		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	60	1488	83	214	1798	71	71	167	167	179	321	83
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	146	1839	102	249	2018	79	228	345	241	293	594	149
Arrive On Green	0.03	0.54	0.54	0.07	0.58	0.58	0.03	0.18	0.18	0.07	0.22	0.22
Sat Flow, veh/h	1792	3434	191	1792	3496	137	1792	1881	1313	1792	2719	681
Grp Volume(v), veh/h	60	771	800	214	912	957	71	167	167	179	207	197
Grp Sat Flow(s),veh/h/ln	1792	1787	1837	1792	1787	1845	1792	1881	1313	1792	1787	1613
Q Serve(g_s), s	1.7	40.4	41.0	5.8	50.4	52.2	3.7	9.1	13.6	8.0	11.7	12.4
Cycle Q Clear(g_c), s	1.7	40.4	41.0	5.8	50.4	52.2	3.7	9.1	13.6	8.0	11.7	12.4
Prop In Lane	1.00		0.10	1.00		0.07	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	146	957	984	249	1032	1065	228	345	241	293	390	352
V/C Ratio(X)	0.41	0.81	0.81	0.86	0.88	0.90	0.31	0.48	0.69	0.61	0.53	0.56
Avail Cap(c_a), veh/h	155	957	984	372	1108	1144	228	345	241	293	390	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.1	21.7	21.9	23.9	20.9	21.3	36.8	41.9	43.7	35.9	39.6	39.8
Incr Delay (d2), s/veh	1.8	5.1	5.3	12.3	8.3	9.2	0.8	4.8	15.2	3.7	5.1	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	21.1	22.1	4.6	26.9	29.1	1.8	5.2	6.0	4.8	6.4	6.1
LnGrp Delay(d), s/veh	26.0	26.8	27.1	36.2	29.2	30.5	37.5	46.7	59.0	39.6	44.7	46.1
LnGrp LOS	C	C	C	D	C	C	D	D	E	D	D	D
Approach Vol, veh/h		1631			2083			405			583	
Approach Delay, s/veh		27.0			30.5			50.2			43.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	25.0	12.2	65.3	8.0	29.0	7.4	70.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	21.0	16.0	59.0	4.0	25.0	4.0	71.0
Max Q Clear Time (g_c+I1), s	10.0	15.6	7.8	43.0	5.7	14.4	3.7	54.2
Green Ext Time (p_c), s	0.0	0.7	0.4	9.5	0.0	1.7	0.0	11.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Future Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	1563	46	34	724	46	57	126	46	184	138	230
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	1858	55	160	1646	105	257	484	168	422	449	389
Arrive On Green	0.07	0.53	0.53	0.02	0.49	0.49	0.04	0.19	0.19	0.10	0.25	0.25
Sat Flow, veh/h	1774	3508	103	1774	3378	215	1774	2551	885	1774	1770	1534
Grp Volume(v), veh/h	172	786	823	34	379	391	57	85	87	184	138	230
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1823	1774	1770	1666	1774	1770	1534
Q Serve(g_s), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Cycle Q Clear(g_c), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Prop In Lane	1.00		0.06	1.00		0.12	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	430	937	975	160	862	888	257	336	316	422	449	389
V/C Ratio(X)	0.40	0.84	0.84	0.21	0.44	0.44	0.22	0.25	0.27	0.44	0.31	0.59
Avail Cap(c_a), veh/h	503	1175	1222	204	1071	1103	279	336	316	469	449	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	20.4	20.5	19.0	17.1	17.1	31.9	35.3	35.5	27.5	30.9	33.6
Incr Delay (d2), s/veh	0.6	4.5	4.5	0.7	0.4	0.3	0.4	1.8	2.1	0.7	1.8	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	19.8	20.9	0.5	7.0	7.3	1.3	2.2	2.3	4.1	3.4	6.4
LnGrp Delay(d), s/veh	12.7	25.0	25.0	19.7	17.5	17.5	32.4	37.1	37.6	28.2	32.7	40.0
LnGrp LOS	B	C	C	B	B	B	C	D	D	C	C	D
Approach Vol, veh/h		1781			804			229			552	
Approach Delay, s/veh		23.8			17.6			36.1			34.2	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	23.5	6.5	58.3	7.7	30.0	10.8	53.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	18.0	5.0	68.0	5.0	26.0	11.0	62.0
Max Q Clear Time (g_c+I1), s	10.2	6.6	3.0	40.9	4.6	15.5	6.7	16.3
Green Ext Time (p_c), s	0.1	0.6	0.0	13.4	0.0	1.6	0.2	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	890	270	240	520	50	250	300	250	40	110	60
Future Volume (veh/h)	120	890	270	240	520	50	250	300	250	40	110	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	136	1011	307	273	591	57	284	341	284	45	125	68
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	168	1295	393	350	1618	154	587	681	556	297	927	402
Arrive On Green	0.10	0.34	0.34	0.10	0.35	0.35	0.14	0.37	0.37	0.03	0.26	0.26
Sat Flow, veh/h	1757	3816	1158	3408	4668	445	1757	1826	1493	1757	3505	1520
Grp Volume(v), veh/h	136	889	429	273	423	225	284	327	298	45	125	68
Grp Sat Flow(s),veh/h/ln	1757	1679	1617	1704	1679	1756	1757	1752	1567	1757	1752	1520
Q Serve(g_s), s	7.7	24.3	24.3	8.0	9.6	9.8	11.4	14.7	15.0	1.9	2.8	3.5
Cycle Q Clear(g_c), s	7.7	24.3	24.3	8.0	9.6	9.8	11.4	14.7	15.0	1.9	2.8	3.5
Prop In Lane	1.00		0.72	1.00		0.25	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	168	1139	549	350	1164	609	587	653	584	297	927	402
V/C Ratio(X)	0.81	0.78	0.78	0.78	0.36	0.37	0.48	0.50	0.51	0.15	0.13	0.17
Avail Cap(c_a), veh/h	327	1449	698	568	1383	723	727	653	584	334	927	402
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	30.3	30.3	44.6	24.9	25.0	20.6	24.7	24.8	26.3	28.6	28.9
Incr Delay (d2), s/veh	9.0	2.2	4.4	3.8	0.2	0.4	0.6	2.7	3.2	0.2	0.3	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	11.6	11.5	3.9	4.5	4.8	5.5	7.6	7.0	0.9	1.4	1.6
LnGrp Delay(d), s/veh	54.2	32.4	34.7	48.4	25.1	25.3	21.2	27.4	27.9	26.5	28.9	29.8
LnGrp LOS	D	C	C	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1454			921			909			238	
Approach Delay, s/veh		35.1			32.1			25.6			28.7	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	42.0	14.5	38.6	17.9	31.0	13.7	39.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	38.0	17.0	44.0	22.0	21.0	19.0	42.0
Max Q Clear Time (g_c+I1), s	3.9	17.0	10.0	26.3	13.4	5.5	9.7	11.8
Green Ext Time (p_c), s	0.0	3.7	0.5	8.3	0.5	0.7	0.2	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	1120	80	120	1430	350	50	440	110	280	410	390
Future Volume (veh/h)	410	1120	80	120	1430	350	50	440	110	280	410	390
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	436	1191	85	128	1521	372	53	468	117	298	436	415
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	495	1836	805	156	1638	716	69	578	239	352	804	566
Arrive On Green	0.14	0.51	0.51	0.09	0.46	0.46	0.04	0.16	0.16	0.10	0.22	0.22
Sat Flow, veh/h	3476	3574	1567	1792	3574	1563	1792	3574	1477	3476	3574	1504
Grp Volume(v), veh/h	436	1191	85	128	1521	372	53	468	117	298	436	415
Grp Sat Flow(s),veh/h/ln	1738	1787	1567	1792	1787	1563	1792	1787	1477	1738	1787	1504
Q Serve(g_s), s	14.5	28.6	3.3	8.3	47.1	19.9	3.4	14.8	8.5	9.9	12.7	26.4
Cycle Q Clear(g_c), s	14.5	28.6	3.3	8.3	47.1	19.9	3.4	14.8	8.5	9.9	12.7	26.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	495	1836	805	156	1638	716	69	578	239	352	804	566
V/C Ratio(X)	0.88	0.65	0.11	0.82	0.93	0.52	0.77	0.81	0.49	0.85	0.54	0.73
Avail Cap(c_a), veh/h	533	1836	805	244	1673	732	137	578	239	355	804	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.4	20.8	14.7	52.7	30.0	22.6	56.0	47.5	44.8	51.9	40.2	32.5
Incr Delay (d2), s/veh	15.0	0.8	0.1	11.8	9.5	0.6	16.6	11.7	7.0	16.8	2.6	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	14.3	1.4	4.6	25.4	8.7	2.0	8.3	3.9	5.6	6.5	13.0
LnGrp Delay(d), s/veh	64.4	21.6	14.7	64.5	39.5	23.2	72.6	59.2	51.8	68.7	42.8	40.7
LnGrp LOS	E	C	B	E	D	C	E	E	D	E	D	D
Approach Vol, veh/h		1712			2021			638			1149	
Approach Delay, s/veh		32.2			38.1			58.9			48.8	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	23.0	14.2	64.3	8.5	30.4	20.7	57.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	19.0	16.0	57.0	9.0	22.0	18.0	55.0
Max Q Clear Time (g_c+I1), s	11.9	16.8	10.3	30.6	5.4	28.4	16.5	49.1
Green Ext Time (p_c), s	0.0	0.7	0.1	9.8	0.0	0.0	0.3	4.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Future Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	1.00		0.91	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	304	293	152	217	33	348	783	152	22	1174	196
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	236	192	119	406	60	282	2015	391	429	1071	889
Arrive On Green	0.03	0.13	0.13	0.03	0.13	0.13	0.13	0.68	0.68	0.02	0.57	0.57
Sat Flow, veh/h	1774	1770	1436	1774	3045	452	1774	2952	573	1774	1863	1547
Grp Volume(v), veh/h	207	304	293	152	124	126	348	469	466	22	1174	196
Grp Sat Flow(s),veh/h/ln	1774	1770	1436	1774	1770	1728	1774	1770	1755	1774	1863	1547
Q Serve(g_s), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Cycle Q Clear(g_c), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	189	236	192	119	236	230	282	1208	1198	429	1071	889
V/C Ratio(X)	1.09	1.29	1.53	1.28	0.53	0.55	1.24	0.39	0.39	0.05	1.10	0.22
Avail Cap(c_a), veh/h	189	236	192	119	236	230	282	1208	1198	457	1071	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	52.0	52.0	51.1	48.5	48.6	43.7	8.2	8.2	10.1	25.5	12.4
Incr Delay (d2), s/veh	92.6	157.8	263.1	174.0	2.1	2.7	132.6	0.9	1.0	0.0	57.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	18.1	20.3	9.1	4.0	4.1	19.7	7.0	6.9	0.3	52.3	3.3
LnGrp Delay(d), s/veh	145.6	209.8	315.1	225.1	50.6	51.3	176.2	9.2	9.2	10.1	83.1	13.0
LnGrp LOS	F	F	F	F	D	D	F	A	A	B	F	B
Approach Vol, veh/h		804			402			1283			1392	
Approach Delay, s/veh		231.6			116.8			54.5			72.1	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	85.9	8.0	20.0	19.0	73.0	8.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	80.0	4.0	16.0	15.0	69.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	2.6	15.7	6.0	18.0	17.0	71.0	6.0	10.2
Green Ext Time (p_c), s	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	680	320	370	660	50	370	280	240	60	160	20
Future Volume (veh/h)	80	680	320	370	660	50	370	280	240	60	160	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	85	723	340	394	702	53	394	298	255	64	170	21
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	335	869	396	431	1918	144	598	1220	533	301	880	105
Arrive On Green	0.05	0.26	0.26	0.19	0.41	0.41	0.20	0.35	0.35	0.04	0.20	0.20
Sat Flow, veh/h	1740	3325	1514	1740	4726	355	1740	3471	1517	1740	4501	536
Grp Volume(v), veh/h	85	723	340	394	493	262	394	298	255	64	124	67
Grp Sat Flow(s),veh/h/ln	1740	1663	1514	1740	1663	1756	1740	1736	1517	1740	1663	1712
Q Serve(g_s), s	3.7	21.6	22.5	17.6	10.9	11.0	18.1	6.4	13.8	3.1	3.3	3.5
Cycle Q Clear(g_c), s	3.7	21.6	22.5	17.6	10.9	11.0	18.1	6.4	13.8	3.1	3.3	3.5
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	335	869	396	431	1350	713	598	1220	533	301	650	335
V/C Ratio(X)	0.25	0.83	0.86	0.91	0.36	0.37	0.66	0.24	0.48	0.21	0.19	0.20
Avail Cap(c_a), veh/h	348	947	431	605	1737	917	669	1220	533	329	650	335
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	36.7	37.1	26.0	21.8	21.8	23.8	24.2	26.6	31.9	35.4	35.5
Incr Delay (d2), s/veh	0.4	6.0	15.0	14.5	0.2	0.3	2.0	0.5	3.1	0.3	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	10.7	11.1	12.9	5.0	5.4	9.0	3.1	6.2	1.5	1.6	1.8
LnGrp Delay(d), s/veh	26.7	42.7	52.1	40.4	22.0	22.2	25.8	24.7	29.7	32.2	36.0	36.8
LnGrp LOS	C	D	D	D	C	C	C	C	C	C	D	D
Approach Vol, veh/h		1148			1149			947			255	
Approach Delay, s/veh		44.3			28.4			26.5			35.3	
Approach LOS		D			C			C			D	

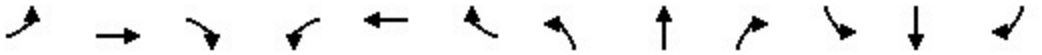
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	41.0	24.5	31.5	24.7	24.6	9.3	46.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	37.0	31.0	30.0	25.0	18.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	5.1	15.8	19.6	24.5	20.1	5.5	5.7	13.0
Green Ext Time (p_c), s	0.0	2.6	0.9	3.0	0.6	0.8	0.0	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1260	60	150	1870	410	20	220	170	40	80	80
Future Volume (veh/h)	200	1260	60	150	1870	410	20	220	170	40	80	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.91		0.84	0.99		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	213	1340	64	160	1989	436	21	234	181	43	85	85
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	244	2303	110	329	2238	974	220	329	232	108	336	240
Arrive On Green	0.09	0.66	0.66	0.05	0.63	0.63	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1792	3471	166	1792	3574	1555	1110	1844	1299	965	1881	1344
Grp Volume(v), veh/h	213	689	715	160	1989	436	21	226	189	43	85	85
Grp Sat Flow(s),veh/h/ln	1792	1787	1849	1792	1787	1555	1110	1787	1356	965	1881	1344
Q Serve(g_s), s	7.6	23.6	23.8	3.5	52.5	16.3	1.9	13.3	14.9	5.0	4.4	6.2
Cycle Q Clear(g_c), s	7.6	23.6	23.8	3.5	52.5	16.3	6.2	13.3	14.9	19.9	4.4	6.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	244	1185	1227	329	2238	974	220	319	242	108	336	240
V/C Ratio(X)	0.87	0.58	0.58	0.49	0.89	0.45	0.10	0.71	0.78	0.40	0.25	0.35
Avail Cap(c_a), veh/h	311	1229	1272	414	2363	1028	220	319	242	108	336	240
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	10.3	10.3	9.3	17.6	10.9	42.2	43.2	43.9	53.3	39.5	40.3
Incr Delay (d2), s/veh	19.1	0.7	0.6	1.1	4.4	0.3	0.9	12.5	21.6	10.5	1.8	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	11.7	12.1	1.8	27.1	7.0	0.6	7.7	7.0	1.6	2.4	2.6
LnGrp Delay(d), s/veh	54.5	11.0	11.0	10.5	22.1	11.2	43.1	55.7	65.4	63.8	41.3	44.3
LnGrp LOS	D	B	B	B	C	B	D	E	E	E	D	D
Approach Vol, veh/h		1617			2585			436			213	
Approach Delay, s/veh		16.7			19.5			59.3			47.1	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	9.7	78.3		24.0	13.8	74.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	11.0	77.0		20.0	14.0	74.0
Max Q Clear Time (g_c+I1), s		16.9	5.5	25.8		21.9	9.6	54.5
Green Ext Time (p_c), s		0.8	0.2	13.1		0.0	0.2	15.6

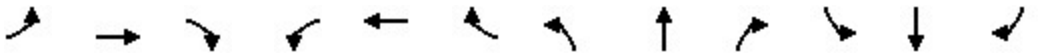
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	620	560	310	2130	0	0	0	0	70	50	140
Future Volume (veh/h)	0	620	560	310	2130	0	0	0	0	70	50	140
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	633	571	316	2173	0				71	51	143
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1715	785	357	2645	0				191	137	288
Arrive On Green	0.00	0.50	0.50	0.20	0.74	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	3593	1568	1792	3668	0				1064	764	1599
Grp Volume(v), veh/h	0	633	571	316	2173	0				122	0	143
Grp Sat Flow(s),veh/h/ln	0	1712	1568	1792	1787	0				1828	0	1599
Q Serve(g_s), s	0.0	11.3	28.6	17.2	40.3	0.0				5.9	0.0	8.1
Cycle Q Clear(g_c), s	0.0	11.3	28.6	17.2	40.3	0.0				5.9	0.0	8.1
Prop In Lane	0.00		1.00	1.00		0.00				0.58		1.00
Lane Grp Cap(c), veh/h	0	1715	785	357	2645	0				329	0	288
V/C Ratio(X)	0.00	0.37	0.73	0.88	0.82	0.00				0.37	0.00	0.50
Avail Cap(c_a), veh/h	0	1917	878	609	3359	0				329	0	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.3	19.6	38.9	8.6	0.0				36.0	0.0	36.9
Incr Delay (d2), s/veh	0.0	0.1	2.7	8.2	1.4	0.0				3.2	0.0	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.4	13.0	9.3	19.8	0.0				3.2	0.0	4.1
LnGrp Delay(d), s/veh	0.0	15.4	22.3	47.1	10.0	0.0				39.2	0.0	43.0
LnGrp LOS		B	C	D	A					D		D
Approach Vol, veh/h		1204			2489						265	
Approach Delay, s/veh		18.7			14.7						41.2	
Approach LOS		B			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			23.9	54.1		22.0		78.0
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			34.0	56.0		18.0		94.0
Max Q Clear Time (g_c+I1), s			19.2	30.6		10.1		42.3
Green Ext Time (p_c), s			0.8	9.1		0.6		31.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	470	0	0	1120	160	1050	0	500	0	0	0
Future Volume (vph)	110	470	0	0	1120	160	1050	0	500	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (prot)	1787	3574			3481		1698	1615	1519			
Flt Permitted	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (perm)	1787	3574			3481		1698	1615	1519			
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	111	475	0	0	1131	162	1061	0	505	0	0	0
RTOR Reduction (vph)	0	0	0	0	10	0	0	26	184	0	0	0
Lane Group Flow (vph)	111	475	0	0	1283	0	562	524	270	0	0	0
Confl. Peds. (#/hr)	8		14	14		8						
Confl. Bikes (#/hr)			10			11						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	10.4	61.1			46.7		49.0	49.0	49.0			
Effective Green, g (s)	10.4	61.1			46.7		49.0	49.0	49.0			
Actuated g/C Ratio	0.09	0.52			0.40		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	157	1849			1376		704	670	630			
v/s Ratio Prot	c0.06	0.13			c0.37		c0.33	0.32	0.18			
v/s Ratio Perm												
v/c Ratio	0.71	0.26			0.93		0.80	0.78	0.43			
Uniform Delay, d1	52.4	15.9			34.2		30.2	29.9	24.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	13.5	0.1			11.6		9.2	8.8	2.1			
Delay (s)	65.9	15.9			45.8		39.4	38.7	26.7			
Level of Service	E	B			D		D	D	C			
Approach Delay (s/veh)		25.4			45.8			35.5			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	118.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	106.6%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	720	160	120	880	90	340	420	170	350	650	200
Future Volume (veh/h)	140	720	160	120	880	90	340	420	170	350	650	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	156	800	178	133	978	100	378	467	189	389	722	222
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	208	973	620	160	1078	466	437	660	265	419	1007	309
Arrive On Green	0.06	0.27	0.27	0.09	0.30	0.30	0.13	0.27	0.27	0.23	0.38	0.38
Sat Flow, veh/h	3476	3574	1541	1792	3574	1544	3476	2462	987	1792	2676	823
Grp Volume(v), veh/h	156	800	178	133	978	100	378	338	318	389	482	462
Grp Sat Flow(s),veh/h/ln	1738	1787	1541	1792	1787	1544	1738	1787	1662	1792	1787	1712
Q Serve(g_s), s	5.2	24.6	9.2	8.5	30.8	5.7	12.5	20.0	20.3	24.9	27.0	27.0
Cycle Q Clear(g_c), s	5.2	24.6	9.2	8.5	30.8	5.7	12.5	20.0	20.3	24.9	27.0	27.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		0.48
Lane Grp Cap(c), veh/h	208	973	620	160	1078	466	437	479	445	419	672	644
V/C Ratio(X)	0.75	0.82	0.29	0.83	0.91	0.21	0.86	0.71	0.71	0.93	0.72	0.72
Avail Cap(c_a), veh/h	208	978	623	184	1130	488	475	479	445	475	672	644
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.1	39.9	24.0	52.4	39.3	30.5	50.2	38.6	38.8	43.9	31.2	31.2
Incr Delay (d2), s/veh	14.0	5.7	0.3	23.9	10.3	0.2	14.5	8.5	9.4	23.2	6.5	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	12.9	4.0	5.3	16.8	2.4	6.9	11.0	10.4	15.0	14.5	13.9
LnGrp Delay(d), s/veh	68.2	45.7	24.2	76.3	49.6	30.7	64.6	47.1	48.2	67.1	37.6	37.9
LnGrp LOS	E	D	C	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1134			1211			1034			1333	
Approach Delay, s/veh		45.4			51.0			53.8			46.3	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.4	35.4	14.4	35.8	18.7	48.0	11.0	39.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	29.0	12.0	32.0	16.0	44.0	7.0	37.0
Max Q Clear Time (g_c+I1), s	26.9	22.3	10.5	26.6	14.5	29.0	7.2	32.8
Green Ext Time (p_c), s	0.5	2.1	0.0	2.7	0.2	5.2	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Future Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	247	258	86	118	409	86	527	1151	151	129	1409	753
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	357	294	212	326	268	356	1788	234	292	1051	507
Arrive On Green	0.07	0.19	0.19	0.05	0.17	0.17	0.17	0.57	0.57	0.05	0.46	0.46
Sat Flow, veh/h	1774	1863	1535	1774	1863	1529	1774	3136	410	1774	2293	1107
Grp Volume(v), veh/h	247	258	86	118	409	86	527	648	654	129	1053	1109
Grp Sat Flow(s),veh/h/ln	1774	1863	1535	1774	1863	1529	1774	1770	1777	1774	1770	1630
Q Serve(g_s), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Cycle Q Clear(g_c), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.68
Lane Grp Cap(c), veh/h	178	357	294	212	326	268	356	1009	1013	292	811	747
V/C Ratio(X)	1.39	0.72	0.29	0.56	1.25	0.32	1.48	0.64	0.65	0.44	1.30	1.48
Avail Cap(c_a), veh/h	178	357	294	212	326	268	356	1009	1013	343	811	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	45.5	41.5	40.6	49.5	43.3	41.1	17.5	17.5	17.0	32.5	32.5
Incr Delay (d2), s/veh	204.3	7.0	0.5	3.2	137.3	0.7	231.3	3.1	3.2	1.0	143.4	225.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	8.7	2.5	3.4	23.2	2.5	34.6	15.3	15.6	2.3	59.1	71.4
LnGrp Delay(d), s/veh	247.7	52.5	42.1	43.8	186.8	44.0	272.4	20.6	20.7	18.0	175.9	257.5
LnGrp LOS	F	D	D	D	F	D	F	C	C	B	F	F
Approach Vol, veh/h		591			613			1829			2291	
Approach Delay, s/veh		132.6			139.2			93.2			206.5	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	72.4	10.0	27.0	24.0	59.0	12.0	25.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	65.0	6.0	23.0	20.0	55.0	8.0	21.0
Max Q Clear Time (g_c+I1), s	6.6	32.0	8.0	17.6	22.0	57.0	10.0	23.0
Green Ext Time (p_c), s	0.1	11.1	0.0	0.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	151.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Future Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	0.99		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	131	24	24	24	24	36	24	476	24	71	357	71
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	236	132	132	247	104	156	752	1438	1171	688	1438	1172
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1322	852	852	1335	669	1004	959	1881	1532	899	1881	1533
Grp Volume(v), veh/h	131	0	48	24	0	60	24	476	24	71	357	71
Grp Sat Flow(s),veh/h/ln	1322	0	1704	1335	0	1673	959	1881	1532	899	1881	1533
Q Serve(g_s), s	9.6	0.0	2.4	1.6	0.0	3.1	0.7	7.9	0.4	2.7	5.5	1.1
Cycle Q Clear(g_c), s	12.7	0.0	2.4	4.0	0.0	3.1	6.2	7.9	0.4	10.6	5.5	1.1
Prop In Lane	1.00		0.50	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	0	265	247	0	260	752	1438	1171	688	1438	1172
V/C Ratio(X)	0.55	0.00	0.18	0.10	0.00	0.23	0.03	0.33	0.02	0.10	0.25	0.06
Avail Cap(c_a), veh/h	509	0	617	523	0	606	752	1438	1171	688	1438	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	0.0	36.5	38.3	0.0	36.8	4.3	3.7	2.8	5.4	3.4	2.9
Incr Delay (d2), s/veh	2.0	0.0	0.3	0.2	0.0	0.4	0.1	0.6	0.0	0.3	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.2	0.6	0.0	1.5	0.2	4.3	0.2	0.7	2.9	0.5
LnGrp Delay(d), s/veh	44.4	0.0	36.8	38.4	0.0	37.2	4.4	4.3	2.8	5.7	3.8	3.0
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		179			84			524			499	
Approach Delay, s/veh		42.4			37.6			4.3			4.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		19.4		80.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		9.9		14.7		12.6		6.0
Green Ext Time (p_c), s		3.7		0.6		3.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	8.9
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	30	20	20	20	20	10	10	20	60	60	10
Future Vol, veh/h	20	30	20	20	20	20	10	10	20	60	60	10
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	27	41	27	27	27	27	14	14	27	82	82	14
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	8.4	8.3	8.4	9.5
HCM LOS	A	A	A	A

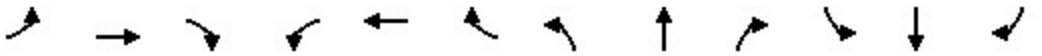
Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	25%	40%	0%	50%	0%	50%	0%
Vol Thru, %	25%	60%	0%	50%	0%	50%	0%
Vol Right, %	50%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	50	20	40	20	120	10
LT Vol	10	20	0	20	0	60	0
Through Vol	10	30	0	20	0	60	0
RT Vol	20	0	20	0	20	0	10
Lane Flow Rate	55	68	27	55	27	164	14
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.075	0.103	0.034	0.083	0.034	0.241	0.016
Departure Headway (Hd)	4.947	5.417	4.512	5.481	4.525	5.269	4.316
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	724	662	794	654	791	682	830
Service Time	2.976	3.142	2.236	3.208	2.252	2.992	2.038
HCM Lane V/C Ratio	0.076	0.103	0.034	0.084	0.034	0.24	0.017
HCM Control Delay, s/veh	8.4	8.8	7.4	8.7	7.4	9.7	7.1
HCM Lane LOS	A	A	A	A	A	A	A
HCM 95th-tile Q	0.2	0.3	0.1	0.3	0.1	0.9	0



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	20	10	10	10	30	20
Future Volume (Veh/h)	20	10	10	10	30	20
Sign Control	Free			Free	Stop	
Grade	0%			0%	0%	
Peak Hour Factor	0.66	0.66	0.66	0.66	0.66	0.66
Hourly flow rate (vph)	30	15	15	15	45	30
Pedestrians	3			2	2	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	4.0			4.0	4.0	
Percent Blockage	0			0	0	
Right turn flare (veh)						
Median type	None			None		
Median storage veh)						
Upstream signal (ft)						
pX, platoon unblocked						
vC, conflicting volume			47		88	42
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol			47		88	42
tC, single (s)			4.2		6.5	6.3
tC, 2 stage (s)						
tF (s)			2.3		3.6	3.4
p0 queue free %			99		95	97
cM capacity (veh/h)			1533		891	1015

Direction, Lane #	EB 1	WB 1	NB 1	NB 2
Volume Total	45	30	45	30
Volume Left	0	15	45	0
Volume Right	15	0	0	30
cSH	1700	1533	891	1015
Volume to Capacity	0.03	0.01	0.05	0.03
Queue Length 95th (ft)	0	1	4	2
Control Delay (s/veh)	0.0	3.7	9.3	8.7
Lane LOS		A	A	A
Approach Delay (s/veh)	0.0	3.7	9.0	
Approach LOS			A	

Intersection Summary			
Average Delay	5.3		
Intersection Capacity Utilization	18.4%	ICU Level of Service	A
Analysis Period (min)	15		



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	270	100	20	130	10	30	30	60	10	10	10
Future Volume (Veh/h)	20	270	100	20	130	10	30	30	60	10	10	10
Sign Control		Free			Free			Stop			Stop	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	22	303	112	22	146	11	34	34	67	11	11	11
Pedestrians		5			2			19			4	
Lane Width (ft)		12.0			12.0			12.0			12.0	
Walking Speed (ft/s)		4.0			4.0			4.0			4.0	
Percent Blockage		0			0			2			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)		642			689							
pX, platoon unblocked				0.86			0.86	0.86	0.86	0.86	0.86	
vC, conflicting volume	161			434			639	627	380	689	678	161
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	161			254			493	479	191	551	538	161
tC, single (s)	4.1			4.1			7.1	6.5	6.2	7.1	6.5	6.2
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			98			91	91	91	96	97	99
cM capacity (veh/h)	1413			1104			377	393	715	308	364	878

Direction, Lane #	EB 1	WB 1	NB 1	SB 1
Volume Total	437	179	135	33
Volume Left	22	22	34	11
Volume Right	112	11	67	11
cSH	1413	1104	499	420
Volume to Capacity	0.02	0.02	0.27	0.08
Queue Length 95th (ft)	1	2	27	6
Control Delay (s/veh)	0.5	1.2	14.9	14.3
Lane LOS	A	A	B	B
Approach Delay (s/veh)	0.5	1.2	14.9	14.3
Approach LOS			B	B

Intersection Summary				
Average Delay	3.7			
Intersection Capacity Utilization	39.9%	ICU Level of Service	A	
Analysis Period (min)	15			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	150	60	120	130	80	30	1070	40	30	1620	50
Future Volume (veh/h)	110	150	60	120	130	80	30	1070	40	30	1620	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	115	156	62	125	135	83	31	1115	42	31	1688	52
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	185	222	494	150	342	210	129	2134	80	268	2151	66
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	438	684	1521	1170	1051	646	279	3508	132	488	3536	109
Grp Volume(v), veh/h	271	0	62	125	0	218	31	568	589	31	850	890
Grp Sat Flow(s),veh/h/ln	1122	0	1521	1170	0	1697	279	1787	1852	488	1787	1858
Q Serve(g_s), s	17.8	0.0	3.4	9.2	0.0	11.9	11.3	21.9	21.9	4.7	42.6	43.3
Cycle Q Clear(g_c), s	29.8	0.0	3.4	39.0	0.0	11.9	54.5	21.9	21.9	26.6	42.6	43.3
Prop In Lane	0.42		1.00	1.00		0.38	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	407	0	494	150	0	552	129	1087	1127	268	1087	1130
V/C Ratio(X)	0.67	0.00	0.13	0.83	0.00	0.40	0.24	0.52	0.52	0.12	0.78	0.79
Avail Cap(c_a), veh/h	407	0	494	150	0	552	129	1087	1127	268	1087	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	28.5	56.7	0.0	31.4	38.2	13.5	13.5	21.1	17.5	17.7
Incr Delay (d2), s/veh	4.1	0.0	0.1	31.3	0.0	0.5	4.3	1.8	1.7	0.9	5.6	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	1.5	5.4	0.0	5.6	1.0	11.3	11.7	0.7	22.5	23.8
LnGrp Delay(d), s/veh	44.8	0.0	28.6	87.9	0.0	31.8	42.5	15.3	15.2	22.0	23.2	23.3
LnGrp LOS	D		C	F		C	D	B	B	C	C	C
Approach Vol, veh/h		333			343			1188			1771	
Approach Delay, s/veh		41.8			52.3			16.0			23.2	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		43.0		77.0		43.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		56.5		31.8		45.3		41.0
Green Ext Time (p_c), s		7.3		1.1		16.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.3
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	30	50	1770	1520	30
Future Volume (Veh/h)	30	30	50	1770	1520	30
Sign Control	Stop			Free	Free	
Grade	0%			0%	0%	
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Hourly flow rate (vph)	32	32	53	1863	1600	32
Pedestrians	12			1	1	
Lane Width (ft)	12.0			12.0	12.0	
Walking Speed (ft/s)	4.0			4.0	4.0	
Percent Blockage	1			0	0	
Right turn flare (veh)		4				
Median type				None	None	
Median storage veh)						
Upstream signal (ft)				405	1102	
pX, platoon unblocked	0.84	0.71	0.71			
vC, conflicting volume	2651	813	1644			
vC1, stage 1 conf vol						
vC2, stage 2 conf vol						
vCu, unblocked vol	1196	0	1081			
tC, single (s)	6.8	6.9	4.1			
tC, 2 stage (s)						
tF (s)	3.5	3.3	2.2			
p0 queue free %	76	96	88			
cM capacity (veh/h)	131	760	453			

Direction, Lane #	EB 1	NB 1	NB 2	NB 3	SB 1	SB 2	SB 3
Volume Total	64	53	932	932	800	800	32
Volume Left	32	53	0	0	0	0	0
Volume Right	32	0	0	0	0	0	32
cSH	263	453	1700	1700	1700	1700	1700
Volume to Capacity	0.24	0.12	0.55	0.55	0.47	0.47	0.02
Queue Length 95th (ft)	23	10	0	0	0	0	0
Control Delay (s/veh)	25.5	14.0	0.0	0.0	0.0	0.0	0.0
Lane LOS	D	B					
Approach Delay (s/veh)	25.5	0.4			0.0		
Approach LOS	D						

Intersection Summary			
Average Delay	0.7		
Intersection Capacity Utilization	59.3%	ICU Level of Service	B
Analysis Period (min)	15		

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	50	80	80	130	170	30	1430	20	30	1330	190
Future Volume (veh/h)	140	50	80	80	130	170	30	1430	20	30	1330	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.78	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	149	53	85	85	138	181	32	1521	21	32	1415	202
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	7	463	41	51	417	141	2164	30	164	1872	263
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	0	22	1390	0	153	1252	314	3606	50	338	3120	439
Grp Volume(v), veh/h	202	0	85	223	0	181	32	753	789	32	802	815
Grp Sat Flow(s),veh/h/ln	22	0	1390	153	0	1252	314	1787	1869	338	1787	1772
Q Serve(g_s), s	0.0	0.0	5.2	0.0	0.0	13.5	10.1	34.9	35.1	8.7	39.0	40.9
Cycle Q Clear(g_c), s	40.0	0.0	5.2	40.0	0.0	13.5	51.0	34.9	35.1	43.8	39.0	40.9
Prop In Lane	0.74		1.00	0.38		1.00	1.00		0.03	1.00		0.25
Lane Grp Cap(c), veh/h	60	0	463	92	0	417	141	1072	1121	164	1072	1063
V/C Ratio(X)	3.39	0.00	0.18	2.42	0.00	0.43	0.23	0.70	0.70	0.20	0.75	0.77
Avail Cap(c_a), veh/h	60	0	463	92	0	417	141	1072	1121	164	1072	1063
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	0.0	28.4	38.8	0.0	31.2	36.7	16.6	16.6	31.8	17.4	17.8
Incr Delay (d2), s/veh	1117.7	0.0	0.2	668.5	0.0	0.7	3.7	3.8	3.7	2.6	4.8	5.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.5	0.0	2.0	20.2	0.0	4.8	1.0	18.3	19.1	0.9	20.6	21.5
LnGrp Delay(d), s/veh	1172.7	0.0	28.6	707.3	0.0	31.9	40.4	20.4	20.3	34.4	22.2	23.1
LnGrp LOS	F		C	F		C	D	C	C	C	C	C
Approach Vol, veh/h		287			404			1574			1649	
Approach Delay, s/veh		833.9			404.7			20.8			22.9	
Approach LOS		F			F			C			C	

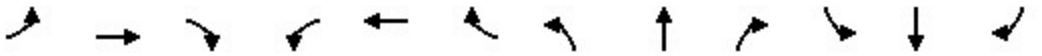
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		44.0		76.0		44.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		53.0		42.0		45.8		42.0
Green Ext Time (p_c), s		10.9		0.0		14.2		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		120.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	590	40	120	810	180	60	340	80	160	500	380
Future Volume (veh/h)	280	590	40	120	810	180	60	340	80	160	500	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	298	628	43	128	862	0	64	362	85	170	532	404
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	334	1486	101	158	1050	327	82	1329	582	236	755	573
Arrive On Green	0.19	0.31	0.31	0.09	0.21	0.00	0.05	0.38	0.38	0.07	0.40	0.40
Sat Flow, veh/h	1757	4809	327	1757	5036	1568	1757	3505	1535	3408	1880	1428
Grp Volume(v), veh/h	298	437	234	128	862	0	64	362	85	170	496	440
Grp Sat Flow(s),veh/h/ln	1757	1679	1779	1757	1679	1568	1757	1752	1535	1704	1752	1555
Q Serve(g_s), s	17.3	10.8	10.9	7.5	17.1	0.0	3.8	7.5	3.8	5.1	24.7	24.7
Cycle Q Clear(g_c), s	17.3	10.8	10.9	7.5	17.1	0.0	3.8	7.5	3.8	5.1	24.7	24.7
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	334	1037	550	158	1050	327	82	1329	582	236	704	625
V/C Ratio(X)	0.89	0.42	0.43	0.81	0.82	0.00	0.78	0.27	0.15	0.72	0.70	0.70
Avail Cap(c_a), veh/h	487	1220	646	269	1204	375	134	1329	582	358	704	625
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	28.7	28.8	46.7	39.5	0.0	49.3	22.5	21.3	47.7	26.1	26.1
Incr Delay (d2), s/veh	13.6	0.3	0.5	9.5	4.1	0.0	14.6	0.5	0.5	4.1	5.8	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	5.0	5.5	4.0	8.3	0.0	2.2	3.7	1.7	2.5	13.0	11.7
LnGrp Delay(d), s/veh	54.9	29.0	29.3	56.3	43.7	0.0	63.9	23.0	21.9	51.8	32.0	32.7
LnGrp LOS	D	C	C	E	D		E	C	C	D	C	C
Approach Vol, veh/h		969			990			511			1106	
Approach Delay, s/veh		37.0			45.3			27.9			35.3	
Approach LOS		D			D			C			D	

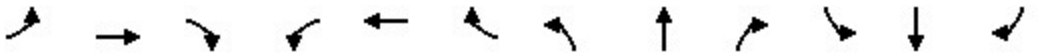
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	43.7	13.4	36.3	8.9	46.0	23.9	25.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	16.0	38.0	8.0	42.0	29.0	25.0
Max Q Clear Time (g_c+I1), s	7.1	9.5	9.5	12.9	5.8	26.7	19.3	19.1
Green Ext Time (p_c), s	0.2	2.6	0.1	4.0	0.0	5.3	0.6	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.5
HCM 2010 LOS	D



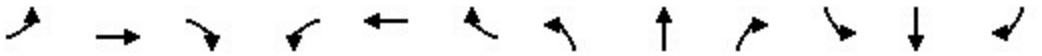
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	270	370	300	2320	0	0	0	0	80	180	700
Future Volume (vph)	0	270	370	300	2320	0	0	0	0	80	180	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.99	0.96	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.94	0.85	1.00	1.00					1.00	0.91	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3209	1413	3502	3610					1715	1574	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3209	1413	3502	3610					1715	1574	1534
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	281	385	312	2417	0	0	0	0	83	188	729
RTOR Reduction (vph)	0	69	108	0	0	0	0	0	0	0	2	32
Lane Group Flow (vph)	0	389	100	313	2417	0	0	0	0	75	478	413
Confl. Peds. (#/hr)	182		12	12		182						
Confl. Bikes (#/hr)						77						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		57.8	57.8	15.2	77.0					35.0	35.0	35.0
Effective Green, g (s)		57.8	57.8	15.2	77.0					35.0	35.0	35.0
Actuated g/C Ratio		0.48	0.48	0.13	0.64					0.29	0.29	0.29
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1545	680	443	2316					500	459	447
v/s Ratio Prot		0.12		0.09	c0.67					0.04	c0.30	0.27
v/s Ratio Perm			0.07									
v/c Ratio		0.25	0.15	0.71	1.04					0.15	1.04	0.92
Uniform Delay, d1		18.3	17.4	50.3	21.5					31.5	42.5	41.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.1	31.3					0.6	53.1	27.3
Delay (s)		18.4	17.5	55.3	52.8					32.1	95.6	68.5
Level of Service		B	B	E	D					C	F	E
Approach Delay (s/veh)		18.1			53.1			0.0			78.8	
Approach LOS		B			D			A			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	700	10	10	950	300	10	10	20	270	10	270
Future Volume (vph)	180	700	10	10	950	300	10	10	20	270	10	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	194	753	11	11	1022	323	11	11	22	290	11	290
RTOR Reduction (vph)	0	1	0	0	0	152	0	0	18	0	227	0
Lane Group Flow (vph)	194	763	0	11	1022	171	0	22	4	261	103	0
Confl. Peds. (#/hr)	2		11	11		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	11.1	43.6		0.7	33.2	33.2		19.5	19.5	22.3	22.3	
Effective Green, g (s)	11.1	43.6		0.7	33.2	33.2		19.5	19.5	22.3	22.3	
Actuated g/C Ratio	0.11	0.43		0.01	0.33	0.33		0.19	0.19	0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	366	2123		11	1621	495		340	296	360	327	
v/s Ratio Prot	c0.06	0.15		0.01	c0.20			c0.01		c0.16	0.07	
v/s Ratio Perm						0.11			0.00			
v/c Ratio	0.53	0.36		1.00	0.63	0.35		0.06	0.01	0.73	0.32	
Uniform Delay, d1	43.0	19.8		50.7	29.2	26.2		33.8	33.5	37.1	33.5	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.5	0.1		271.4	0.8	0.4		0.4	0.1	7.1	0.6	
Delay (s)	44.5	19.9		322.1	30.0	26.6		34.2	33.6	44.1	34.1	
Level of Service	D	B		F	C	C		C	C	D	C	
Approach Delay (s/veh)		24.9			31.6			33.9			38.5	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.51		
Actuated Cycle Length (s)	102.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

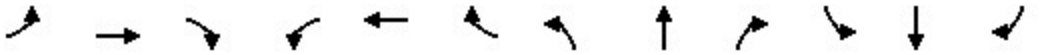


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	220	0	0	1230	90	1420	250	250	0	0	0
Future Volume (vph)	110	220	0	0	1230	90	1420	250	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.98		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3500		1643	3142	1470			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3500		1643	3142	1470			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	116	232	0	0	1295	95	1495	263	263	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	86	0	0	0
Lane Group Flow (vph)	116	232	0	0	1390	0	747	1036	151	0	0	0
Confl. Peds. (#/hr)	124		12	12		124						
Confl. Bikes (#/hr)			3			49						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	5.0	57.0			48.0		55.0	55.0	55.0			
Effective Green, g (s)	5.0	57.0			48.0		55.0	55.0	55.0			
Actuated g/C Ratio	0.04	0.48			0.40		0.46	0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	145	1714			1400		753	1440	673			
v/s Ratio Prot	c0.03	0.06			c0.40		c0.45	0.33				
v/s Ratio Perm									0.10			
v/c Ratio	0.80	0.14			0.99		0.99	0.99dl	0.22			
Uniform Delay, d1	57.0	17.7			35.8		32.3	26.3	19.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	26.2	0.0			22.2		30.9	3.1	0.8			
Delay (s)	83.2	17.7			58.1		63.2	29.4	20.4			
Level of Service	F	B			E		E	C	C			
Approach Delay (s/veh)		39.5			58.1			40.8			0.0	
Approach LOS		D			E			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	47.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	112.3%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	820	0	0	940	190	320	0	710	0	0	0
Future Volume (veh/h)	130	820	0	0	940	190	320	0	710	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1827	0	0	1827	1900	1827	0	1827			
Adj Flow Rate, veh/h	140	882	0	0	1011	204	344	0	763			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	4	4	4	0	4			
Cap, veh/h	193	1769	0	0	1095	220	1952	0	898			
Arrive On Green	0.06	0.35	0.00	0.00	0.26	0.26	0.58	0.00	0.58			
Sat Flow, veh/h	3375	5152	0	0	4309	835	3375	0	1553			
Grp Volume(v), veh/h	140	882	0	0	811	404	344	0	763			
Grp Sat Flow(s),veh/h/ln	1688	1663	0	0	1663	1654	1688	0	1553			
Q Serve(g_s), s	4.9	16.5	0.0	0.0	28.3	28.4	5.7	0.0	48.6			
Cycle Q Clear(g_c), s	4.9	16.5	0.0	0.0	28.3	28.4	5.7	0.0	48.6			
Prop In Lane	1.00		0.00	0.00		0.50	1.00		1.00			
Lane Grp Cap(c), veh/h	193	1769	0	0	878	437	1952	0	898			
V/C Ratio(X)	0.73	0.50	0.00	0.00	0.92	0.93	0.18	0.00	0.85			
Avail Cap(c_a), veh/h	198	1797	0	0	892	444	1952	0	898			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	55.3	30.2	0.0	0.0	42.7	42.8	11.8	0.0	20.9			
Incr Delay (d2), s/veh	12.2	0.2	0.0	0.0	14.8	25.2	0.2	0.0	9.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	7.6	0.0	0.0	14.7	16.1	2.7	0.0	23.2			
LnGrp Delay(d), s/veh	67.6	30.4	0.0	0.0	57.5	67.9	12.0	0.0	30.7			
LnGrp LOS	E	C			E	E	B		C			
Approach Vol, veh/h		1022			1215			1107				
Approach Delay, s/veh		35.5			61.0			24.9				
Approach LOS		D			E			C				

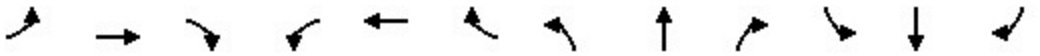
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		73.0		46.3			10.8	35.5
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		69.0		43.0			7.0	32.0
Max Q Clear Time (g_c+I1), s		50.6		18.5			6.9	30.4
Green Ext Time (p_c), s		4.5		6.2			0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1570	420	240	1550	80	420	500	160	220	1020	320
Future Volume (veh/h)	230	1570	420	240	1550	80	420	500	160	220	1020	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	245	1670	447	255	1649	85	447	532	170	234	1085	340
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1695	517	258	1695	524	459	1897	580	293	1150	497
Arrive On Green	0.08	0.33	0.33	0.08	0.33	0.33	0.13	0.37	0.37	0.09	0.32	0.32
Sat Flow, veh/h	3442	5085	1551	3442	5085	1571	3442	5085	1554	3442	3539	1530
Grp Volume(v), veh/h	245	1670	447	255	1649	85	447	532	170	234	1085	340
Grp Sat Flow(s),veh/h/ln	1721	1695	1551	1721	1695	1571	1721	1695	1554	1721	1770	1530
Q Serve(g_s), s	8.5	39.1	32.4	8.9	38.4	4.6	15.5	8.8	9.2	8.0	35.8	23.1
Cycle Q Clear(g_c), s	8.5	39.1	32.4	8.9	38.4	4.6	15.5	8.8	9.2	8.0	35.8	23.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	1695	517	258	1695	524	459	1897	580	293	1150	497
V/C Ratio(X)	0.95	0.99	0.86	0.99	0.97	0.16	0.97	0.28	0.29	0.80	0.94	0.68
Avail Cap(c_a), veh/h	258	1695	517	258	1695	524	459	1897	580	373	1150	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	39.7	37.5	55.4	39.5	28.2	51.8	26.3	26.5	53.9	39.4	35.1
Incr Delay (d2), s/veh	42.2	18.4	14.2	52.5	15.8	0.1	35.2	0.4	1.3	9.2	16.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	21.1	15.8	6.1	20.4	2.0	9.6	4.2	4.2	4.2	20.0	10.8
LnGrp Delay(d), s/veh	97.4	58.1	51.7	107.9	55.3	28.3	87.0	26.7	27.8	63.0	55.4	42.6
LnGrp LOS	F	E	D	F	E	C	F	C	C	E	E	D
Approach Vol, veh/h		2362			1989			1149			1659	
Approach Delay, s/veh		60.9			60.9			50.3			53.9	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	48.8	13.0	44.0	20.0	43.0	13.0	44.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	42.0	9.0	40.0	16.0	39.0	9.0	40.0
Max Q Clear Time (g_c+I1), s	10.0	11.2	10.9	41.1	17.5	37.8	10.5	40.4
Green Ext Time (p_c), s	0.2	4.1	0.0	0.0	0.0	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.6
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	380	40	840	310	140	50	300	300	450	1410	250
Future Volume (vph)	90	380	40	840	310	140	50	300	300	450	1410	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.98	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4983		3253	1689	1575	1787	3574	1573	3467	4991	
Flt Permitted		0.79		0.95	0.53	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3948		3253	904	1575	1787	3574	1573	3467	4991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	422	44	933	344	156	56	333	333	500	1567	278
RTOR Reduction (vph)	0	8	0	0	0	86	0	0	38	0	21	0
Lane Group Flow (vph)	0	558	0	840	437	70	56	333	295	500	1824	0
Confl. Peds. (#/hr)	1		47	47		1	5		9	9		5
Confl. Bikes (#/hr)			5			2			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.3		32.7	54.0	54.0	4.0	32.4	65.1	21.6	50.0	
Effective Green, g (s)		17.3		32.7	54.0	54.0	4.0	32.4	65.1	21.6	50.0	
Actuated g/C Ratio		0.14		0.27	0.45	0.45	0.03	0.27	0.54	0.18	0.42	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		569		886	620	708	59	964	905	624	2079	
v/s Ratio Prot				c0.26	0.19		0.03	0.09	0.09	c0.14	c0.37	
v/s Ratio Perm		c0.14			0.12	0.04			0.10			
v/c Ratio		0.98		0.95	0.70	0.10	0.95	0.35	0.33	0.80	0.88	
Uniform Delay, d1		51.2		42.8	26.6	19.0	57.9	35.3	15.3	47.1	32.2	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		32.8		18.6	3.6	0.1	97.7	1.0	0.2	7.3	5.6	
Delay (s)		84.0		61.5	30.2	19.1	155.6	36.2	15.5	54.5	37.8	
Level of Service		F		E	C	B	F	D	B	D	D	
Approach Delay (s/veh)		84.0			47.3			35.9			41.4	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	47.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.93		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	83.2%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	520	1680	0	130	420
Future Volume (veh/h)	0	520	1680	0	130	420
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	536	1732	0	134	433
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2219	2219	0	904	807
Arrive On Green	0.00	0.43	0.43	0.00	0.50	0.50
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	536	1732	0	134	433
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	7.3	31.6	0.0	4.4	20.2
Cycle Q Clear(g_c), s	0.0	7.3	31.6	0.0	4.4	20.2
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2219	2219	0	904	807
V/C Ratio(X)	0.00	0.24	0.78	0.00	0.15	0.54
Avail Cap(c_a), veh/h	0	2685	2685	0	904	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.1	27.1	0.0	14.9	18.8
Incr Delay (d2), s/veh	0.0	0.1	1.3	0.0	0.3	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	3.5	15.3	0.0	2.3	9.5
LnGrp Delay(d), s/veh	0.0	20.2	28.3	0.0	15.2	21.4
LnGrp LOS		C	C		B	C
Approach Vol, veh/h		536	1732		567	
Approach Delay, s/veh		20.2	28.3		19.9	
Approach LOS		C	C		B	

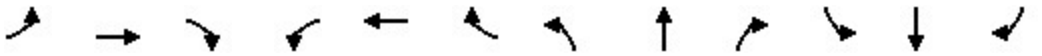
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				51.1		59.0		51.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				57.0		55.0		57.0
Max Q Clear Time (g_c+I1), s				9.3		22.2		33.6
Green Ext Time (p_c), s				3.8		2.0		13.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.1
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	470	0	0	1820	630	1040
Future Volume (vph)	470	0	0	1820	630	1040
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	0.99	0.97
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5136			5136	1724	1466
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5136			5136	1724	1466
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	505	0	0	1957	677	1118
RTOR Reduction (vph)	0	0	0	0	11	87
Lane Group Flow (vph)	505	0	0	1957	923	774
Confl. Peds. (#/hr)						10
Confl. Bikes (#/hr)						2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	46.0			46.0	66.0	66.0
Effective Green, g (s)	46.0			46.0	66.0	66.0
Actuated g/C Ratio	0.38			0.38	0.55	0.55
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1968			1968	948	806
v/s Ratio Prot	0.10			c0.38	c0.54	
v/s Ratio Perm						0.53
v/c Ratio	0.26			0.99	0.97	0.96
Uniform Delay, d1	25.3			36.9	26.1	25.7
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			18.9	23.5	23.3
Delay (s)	25.4			55.7	49.6	49.1
Level of Service	C			E	D	D
Approach Delay (s/veh)	25.4			55.7	49.3	
Approach LOS	C			E	D	

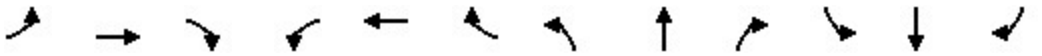
Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Future Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.89						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1645	1544						5036	1539	1752	3505	
Flt Permitted	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1645	1544						5036	1539	1752	3505	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	526	0	268	0	0	0	0	887	412	247	392	0
RTOR Reduction (vph)	0	82	0	0	0	0	0	0	228	0	0	0
Lane Group Flow (vph)	416	296	0	0	0	0	0	887	184	247	392	0
Confl. Peds. (#/hr)							5		3	3		5
Confl. Bikes (#/hr)									1			7
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	3	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA						NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Effective Green, g (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Actuated g/C Ratio	0.31	0.31						0.39	0.39	0.18	0.61	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	513	482						1982	605	320	2150	
v/s Ratio Prot								c0.18		c0.14	0.11	
v/s Ratio Perm	c0.25	0.19							0.12			
v/c Ratio	0.81	0.61						0.45	0.30	0.77	0.18	
Uniform Delay, d1	34.3	31.7						24.1	22.6	42.1	9.1	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.4	2.3						0.7	1.3	11.0	0.2	
Delay (s)	43.7	34.0						24.9	23.9	53.0	9.3	
Level of Service	D	C						C	C	D	A	
Approach Delay (s/veh)		39.1			0.0			24.6			26.2	
Approach LOS		D			A			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	108.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



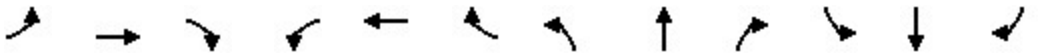
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Future Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1752		1568	1752	3505			5036	1517
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1752		1568	1752	3505			5036	1517
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	219	0	312	583	1021	0	0	500	292
RTOR Reduction (vph)	0	0	0	0	0	132	0	0	0	0	0	194
Lane Group Flow (vph)	0	0	0	219	0	181	583	1021	0	0	500	98
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												5
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm		Perm	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases				8		8						6
Actuated Green, G (s)				19.2		19.2	42.9	84.2			37.3	37.3
Effective Green, g (s)				19.2		19.2	42.9	84.2			37.3	37.3
Actuated g/C Ratio				0.17		0.17	0.39	0.76			0.33	0.33
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				301		270	674	2649			1686	507
v/s Ratio Prot							c0.33	c0.29			0.10	
v/s Ratio Perm				c0.12		0.12						0.06
v/c Ratio				0.73		0.67	0.86	0.39			0.30	0.19
Uniform Delay, d1				43.6		43.1	31.6	4.7			27.4	26.3
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				8.5		6.2	11.2	0.4			0.4	0.8
Delay (s)				52.1		49.3	42.8	5.1			27.8	27.2
Level of Service				D		D	D	A			C	C
Approach Delay (s/veh)		0.0			50.4			18.8			27.6	
Approach LOS		A			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	111.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Future Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				489	0	245	117	1160	0	0	1660	351
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				546	0	858	178	2209	0	0	2712	819
Arrive On Green				0.30	0.00	0.30	0.05	0.62	0.00	0.00	0.53	0.53
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1551
Grp Volume(v), veh/h				489	0	245	117	1160	0	0	1660	351
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1551
Q Serve(g_s), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Cycle Q Clear(g_c), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				546	0	858	178	2209	0	0	2712	819
V/C Ratio(X)				0.90	0.00	0.29	0.66	0.53	0.00	0.00	0.61	0.43
Avail Cap(c_a), veh/h				830	0	1304	268	2209	0	0	2712	819
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.4	0.0	27.4	48.2	11.2	0.0	0.0	17.0	14.9
Incr Delay (d2), s/veh				8.5	0.0	0.2	4.1	0.9	0.0	0.0	1.0	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.6	0.0	2.7	1.7	9.6	0.0	0.0	11.2	6.4
LnGrp Delay(d), s/veh				42.9	0.0	27.6	52.3	12.1	0.0	0.0	18.1	16.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					734			1277			2011	
Approach Delay, s/veh					37.8			15.8			17.8	
Approach LOS					D			B			B	

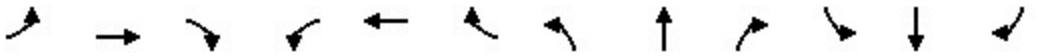
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		68.0			9.3	58.7		35.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			8.0	52.0		48.0
Max Q Clear Time (g_c+I1), s		21.0			5.4	25.3		29.0
Green Ext Time (p_c), s		10.9			0.1	16.1		2.5

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		20.8
HCM 2010 LOS		C



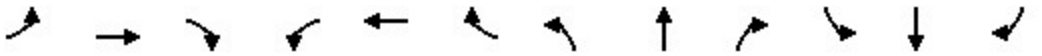
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Future Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.93	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1555	1519					5136	1557	3467	3574	
Flt Permitted	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1555	1519					5136	1557	3467	3574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	0	147	0	0	0	0	1084	737	379	1758	0
RTOR Reduction (vph)	0	40	48	0	0	0	0	0	187	0	0	0
Lane Group Flow (vph)	109	66	52	0	0	0	0	1084	550	379	1758	0
Confl. Peds. (#/hr)							6		6	6		6
Confl. Bikes (#/hr)									5			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Effective Green, g (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Actuated g/C Ratio	0.11	0.11	0.11					0.64	0.64	0.15	0.82	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	183	168	164					3265	989	527	2940	
v/s Ratio Prot								0.21		c0.11	c0.49	
v/s Ratio Perm	c0.06	0.04	0.03						0.35			
v/c Ratio	0.60	0.39	0.32					0.33	0.56	0.72	0.60	
Uniform Delay, d1	49.1	48.0	47.6					9.7	11.9	46.6	3.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	1.5	1.1					0.3	2.3	4.7	0.9	
Delay (s)	54.3	49.5	48.7					10.0	14.1	51.3	4.5	
Level of Service	D	D	D					A	B	D	A	
Approach Delay (s/veh)		50.9			0.0			11.7			12.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Future Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.93	0.85					0.94		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1649	1502	1475					4661		3367	4988	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1649	1502	1475					4661		3367	4988	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	323	0	301	0	0	0	0	742	462	226	473	0
RTOR Reduction (vph)	0	36	161	0	0	0	0	71	0	0	0	0
Lane Group Flow (vph)	216	173	38	0	0	0	0	1133	0	226	473	0
Confl. Peds. (#/hr)							6		4	4		6
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Effective Green, g (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Actuated g/C Ratio	0.19	0.19	0.19					0.58		0.12	0.73	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	316	288	282					2685		393	3648	
v/s Ratio Prot								c0.24		c0.07	0.09	
v/s Ratio Perm	c0.13	0.11	0.03									
v/c Ratio	0.68	0.60	0.14					0.42		0.58	0.13	
Uniform Delay, d1	39.2	38.5	35.0					12.4		43.6	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	6.0	3.3	0.2					0.5		2.0	0.1	
Delay (s)	45.2	41.8	35.2					12.9		45.6	4.2	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.9			0.0			12.9			17.6	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	104.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Future Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.87	0.85	1.00	1.00			0.94	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1431	1475	3367	4988			4653	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1649	1431	1475	3367	4988			4653	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	180	0	337	326	730	0	0	562	337
RTOR Reduction (vph)	0	0	0	0	137	148	0	0	0	0	62	0
Lane Group Flow (vph)	0	0	0	162	43	27	326	730	0	0	837	0
Confl. Peds. (#/hr)							3		4	4		3
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm	NA	Perm	Prot	NA			NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Effective Green, g (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Actuated g/C Ratio				0.16	0.16	0.16	0.15	0.77			0.58	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				258	224	231	491	3820			2704	
v/s Ratio Prot							c0.10	0.15			c0.18	
v/s Ratio Perm				c0.10	0.03	0.02						
v/c Ratio				0.63	0.19	0.12	0.66	0.19			0.31	
Uniform Delay, d1				40.8	37.9	37.5	41.8	3.3			11.1	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				4.7	0.4	0.2	3.4	0.1			0.3	
Delay (s)				45.5	38.3	37.7	45.1	3.4			11.4	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			40.4			16.3			11.4	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	103.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

FULLERTON STATION NO PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	740	180	160	730	200	220	1350	130	110	920	30
Future Volume (veh/h)	50	740	180	160	730	200	220	1350	130	110	920	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	56	822	200	178	811	222	244	1500	144	122	1022	33
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	861	209	207	955	261	317	1501	143	136	1417	46
Arrive On Green	0.03	0.30	0.30	0.08	0.34	0.34	0.10	0.45	0.45	0.04	0.40	0.40
Sat Flow, veh/h	1810	2879	700	1810	2792	764	1810	3330	317	1810	3569	115
Grp Volume(v), veh/h	56	515	507	178	524	509	244	808	836	122	517	538
Grp Sat Flow(s),veh/h/ln	1810	1805	1774	1810	1805	1751	1810	1805	1843	1810	1805	1879
Q Serve(g_s), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.3	54.0	4.9	29.0	29.0
Cycle Q Clear(g_c), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.3	54.0	4.9	29.0	29.0
Prop In Lane	1.00		0.39	1.00		0.44	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	159	540	531	207	617	599	317	813	830	136	717	746
V/C Ratio(X)	0.35	0.95	0.95	0.86	0.85	0.85	0.77	0.99	1.01	0.90	0.72	0.72
Avail Cap(c_a), veh/h	161	542	533	207	618	599	371	813	830	136	717	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	41.2	41.2	30.6	36.6	36.6	23.7	32.7	32.9	29.7	30.5	30.5
Incr Delay (d2), s/veh	1.3	27.6	27.9	29.0	10.8	11.1	8.2	29.9	33.1	48.5	6.2	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	20.9	20.6	5.6	17.9	17.4	5.3	33.2	34.8	4.2	15.6	16.2
LnGrp Delay(d), s/veh	32.4	68.8	69.1	59.6	47.4	47.7	31.9	62.6	66.0	78.1	36.7	36.5
LnGrp LOS	C	E	E	E	D	D	C	E	F	E	D	D
Approach Vol, veh/h		1078			1211			1888			1177	
Approach Delay, s/veh		67.0			49.3			60.2			40.9	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	58.0	13.0	39.8	15.4	51.6	7.9	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	54.0	9.0	36.0	15.0	44.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	6.9	56.0	10.0	35.6	11.2	31.0	4.6	34.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.2	5.5	0.0	3.4

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		54.9
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	490	80	330	670	200	100	1330	230	110	960	190
Future Volume (veh/h)	180	490	80	330	670	200	100	1330	230	110	960	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	189	516	84	347	705	211	105	1400	242	116	1011	200
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	245	639	103	399	759	227	222	1599	705	180	1340	264
Arrive On Green	0.09	0.21	0.21	0.17	0.28	0.28	0.05	0.44	0.44	0.05	0.45	0.45
Sat Flow, veh/h	1810	3096	502	1810	2720	814	1810	3610	1591	1810	2998	592
Grp Volume(v), veh/h	189	300	300	347	468	448	105	1400	242	116	608	603
Grp Sat Flow(s),veh/h/ln	1810	1805	1793	1810	1805	1730	1810	1805	1591	1810	1805	1785
Q Serve(g_s), s	9.7	18.8	18.9	17.2	29.9	29.9	3.7	41.9	11.9	4.1	33.3	33.5
Cycle Q Clear(g_c), s	9.7	18.8	18.9	17.2	29.9	29.9	3.7	41.9	11.9	4.1	33.3	33.5
Prop In Lane	1.00		0.28	1.00		0.47	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	245	372	370	399	503	482	222	1599	705	180	806	798
V/C Ratio(X)	0.77	0.81	0.81	0.87	0.93	0.93	0.47	0.88	0.34	0.64	0.75	0.76
Avail Cap(c_a), veh/h	245	372	370	450	517	496	229	1599	705	195	806	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	44.8	44.9	30.1	41.6	41.6	22.3	30.1	21.7	26.6	27.4	27.4
Incr Delay (d2), s/veh	14.0	12.2	12.9	15.4	23.1	23.9	1.6	7.0	1.3	6.3	6.5	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	10.6	10.7	10.3	18.2	17.5	1.9	22.4	5.4	2.3	18.0	17.9
LnGrp Delay(d), s/veh	49.0	57.0	57.8	45.5	64.8	65.5	23.9	37.1	23.0	32.9	33.8	34.0
LnGrp LOS	D	E	E	D	E	E	C	D	C	C	C	C
Approach Vol, veh/h		789			1263			1747			1327	
Approach Delay, s/veh		55.4			59.7			34.4			33.8	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	56.6	23.6	28.5	9.6	57.0	15.0	37.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	52.0	23.0	22.0	6.0	53.0	11.0	34.0
Max Q Clear Time (g_c+I1), s	6.1	43.9	19.2	20.9	5.7	35.5	11.7	31.9
Green Ext Time (p_c), s	0.0	5.9	0.4	0.4	0.0	7.7	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Future Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	41	856	144	124	1082	21	196	134	134	21	124	52
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	226	1556	262	254	1825	35	521	786	646	117	660	663
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	519	3089	520	572	3622	70	1223	1900	1561	179	1596	1604
Grp Volume(v), veh/h	41	500	500	124	539	564	196	134	134	145	0	52
Grp Sat Flow(s),veh/h/ln	519	1805	1804	572	1805	1887	1223	1900	1561	1776	0	1604
Q Serve(g_s), s	5.9	18.4	18.4	18.4	20.4	20.5	11.7	4.3	5.3	0.0	0.0	1.9
Cycle Q Clear(g_c), s	26.3	18.4	18.4	36.8	20.4	20.5	16.4	4.3	5.3	4.7	0.0	1.9
Prop In Lane	1.00		0.29	1.00		0.04	1.00		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	226	909	909	254	909	951	521	786	646	777	0	663
V/C Ratio(X)	0.18	0.55	0.55	0.49	0.59	0.59	0.38	0.17	0.21	0.19	0.00	0.08
Avail Cap(c_a), veh/h	351	1343	1343	392	1343	1405	521	786	646	777	0	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.3	16.5	16.5	29.1	17.0	17.0	23.2	17.9	18.2	18.0	0.0	17.2
Incr Delay (d2), s/veh	0.4	0.5	0.5	1.5	0.6	0.6	2.1	0.5	0.7	0.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.3	9.3	3.0	10.3	10.8	4.3	2.4	2.4	2.6	0.0	0.9
LnGrp Delay(d), s/veh	26.7	17.0	17.0	30.5	17.6	17.6	25.3	18.4	18.9	18.5	0.0	17.4
LnGrp LOS	C	B	B	C	B	B	C	B	B	B		B
Approach Vol, veh/h		1041			1227			464			197	
Approach Delay, s/veh		17.4			18.9			21.5			18.2	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.0		52.7		44.0		52.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s		18.4		28.3		6.7		38.8
Green Ext Time (p_c), s		2.0		8.1		1.1		10.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	620	230	140	640	40	250	290	110	40	330	70
Future Volume (veh/h)	80	620	230	140	640	40	250	290	110	40	330	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	667	247	151	688	43	269	312	118	43	355	75
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	268	1503	637	239	1503	637	454	976	811	469	976	810
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	736	3610	1529	620	3610	1531	972	1900	1579	972	1900	1577
Grp Volume(v), veh/h	86	667	247	151	688	43	269	312	118	43	355	75
Grp Sat Flow(s),veh/h/ln	736	1805	1529	620	1805	1531	972	1900	1579	972	1900	1577
Q Serve(g_s), s	10.9	15.2	12.9	26.4	15.8	1.9	26.2	11.0	4.5	3.1	12.8	2.8
Cycle Q Clear(g_c), s	26.7	15.2	12.9	41.6	15.8	1.9	39.1	11.0	4.5	14.1	12.8	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	268	1503	637	239	1503	637	454	976	811	469	976	810
V/C Ratio(X)	0.32	0.44	0.39	0.63	0.46	0.07	0.59	0.32	0.15	0.09	0.36	0.09
Avail Cap(c_a), veh/h	301	1666	706	267	1666	707	454	976	811	469	976	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	24.0	23.3	38.9	24.2	20.1	28.4	16.2	14.7	20.3	16.7	14.2
Incr Delay (d2), s/veh	0.7	0.2	0.4	4.0	0.2	0.0	5.6	0.9	0.4	0.4	1.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.5	5.5	4.8	7.9	0.8	7.7	6.0	2.1	0.9	7.0	1.3
LnGrp Delay(d), s/veh	34.5	24.2	23.7	42.9	24.4	20.2	34.0	17.1	15.0	20.7	17.7	14.5
LnGrp LOS	C	C	C	D	C	C	C	B	B	C	B	B
Approach Vol, veh/h		1000			882			699			473	
Approach Delay, s/veh		25.0			27.3			23.2			17.5	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		63.0		51.8		63.0		51.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		59.0		53.0		59.0		53.0
Max Q Clear Time (g_c+I1), s		41.1		28.7		16.1		43.6
Green Ext Time (p_c), s		3.5		6.4		3.0		4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	40	570	30	20	630
Future Vol, veh/h	50	40	570	30	20	630
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	57	45	648	34	23	716

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1413	651	0	0	685	0
Stage 1	651	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	153	472	-	-	918	-
Stage 1	523	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	149	471	-	-	916	-
Mov Cap-2 Maneuver	149	-	-	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	30.1	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	149	471	916	-
HCM Lane V/C Ratio	-	-	0.381	0.097	0.025	-
HCM Control Delay (s/veh)	-	-	43.3	13.5	9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Future Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Conflicting Peds, #/hr	5	0	0	0	0	5	4	0	18	18	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	11	23	23	11	34	23	580	23	11	534	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1225	1227	538	1223	1215	603	549	0	0	621	0	0
Stage 1	560	560	-	644	644	-	-	-	-	-	-	-
Stage 2	665	667	-	579	571	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	157	180	547	158	183	503	1031	-	-	969	-	-
Stage 1	516	514	-	465	471	-	-	-	-	-	-	-
Stage 2	453	460	-	504	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	171	545	138	174	493	1028	-	-	954	-	-
Mov Cap-2 Maneuver	134	171	-	138	174	-	-	-	-	-	-	-
Stage 1	503	506	-	448	454	-	-	-	-	-	-	-
Stage 2	400	443	-	467	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22.6	24.7	0.3	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	150	545	148	493	954	-	-
HCM Lane V/C Ratio	0.022	-	-	0.152	0.042	0.23	0.069	0.012	-	-
HCM Control Delay (s/veh)	8.6	-	-	33.2	11.9	36.5	12.8	8.8	-	-
HCM Lane LOS	A	-	-	D	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0.8	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Future Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.98		0.95	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Grp Volume(v), veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Grp Sat Flow(s),veh/h/ln	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Q Serve(g_s), s	10.9	6.3	2.7	3.0	6.8	3.2	2.6	6.4	0.6	3.2	7.6	5.2
Cycle Q Clear(g_c), s	17.7	6.3	2.7	9.3	6.8	3.2	10.2	6.4	0.6	9.6	7.6	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
V/C Ratio(X)	0.55	0.35	0.16	0.16	0.38	0.19	0.09	0.26	0.03	0.12	0.30	0.22
Avail Cap(c_a), veh/h	552	918	738	568	918	738	571	1317	1077	715	1317	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	31.2	29.8	35.1	31.4	30.0	7.6	5.5	4.6	7.3	5.7	5.3
Incr Delay (d2), s/veh	1.9	0.5	0.2	0.3	0.6	0.3	0.3	0.5	0.1	0.3	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.4	1.1	1.0	3.6	1.4	0.6	3.5	0.3	1.0	4.2	2.3
LnGrp Delay(d), s/veh	40.8	31.7	30.0	35.4	31.9	30.3	8.0	5.9	4.6	7.6	6.2	5.7
LnGrp LOS	D	C	C	D	C	C	A	A	A	A	A	A
Approach Vol, veh/h		340			267			425			713	
Approach Delay, s/veh		35.1			32.1			6.1			6.2	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		25.2		70.0		25.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		12.2		19.7		11.6		11.3
Green Ext Time (p_c), s		2.8		1.5		4.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Future Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.93	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	289	959	103	103	1062	186	134	165	103	124	155	237
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	371	1927	206	321	1469	257	418	740	605	453	740	603
Arrive On Green	0.13	0.41	0.41	0.06	0.34	0.34	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1792	4675	500	1792	4341	759	988	1881	1538	1105	1881	1535
Grp Volume(v), veh/h	289	701	361	103	837	411	134	165	103	124	155	237
Grp Sat Flow(s),veh/h/ln	1792	1712	1751	1792	1712	1676	988	1881	1538	1105	1881	1535
Q Serve(g_s), s	8.5	13.1	13.2	3.2	18.5	18.6	9.0	5.0	3.8	7.3	4.7	9.6
Cycle Q Clear(g_c), s	8.5	13.1	13.2	3.2	18.5	18.6	13.7	5.0	3.8	12.3	4.7	9.6
Prop In Lane	1.00		0.29	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	1411	722	321	1159	567	418	740	605	453	740	603
V/C Ratio(X)	0.78	0.50	0.50	0.32	0.72	0.72	0.32	0.22	0.17	0.27	0.21	0.39
Avail Cap(c_a), veh/h	781	2494	1276	449	1702	833	418	740	605	453	740	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	18.8	18.8	17.2	25.1	25.1	21.9	17.5	17.1	21.6	17.4	18.8
Incr Delay (d2), s/veh	3.6	0.3	0.5	0.6	0.9	1.8	2.0	0.7	0.6	1.5	0.6	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	6.2	6.4	1.6	8.9	8.8	2.7	2.8	1.7	2.4	2.6	4.4
LnGrp Delay(d), s/veh	21.5	19.1	19.4	17.7	25.9	26.8	23.9	18.2	17.7	23.0	18.0	20.8
LnGrp LOS	C	B	B	B	C	C	C	B	B	C	B	C
Approach Vol, veh/h		1351			1351			402			516	
Approach Delay, s/veh		19.7			25.6			19.9			20.5	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.8	39.6		38.0	15.2	33.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0	11.0	63.0		34.0	31.0	43.0
Max Q Clear Time (g_c+I1), s		15.7	5.2	15.2		14.3	10.5	20.6
Green Ext Time (p_c), s		1.8	0.1	8.0		2.2	0.8	8.7

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		22.0
HCM 2010 LOS		C

Intersection	
Int Delay, s/veh	94.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	880	80	40	1100	30	90	20	110	10	10	130
Future Vol, veh/h	70	880	80	40	1100	30	90	20	110	10	10	130
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	72	907	82	41	1134	31	93	21	113	10	10	134

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1165	0	0	995	0	0	1752	2345	502	1841	2371	583
Stage 1	-	-	-	-	-	-	1098	1098	-	1232	1232	-
Stage 2	-	-	-	-	-	-	654	1247	-	609	1139	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	607	-	-	703	-	-	~ 56	37	520	48	35	461
Stage 1	-	-	-	-	-	-	230	291	-	191	252	-
Stage 2	-	-	-	-	-	-	427	247	-	454	278	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	607	-	-	699	-	-	~ 25	31	517	15	29	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 25	31	-	15	29	-
Stage 1	-	-	-	-	-	-	202	255	-	168	237	-
Stage 2	-	-	-	-	-	-	273	232	-	287	244	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.8	0.4	$ 916.2	266.7
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	26	517	607	-	-	699	-	-	116
HCM Lane V/C Ratio	4.362	0.219	0.119	-	-	0.059	-	-	1.333
HCM Control Delay (s/veh)	$ 1818.4	13.9	11.7	-	-	10.5	-	-	266.7
HCM Lane LOS	F	B	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	14	0.8	0.4	-	-	0.2	-	-	10.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	700	70	30	690	40	120	30	50	40	20	120
Future Volume (veh/h)	100	700	70	30	690	40	120	30	50	40	20	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	714	71	31	704	41	122	31	51	41	20	122
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	272	1118	478	235	994	426	83	12	824	77	24	824
Arrive On Green	0.06	0.31	0.31	0.03	0.28	0.28	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	1810	3610	1543	1810	3610	1546	0	24	1610	0	46	1610
Grp Volume(v), veh/h	102	714	71	31	704	41	153	0	51	61	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1543	1810	1805	1546	24	0	1610	46	0	1610
Q Serve(g_s), s	3.1	13.3	2.6	1.0	13.7	1.5	0.0	0.0	1.2	0.0	0.0	3.1
Cycle Q Clear(g_c), s	3.1	13.3	2.6	1.0	13.7	1.5	40.0	0.0	1.2	40.0	0.0	3.1
Prop In Lane	1.00		1.00	1.00		1.00	0.80		1.00	0.67		1.00
Lane Grp Cap(c), veh/h	272	1118	478	235	994	426	95	0	824	101	0	824
V/C Ratio(X)	0.37	0.64	0.15	0.13	0.71	0.10	1.61	0.00	0.06	0.61	0.00	0.15
Avail Cap(c_a), veh/h	512	2771	1184	375	2448	1048	95	0	824	101	0	824
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	19.4	23.2	19.5	20.2	25.5	21.1	33.9	0.0	9.6	23.7	0.0	10.1
Incr Delay (d2), s/veh	0.9	0.6	0.1	0.3	0.9	0.1	317.0	0.0	0.1	24.2	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	6.7	1.1	0.5	7.0	0.7	10.4	0.0	0.6	2.0	0.0	1.5
LnGrp Delay(d), s/veh	20.2	23.8	19.7	20.5	26.4	21.2	350.9	0.0	9.8	47.9	0.0	10.5
LnGrp LOS	C	C	B	C	C	C	F		A	D		B
Approach Vol, veh/h		887			776			204			183	
Approach Delay, s/veh		23.1			25.9			265.6			22.9	
Approach LOS		C			C			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	6.0	28.2		44.0	8.6	25.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	8.0	60.0		40.0	15.0	53.0
Max Q Clear Time (g_c+I1), s		42.0	3.0	15.3		42.0	5.1	15.7
Green Ext Time (p_c), s		0.0	0.0	6.1		0.0	0.1	5.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1240	570	480	1680	170	840	1050	290	230	900	190
Future Volume (veh/h)	290	1240	570	480	1680	170	840	1050	290	230	900	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	309	1319	606	511	1787	181	894	1117	309	245	957	202
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	319	1146	517	463	1926	595	782	1605	489	304	899	272
Arrive On Green	0.09	0.33	0.33	0.13	0.38	0.38	0.22	0.31	0.31	0.09	0.17	0.17
Sat Flow, veh/h	3476	3437	1552	3476	5136	1587	3476	5136	1565	3476	5136	1554
Grp Volume(v), veh/h	309	1314	611	511	1787	181	894	1117	309	245	957	202
Grp Sat Flow(s),veh/h/ln	1738	1712	1565	1738	1712	1587	1738	1712	1565	1738	1712	1554
Q Serve(g_s), s	10.6	40.0	40.0	16.0	40.0	9.7	27.0	22.9	20.3	8.3	21.0	14.8
Cycle Q Clear(g_c), s	10.6	40.0	40.0	16.0	40.0	9.7	27.0	22.9	20.3	8.3	21.0	14.8
Prop In Lane	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1141	522	463	1926	595	782	1605	489	304	899	272
V/C Ratio(X)	0.97	1.15	1.17	1.10	0.93	0.30	1.14	0.70	0.63	0.80	1.06	0.74
Avail Cap(c_a), veh/h	319	1141	522	463	1926	595	782	1605	489	377	899	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	40.0	40.0	52.0	35.9	26.5	46.5	36.2	35.3	53.7	49.5	46.9
Incr Delay (d2), s/veh	42.2	78.5	96.0	72.7	8.5	0.3	79.3	2.5	6.1	9.9	48.8	16.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	31.3	31.2	12.3	20.4	4.3	21.5	11.2	9.6	4.4	14.0	7.6
LnGrp Delay(d), s/veh	96.5	118.5	136.0	124.7	44.4	26.7	125.8	38.8	41.4	63.7	98.3	63.7
LnGrp LOS	F	F	F	F	D	C	F	D	D	E	F	E
Approach Vol, veh/h		2234			2479			2320			1404	
Approach Delay, s/veh		120.2			59.7			72.7			87.3	
Approach LOS		F			E			E			F	

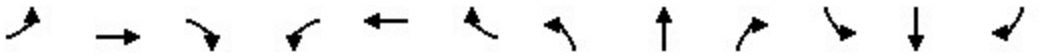
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	41.5	20.0	44.0	31.0	25.0	15.0	49.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	16.0	40.0	27.0	21.0	11.0	45.0
Max Q Clear Time (g_c+I1), s	10.3	24.9	18.0	42.0	29.0	23.0	12.6	42.0
Green Ext Time (p_c), s	0.2	5.7	0.0	0.0	0.0	0.0	0.0	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	83.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1430	380	400	1090	250	270	1510	270	340	1640	290
Future Volume (veh/h)	270	1430	380	400	1090	250	270	1510	270	340	1640	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	287	1521	404	426	1160	266	287	1606	287	362	1745	309
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	302	1293	340	351	1297	394	234	1815	554	351	1697	297
Arrive On Green	0.17	0.32	0.32	0.10	0.25	0.25	0.07	0.35	0.35	0.10	0.38	0.38
Sat Flow, veh/h	1810	4082	1074	3510	5187	1575	3510	5187	1584	3510	4428	776
Grp Volume(v), veh/h	287	1286	639	426	1160	266	287	1606	287	362	1359	695
Grp Sat Flow(s),veh/h/ln	1810	1729	1698	1755	1729	1575	1755	1729	1584	1755	1729	1746
Q Serve(g_s), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	35.0	17.3	12.0	46.0	46.0
Cycle Q Clear(g_c), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	35.0	17.3	12.0	46.0	46.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	669
V/C Ratio(X)	0.95	1.17	1.19	1.21	0.89	0.68	1.23	0.88	0.52	1.03	1.03	1.04
Avail Cap(c_a), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	41.0	41.0	54.0	43.5	40.6	56.0	36.7	31.0	54.0	37.0	37.0
Incr Delay (d2), s/veh	38.9	88.4	101.9	119.5	8.4	4.5	133.6	6.7	3.4	56.3	31.3	45.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	31.5	33.0	11.6	13.4	8.5	8.2	17.8	8.1	8.5	27.7	30.5
LnGrp Delay(d), s/veh	88.4	129.4	142.9	173.5	51.8	45.1	189.6	43.4	34.4	110.3	68.3	82.3
LnGrp LOS	F	F	F	F	D	D	F	D	C	F	F	F
Approach Vol, veh/h		2212			1852			2180			2416	
Approach Delay, s/veh		128.0			78.9			61.5			78.6	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	46.0	16.0	42.0	12.0	50.0	24.0	34.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	42.0	12.0	38.0	8.0	46.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	14.0	37.0	14.0	40.0	10.0	48.0	20.9	27.9
Green Ext Time (p_c), s	0.0	4.0	0.0	0.0	0.0	0.0	0.0	1.5

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		87.0
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	190	30	710	140	470	30	1440	540	260	1360	40
Future Volume (vph)	90	190	30	710	140	470	30	1440	540	260	1360	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1900	1615	1715	1746	1559	1805	5187	1594	1805	5158	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1900	1615	1715	1746	1559	1805	5187	1594	1805	5158	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	94	198	31	740	146	490	31	1500	562	271	1417	42
RTOR Reduction (vph)	0	0	27	0	0	261	0	0	332	0	2	0
Lane Group Flow (vph)	94	198	4	437	449	229	31	1500	231	271	1457	0
Confl. Peds. (#/hr)	9					9	6					6
Confl. Bikes (#/hr)						3			1			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	15.2	15.2	15.2	32.0	32.0	32.0	5.2	38.7	38.7	19.0	52.5	
Effective Green, g (s)	15.2	15.2	15.2	32.0	32.0	32.0	5.2	38.7	38.7	19.0	52.5	
Actuated g/C Ratio	0.13	0.13	0.13	0.26	0.26	0.26	0.04	0.32	0.32	0.16	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	226	238	203	453	462	412	77	1660	510	283	2239	
v/s Ratio Prot	0.05	c0.10		0.25	c0.26		0.02	c0.29		c0.15	0.28	
v/s Ratio Perm			0.00			0.15			0.14			
v/c Ratio	0.42	0.83	0.02	0.96	0.97	0.56	0.40	0.90	0.45	0.96	0.65	
Uniform Delay, d1	48.8	51.6	46.3	43.9	44.0	38.3	56.3	39.3	32.7	50.6	27.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	21.3	0.0	33.0	34.4	1.6	3.4	8.5	2.9	41.6	0.7	
Delay (s)	50.0	72.9	46.4	76.9	78.4	39.9	59.8	47.8	35.5	92.1	27.7	
Level of Service	D	E	D	E	E	D	E	D	D	F	C	
Approach Delay (s/veh)		63.7			64.2			44.7			37.8	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	88.9%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	130	60	70	200	530	110	1310	30	580	1090	50
Future Volume (veh/h)	60	130	60	70	200	530	110	1310	30	580	1090	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	61	133	61	71	204	541	112	1337	31	592	1112	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	117	330	275	198	330	590	139	1859	43	689	2292	995
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.08	0.52	0.52	0.20	0.64	0.64
Sat Flow, veh/h	719	1881	1563	1192	1881	1553	1792	3569	83	3476	3574	1552
Grp Volume(v), veh/h	61	133	61	71	204	541	112	669	699	592	1112	51
Grp Sat Flow(s),veh/h/ln	719	1881	1563	1192	1881	1553	1792	1787	1865	1738	1787	1552
Q Serve(g_s), s	8.6	7.1	3.8	6.4	11.4	20.0	7.0	32.6	32.7	18.7	18.4	1.4
Cycle Q Clear(g_c), s	20.0	7.1	3.8	13.5	11.4	20.0	7.0	32.6	32.7	18.7	18.4	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	117	330	275	198	330	590	139	931	971	689	2292	995
V/C Ratio(X)	0.52	0.40	0.22	0.36	0.62	0.92	0.80	0.72	0.72	0.86	0.49	0.05
Avail Cap(c_a), veh/h	117	330	275	198	330	590	236	931	971	1007	2292	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	41.6	40.3	47.6	43.4	34.1	51.6	20.9	20.9	44.1	10.6	7.6
Incr Delay (d2), s/veh	4.0	0.8	0.4	1.1	3.4	19.4	10.3	4.8	4.6	5.2	0.7	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.8	1.7	2.2	6.3	19.3	3.9	17.2	17.9	9.5	9.2	0.6
LnGrp Delay(d), s/veh	57.1	42.4	40.7	48.7	46.8	53.5	61.9	25.7	25.5	49.3	11.4	7.7
LnGrp LOS	E	D	D	D	D	D	E	C	C	D	B	A
Approach Vol, veh/h		255			816			1480			1755	
Approach Delay, s/veh		45.5			51.5			28.3			24.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.6	63.3		24.0	12.9	77.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	33.0	55.0		20.0	15.0	73.0		20.0
Max Q Clear Time (g_c+I1), s	20.7	34.7		22.0	9.0	20.4		22.0
Green Ext Time (p_c), s	1.8	9.5		0.0	0.1	10.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	640	110	410	950	300	90	930	220	260	950	150
Future Volume (veh/h)	220	640	110	410	950	300	90	930	220	260	950	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	227	660	113	423	979	309	93	959	227	268	979	155
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	260	656	112	403	1102	476	212	974	230	272	1258	199
Arrive On Green	0.10	0.22	0.22	0.19	0.31	0.31	0.05	0.34	0.34	0.12	0.41	0.41
Sat Flow, veh/h	1792	3030	518	1792	3574	1545	1792	2850	673	1792	3065	485
Grp Volume(v), veh/h	227	389	384	423	979	309	93	600	586	268	570	564
Grp Sat Flow(s),veh/h/ln	1792	1787	1761	1792	1787	1545	1792	1787	1736	1792	1787	1762
Q Serve(g_s), s	11.9	26.0	26.0	23.0	31.3	20.7	4.0	40.0	40.2	13.7	33.2	33.3
Cycle Q Clear(g_c), s	11.9	26.0	26.0	23.0	31.3	20.7	4.0	40.0	40.2	13.7	33.2	33.3
Prop In Lane	1.00		0.29	1.00		1.00	1.00		0.39	1.00		0.28
Lane Grp Cap(c), veh/h	260	387	381	403	1102	476	212	611	593	272	734	723
V/C Ratio(X)	0.87	1.00	1.01	1.05	0.89	0.65	0.44	0.98	0.99	0.98	0.78	0.78
Avail Cap(c_a), veh/h	260	387	381	403	1102	476	216	611	593	272	734	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	47.0	47.0	36.5	39.5	35.9	26.8	39.2	39.2	36.4	30.6	30.7
Incr Delay (d2), s/veh	26.4	46.8	47.8	58.1	9.1	3.1	1.4	32.6	33.9	50.1	7.9	8.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	17.8	17.7	19.8	16.8	9.2	2.0	25.2	24.8	12.6	17.9	17.8
LnGrp Delay(d), s/veh	61.1	93.8	94.9	94.6	48.6	39.0	28.2	71.7	73.2	86.5	38.6	38.8
LnGrp LOS	E	F	F	F	D	D	C	E	E	F	D	D
Approach Vol, veh/h		1000			1711			1279			1402	
Approach Delay, s/veh		86.8			58.2			69.2			47.8	
Approach LOS		F			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	45.0	27.0	30.0	9.7	53.3	16.0	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	41.0	23.0	26.0	6.0	49.0	12.0	37.0
Max Q Clear Time (g_c+I1), s	15.7	42.2	25.0	28.0	6.0	35.3	13.9	33.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	6.2	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	100	420	1000	60	130	960	260	80	1030	80
Future Volume (veh/h)	110	620	100	420	1000	60	130	960	260	80	1030	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	116	653	105	442	1053	63	137	1011	274	84	1084	84
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	224	720	297	472	1269	539	210	1422	601	208	1271	98
Arrive On Green	0.07	0.20	0.20	0.22	0.35	0.35	0.06	0.40	0.40	0.04	0.38	0.38
Sat Flow, veh/h	1792	3574	1473	1792	3574	1518	1792	3574	1510	1792	3346	259
Grp Volume(v), veh/h	116	653	105	442	1053	63	137	1011	274	84	579	589
Grp Sat Flow(s),veh/h/ln	1792	1787	1473	1792	1787	1518	1792	1787	1510	1792	1787	1818
Q Serve(g_s), s	5.9	20.7	7.1	22.8	31.2	3.2	5.4	27.5	15.5	3.3	34.4	34.4
Cycle Q Clear(g_c), s	5.9	20.7	7.1	22.8	31.2	3.2	5.4	27.5	15.5	3.3	34.4	34.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	224	720	297	472	1269	539	210	1422	601	208	679	691
V/C Ratio(X)	0.52	0.91	0.35	0.94	0.83	0.12	0.65	0.71	0.46	0.40	0.85	0.85
Avail Cap(c_a), veh/h	229	741	305	527	1389	590	210	1422	601	209	679	691
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.2	45.2	39.8	30.5	34.1	25.1	26.6	29.3	25.6	23.7	32.9	32.9
Incr Delay (d2), s/veh	1.9	14.7	0.7	23.0	4.1	0.1	6.9	3.0	2.5	1.3	12.8	12.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	11.6	3.0	16.8	16.1	1.4	3.0	14.1	6.9	1.7	19.3	19.6
LnGrp Delay(d), s/veh	36.1	59.9	40.5	53.5	38.2	25.2	33.5	32.3	28.1	25.0	45.7	45.6
LnGrp LOS	D	E	D	D	D	C	C	C	C	C	D	D
Approach Vol, veh/h		874			1558			1422			1252	
Approach Delay, s/veh		54.4			42.0			31.6			44.3	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	50.1	29.5	27.3	11.0	48.0	11.7	45.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	46.0	29.0	24.0	7.0	44.0	8.0	45.0
Max Q Clear Time (g_c+I1), s	5.3	29.5	24.8	22.7	7.4	36.4	7.9	33.2
Green Ext Time (p_c), s	0.0	7.5	0.6	0.7	0.0	4.5	0.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	20	40	60	20	130	40	1170	60	110	1410	70
Future Volume (veh/h)	60	20	40	60	20	130	40	1170	60	110	1410	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	62	21	41	62	21	134	41	1206	62	113	1454	72
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	54	11	275	54	11	272	276	2460	1064	359	2497	1077
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.03	0.69	0.69	0.04	0.70	0.70
Sat Flow, veh/h	0	64	1594	0	64	1575	1792	3574	1546	1792	3574	1542
Grp Volume(v), veh/h	83	0	41	83	0	134	41	1206	62	113	1454	72
Grp Sat Flow(s),veh/h/ln	64	0	1594	64	0	1575	1792	1787	1546	1792	1787	1542
Q Serve(g_s), s	0.0	0.0	2.5	0.0	0.0	8.9	0.8	18.4	1.5	2.2	24.0	1.7
Cycle Q Clear(g_c), s	20.0	0.0	2.5	20.0	0.0	8.9	0.8	18.4	1.5	2.2	24.0	1.7
Prop In Lane	0.75		1.00	0.75		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	65	0	275	65	0	272	276	2460	1064	359	2497	1077
V/C Ratio(X)	1.27	0.00	0.15	1.27	0.00	0.49	0.15	0.49	0.06	0.31	0.58	0.07
Avail Cap(c_a), veh/h	65	0	275	65	0	272	339	2460	1064	449	2497	1077
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	0.0	40.7	54.7	0.0	43.4	7.4	8.5	5.9	6.7	8.9	5.5
Incr Delay (d2), s/veh	201.1	0.0	0.2	201.1	0.0	1.4	0.2	0.7	0.1	0.5	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	0.0	1.1	5.7	0.0	4.0	0.4	9.3	0.7	1.1	12.1	0.8
LnGrp Delay(d), s/veh	255.7	0.0	41.0	255.7	0.0	44.8	7.6	9.2	6.0	7.2	9.9	5.6
LnGrp LOS	F		D	F		D	A	A	A	A	A	A
Approach Vol, veh/h		124			217			1309			1639	
Approach Delay, s/veh		184.7			125.4			9.0			9.5	
Approach LOS		F			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	83.8		24.0	6.9	85.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	78.0		20.0	7.0	81.0		20.0
Max Q Clear Time (g_c+I1), s	4.2	20.4		22.0	2.8	26.0		22.0
Green Ext Time (p_c), s	0.1	12.4		0.0	0.0	17.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	20	0	0	20	0	1350	30	0	1590	20
Future Vol, veh/h	0	0	20	0	0	20	0	1350	30	0	1590	20
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	6	6	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	21	0	0	21	0	1392	31	0	1639	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	820	-	-	696	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	320	0	0	386	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	320	-	-	386	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17	14.9	0	0
HCM LOS	C	B		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	320	386	-
HCM Lane V/C Ratio	-	0.064	0.053	-
HCM Control Delay (s/veh)	-	17	14.9	-
HCM Lane LOS	-	C	B	-
HCM 95th %tile Q(veh)	-	0.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	670	220	340	800	250	300	1440	480	310	1290	210
Future Volume (veh/h)	240	670	220	340	800	250	300	1440	480	310	1290	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.90	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	242	677	222	343	808	253	303	1455	485	313	1303	212
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	261	1036	283	397	860	346	366	1640	700	319	1966	320
Arrive On Green	0.08	0.20	0.20	0.11	0.24	0.24	0.11	0.46	0.46	0.09	0.45	0.45
Sat Flow, veh/h	3476	5136	1402	3476	3574	1437	3476	3574	1525	3476	4414	718
Grp Volume(v), veh/h	242	677	222	343	808	253	303	1455	485	313	1011	504
Grp Sat Flow(s),veh/h/ln	1738	1712	1402	1738	1787	1437	1738	1787	1525	1738	1712	1709
Q Serve(g_s), s	8.3	14.5	18.0	11.6	26.6	19.4	10.2	44.5	30.2	10.8	27.8	27.8
Cycle Q Clear(g_c), s	8.3	14.5	18.0	11.6	26.6	19.4	10.2	44.5	30.2	10.8	27.8	27.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	261	1036	283	397	860	346	366	1640	700	319	1525	761
V/C Ratio(X)	0.93	0.65	0.78	0.86	0.94	0.73	0.83	0.89	0.69	0.98	0.66	0.66
Avail Cap(c_a), veh/h	261	1036	283	406	865	348	464	1640	700	319	1525	761
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	44.0	45.4	52.2	44.6	41.9	52.6	29.6	25.7	54.3	26.1	26.1
Incr Delay (d2), s/veh	36.7	1.5	13.5	17.1	17.6	7.6	9.6	7.5	5.6	45.1	2.3	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	7.0	8.0	6.5	15.2	8.5	5.4	23.5	13.7	7.1	13.5	14.0
LnGrp Delay(d), s/veh	91.8	45.5	58.9	69.3	62.3	49.6	62.2	37.1	31.3	99.4	28.4	30.7
LnGrp LOS	F	D	E	E	E	D	E	D	C	F	C	C
Approach Vol, veh/h		1141			1404			2243			1828	
Approach Delay, s/veh		57.9			61.7			39.2			41.2	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	59.0	17.7	28.2	16.6	57.4	13.0	32.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	55.0	14.0	24.0	16.0	50.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	12.8	46.5	13.6	20.0	12.2	29.8	10.3	28.6
Green Ext Time (p_c), s	0.0	6.5	0.1	1.9	0.4	10.3	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	180	380	220	90	2010	0	0	1390	770
Future Volume (veh/h)	0	0	0	180	380	220	90	2010	0	0	1390	770
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				184	388	224	92	2051	0	0	1418	786
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				315	629	281	145	3868	0	0	2315	1056
Arrive On Green				0.18	0.18	0.18	0.04	0.75	0.00	0.00	0.68	0.68
Sat Flow, veh/h				1792	3574	1596	3476	5305	0	0	3593	1562
Grp Volume(v), veh/h				184	388	224	92	2051	0	0	1418	786
Grp Sat Flow(s),veh/h/ln				1792	1787	1596	1738	1712	0	0	1712	1562
Q Serve(g_s), s				10.6	11.3	15.2	2.9	18.5	0.0	0.0	25.8	37.0
Cycle Q Clear(g_c), s				10.6	11.3	15.2	2.9	18.5	0.0	0.0	25.8	37.0
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				315	629	281	145	3868	0	0	2315	1056
V/C Ratio(X)				0.58	0.62	0.80	0.64	0.53	0.00	0.00	0.61	0.74
Avail Cap(c_a), veh/h				429	855	382	216	3868	0	0	2315	1056
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.7	43.0	44.6	53.2	5.7	0.0	0.0	10.1	11.9
Incr Delay (d2), s/veh				1.7	1.0	8.1	4.6	0.5	0.0	0.0	1.2	4.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.4	5.7	7.4	1.5	8.7	0.0	0.0	12.4	17.1
LnGrp Delay(d), s/veh				44.4	44.0	52.7	57.8	6.3	0.0	0.0	11.3	16.7
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					796			2143			2204	
Approach Delay, s/veh					46.5			8.5			13.2	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		89.0			8.7	80.3		23.9
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		85.0			7.0	74.0		27.0
Max Q Clear Time (g_c+I1), s		20.5			4.9	39.0		17.2
Green Ext Time (p_c), s		28.6			0.0	23.0		2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1070	350	200	0	0	0	0	1280	210	270	1270	0
Future Volume (veh/h)	1070	350	200	0	0	0	0	1280	210	270	1270	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881				0	1881	1881	1881	1881	0
Adj Flow Rate, veh/h	1092	357	204				0	1306	214	276	1296	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	1275	690	587				0	2185	666	345	2880	0
Arrive On Green	0.37	0.37	0.37				0.00	0.43	0.43	0.10	0.56	0.00
Sat Flow, veh/h	3476	1881	1599				0	5305	1565	3476	5305	0
Grp Volume(v), veh/h	1092	357	204				0	1306	214	276	1296	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1599				0	1712	1565	1738	1712	0
Q Serve(g_s), s	32.1	16.4	10.2				0.0	21.7	10.1	8.6	16.4	0.0
Cycle Q Clear(g_c), s	32.1	16.4	10.2				0.0	21.7	10.1	8.6	16.4	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1275	690	587				0	2185	666	345	2880	0
V/C Ratio(X)	0.86	0.52	0.35				0.00	0.60	0.32	0.80	0.45	0.00
Avail Cap(c_a), veh/h	1572	851	723				0	2185	666	472	2880	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	32.3	27.3	25.4				0.0	24.5	21.1	48.7	14.3	0.0
Incr Delay (d2), s/veh	4.1	0.6	0.4				0.0	1.2	1.3	6.8	0.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.0	8.6	4.6				0.0	10.4	4.6	4.5	7.8	0.0
LnGrp Delay(d), s/veh	36.4	28.0	25.8				0.0	25.7	22.4	55.6	14.8	0.0
LnGrp LOS	D	C	C					C	C	E	B	
Approach Vol, veh/h		1653						1520			1572	
Approach Delay, s/veh		33.3						25.2			21.9	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	51.0		44.6		66.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	15.0	43.0		50.0		62.0		
Max Q Clear Time (g_c+I1), s	10.6	23.7		34.1		18.4		
Green Ext Time (p_c), s	0.4	9.9		6.5		11.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	570	1710	120	470	1170	230	110	980	520	220	710	290
Future Volume (veh/h)	570	1710	120	470	1170	230	110	980	520	220	710	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	600	1800	126	495	1232	242	116	1032	547	232	747	305
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
Arrive On Green	0.19	0.34	0.34	0.15	0.30	0.30	0.08	0.31	0.31	0.07	0.30	0.30
Sat Flow, veh/h	3510	5187	1592	3510	5187	1612	1810	3610	1590	3510	3610	1585
Grp Volume(v), veh/h	600	1800	126	495	1232	242	116	1032	547	232	747	305
Grp Sat Flow(s),veh/h/ln	1755	1729	1592	1755	1729	1612	1810	1805	1590	1755	1805	1585
Q Serve(g_s), s	20.1	41.0	6.8	16.7	26.0	14.8	7.6	33.2	34.1	7.9	22.0	14.7
Cycle Q Clear(g_c), s	20.1	41.0	6.8	16.7	26.0	14.8	7.6	33.2	34.1	7.9	22.0	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
V/C Ratio(X)	0.91	1.02	0.23	0.94	0.78	0.49	0.82	0.93	0.75	0.99	0.70	0.39
Avail Cap(c_a), veh/h	702	1772	544	527	1574	489	166	1113	733	234	1071	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	39.5	28.2	50.5	38.2	34.2	54.5	40.2	26.8	56.0	37.4	19.7
Incr Delay (d2), s/veh	15.2	25.4	0.2	25.1	2.6	0.8	23.4	14.3	6.8	56.3	3.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	23.7	3.0	10.0	12.8	6.7	4.7	18.7	16.3	5.7	11.6	6.7
LnGrp Delay(d), s/veh	62.9	64.9	28.5	75.6	40.8	35.0	77.9	54.5	33.7	112.2	41.2	21.2
LnGrp LOS	E	F	C	E	D	D	E	D	C	F	D	C
Approach Vol, veh/h		2526			1969			1695			1284	
Approach Delay, s/veh		62.6			48.8			49.4			49.3	
Approach LOS		E			D			D			D	

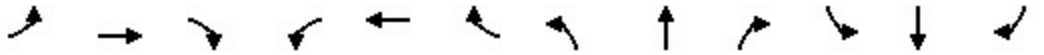
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	41.0	22.0	45.0	13.4	39.6	26.6	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	37.0	18.0	41.0	11.0	34.0	24.0	35.0
Max Q Clear Time (g_c+I1), s	9.9	36.1	18.7	43.0	9.6	24.0	22.1	28.0
Green Ext Time (p_c), s	0.0	0.7	0.0	0.0	0.0	4.1	0.5	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	820	150	450	1160	210	140	780	210	140	540	150
Future Volume (veh/h)	220	820	150	450	1160	210	140	780	210	140	540	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.87	1.00		0.83	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	242	901	165	495	1275	231	154	857	231	154	593	165
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	1080	198	554	1349	524	223	1029	384	200	760	210
Arrive On Green	0.15	0.36	0.36	0.16	0.37	0.37	0.06	0.29	0.29	0.06	0.29	0.29
Sat Flow, veh/h	1810	2966	543	3510	3610	1403	1810	3610	1347	1810	2664	737
Grp Volume(v), veh/h	242	548	518	495	1275	231	154	857	231	154	401	357
Grp Sat Flow(s),veh/h/ln	1810	1805	1704	1755	1805	1403	1810	1805	1347	1810	1805	1596
Q Serve(g_s), s	15.7	33.1	33.1	16.5	40.8	14.7	7.0	26.5	17.6	7.0	24.3	24.6
Cycle Q Clear(g_c), s	15.7	33.1	33.1	16.5	40.8	14.7	7.0	26.5	17.6	7.0	24.3	24.6
Prop In Lane	1.00		0.32	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	269	657	620	554	1349	524	223	1029	384	200	515	455
V/C Ratio(X)	0.90	0.83	0.83	0.89	0.95	0.44	0.69	0.83	0.60	0.77	0.78	0.78
Avail Cap(c_a), veh/h	273	657	620	589	1362	529	223	1029	384	200	515	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	34.6	34.6	49.2	36.2	28.0	32.1	40.0	36.8	33.0	39.2	39.3
Incr Delay (d2), s/veh	30.0	9.1	9.6	15.5	13.4	0.6	8.6	7.9	6.8	16.8	11.1	12.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	18.1	17.2	9.2	22.7	5.8	4.1	14.3	7.3	4.5	13.7	12.4
LnGrp Delay(d), s/veh	79.9	43.7	44.2	64.7	49.6	28.6	40.7	47.8	43.6	49.8	50.2	52.0
LnGrp LOS	E	D	D	E	D	C	D	D	D	D	D	D
Approach Vol, veh/h		1308			2001			1242			912	
Approach Delay, s/veh		50.6			50.9			46.2			50.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	38.0	22.8	47.4	11.0	38.0	21.7	48.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	34.0	20.0	43.0	7.0	34.0	18.0	45.0
Max Q Clear Time (g_c+I1), s	9.0	28.5	18.5	35.1	9.0	26.6	17.7	42.8
Green Ext Time (p_c), s	0.0	3.0	0.3	4.2	0.0	2.9	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	510	270	590	870	160	440	810	490	110	880	190
Future Volume (veh/h)	120	510	270	590	870	160	440	810	490	110	880	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	125	531	281	615	906	167	458	844	510	115	917	198
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	134	536	215	637	923	398	450	1698	741	291	923	199
Arrive On Green	0.08	0.15	0.15	0.18	0.26	0.26	0.22	0.48	0.48	0.06	0.32	0.32
Sat Flow, veh/h	1792	3574	1433	3476	3574	1542	1792	3574	1560	1792	2915	629
Grp Volume(v), veh/h	125	531	281	615	906	167	458	844	510	115	562	553
Grp Sat Flow(s),veh/h/ln	1792	1787	1433	1738	1787	1542	1792	1787	1560	1792	1787	1757
Q Serve(g_s), s	8.3	17.8	18.0	21.1	30.2	10.8	26.0	19.5	30.6	5.1	37.6	37.7
Cycle Q Clear(g_c), s	8.3	17.8	18.0	21.1	30.2	10.8	26.0	19.5	30.6	5.1	37.6	37.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	134	536	215	637	923	398	450	1698	741	291	566	556
V/C Ratio(X)	0.93	0.99	1.31	0.97	0.98	0.42	1.02	0.50	0.69	0.40	0.99	0.99
Avail Cap(c_a), veh/h	134	536	215	637	923	398	450	1698	741	291	566	556
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	50.9	51.0	48.6	44.2	37.0	37.9	21.6	24.6	25.1	40.9	40.9
Incr Delay (d2), s/veh	56.7	36.3	167.6	27.1	25.0	0.7	47.3	1.0	5.2	0.9	36.1	36.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.5	17.1	12.5	18.1	4.7	20.8	9.9	14.2	2.6	24.3	24.0
LnGrp Delay(d), s/veh	111.9	87.2	218.6	75.7	69.2	37.7	85.2	22.7	29.7	25.9	77.0	77.7
LnGrp LOS	F	F	F	E	E	D	F	C	C	C	E	E
Approach Vol, veh/h		937			1688			1812			1230	
Approach Delay, s/veh		129.9			68.5			40.5			72.5	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	61.0	26.0	22.0	30.0	42.0	13.0	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	57.0	22.0	18.0	26.0	38.0	9.0	31.0
Max Q Clear Time (g_c+I1), s	7.1	32.6	23.1	20.0	28.0	39.7	10.3	32.2
Green Ext Time (p_c), s	0.0	8.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	70.6
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	65.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	0	110	30	10	10	50	1710	60	10	1690	50
Future Vol, veh/h	10	0	110	30	10	10	50	1710	60	10	1690	50
Conflicting Peds, #/hr	0	0	1	1	0	0	8	0	17	17	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	150	-	50	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	94	94	94	94	94	94	94	94	94	94	94	94
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	11	0	117	32	11	11	53	1819	64	11	1798	53

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	2876	3861	935	2864	3823	927	1859	0	0	1900	0	0
Stage 1	1855	1855	-	1942	1942	-	-	-	-	-	-	-
Stage 2	1021	2006	-	922	1881	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	6.52	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	4.01	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 8	4	269	~ 8	~ 4	272	325	-	-	314	-	-
Stage 1	77	124	-	68	112	-	-	-	-	-	-	-
Stage 2	255	104	-	293	120	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	-	3	267	~ 4	~ 3	268	323	-	-	310	-	-
Mov Cap-2 Maneuver	-	3	-	~ 4	~ 3	-	-	-	-	-	-	-
Stage 1	64	119	-	56	92	-	-	-	-	-	-	-
Stage 2	181	86	-	159	115	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v		$ 4864.2	0.5	0.1
HCM LOS	-	F		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	323	-	-	-	267	4	268	310	-	-
HCM Lane V/C Ratio	0.165	-	-	-	0.438	10.638	0.04	0.034	-	-
HCM Control Delay (s/veh)	18.3	-	-	-	28.8	$ 6075.5	19	17	-	-
HCM Lane LOS	C	-	-	-	D	F	C	C	-	-
HCM 95th %tile Q(veh)	0.6	-	-	-	2.1	7.1	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	810	190	250	770	250	290	1170	80	240	1290	230
Future Volume (veh/h)	290	810	190	250	770	250	290	1170	80	240	1290	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	293	818	192	253	778	253	293	1182	81	242	1303	232
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	269	1314	306	314	676	220	254	1311	567	248	1251	541
Arrive On Green	0.15	0.32	0.32	0.09	0.26	0.26	0.11	0.37	0.37	0.09	0.35	0.35
Sat Flow, veh/h	1792	4130	961	3476	2615	850	1792	3574	1546	1792	3574	1547
Grp Volume(v), veh/h	293	677	333	253	532	499	293	1182	81	242	1303	232
Grp Sat Flow(s),veh/h/ln	1792	1712	1668	1738	1787	1679	1792	1787	1546	1792	1787	1547
Q Serve(g_s), s	18.0	20.2	20.4	8.6	31.0	31.0	13.0	37.6	4.2	10.5	42.0	13.8
Cycle Q Clear(g_c), s	18.0	20.2	20.4	8.6	31.0	31.0	13.0	37.6	4.2	10.5	42.0	13.8
Prop In Lane	1.00		0.58	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	1089	530	314	462	434	254	1311	567	248	1251	541
V/C Ratio(X)	1.09	0.62	0.63	0.81	1.15	1.15	1.15	0.90	0.14	0.98	1.04	0.43
Avail Cap(c_a), veh/h	269	1089	530	406	462	434	254	1311	567	248	1251	541
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	34.8	34.9	53.5	44.5	44.5	36.6	36.0	25.4	29.0	39.0	29.8
Incr Delay (d2), s/veh	81.1	1.1	2.4	8.9	90.4	91.8	104.2	10.2	0.5	50.2	37.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.9	9.7	9.8	4.5	26.9	25.4	15.8	20.4	1.9	11.5	27.1	6.2
LnGrp Delay(d), s/veh	132.1	35.9	37.2	62.4	134.9	136.3	140.8	46.2	25.9	79.2	76.0	32.3
LnGrp LOS	F	D	D	E	F	F	F	D	C	E	F	C
Approach Vol, veh/h		1303			1284			1556			1777	
Approach Delay, s/veh		57.9			121.2			63.0			70.7	
Approach LOS		E			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	48.0	14.8	42.2	17.0	46.0	22.0	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	44.0	14.0	35.0	13.0	42.0	18.0	31.0
Max Q Clear Time (g_c+I1), s	12.5	39.6	10.6	22.4	15.0	44.0	20.0	33.0
Green Ext Time (p_c), s	0.0	2.9	0.3	5.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	76.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	240	350	510	110	1310	0	0	1510	360
Future Volume (veh/h)	0	0	0	240	350	510	110	1310	0	0	1510	360
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				250	365	531	115	1365	0	0	1573	375
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				498	784	570	141	2958	0	0	1916	452
Arrive On Green				0.36	0.36	0.36	0.08	0.58	0.00	0.00	0.46	0.46
Sat Flow, veh/h				1397	2202	1599	1792	5305	0	0	4304	976
Grp Volume(v), veh/h				324	291	531	115	1365	0	0	1300	648
Grp Sat Flow(s),veh/h/ln				1811	1787	1599	1792	1712	0	0	1712	1687
Q Serve(g_s), s				16.6	14.8	37.8	7.5	18.1	0.0	0.0	38.8	39.5
Cycle Q Clear(g_c), s				16.6	14.8	37.8	7.5	18.1	0.0	0.0	38.8	39.5
Prop In Lane				0.77		1.00	1.00		0.00	0.00		0.58
Lane Grp Cap(c), veh/h				645	637	570	141	2958	0	0	1587	782
V/C Ratio(X)				0.50	0.46	0.93	0.82	0.46	0.00	0.00	0.82	0.83
Avail Cap(c_a), veh/h				675	666	596	167	2958	0	0	1587	782
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				29.8	29.2	36.6	53.6	14.5	0.0	0.0	27.4	27.6
Incr Delay (d2), s/veh				0.6	0.5	21.2	22.9	0.5	0.0	0.0	4.8	9.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				8.4	7.4	20.0	4.6	8.6	0.0	0.0	19.3	20.5
LnGrp Delay(d), s/veh				30.4	29.7	57.9	76.4	15.0	0.0	0.0	32.2	37.5
LnGrp LOS				C	C	E	E	B			C	D
Approach Vol, veh/h					1146			1480			1948	
Approach Delay, s/veh					42.9			19.7			34.0	
Approach LOS					D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		72.0			13.3	58.7		46.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		68.0			11.0	53.0		44.0
Max Q Clear Time (g_c+I1), s		20.1			9.5	41.5		39.8
Green Ext Time (p_c), s		13.0			0.0	8.8		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	420	70	0	0	0	0	1240	400	600	1140	0
Future Volume (veh/h)	310	420	70	0	0	0	0	1240	400	600	1140	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	320	433	72				0	1278	412	619	1175	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	465	464	415				0	1656	532	689	2374	0
Arrive On Green	0.26	0.26	0.26				0.00	0.44	0.44	0.20	0.67	0.00
Sat Flow, veh/h	1774	1770	1583				0	3959	1219	3442	3632	0
Grp Volume(v), veh/h	320	433	72				0	1143	547	619	1175	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583				0	1695	1619	1721	1770	0
Q Serve(g_s), s	19.4	28.5	4.2				0.0	34.1	34.3	20.9	19.5	0.0
Cycle Q Clear(g_c), s	19.4	28.5	4.2				0.0	34.1	34.3	20.9	19.5	0.0
Prop In Lane	1.00		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	465	464	415				0	1481	707	689	2374	0
V/C Ratio(X)	0.69	0.93	0.17				0.00	0.77	0.77	0.90	0.49	0.00
Avail Cap(c_a), veh/h	476	475	425				0	1481	707	779	2374	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	39.6	43.0	34.0				0.0	28.5	28.6	46.5	9.7	0.0
Incr Delay (d2), s/veh	4.0	25.4	0.2				0.0	3.9	8.1	12.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	17.2	1.9				0.0	16.7	16.9	11.1	9.7	0.0
LnGrp Delay(d), s/veh	43.6	68.3	34.2				0.0	32.5	36.6	58.8	10.4	0.0
LnGrp LOS	D	E	C					C	D	E	B	
Approach Vol, veh/h		825						1690			1794	
Approach Delay, s/veh		55.8						33.8			27.1	
Approach LOS		E						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	27.9	56.1		35.3		84.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	27.0	49.0		32.0		80.0		
Max Q Clear Time (g_c+I1), s	22.9	36.3		30.5		21.5		
Green Ext Time (p_c), s	1.0	8.5		0.8		11.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1230	110	200	2430	140	120	120	130	110	120	70
Future Volume (veh/h)	60	1230	110	200	2430	140	120	120	130	110	120	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.97		0.93	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	62	1281	115	208	2531	146	125	125	135	115	125	73
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	2145	192	328	2319	132	210	254	201	201	296	158
Arrive On Green	0.03	0.64	0.64	0.06	0.67	0.67	0.03	0.13	0.13	0.03	0.13	0.13
Sat Flow, veh/h	1810	3345	299	1810	3464	197	1810	1900	1502	1810	2209	1179
Grp Volume(v), veh/h	62	689	707	208	1304	1373	125	125	135	115	100	98
Grp Sat Flow(s),veh/h/ln	1810	1805	1840	1810	1805	1857	1810	1900	1502	1810	1805	1583
Q Serve(g_s), s	1.4	26.5	26.8	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Cycle Q Clear(g_c), s	1.4	26.5	26.8	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Prop In Lane	1.00		0.16	1.00		0.11	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	113	1157	1179	328	1208	1243	210	254	201	201	242	212
V/C Ratio(X)	0.55	0.60	0.60	0.63	1.08	1.10	0.60	0.49	0.67	0.57	0.41	0.46
Avail Cap(c_a), veh/h	121	1157	1179	482	1208	1243	210	254	201	201	242	212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	12.4	12.5	12.7	19.7	19.7	48.0	48.0	49.2	47.6	47.4	47.8
Incr Delay (d2), s/veh	4.5	0.8	0.8	2.0	50.1	59.1	4.5	6.6	16.4	3.8	5.2	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	13.3	13.8	3.5	56.1	60.8	3.8	4.3	5.2	3.5	3.4	3.4
LnGrp Delay(d), s/veh	35.8	13.3	13.3	14.7	69.8	78.9	52.5	54.6	65.7	51.4	52.6	54.9
LnGrp LOS	D	B	B	B	F	F	D	D	E	D	D	D
Approach Vol, veh/h		1458			2885			385			313	
Approach Delay, s/veh		14.3			70.2			57.8			52.9	
Approach LOS		B			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	20.0	10.9	80.6	8.0	20.0	7.5	84.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	16.0	17.0	67.0	4.0	16.0	4.0	80.0
Max Q Clear Time (g_c+I1), s	6.0	12.2	6.5	28.8	6.0	8.8	3.4	82.0
Green Ext Time (p_c), s	0.0	0.4	0.4	12.2	0.0	0.6	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		52.0
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Future Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	224	816	133	31	1184	51	143	102	20	92	102	245
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	295	1480	241	293	1436	62	337	832	159	493	454	397
Arrive On Green	0.09	0.48	0.48	0.02	0.41	0.41	0.08	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1810	3100	505	1810	3526	152	1810	3015	575	1810	1805	1581
Grp Volume(v), veh/h	224	475	474	31	606	629	143	60	62	92	102	245
Grp Sat Flow(s),veh/h/ln	1810	1805	1800	1810	1805	1872	1810	1805	1784	1810	1805	1581
Q Serve(g_s), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Cycle Q Clear(g_c), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Prop In Lane	1.00		0.28	1.00		0.08	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	295	861	859	293	735	763	337	498	492	493	454	397
V/C Ratio(X)	0.76	0.55	0.55	0.11	0.82	0.83	0.42	0.12	0.13	0.19	0.22	0.62
Avail Cap(c_a), veh/h	529	1303	1300	328	977	1014	426	498	492	512	454	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	17.5	17.5	16.2	24.9	24.9	23.8	25.5	25.6	24.0	28.0	31.2
Incr Delay (d2), s/veh	4.0	0.6	0.6	0.2	4.4	4.3	0.8	0.5	0.5	0.2	1.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	8.8	8.8	0.5	14.9	15.4	2.7	1.2	1.3	1.8	2.2	6.4
LnGrp Delay(d), s/veh	23.8	18.0	18.0	16.4	29.3	29.2	24.7	26.0	26.1	24.2	29.1	38.3
LnGrp LOS	C	B	B	B	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1173			1266			265			439	
Approach Delay, s/veh		19.1			28.9			25.3			33.2	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	30.0	6.2	49.0	11.3	27.7	12.8	42.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	26.0	4.0	68.0	12.0	20.0	21.0	51.0
Max Q Clear Time (g_c+I1), s	5.5	4.5	2.9	19.6	7.4	14.9	8.4	30.3
Green Ext Time (p_c), s	0.0	0.6	0.0	6.9	0.1	0.9	0.5	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	660	250	380	1060	130	280	290	220	90	280	180
Future Volume (veh/h)	140	660	250	380	1060	130	280	290	220	90	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	147	695	263	400	1116	137	295	305	232	95	295	189
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	178	954	355	482	1386	170	522	741	548	389	1077	471
Arrive On Green	0.10	0.27	0.27	0.14	0.31	0.31	0.13	0.39	0.39	0.05	0.31	0.31
Sat Flow, veh/h	1757	3588	1335	3408	4530	556	1757	1907	1410	1757	3505	1533
Grp Volume(v), veh/h	147	650	308	400	827	426	295	280	257	95	295	189
Grp Sat Flow(s),veh/h/ln	1757	1679	1565	1704	1679	1729	1757	1752	1564	1757	1752	1533
Q Serve(g_s), s	8.7	18.6	19.0	12.0	23.9	24.0	11.5	12.2	12.7	3.9	6.7	10.3
Cycle Q Clear(g_c), s	8.7	18.6	19.0	12.0	23.9	24.0	11.5	12.2	12.7	3.9	6.7	10.3
Prop In Lane	1.00		0.85	1.00		0.32	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	178	892	416	482	1027	529	522	681	608	389	1077	471
V/C Ratio(X)	0.82	0.73	0.74	0.83	0.81	0.81	0.57	0.41	0.42	0.24	0.27	0.40
Avail Cap(c_a), veh/h	300	1114	519	711	1242	639	670	681	608	397	1077	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	35.2	35.4	44.0	33.7	33.7	19.0	23.4	23.6	23.0	27.6	28.9
Incr Delay (d2), s/veh	9.2	1.8	4.3	5.3	3.3	6.3	1.0	1.8	2.2	0.3	0.6	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	8.8	8.7	6.0	11.5	12.3	5.6	6.2	5.9	1.9	3.3	4.7
LnGrp Delay(d), s/veh	55.6	37.1	39.7	49.3	37.0	40.0	20.0	25.3	25.7	23.3	28.3	31.4
LnGrp LOS	E	D	D	D	D	D	B	C	C	C	C	C
Approach Vol, veh/h		1105			1653			832			579	
Approach Delay, s/veh		40.3			40.8			23.5			28.5	
Approach LOS		D			D			C			C	

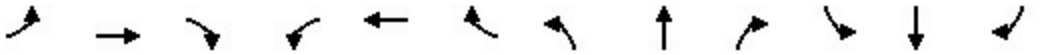
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	45.0	18.9	32.0	18.1	36.4	14.7	36.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	41.0	22.0	35.0	23.0	24.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	5.9	14.7	14.0	21.0	13.5	12.3	10.7	26.0
Green Ext Time (p_c), s	0.0	3.3	0.9	5.2	0.6	1.9	0.2	6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	410	1430	70	190	1980	170	110	360	100	250	490	390
Future Volume (veh/h)	410	1430	70	190	1980	170	110	360	100	250	490	390
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.90	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	436	1521	74	202	2106	181	117	383	106	266	521	415
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	406	1895	823	229	1936	841	119	477	192	261	506	392
Arrive On Green	0.12	0.53	0.53	0.13	0.54	0.54	0.07	0.13	0.13	0.08	0.14	0.14
Sat Flow, veh/h	3476	3574	1551	1792	3574	1552	1792	3574	1437	3476	3574	1452
Grp Volume(v), veh/h	436	1521	74	202	2106	181	117	383	106	266	521	415
Grp Sat Flow(s),veh/h/ln	1738	1787	1551	1792	1787	1552	1792	1787	1437	1738	1787	1452
Q Serve(g_s), s	14.0	41.8	2.8	13.3	65.0	7.3	7.8	12.5	8.3	9.0	17.0	17.0
Cycle Q Clear(g_c), s	14.0	41.8	2.8	13.3	65.0	7.3	7.8	12.5	8.3	9.0	17.0	17.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	406	1895	823	229	1936	841	119	477	192	261	506	392
V/C Ratio(X)	1.08	0.80	0.09	0.88	1.09	0.22	0.98	0.80	0.55	1.02	1.03	1.06
Avail Cap(c_a), veh/h	406	1895	823	254	1936	841	119	477	192	261	506	392
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.0	23.0	13.9	51.4	27.5	14.3	55.9	50.5	48.7	55.5	51.5	44.9
Incr Delay (d2), s/veh	66.3	2.6	0.0	26.3	48.8	0.1	75.7	13.4	11.0	61.1	47.6	61.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	21.2	1.2	8.2	44.9	3.1	6.4	7.1	3.9	6.5	11.7	19.7
LnGrp Delay(d), s/veh	119.3	25.6	13.9	77.8	76.3	14.4	131.6	63.9	59.7	116.7	99.1	106.5
LnGrp LOS	F	C	B	E	F	B	F	E	E	F	F	F
Approach Vol, veh/h		2031			2489			606			1202	
Approach Delay, s/veh		45.3			71.9			76.2			105.5	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	20.0	19.4	67.6	12.0	21.0	18.0	69.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	16.0	17.0	62.0	8.0	17.0	14.0	65.0
Max Q Clear Time (g_c+I1), s	11.0	14.5	15.3	43.8	9.8	19.0	16.0	67.0
Green Ext Time (p_c), s	0.0	0.4	0.1	10.7	0.0	0.0	0.0	0.0

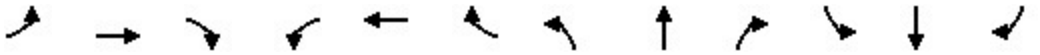
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	70.2
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Future Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	215	344	269	151	280	32	527	1118	151	43	871	247
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	248	285	218	165	431	49	463	2002	270	295	815	677
Arrive On Green	0.08	0.15	0.15	0.06	0.13	0.13	0.22	0.63	0.63	0.03	0.43	0.43
Sat Flow, veh/h	1792	1903	1456	1792	3232	366	1792	3163	426	1792	1881	1562
Grp Volume(v), veh/h	215	323	290	151	154	158	527	631	638	43	871	247
Grp Sat Flow(s),veh/h/ln	1792	1787	1572	1792	1787	1811	1792	1787	1803	1792	1881	1562
Q Serve(g_s), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Cycle Q Clear(g_c), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Prop In Lane	1.00		0.93	1.00		0.20	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	248	268	236	165	238	241	463	1131	1141	295	815	677
V/C Ratio(X)	0.87	1.20	1.23	0.92	0.64	0.66	1.14	0.56	0.56	0.15	1.07	0.36
Avail Cap(c_a), veh/h	248	268	236	165	238	241	463	1131	1141	309	815	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	51.0	51.0	46.5	49.3	49.4	39.7	12.5	12.5	18.0	34.0	22.9
Incr Delay (d2), s/veh	26.1	121.6	135.4	46.9	5.9	6.3	85.4	2.0	2.0	0.2	51.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	17.9	16.7	6.4	5.2	5.4	26.3	12.4	12.5	0.8	38.6	5.8
LnGrp Delay(d), s/veh	72.5	172.6	186.4	93.4	55.2	55.7	125.1	14.5	14.5	18.2	85.4	24.4
LnGrp LOS	E	F	F	F	E	E	F	B	B	B	F	C
Approach Vol, veh/h		828			463			1796			1161	
Approach Delay, s/veh		151.4			67.8			46.9			70.0	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	80.0	11.0	22.0	31.0	56.0	13.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	75.0	7.0	18.0	27.0	52.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	26.2	9.0	20.0	29.0	54.0	11.0	12.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.9
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	920	350	480	1080	60	390	270	300	130	280	60
Future Volume (veh/h)	60	920	350	480	1080	60	390	270	300	130	280	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	64	979	372	511	1149	64	415	287	319	138	298	64
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	247	949	360	528	2415	134	463	883	386	323	625	128
Arrive On Green	0.04	0.27	0.27	0.27	0.50	0.50	0.18	0.25	0.25	0.08	0.15	0.15
Sat Flow, veh/h	1757	3558	1351	1757	4875	271	1757	3505	1532	1757	4165	854
Grp Volume(v), veh/h	64	924	427	511	791	422	415	287	319	138	237	125
Grp Sat Flow(s),veh/h/ln	1757	1679	1551	1757	1679	1789	1757	1752	1532	1757	1679	1662
Q Serve(g_s), s	3.2	32.0	32.0	30.3	18.7	18.7	22.0	8.0	23.6	7.9	7.8	8.3
Cycle Q Clear(g_c), s	3.2	32.0	32.0	30.3	18.7	18.7	22.0	8.0	23.6	7.9	7.8	8.3
Prop In Lane	1.00		0.87	1.00		0.15	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	247	895	414	528	1663	886	463	883	386	323	504	249
V/C Ratio(X)	0.26	1.03	1.03	0.97	0.48	0.48	0.90	0.33	0.83	0.43	0.47	0.50
Avail Cap(c_a), veh/h	268	895	414	528	1663	886	463	883	386	326	504	249
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.1	44.0	44.0	35.3	20.0	20.0	35.0	36.6	42.4	38.5	46.6	46.9
Incr Delay (d2), s/veh	0.5	38.5	52.9	30.8	0.2	0.4	19.7	1.0	18.1	0.9	3.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	19.6	19.8	21.1	8.6	9.2	5.6	4.0	11.9	3.9	3.8	4.3
LnGrp Delay(d), s/veh	30.7	82.5	96.9	66.0	20.2	20.4	54.6	37.5	60.5	39.4	49.8	53.8
LnGrp LOS	C	F	F	E	C	C	D	D	E	D	D	D
Approach Vol, veh/h		1415			1724			1021			500	
Approach Delay, s/veh		84.5			33.8			51.7			47.9	
Approach LOS		F			C			D			D	

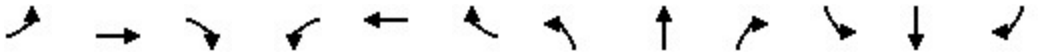
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	34.2	36.0	36.0	26.0	22.0	8.6	63.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	30.0	32.0	32.0	22.0	18.0	6.0	58.0
Max Q Clear Time (g_c+I1), s	9.9	25.6	32.3	34.0	24.0	10.3	5.2	20.7
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.0	1.2	0.0	9.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1800	30	320	2130	120	30	170	190	100	200	180
Future Volume (veh/h)	120	1800	30	320	2130	120	30	170	190	100	200	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.98		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	124	1856	31	330	2196	124	31	175	196	103	206	186
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	153	1942	32	355	2346	1024	161	360	287	135	379	288
Arrive On Green	0.04	0.54	0.54	0.16	0.66	0.66	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1792	3596	60	1792	3574	1560	981	1787	1428	1013	1881	1429
Grp Volume(v), veh/h	124	920	967	330	2196	124	31	175	196	103	206	186
Grp Sat Flow(s),veh/h/ln	1792	1787	1869	1792	1787	1560	981	1787	1428	1013	1881	1429
Q Serve(g_s), s	3.7	58.1	58.9	16.8	65.3	3.5	3.5	10.3	15.2	8.8	11.7	14.3
Cycle Q Clear(g_c), s	3.7	58.1	58.9	16.8	65.3	3.5	15.2	10.3	15.2	24.0	11.7	14.3
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	965	1009	355	2346	1024	161	360	287	135	379	288
V/C Ratio(X)	0.81	0.95	0.96	0.93	0.94	0.12	0.19	0.49	0.68	0.76	0.54	0.65
Avail Cap(c_a), veh/h	153	974	1018	357	2368	1033	161	360	287	135	379	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.7	26.0	26.1	40.1	18.3	7.7	49.5	42.2	44.1	56.4	42.7	43.7
Incr Delay (d2), s/veh	27.3	18.4	18.9	30.3	7.8	0.1	2.6	4.7	12.4	32.4	5.5	10.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	33.5	35.4	13.7	34.3	1.5	1.1	5.6	7.0	4.6	6.6	6.5
LnGrp Delay(d), s/veh	55.0	44.4	45.0	70.4	26.1	7.7	52.2	46.8	56.5	88.8	48.3	54.5
LnGrp LOS	D	D	D	E	C	A	D	D	E	F	D	D
Approach Vol, veh/h		2011			2650			402			495	
Approach Delay, s/veh		45.3			30.8			51.9			59.0	
Approach LOS		D			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	22.8	68.4		28.0	9.0	82.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	19.0	65.0		24.0	5.0	79.0
Max Q Clear Time (g_c+I1), s		17.2	18.8	60.9		26.0	5.7	67.3
Green Ext Time (p_c), s		1.3	0.0	3.6		0.0	0.0	10.2

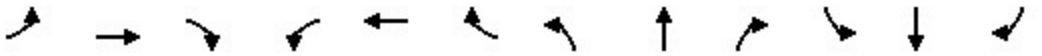
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1100	590	250	2050	0	0	0	0	170	110	210
Future Volume (veh/h)	0	1100	590	250	2050	0	0	0	0	170	110	210
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	1134	608	258	2113	0				175	113	216
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1617	737	292	2398	0				286	185	412
Arrive On Green	0.00	0.47	0.47	0.16	0.67	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3593	1559	1792	3668	0				1109	716	1599
Grp Volume(v), veh/h	0	1134	608	258	2113	0				288	0	216
Grp Sat Flow(s),veh/h/ln	0	1712	1559	1792	1787	0				1826	0	1599
Q Serve(g_s), s	0.0	29.4	37.9	15.8	53.5	0.0				15.6	0.0	13.0
Cycle Q Clear(g_c), s	0.0	29.4	37.9	15.8	53.5	0.0				15.6	0.0	13.0
Prop In Lane	0.00		1.00	1.00		0.00				0.61		1.00
Lane Grp Cap(c), veh/h	0	1617	737	292	2398	0				471	0	412
V/C Ratio(X)	0.00	0.70	0.83	0.88	0.88	0.00				0.61	0.00	0.52
Avail Cap(c_a), veh/h	0	1617	737	446	2638	0				471	0	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.4	25.7	46.0	14.9	0.0				36.8	0.0	35.8
Incr Delay (d2), s/veh	0.0	1.4	7.6	12.7	3.6	0.0				5.8	0.0	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.2	17.8	8.8	27.3	0.0				8.6	0.0	6.3
LnGrp Delay(d), s/veh	0.0	24.8	33.3	58.7	18.5	0.0				42.6	0.0	40.5
LnGrp LOS		C	C	E	B					D		D
Approach Vol, veh/h		1742			2371						504	
Approach Delay, s/veh		27.8			22.8						41.7	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.3	57.1		33.0		79.5
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			28.0	51.0		29.0		83.0
Max Q Clear Time (g_c+I1), s			17.8	39.9		17.6		55.5
Green Ext Time (p_c), s			0.5	7.9		1.7		20.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	840	0	0	1100	270	990	0	880	0	0	0
Future Volume (vph)	160	840	0	0	1100	270	990	0	880	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	0.93	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	1805	3610			3478		1715	1569	1534			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	1805	3610			3478		1715	1569	1534			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	165	866	0	0	1134	278	1021	0	907	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	27	69	0	0	0
Lane Group Flow (vph)	165	866	0	0	1394	0	664	620	548	0	0	0
Confl. Peds. (#/hr)	3		10	10		3						
Confl. Bikes (#/hr)			11			6						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Effective Green, g (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Actuated g/C Ratio	0.10	0.53			0.39		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	180	1895			1362		700	640	626			
v/s Ratio Prot	c0.09	0.24			c0.40		0.39	c0.40	0.36			
v/s Ratio Perm												
v/c Ratio	0.92	0.46			1.02		0.95	0.97	0.88			
Uniform Delay, d1	53.5	17.8			36.5		34.3	34.8	32.7			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	43.6	0.2			30.6		23.5	28.8	15.7			
Delay (s)	97.1	18.0			67.1		57.8	63.6	48.4			
Level of Service	F	B			E		E	E	D			
Approach Delay (s/veh)		30.6			67.1			56.7			0.0	
Approach LOS		C			E			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	128.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1310	180	120	860	190	500	670	160	330	440	200
Future Volume (veh/h)	260	1310	180	120	860	190	500	670	160	330	440	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	274	1379	189	126	905	200	526	705	168	347	463	211
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	333	1324	837	136	1252	538	584	668	159	347	617	279
Arrive On Green	0.09	0.37	0.37	0.08	0.35	0.35	0.17	0.23	0.23	0.19	0.26	0.26
Sat Flow, veh/h	3510	3610	1551	1810	3610	1551	3510	2861	681	1810	2386	1078
Grp Volume(v), veh/h	274	1379	189	126	905	200	526	445	428	347	349	325
Grp Sat Flow(s),veh/h/ln	1755	1805	1551	1810	1805	1551	1755	1805	1738	1810	1805	1659
Q Serve(g_s), s	9.2	44.0	7.8	8.3	26.2	11.6	17.6	28.0	28.0	23.0	21.3	21.7
Cycle Q Clear(g_c), s	9.2	44.0	7.8	8.3	26.2	11.6	17.6	28.0	28.0	23.0	21.3	21.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.65
Lane Grp Cap(c), veh/h	333	1324	837	136	1252	538	584	421	405	347	467	429
V/C Ratio(X)	0.82	1.04	0.23	0.93	0.72	0.37	0.90	1.06	1.06	1.00	0.75	0.76
Avail Cap(c_a), veh/h	380	1324	837	136	1252	538	614	421	405	347	467	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	38.0	14.9	55.2	34.2	29.4	49.1	46.0	46.0	48.5	40.9	41.0
Incr Delay (d2), s/veh	12.3	36.3	0.1	55.9	2.1	0.4	16.0	59.3	60.4	48.5	10.5	11.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	28.6	3.3	6.3	13.4	5.0	9.8	20.9	20.2	16.1	12.0	11.3
LnGrp Delay(d), s/veh	65.6	74.3	15.0	111.0	36.2	29.8	65.1	105.3	106.4	97.0	51.3	52.8
LnGrp LOS	E	F	B	F	D	C	E	F	F	F	D	D
Approach Vol, veh/h		1842			1231			1399			1021	
Approach Delay, s/veh		67.0			42.8			90.5			67.3	
Approach LOS		E			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.0	32.0	13.0	48.0	24.0	35.0	15.4	45.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	28.0	9.0	44.0	21.0	30.0	13.0	40.0
Max Q Clear Time (g_c+I1), s	25.0	30.0	10.3	46.0	19.6	23.7	11.2	28.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.3	2.1	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Future Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.95	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	495	309	247	186	258	113	103	1371	82	103	1082	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	520	558	458	372	286	231	211	1510	90	146	1381	158
Arrive On Green	0.24	0.29	0.29	0.10	0.15	0.15	0.05	0.44	0.44	0.03	0.42	0.42
Sat Flow, veh/h	1810	1900	1559	1810	1900	1537	1810	3455	206	1810	3262	373
Grp Volume(v), veh/h	495	309	247	186	258	113	103	714	739	103	598	608
Grp Sat Flow(s),veh/h/ln	1810	1900	1559	1810	1900	1537	1810	1805	1856	1810	1805	1830
Q Serve(g_s), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Cycle Q Clear(g_c), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	520	558	458	372	286	231	211	789	811	146	764	775
V/C Ratio(X)	0.95	0.55	0.54	0.50	0.90	0.49	0.49	0.91	0.91	0.71	0.78	0.78
Avail Cap(c_a), veh/h	534	575	472	372	288	233	231	789	811	146	764	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	35.4	35.2	37.1	49.7	46.3	23.9	31.2	31.3	28.3	29.6	29.6
Incr Delay (d2), s/veh	27.0	1.1	1.2	1.0	29.3	1.6	1.8	15.9	16.1	14.6	7.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	8.8	6.9	5.2	10.6	3.5	2.0	25.3	26.2	2.5	18.6	18.9
LnGrp Delay(d), s/veh	58.0	36.5	36.4	38.2	78.9	47.9	25.7	47.1	47.4	42.9	37.4	37.4
LnGrp LOS	E	D	D	D	E	D	C	D	D	D	D	D
Approach Vol, veh/h		1051			557			1556			1309	
Approach Delay, s/veh		46.6			59.0			45.8			37.8	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	56.0	16.0	38.9	9.6	54.4	33.0	21.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	52.0	12.0	36.0	7.0	49.0	30.0	18.0
Max Q Clear Time (g_c+I1), s	5.9	46.3	12.2	18.3	5.8	36.1	28.8	17.9
Green Ext Time (p_c), s	0.0	4.1	0.0	2.5	0.0	6.4	0.2	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		45.3
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Future Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	106	21	21	11	32	53	11	447	11	43	574	106
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	203	127	127	240	94	155	594	1478	1217	740	1478	1213
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1327	870	870	1378	641	1062	771	1900	1564	946	1900	1559
Grp Volume(v), veh/h	106	0	42	11	0	85	11	447	11	43	574	106
Grp Sat Flow(s),veh/h/ln	1327	0	1739	1378	0	1704	771	1900	1564	946	1900	1559
Q Serve(g_s), s	8.2	0.0	2.2	0.7	0.0	4.7	0.5	7.2	0.2	1.5	10.1	1.7
Cycle Q Clear(g_c), s	13.0	0.0	2.2	3.0	0.0	4.7	10.6	7.2	0.2	8.7	10.1	1.7
Prop In Lane	1.00		0.50	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	0	254	240	0	249	594	1478	1217	740	1478	1213
V/C Ratio(X)	0.52	0.00	0.17	0.05	0.00	0.34	0.02	0.30	0.01	0.06	0.39	0.09
Avail Cap(c_a), veh/h	386	0	495	431	0	485	594	1478	1217	740	1478	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	39.4	40.7	0.0	40.4	5.4	3.4	2.6	4.6	3.7	2.8
Incr Delay (d2), s/veh	2.1	0.0	0.3	0.1	0.0	0.8	0.1	0.5	0.0	0.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.1	0.3	0.0	2.3	0.1	3.9	0.1	0.4	5.6	0.8
LnGrp Delay(d), s/veh	48.4	0.0	39.7	40.8	0.0	41.3	5.5	3.9	2.6	4.8	4.5	2.9
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		148			96			469			723	
Approach Delay, s/veh		45.9			41.2			3.9			4.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.0		19.4		86.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		82.0		30.0		82.0		30.0
Max Q Clear Time (g_c+I1), s		12.6		15.0		12.1		6.7
Green Ext Time (p_c), s		3.3		0.4		5.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.9
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	9.5
Intersection LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	20	10	20	40	60	30	140	40	40	20	20
Future Vol, veh/h	20	20	10	20	40	60	30	140	40	40	20	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	23	12	23	47	70	35	163	47	47	23	23
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	8.7	8.5	10.7	8.6
HCM LOS	A	A	B	A

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	14%	50%	0%	33%	0%	67%	0%
Vol Thru, %	67%	50%	0%	67%	0%	33%	0%
Vol Right, %	19%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	210	40	10	60	60	60	20
LT Vol	30	20	0	20	0	40	0
Through Vol	140	20	0	40	0	20	0
RT Vol	40	0	10	0	60	0	20
Lane Flow Rate	244	47	12	70	70	70	23
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.341	0.075	0.016	0.109	0.092	0.108	0.029
Departure Headway (Hd)	5.032	5.78	4.821	5.606	4.732	5.575	4.535
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	713	618	739	638	755	641	785
Service Time	3.075	3.532	2.572	3.35	2.476	3.327	2.287
HCM Lane V/C Ratio	0.342	0.076	0.016	0.11	0.093	0.109	0.029
HCM Control Delay, s/veh	10.7	9	7.7	9	8	9	7.4
HCM Lane LOS	B	A	A	A	A	A	A
HCM 95th-tile Q	1.5	0.2	0	0.4	0.3	0.4	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	10	10	20	20	10
Future Vol, veh/h	10	10	10	20	20	10
Conflicting Peds, #/hr	0	10	10	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	17	17	34	34	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	44	0	105	37
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1577	-	898	1041
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1564	-	880	1031
Mov Cap-2 Maneuver	-	-	-	-	880	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	947	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.4	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	880	1031	-	-	1564	-
HCM Lane V/C Ratio	0.039	0.016	-	-	0.011	-
HCM Control Delay (s/veh)	9.3	8.6	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Future Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Conflicting Peds, #/hr	6	0	4	4	0	6	3	0	3	3	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	183	32	32	237	11	11	11	32	11	11	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	254	0	0	219	0	0	546	543	206	559	554	252
Stage 1	-	-	-	-	-	-	225	225	-	313	313	-
Stage 2	-	-	-	-	-	-	321	318	-	246	241	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1323	-	-	1362	-	-	452	450	840	443	443	792
Stage 1	-	-	-	-	-	-	782	721	-	702	661	-
Stage 2	-	-	-	-	-	-	695	657	-	762	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1316	-	-	1357	-	-	423	430	835	403	424	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	423	430	-	403	424	-
Stage 1	-	-	-	-	-	-	772	712	-	691	640	-
Stage 2	-	-	-	-	-	-	654	636	-	712	701	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.9	11.5	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	604	1316	-	-	1357	-	-	491
HCM Lane V/C Ratio	0.089	0.008	-	-	0.024	-	-	0.066
HCM Control Delay (s/veh)	11.5	7.8	0	-	7.7	0	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	130	80	80	150	20	90	1310	60	40	1440	70
Future Volume (veh/h)	50	130	80	80	150	20	90	1310	60	40	1440	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	51	133	82	82	153	20	92	1337	61	41	1469	71
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	209	306	123	323	42	242	2550	116	280	2542	122
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	261	1043	1528	1173	1613	211	339	3477	158	388	3466	167
Grp Volume(v), veh/h	184	0	82	82	0	173	92	686	712	41	755	785
Grp Sat Flow(s),veh/h/ln	1304	0	1528	1173	0	1824	339	1787	1848	388	1787	1846
Q Serve(g_s), s	7.5	0.0	5.4	6.4	0.0	10.1	20.8	19.9	20.1	6.1	23.4	23.7
Cycle Q Clear(g_c), s	17.6	0.0	5.4	24.0	0.0	10.1	44.4	19.9	20.1	26.2	23.4	23.7
Prop In Lane	0.28		1.00	1.00		0.12	1.00		0.09	1.00		0.09
Lane Grp Cap(c), veh/h	299	0	306	123	0	365	242	1311	1355	280	1311	1354
V/C Ratio(X)	0.62	0.00	0.27	0.67	0.00	0.47	0.38	0.52	0.53	0.15	0.58	0.58
Avail Cap(c_a), veh/h	299	0	306	123	0	365	242	1311	1355	280	1311	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	40.6	57.6	0.0	42.4	17.7	6.9	6.9	12.6	7.4	7.4
Incr Delay (d2), s/veh	3.7	0.0	0.5	13.1	0.0	1.0	4.5	1.5	1.5	1.1	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	2.3	3.2	0.0	5.1	2.2	10.3	10.6	0.7	12.0	12.5
LnGrp Delay(d), s/veh	49.4	0.0	41.0	70.7	0.0	43.4	22.2	8.4	8.4	13.7	9.2	9.2
LnGrp LOS	D		D	E		D	C	A	A	B	A	A
Approach Vol, veh/h		266			255			1490			1581	
Approach Delay, s/veh		46.8			52.2			9.3			9.4	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		28.0		92.0		28.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		24.0		88.0		24.0
Max Q Clear Time (g_c+I1), s		46.4		19.6		28.2		26.0
Green Ext Time (p_c), s		15.7		0.5		18.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.1
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	9.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	60	60	1810	1820	30
Future Vol, veh/h	20	60	60	1810	1820	30
Conflicting Peds, #/hr	2	2	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	65	65	1946	1957	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3071	990	1998	0	-	0
Stage 1	1966	-	-	-	-	-
Stage 2	1105	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	~ 10	247	287	-	-	-
Stage 1	96	-	-	-	-	-
Stage 2	281	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	245	285	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	74	-	-	-	-	-
Stage 2	279	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 434.9	0.7	0
HCM LOS	F		

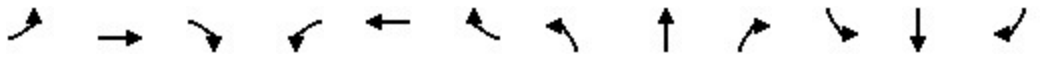
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	285	-	8	245	-	-
HCM Lane V/C Ratio	0.226	-	2.688	0.263	-	-
HCM Control Delay (s/veh)	21.3	-	$ 1664.7	24.9	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.9	-	3.8	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	50	70	90	50	70	110	1570	50	100	1640	120
Future Volume (veh/h)	150	50	70	90	50	70	110	1570	50	100	1640	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	155	52	72	93	52	72	113	1619	52	103	1691	124
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	296	49	18	290	183	2619	84	216	2500	181
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	0	0	1545	0	91	1515	259	3531	113	298	3371	244
Grp Volume(v), veh/h	207	0	72	145	0	72	113	817	854	103	888	927
Grp Sat Flow(s),veh/h/ln	0	0	1545	91	0	1515	259	1787	1857	298	1787	1828
Q Serve(g_s), s	0.0	0.0	4.7	0.0	0.0	4.8	48.5	26.1	26.4	30.3	30.6	31.9
Cycle Q Clear(g_c), s	23.0	0.0	4.7	23.0	0.0	4.8	80.5	26.1	26.4	56.7	30.6	31.9
Prop In Lane	0.75		1.00	0.64		1.00	1.00		0.06	1.00		0.13
Lane Grp Cap(c), veh/h	52	0	296	67	0	290	183	1325	1377	216	1325	1356
V/C Ratio(X)	3.95	0.00	0.24	2.17	0.00	0.25	0.62	0.62	0.62	0.48	0.67	0.68
Avail Cap(c_a), veh/h	52	0	296	67	0	290	183	1325	1377	216	1325	1356
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	41.1	54.1	0.0	41.2	29.2	7.4	7.4	21.0	8.0	8.1
Incr Delay (d2), s/veh	1370.0	0.0	0.4	573.2	0.0	0.4	14.5	2.2	2.1	7.4	2.7	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.7	0.0	2.1	12.8	0.0	2.1	4.2	13.5	14.1	2.9	15.8	16.8
LnGrp Delay(d), s/veh	1430.0	0.0	41.5	627.3	0.0	41.6	43.7	9.5	9.5	28.4	10.7	10.9
LnGrp LOS	F		D	F		D	D	A	A	C	B	B
Approach Vol, veh/h		279			217			1784			1918	
Approach Delay, s/veh		1071.7			432.9			11.7			11.7	
Approach LOS		F			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		93.0		27.0		93.0		27.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		89.0		23.0		89.0		23.0
Max Q Clear Time (g_c+I1), s		82.5		25.0		58.7		25.0
Green Ext Time (p_c), s		5.5		0.0		20.0		0.0

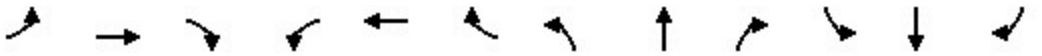
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	103.9
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	760	70	150	1040	110	60	360	90	240	400	460
Future Volume (veh/h)	330	760	70	150	1040	110	60	360	90	240	400	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	347	800	74	158	1095	0	63	379	95	253	421	484
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	383	1721	158	190	1296	403	81	1016	438	322	593	513
Arrive On Green	0.22	0.36	0.36	0.11	0.25	0.00	0.05	0.29	0.29	0.09	0.34	0.34
Sat Flow, veh/h	1774	4732	435	1774	5085	1583	1774	3539	1525	3442	1770	1532
Grp Volume(v), veh/h	347	572	302	158	1095	0	63	379	95	253	421	484
Grp Sat Flow(s),veh/h/ln	1774	1695	1777	1774	1695	1583	1774	1770	1525	1721	1770	1532
Q Serve(g_s), s	20.5	13.9	14.0	9.4	22.0	0.0	3.8	9.2	5.1	7.7	22.3	33.0
Cycle Q Clear(g_c), s	20.5	13.9	14.0	9.4	22.0	0.0	3.8	9.2	5.1	7.7	22.3	33.0
Prop In Lane	1.00		0.24	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	383	1233	646	190	1296	403	81	1016	438	322	593	513
V/C Ratio(X)	0.91	0.46	0.47	0.83	0.85	0.00	0.78	0.37	0.22	0.79	0.71	0.94
Avail Cap(c_a), veh/h	512	1357	711	297	1420	442	116	1016	438	448	593	513
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	26.2	26.2	47.1	38.0	0.0	50.7	30.6	29.1	47.7	31.2	34.7
Incr Delay (d2), s/veh	16.3	0.3	0.5	11.0	4.6	0.0	18.8	1.0	1.1	6.1	7.1	27.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	6.6	7.0	5.2	10.8	0.0	2.3	4.6	2.3	4.0	12.0	18.0
LnGrp Delay(d), s/veh	57.4	26.4	26.7	58.1	42.6	0.0	69.6	31.6	30.3	53.8	38.2	62.6
LnGrp LOS	E	C	C	E	D		E	C	C	D	D	E
Approach Vol, veh/h		1221			1253			537			1158	
Approach Delay, s/veh		35.3			44.5			35.8			51.8	
Approach LOS		D			D			D			D	

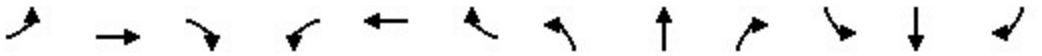
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	34.9	15.5	43.1	8.9	40.0	27.2	31.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	18.0	43.0	7.0	36.0	31.0	30.0
Max Q Clear Time (g_c+I1), s	9.7	11.2	11.4	16.0	5.8	35.0	22.5	24.0
Green Ext Time (p_c), s	0.3	2.4	0.2	5.6	0.0	0.6	0.7	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.7
HCM 2010 LOS	D



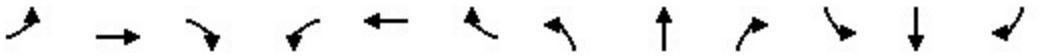
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	780	1140	160	1260	0	0	0	0	150	240	570
Future Volume (vph)	0	780	1140	160	1260	0	0	0	0	150	240	570
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.97	0.93	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.94	0.85	1.00	1.00					1.00	0.94	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3159	1372	3502	3610					1715	1620	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3159	1372	3502	3610					1715	1620	1534
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	897	1310	184	1448	0	0	0	0	172	276	655
RTOR Reduction (vph)	0	86	165	0	0	0	0	0	0	0	11	30
Lane Group Flow (vph)	0	1427	529	184	1448	0	0	0	0	155	485	422
Confl. Peds. (#/hr)	174		24	24		174						
Confl. Bikes (#/hr)			4			31						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		59.0	59.0	8.0	71.0					41.0	41.0	41.0
Effective Green, g (s)		59.0	59.0	8.0	71.0					41.0	41.0	41.0
Actuated g/C Ratio		0.49	0.49	0.07	0.59					0.34	0.34	0.34
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1553	674	233	2135					585	553	524
v/s Ratio Prot		c0.45		0.05	c0.40					0.09	c0.30	0.28
v/s Ratio Perm			0.39									
v/c Ratio		0.92	0.78	0.79	0.68					0.26	0.88	0.81
Uniform Delay, d1		28.3	25.2	55.2	16.7					28.6	37.1	35.9
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		9.0	6.0	16.2	0.9					1.1	17.6	12.5
Delay (s)		37.3	31.2	71.3	17.6					29.7	54.7	48.4
Level of Service		D	C	E	B					C	D	D
Approach Delay (s/veh)		35.4			23.6			0.0			48.6	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	240	790	0	20	910	360	10	10	10	170	10	260
Future Volume (vph)	240	790	0	20	910	360	10	10	10	170	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	255	840	0	21	968	383	11	11	11	181	11	277
RTOR Reduction (vph)	0	0	0	0	0	225	0	0	9	0	233	0
Lane Group Flow (vph)	255	840	0	21	968	158	0	22	2	163	73	0
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			4			2						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	12.6	42.2		1.7	31.3	31.3		21.6	21.6	15.5	15.5	
Effective Green, g (s)	12.6	42.2		1.7	31.3	31.3		21.6	21.6	15.5	15.5	
Actuated g/C Ratio	0.13	0.44		0.02	0.32	0.32		0.22	0.22	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	441	2190		30	1625	498		400	349	266	241	
v/s Ratio Prot	c0.08	0.17		0.01	c0.19			c0.01		c0.10	0.05	
v/s Ratio Perm						0.10			0.00			
v/c Ratio	0.58	0.38		0.70	0.60	0.32		0.06	0.01	0.61	0.30	
Uniform Delay, d1	39.7	18.6		47.4	27.5	24.8		29.7	29.4	38.0	36.0	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.8	0.1		54.0	0.6	0.4		0.3	0.0	4.1	0.7	
Delay (s)	41.5	18.7		101.4	28.1	25.2		29.9	29.4	42.1	36.7	
Level of Service	D	B		F	C	C		C	C	D	D	
Approach Delay (s/veh)		24.0			28.4			29.7			38.6	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	97.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	550	0	0	640	80	730	280	250	0	0	0
Future Volume (vph)	210	550	0	0	640	80	730	280	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.96		1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3419		1643	3161	1443			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3419		1643	3161	1443			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	236	618	0	0	719	90	820	315	281	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	2	101	0	0	0
Lane Group Flow (vph)	236	618	0	0	809	0	410	751	152	0	0	0
Confl. Peds. (#/hr)	162		26	26		162			3	3		
Confl. Bikes (#/hr)			9			51			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	12.2	48.4			32.2		51.4	51.4	51.4			
Effective Green, g (s)	12.2	48.4			32.2		51.4	51.4	51.4			
Actuated g/C Ratio	0.11	0.45			0.30		0.48	0.48	0.48			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	396	1620			1021		783	1507	688			
v/s Ratio Prot	c0.07	0.17			c0.24		c0.25	0.24				
v/s Ratio Perm									0.11			
v/c Ratio	0.60	0.38			0.79		0.52	0.50	0.22			
Uniform Delay, d1	45.5	19.7			34.7		19.7	19.4	16.5			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	2.4	0.2			4.3		2.5	1.2	0.7			
Delay (s)	47.9	19.9			39.0		22.2	20.5	17.2			
Level of Service	D	B			D		C	C	B			
Approach Delay (s/veh)		27.6			39.0			20.4			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	107.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	750	0	0	1080	550	230	0	360	0	0	0
Future Volume (veh/h)	230	750	0	0	1080	550	230	0	360	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1900	1845	0	1845			
Adj Flow Rate, veh/h	247	806	0	0	1161	591	247	0	387			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	311	2855	0	0	1478	675	1235	0	568			
Arrive On Green	0.09	0.57	0.00	0.00	0.44	0.44	0.36	0.00	0.36			
Sat Flow, veh/h	3408	5202	0	0	3523	1532	3408	0	1568			
Grp Volume(v), veh/h	247	806	0	0	1161	591	247	0	387			
Grp Sat Flow(s),veh/h/ln	1704	1679	0	0	1679	1532	1704	0	1568			
Q Serve(g_s), s	8.0	9.3	0.0	0.0	33.5	39.8	5.6	0.0	23.6			
Cycle Q Clear(g_c), s	8.0	9.3	0.0	0.0	33.5	39.8	5.6	0.0	23.6			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	311	2855	0	0	1478	675	1235	0	568			
V/C Ratio(X)	0.79	0.28	0.00	0.00	0.79	0.88	0.20	0.00	0.68			
Avail Cap(c_a), veh/h	422	3160	0	0	1573	718	1235	0	568			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.4	12.6	0.0	0.0	27.1	28.8	24.8	0.0	30.5			
Incr Delay (d2), s/veh	7.3	0.1	0.0	0.0	2.6	11.3	0.4	0.0	6.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.1	4.3	0.0	0.0	16.0	18.9	2.7	0.0	11.2			
LnGrp Delay(d), s/veh	57.6	12.7	0.0	0.0	29.6	40.2	25.2	0.0	37.0			
LnGrp LOS	E	B			C	D	C		D			
Approach Vol, veh/h		1053			1752			634				
Approach Delay, s/veh		23.2			33.2			32.4				
Approach LOS		C			C			C				

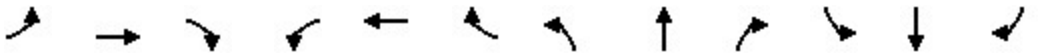
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		45.0		68.1			14.3	53.8
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		41.0		71.0			14.0	53.0
Max Q Clear Time (g_c+I1), s		25.6		11.3			10.0	41.8
Green Ext Time (p_c), s		2.1		6.3			0.3	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1480	440	330	1660	190	420	860	220	210	680	230
Future Volume (veh/h)	230	1480	440	330	1660	190	420	860	220	210	680	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	258	1663	494	371	1865	213	472	966	247	236	764	258
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	291	1803	546	425	2001	607	522	1580	477	296	867	375
Arrive On Green	0.08	0.35	0.35	0.12	0.39	0.39	0.15	0.31	0.31	0.09	0.24	0.24
Sat Flow, veh/h	3476	5136	1556	3476	5136	1558	3476	5136	1552	3476	3574	1546
Grp Volume(v), veh/h	258	1663	494	371	1865	213	472	966	247	236	764	258
Grp Sat Flow(s),veh/h/ln	1738	1712	1556	1738	1712	1558	1738	1712	1552	1738	1787	1546
Q Serve(g_s), s	8.8	37.2	36.1	12.5	41.6	11.6	16.0	19.2	15.7	8.0	24.6	18.1
Cycle Q Clear(g_c), s	8.8	37.2	36.1	12.5	41.6	11.6	16.0	19.2	15.7	8.0	24.6	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	1803	546	425	2001	607	522	1580	477	296	867	375
V/C Ratio(X)	0.89	0.92	0.90	0.87	0.93	0.35	0.90	0.61	0.52	0.80	0.88	0.69
Avail Cap(c_a), veh/h	291	1804	547	436	2019	613	523	1580	477	378	867	375
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	37.2	36.9	51.6	35.0	25.8	49.9	35.3	34.1	53.7	43.6	41.2
Incr Delay (d2), s/veh	26.4	8.4	18.5	17.2	8.5	0.3	19.0	1.8	4.0	8.9	12.5	9.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	19.0	18.3	7.0	21.3	5.0	9.0	9.3	7.2	4.2	13.6	8.7
LnGrp Delay(d), s/veh	80.6	45.6	55.4	68.8	43.5	26.1	68.9	37.1	38.0	62.6	56.1	51.1
LnGrp LOS	F	D	E	E	D	C	E	D	D	E	E	D
Approach Vol, veh/h		2415			2449			1685			1258	
Approach Delay, s/veh		51.4			45.8			46.1			56.3	
Approach LOS		D			D			D			E	

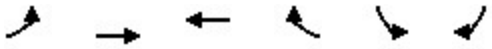
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	40.8	18.6	46.0	22.0	33.0	14.0	50.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	34.0	15.0	42.0	18.0	29.0	10.0	47.0
Max Q Clear Time (g_c+I1), s	10.0	21.2	14.5	39.2	18.0	26.6	10.8	43.6
Green Ext Time (p_c), s	0.2	5.7	0.1	2.6	0.0	1.4	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	200	40	680	270	330	50	860	650	220	530	100
Future Volume (vph)	110	200	40	680	270	330	50	860	650	220	530	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.98		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4981		3285	1705	1594	1805	3610	1578	3502	5044	
Flt Permitted		0.75		0.95	0.82	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3802		3285	1412	1594	1805	3610	1578	3502	5044	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	217	43	739	293	359	54	935	707	239	576	109
RTOR Reduction (vph)	0	14	0	0	0	121	0	0	22	0	22	0
Lane Group Flow (vph)	0	366	0	665	367	238	54	935	685	239	663	0
Confl. Peds. (#/hr)			25	25			1		11	11		1
Confl. Bikes (#/hr)			1			2			2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.7		29.3	51.0	51.0	6.9	46.8	76.1	10.8	50.7	
Effective Green, g (s)		17.7		29.3	51.0	51.0	6.9	46.8	76.1	10.8	50.7	
Actuated g/C Ratio		0.15		0.24	0.42	0.42	0.06	0.39	0.63	0.09	0.42	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		558		798	668	674	103	1400	1048	313	2120	
v/s Ratio Prot				c0.20	0.13		0.03	0.26	c0.16	c0.07	c0.13	
v/s Ratio Perm		c0.10			0.10	0.15			0.28			
v/c Ratio		0.66		0.83	0.55	0.35	0.52	0.67	0.65	0.76	0.31	
Uniform Delay, d1		48.6		43.3	26.2	23.6	55.3	30.5	14.0	53.7	23.3	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		2.8		7.5	0.9	0.3	4.7	2.5	1.5	10.5	0.4	
Delay (s)		51.4		50.8	27.1	23.9	60.0	33.0	15.4	64.2	23.7	
Level of Service		D		D	C	C	E	C	B	E	C	
Approach Delay (s/veh)		51.4			37.6			26.6			34.2	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	120.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	960	1370	0	410	190
Future Volume (veh/h)	0	960	1370	0	410	190
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	1043	1489	0	446	207
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2001	2001	0	973	868
Arrive On Green	0.00	0.39	0.39	0.00	0.54	0.54
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	1043	1489	0	446	207
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	16.1	25.8	0.0	15.8	7.1
Cycle Q Clear(g_c), s	0.0	16.1	25.8	0.0	15.8	7.1
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2001	2001	0	973	868
V/C Ratio(X)	0.00	0.52	0.74	0.00	0.46	0.24
Avail Cap(c_a), veh/h	0	2788	2788	0	973	868
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.6	27.6	0.0	14.8	12.8
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	1.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	7.7	12.4	0.0	8.2	3.3
LnGrp Delay(d), s/veh	0.0	24.8	28.3	0.0	16.3	13.4
LnGrp LOS		C	C		B	B
Approach Vol, veh/h		1043	1489		653	
Approach Delay, s/veh		24.8	28.3		15.4	
Approach LOS		C	C		B	

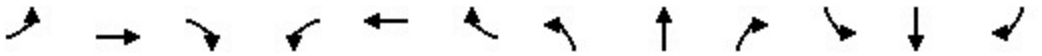
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.2		60.0		44.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s				18.1		17.8		27.8
Green Ext Time (p_c), s				8.4		2.2		12.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1260	0	0	1260	550	1170
Future Volume (vph)	1260	0	0	1260	550	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.94	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5187			5187	1738	1534
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5187			5187	1738	1534
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1326	0	0	1326	579	1232
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1326	0	0	1326	936	875
Confl. Peds. (#/hr)		7	7		5	
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	33.9			33.9	78.0	78.0
Effective Green, g (s)	33.9			33.9	78.0	78.0
Actuated g/C Ratio	0.28			0.28	0.65	0.65
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1466			1466	1130	997
v/s Ratio Prot	c0.26			0.26	0.54	
v/s Ratio Perm						c0.57
v/c Ratio	0.90			0.90	0.83	0.88
Uniform Delay, d1	41.4			41.4	15.9	17.1
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	8.2			8.2	7.0	10.8
Delay (s)	49.6			49.6	22.9	27.8
Level of Service	D			D	C	C
Approach Delay (s/veh)	49.6			49.6	25.3	
Approach LOS	D			D	C	

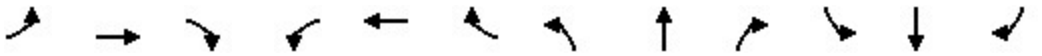
Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	119.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.0%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Future Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.86						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1512						5085	1564	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.38	1.00	
Satd. Flow (perm)	1681	1512						5085	1564	711	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	284	0	621	0	0	0	0	653	474	337	505	0
RTOR Reduction (vph)	0	273	0	0	0	0	0	0	163	0	0	0
Lane Group Flow (vph)	256	376	0	0	0	0	0	653	311	337	505	0
Confl. Peds. (#/hr)							5					5
Confl. Bikes (#/hr)									1			10
Turn Type	Perm	NA						NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4								2	6		
Actuated Green, G (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Effective Green, g (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Actuated g/C Ratio	0.28	0.28						0.66	0.66	0.66	0.66	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	462	415						3332	1024	465	2319	
v/s Ratio Prot								0.13			0.14	
v/s Ratio Perm	0.15	0.25							0.20	c0.47		
v/c Ratio	0.55	0.91						0.20	0.30	0.72	0.22	
Uniform Delay, d1	35.6	40.2						7.8	8.5	13.0	8.0	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	22.9						0.1	0.8	9.5	0.2	
Delay (s)	37.1	63.2						8.0	9.3	22.5	8.2	
Level of Service	D	E						A	A	C	A	
Approach Delay (s/veh)		55.8			0.0			8.5			13.9	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



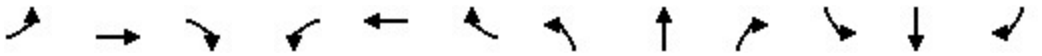
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Future Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.95
Flpb, ped/bikes				1.00		1.00	0.99	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1736		1553	1720	3471			4988	1479
Flt Permitted				0.95		1.00	0.38	1.00			1.00	1.00
Satd. Flow (perm)				1736		1553	696	3471			4988	1479
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	234	0	181	383	574	0	0	670	585
RTOR Reduction (vph)	0	0	0	0	0	152	0	0	0	0	0	134
Lane Group Flow (vph)	0	0	0	234	0	29	383	574	0	0	670	451
Confl. Peds. (#/hr)							6		2	2		6
Confl. Bikes (#/hr)									1			12
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				19.2		19.2	91.5	91.5			91.5	91.5
Effective Green, g (s)				19.2		19.2	91.5	91.5			91.5	91.5
Actuated g/C Ratio				0.16		0.16	0.77	0.77			0.77	0.77
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				280		251	536	2675			3845	1140
v/s Ratio Prot								0.17			0.13	
v/s Ratio Perm				c0.13		0.02	c0.55					0.30
v/c Ratio				0.84		0.12	0.71	0.21			0.17	0.40
Uniform Delay, d1				48.2		42.5	6.9	3.7			3.6	4.5
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				18.9		0.2	7.9	0.2			0.1	1.0
Delay (s)				67.2		42.7	14.9	3.9			3.7	5.5
Level of Service				E		D	B	A			A	A
Approach Delay (s/veh)		0.0			56.5			8.3			4.5	
Approach LOS		A			E			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	118.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Future Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				484	0	358	200	1684	0	0	1337	347
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				541	0	850	266	2232	0	0	2625	794
Arrive On Green				0.30	0.00	0.30	0.08	0.62	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1552
Grp Volume(v), veh/h				484	0	358	200	1684	0	0	1337	347
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1552
Q Serve(g_s), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Cycle Q Clear(g_c), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				541	0	850	266	2232	0	0	2625	794
V/C Ratio(X)				0.89	0.00	0.42	0.75	0.75	0.00	0.00	0.51	0.44
Avail Cap(c_a), veh/h				724	0	1137	383	2232	0	0	2625	794
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.3	0.0	30.4	49.3	14.5	0.0	0.0	17.6	16.7
Incr Delay (d2), s/veh				11.0	0.0	0.3	4.9	2.4	0.0	0.0	0.7	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.5	0.0	4.3	3.1	18.5	0.0	0.0	9.0	6.9
LnGrp Delay(d), s/veh				47.3	0.0	30.7	54.2	16.9	0.0	0.0	18.3	18.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					842			1884			1684	
Approach Delay, s/veh					40.3			20.9			18.3	
Approach LOS					D			C			B	

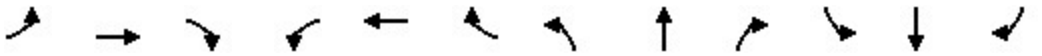
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		72.0			12.3	59.7		36.9
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		68.0			12.0	52.0		44.0
Max Q Clear Time (g_c+I1), s		38.4			8.1	20.7		30.1
Green Ext Time (p_c), s		16.4			0.2	13.7		2.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Future Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.99	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1617	1519					5136	1533	3467	3574	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1617	1519					5136	1533	3467	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	520	0	214	0	0	0	0	1388	582	367	1439	0
RTOR Reduction (vph)	0	32	39	0	0	0	0	0	308	0	0	0
Lane Group Flow (vph)	270	239	154	0	0	0	0	1388	274	367	1439	0
Confl. Peds. (#/hr)							6		12	12		6
Confl. Bikes (#/hr)									6			6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Effective Green, g (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Actuated g/C Ratio	0.28	0.28	0.28					0.47	0.47	0.15	0.65	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	481	458	430					2413	720	508	2323	
v/s Ratio Prot	c0.16	0.15						0.27		c0.11	c0.40	
v/s Ratio Perm			0.10						0.18			
v/c Ratio	0.56	0.52	0.36					0.58	0.38	0.72	0.62	
Uniform Delay, d1	36.6	36.2	34.3					23.1	20.5	48.9	12.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.5	1.1	0.5					1.0	1.5	5.0	1.3	
Delay (s)	38.1	37.2	34.8					24.1	22.0	53.9	13.6	
Level of Service	D	D	C					C	C	D	B	
Approach Delay (s/veh)		36.9			0.0			23.5			21.8	
Approach LOS		D			A			C			C	

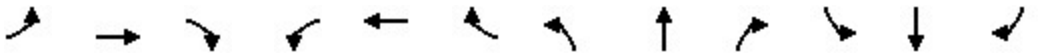
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Future Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.87	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1461	1504					4868		3433	5085	
Flt Permitted	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1461	1504					4868		3433	5085	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	187	0	330	0	0	0	0	956	286	418	615	0
RTOR Reduction (vph)	0	126	143	0	0	0	0	36	0	0	0	0
Lane Group Flow (vph)	168	48	32	0	0	0	0	1206	0	418	615	0
Confl. Peds. (#/hr)							1		11	11		1
Confl. Bikes (#/hr)									4			3
Turn Type	Prot	NA	Perm					NA		Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Effective Green, g (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Actuated g/C Ratio	0.19	0.19	0.19					0.54		0.17	0.74	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	311	270	278					2635		575	3784	
v/s Ratio Prot	c0.10	0.03						c0.25		c0.12	0.12	
v/s Ratio Perm			0.02									
v/c Ratio	0.54	0.18	0.12					0.46		0.73	0.16	
Uniform Delay, d1	41.8	38.9	38.5					15.9		44.7	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.3	0.2					0.6		4.6	0.1	
Delay (s)	43.7	39.2	38.7					16.4		49.3	4.3	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.5			0.0			16.4			22.5	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Future Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.90	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1665	1489	1490	3400	5036			4718	
Flt Permitted				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1665	1489	1490	3400	5036			4718	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	204	0	237	355	742	0	0	817	591
RTOR Reduction (vph)	0	0	0	0	58	116	0	0	0	0	92	0
Lane Group Flow (vph)	0	0	0	153	88	26	355	742	0	0	1316	0
Confl. Peds. (#/hr)							2		12	12		2
Confl. Bikes (#/hr)									4			4
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	0%
Turn Type				Prot	NA	Perm	Prot	NA			NA	
Protected Phases				3	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Effective Green, g (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Actuated g/C Ratio				0.18	0.18	0.18	0.15	0.75			0.56	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				307	275	275	506	3760			2659	
v/s Ratio Prot				c0.09	0.06		c0.10	0.15			c0.28	
v/s Ratio Perm						0.02						
v/c Ratio				0.50	0.32	0.10	0.70	0.20			0.49	
Uniform Delay, d1				42.8	41.3	39.5	47.3	4.4			15.4	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.3	0.7	0.2	4.4	0.1			0.7	
Delay (s)				44.1	42.0	39.7	51.7	4.5			16.1	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			42.0			19.8			16.1	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	116.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NORWALK STATION NO PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1130	270	10	1340	410	270	420	0	280	770	10
Future Volume (vph)	0	1130	270	10	1340	410	270	420	0	280	770	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.97		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (prot)		4924		1770	5085	1551	1522	4759		1522	4797	1560
Flt Permitted		1.00		0.11	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (perm)		4924		202	5085	1551	1522	4759		1522	4797	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1256	300	11	1489	456	300	467	0	311	856	11
RTOR Reduction (vph)	0	26	0	0	0	92	0	0	0	0	0	9
Lane Group Flow (vph)	0	1530	0	11	1489	364	186	581	0	280	887	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Effective Green, g (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2855		117	2949	899	294	920		223	703	228
v/s Ratio Prot		c0.31			0.29		c0.12	0.12		0.18	c0.18	
v/s Ratio Perm				0.05		0.23						0.00
v/c Ratio		0.54		0.09	0.50	0.40	0.63	0.63		1.26	1.26	0.01
Uniform Delay, d1		19.2		14.0	18.7	17.3	55.6	55.6		64.0	64.0	54.7
Progression Factor		0.92		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		0.4	0.1	0.3	9.9	3.3		146.2	129.0	0.1
Delay (s)		17.7		14.3	18.8	17.6	65.6	58.9		210.2	193.0	54.7
Level of Service		B		B	B	B	E	E		F	F	D
Approach Delay (s/veh)		17.7			18.5			60.5			195.8	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	62.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Future Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.87	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
Arrive On Green	0.06	0.50	0.50	0.04	0.48	0.48	0.13	0.26	0.26	0.09	0.22	0.22
Sat Flow, veh/h	1757	3505	1523	1757	3505	1542	3408	3505	1367	1757	3505	1353
Grp Volume(v), veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1523	1757	1752	1542	1704	1752	1367	1757	1752	1353
Q Serve(g_s), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Cycle Q Clear(g_c), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
V/C Ratio(X)	0.87	0.61	0.24	0.39	0.90	0.19	0.88	0.73	0.43	0.65	0.65	0.37
Avail Cap(c_a), veh/h	240	1906	828	286	1806	795	488	903	352	273	766	296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	25.4	20.1	20.7	33.6	21.1	59.9	47.4	43.3	38.7	49.7	46.4
Incr Delay (d2), s/veh	22.5	0.5	0.2	1.0	6.4	0.1	16.1	5.1	3.8	5.0	4.2	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	14.9	4.1	2.0	28.0	3.1	8.3	12.2	5.2	5.4	9.1	3.8
LnGrp Delay(d), s/veh	54.5	25.9	20.3	21.8	40.0	21.2	76.0	52.4	47.1	43.7	53.8	49.8
LnGrp LOS	D	C	C	C	D	C	E	D	D	D	D	D
Approach Vol, veh/h		1409			1742			1194			775	
Approach Delay, s/veh		28.5			37.5			59.4			51.0	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	40.0	9.8	73.4	22.0	34.5	12.7	70.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	36.0	9.0	76.0	20.0	29.0	13.0	72.0
Max Q Clear Time (g_c+I1), s	12.5	25.9	5.9	32.7	17.6	20.0	8.6	57.1
Green Ext Time (p_c), s	0.0	3.4	0.1	10.1	0.4	2.4	0.2	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1030	120	140	1080	70	50	520	150	80	430	370
Future Volume (veh/h)	290	1030	120	140	1080	70	50	520	150	80	430	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	299	1062	124	144	1113	72	52	536	155	82	443	381
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	333	1884	574	173	1425	438	67	1274	566	130	1274	566
Arrive On Green	0.19	0.37	0.37	0.10	0.28	0.28	0.04	0.36	0.36	0.04	0.36	0.36
Sat Flow, veh/h	1774	5085	1550	1774	5085	1565	1774	3539	1571	3442	3539	1571
Grp Volume(v), veh/h	299	1062	124	144	1113	72	52	536	155	82	443	381
Grp Sat Flow(s),veh/h/ln	1774	1695	1550	1774	1695	1565	1774	1770	1571	1721	1770	1571
Q Serve(g_s), s	19.7	19.8	6.5	9.5	24.1	4.1	3.5	13.6	8.4	2.8	10.9	24.5
Cycle Q Clear(g_c), s	19.7	19.8	6.5	9.5	24.1	4.1	3.5	13.6	8.4	2.8	10.9	24.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	333	1884	574	173	1425	438	67	1274	566	130	1274	566
V/C Ratio(X)	0.90	0.56	0.22	0.83	0.78	0.16	0.77	0.42	0.27	0.63	0.35	0.67
Avail Cap(c_a), veh/h	594	2597	791	342	1874	576	149	1274	566	202	1274	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.4	29.9	25.7	52.9	39.6	32.4	57.0	28.8	27.1	56.6	28.0	32.3
Incr Delay (d2), s/veh	8.7	0.3	0.2	9.7	1.6	0.2	17.1	1.0	1.2	4.9	0.8	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	9.3	2.8	5.1	11.4	1.8	2.0	6.8	3.8	1.4	5.5	11.6
LnGrp Delay(d), s/veh	56.1	30.2	25.9	62.6	41.2	32.6	74.0	29.8	28.3	61.6	28.7	38.6
LnGrp LOS	E	C	C	E	D	C	E	C	C	E	C	D
Approach Vol, veh/h		1485			1329			743			906	
Approach Delay, s/veh		35.0			43.1			32.6			35.8	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.5	47.0	15.7	48.2	8.5	47.0	26.4	37.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	43.0	23.0	61.0	10.0	40.0	40.0	44.0
Max Q Clear Time (g_c+I1), s	4.8	15.6	11.5	21.8	5.5	26.5	21.7	26.1
Green Ext Time (p_c), s	0.0	4.1	0.3	9.3	0.0	3.5	0.8	7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Future Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	1126	242	105	1505	126	221	653	105	74	547	179
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	258	2202	674	128	1718	144	247	1084	476	93	777	576
Arrive On Green	0.15	0.44	0.44	0.07	0.37	0.37	0.14	0.31	0.31	0.05	0.22	0.22
Sat Flow, veh/h	1740	4988	1526	1740	4683	392	1740	3471	1525	1740	3471	1545
Grp Volume(v), veh/h	232	1126	242	105	1068	563	221	653	105	74	547	179
Grp Sat Flow(s),veh/h/ln	1740	1663	1526	1740	1663	1750	1740	1736	1525	1740	1736	1545
Q Serve(g_s), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Cycle Q Clear(g_c), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	2202	674	128	1220	642	247	1084	476	93	777	576
V/C Ratio(X)	0.90	0.51	0.36	0.82	0.88	0.88	0.89	0.60	0.22	0.79	0.70	0.31
Avail Cap(c_a), veh/h	336	2335	715	207	1310	689	323	1084	476	168	777	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	27.1	24.9	61.4	39.7	39.7	56.7	39.2	34.2	62.9	48.1	30.0
Incr Delay (d2), s/veh	21.6	0.2	0.3	12.6	6.6	11.7	21.5	2.5	1.1	13.8	5.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.0	6.0	4.3	19.7	21.6	9.6	10.6	3.0	3.1	9.9	4.9
LnGrp Delay(d), s/veh	77.9	27.3	25.3	74.0	46.4	51.4	78.2	41.7	35.2	76.7	53.4	31.4
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	D	C
Approach Vol, veh/h		1600			1736			979			800	
Approach Delay, s/veh		34.3			49.7			49.2			50.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	46.0	13.9	63.4	23.1	34.1	24.0	53.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	42.0	16.0	63.0	25.0	30.0	26.0	53.0
Max Q Clear Time (g_c+I1), s	7.7	23.4	10.0	23.9	18.8	21.5	19.6	42.4
Green Ext Time (p_c), s	0.1	4.2	0.1	10.4	0.3	2.6	0.3	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Future Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
Arrive On Green	0.10	0.47	0.47	0.07	0.45	0.45	0.11	0.30	0.30	0.04	0.23	0.23
Sat Flow, veh/h	1740	3471	1525	1740	3471	1526	1740	3471	1547	1740	3471	1525
Grp Volume(v), veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Grp Sat Flow(s),veh/h/ln	1740	1736	1525	1740	1736	1526	1740	1736	1547	1740	1736	1525
Q Serve(g_s), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Cycle Q Clear(g_c), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
V/C Ratio(X)	0.90	0.58	0.30	0.60	0.92	0.10	0.76	0.65	0.29	0.38	0.73	0.42
Avail Cap(c_a), veh/h	290	1704	749	361	1631	717	335	1047	467	209	805	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	27.4	23.1	22.0	37.2	22.8	36.9	43.3	38.1	40.2	50.7	46.6
Incr Delay (d2), s/veh	25.9	0.5	0.2	2.0	9.0	0.1	8.9	3.1	1.6	1.1	5.9	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	13.8	5.3	4.0	28.4	1.6	7.3	12.1	4.3	2.4	11.4	5.3
LnGrp Delay(d), s/veh	66.3	27.8	23.3	24.0	46.2	22.9	45.9	46.4	39.7	41.3	56.5	50.2
LnGrp LOS	E	C	C	C	D	C	D	D	D	D	E	D
Approach Vol, veh/h		1387			1682			1045			819	
Approach Delay, s/veh		33.1			42.8			45.4			53.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	47.0	14.2	71.3	19.9	37.1	17.9	67.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	15.0	70.0	19.0	30.0	18.0	67.0
Max Q Clear Time (g_c+I1), s	7.0	26.3	10.0	30.5	15.7	24.5	13.7	57.4
Green Ext Time (p_c), s	0.0	4.5	0.2	8.8	0.2	2.0	0.2	6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	850	300	220	1180	60	390	1030	480	140	800	160
Future Volume (veh/h)	200	850	300	220	1180	60	390	1030	480	140	800	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	895	316	232	1242	63	411	1084	505	147	842	168
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	234	1321	398	255	1382	417	437	1345	816	170	1169	353
Arrive On Green	0.13	0.26	0.26	0.15	0.27	0.27	0.25	0.38	0.38	0.10	0.23	0.23
Sat Flow, veh/h	1757	5036	1518	1757	5036	1519	1757	3505	1532	1757	5036	1519
Grp Volume(v), veh/h	211	895	316	232	1242	63	411	1084	505	147	842	168
Grp Sat Flow(s),veh/h/ln	1757	1679	1518	1757	1679	1519	1757	1752	1532	1757	1679	1519
Q Serve(g_s), s	16.9	22.8	27.8	18.6	34.0	4.5	32.9	39.5	33.2	11.8	22.1	13.7
Cycle Q Clear(g_c), s	16.9	22.8	27.8	18.6	34.0	4.5	32.9	39.5	33.2	11.8	22.1	13.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	234	1321	398	255	1382	417	437	1345	816	170	1169	353
V/C Ratio(X)	0.90	0.68	0.79	0.91	0.90	0.15	0.94	0.81	0.62	0.87	0.72	0.48
Avail Cap(c_a), veh/h	270	1371	413	294	1441	435	503	1345	816	196	1169	353
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	47.4	49.2	60.3	50.1	39.3	52.8	39.4	23.7	63.8	50.7	47.5
Incr Delay (d2), s/veh	28.1	1.3	9.9	27.8	7.7	0.2	24.5	5.2	3.5	28.2	3.9	4.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.8	12.7	11.0	16.7	1.9	19.0	20.1	14.7	7.1	10.7	6.2
LnGrp Delay(d), s/veh	89.3	48.7	59.1	88.1	57.8	39.5	77.3	44.6	27.2	92.0	54.6	52.1
LnGrp LOS	F	D	E	F	E	D	E	D	C	F	D	D
Approach Vol, veh/h		1422			1537			2000			1157	
Approach Delay, s/veh		57.0			61.6			46.9			59.0	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	59.0	24.8	41.6	39.6	37.2	23.1	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	55.0	24.0	39.0	41.0	30.0	22.0	41.0
Max Q Clear Time (g_c+I1), s	13.8	41.5	20.6	29.8	34.9	24.1	18.9	36.0
Green Ext Time (p_c), s	0.1	7.8	0.2	4.6	0.7	2.9	0.2	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Future Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
Arrive On Green	0.14	0.44	0.44	0.03	0.33	0.33	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1757	5036	1543	1757	5036	1541	584	3505	1546	739	3505	1545
Grp Volume(v), veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Grp Sat Flow(s),veh/h/ln	1757	1679	1543	1757	1679	1541	584	1752	1546	739	1752	1545
Q Serve(g_s), s	15.0	14.0	7.6	3.0	30.5	11.2	17.0	15.1	4.1	8.1	16.0	17.6
Cycle Q Clear(g_c), s	15.0	14.0	7.6	3.0	30.5	11.2	33.0	15.1	4.1	23.1	16.0	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
V/C Ratio(X)	0.88	0.37	0.22	0.78	0.80	0.35	0.40	0.40	0.12	0.21	0.42	0.45
Avail Cap(c_a), veh/h	414	2886	884	124	2056	629	240	1541	680	294	1541	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	24.2	22.4	61.3	38.9	32.4	35.8	24.2	21.2	32.1	24.5	24.9
Incr Delay (d2), s/veh	10.4	0.1	0.2	21.2	1.9	0.4	4.8	0.8	0.4	1.7	0.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	6.5	3.3	1.8	14.4	4.8	3.1	7.5	1.8	1.8	7.9	7.9
LnGrp Delay(d), s/veh	64.4	24.3	22.6	82.5	40.8	32.8	40.6	25.0	21.5	33.7	25.3	27.1
LnGrp LOS	E	C	C	F	D	C	D	C	C	C	C	C
Approach Vol, veh/h		1179			1547			790			1010	
Approach Delay, s/veh		31.3			41.0			26.5			26.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	7.9	59.5		60.0	21.4	46.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	9.0	73.0		56.0	30.0	52.0
Max Q Clear Time (g_c+I1), s		35.0	5.0	16.0		25.1	17.0	32.5
Green Ext Time (p_c), s		5.0	0.0	6.8		6.1	0.4	9.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Future Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
Arrive On Green	0.10	0.38	0.38	0.16	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1757	3505	1546	1757	3505	1547	706	3505	1545	665	3505	1544
Grp Volume(v), veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Grp Sat Flow(s),veh/h/ln	1757	1752	1546	1757	1752	1547	706	1752	1545	665	1752	1544
Q Serve(g_s), s	11.4	27.8	8.4	18.7	48.6	3.3	16.3	20.8	6.9	11.2	18.9	6.2
Cycle Q Clear(g_c), s	11.4	27.8	8.4	18.7	48.6	3.3	35.2	20.8	6.9	32.0	18.9	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
V/C Ratio(X)	0.86	0.65	0.24	0.90	0.89	0.10	0.43	0.52	0.20	0.31	0.48	0.18
Avail Cap(c_a), veh/h	244	1384	611	411	1717	758	224	1333	587	204	1333	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.7	35.2	29.2	56.7	35.8	22.9	45.4	32.7	28.4	45.1	32.1	28.2
Incr Delay (d2), s/veh	18.7	1.0	0.2	15.9	5.7	0.1	5.9	1.4	0.8	4.0	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	13.6	3.6	10.3	24.7	1.4	3.5	10.3	3.1	2.3	9.4	2.8
LnGrp Delay(d), s/veh	79.4	36.3	29.4	72.6	41.5	23.0	51.3	34.2	29.2	49.0	33.3	28.9
LnGrp LOS	E	D	C	E	D	C	D	C	C	D	C	C
Approach Vol, veh/h		1149			1660			904			808	
Approach Delay, s/veh		41.0			45.4			35.3			34.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	25.2	55.5		56.0	17.5	63.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	32.0	54.0		52.0	19.0	67.0
Max Q Clear Time (g_c+I1), s		37.2	20.7	29.8		34.0	13.4	50.6
Green Ext Time (p_c), s		4.8	0.5	6.3		4.6	0.2	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Future Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	872	1845	1547	1067	1845	1567	616	3505	1529	649	3505	1530
Grp Volume(v), veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Grp Sat Flow(s),veh/h/ln	872	1845	1547	1067	1845	1567	616	1752	1529	649	1752	1530
Q Serve(g_s), s	16.6	9.4	7.6	24.0	26.1	6.0	10.0	15.6	2.0	17.9	15.9	3.8
Cycle Q Clear(g_c), s	42.7	9.4	7.6	33.3	26.1	6.0	25.9	15.6	2.0	33.5	15.9	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
V/C Ratio(X)	0.60	0.28	0.23	0.61	0.66	0.18	0.22	0.37	0.06	0.36	0.38	0.11
Avail Cap(c_a), veh/h	278	831	697	460	831	706	350	2096	914	367	2096	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	32.3	31.7	44.4	37.8	31.2	20.8	14.1	11.3	22.7	14.1	11.7
Incr Delay (d2), s/veh	3.1	0.2	0.2	1.7	1.2	0.2	1.4	0.5	0.1	2.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.8	3.3	7.2	13.5	2.6	1.9	7.6	0.9	3.5	7.8	1.7
LnGrp Delay(d), s/veh	59.0	32.6	31.9	46.2	39.0	31.4	22.3	14.6	11.5	25.5	14.6	11.9
LnGrp LOS	E	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		407			726			912			1022	
Approach Delay, s/veh		39.5			40.0			15.0			15.8	
Approach LOS		D			D			B			B	

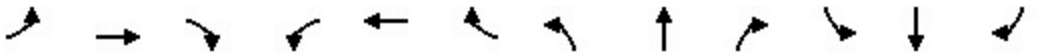
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.0		50.4		85.0		50.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		81.0		61.0		81.0		61.0
Max Q Clear Time (g_c+I1), s		27.9		44.7		35.5		35.3
Green Ext Time (p_c), s		7.0		1.7		8.0		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	840	60	220	1350	110	90	790	290	80	450	190
Future Volume (veh/h)	140	840	60	220	1350	110	90	790	290	80	450	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	157	944	67	247	1517	124	101	888	326	90	506	213
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	182	1594	473	274	1746	143	124	1220	533	111	1195	528
Arrive On Green	0.10	0.32	0.32	0.16	0.37	0.37	0.07	0.35	0.35	0.06	0.34	0.34
Sat Flow, veh/h	1757	5036	1496	1757	4727	386	1757	3505	1531	1757	3505	1550
Grp Volume(v), veh/h	157	944	67	247	1077	564	101	888	326	90	506	213
Grp Sat Flow(s),veh/h/ln	1757	1679	1496	1757	1679	1756	1757	1752	1531	1757	1752	1550
Q Serve(g_s), s	12.1	21.8	4.4	19.0	41.1	41.1	7.8	30.5	24.3	7.0	15.3	14.5
Cycle Q Clear(g_c), s	12.1	21.8	4.4	19.0	41.1	41.1	7.8	30.5	24.3	7.0	15.3	14.5
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	182	1594	473	274	1240	649	124	1220	533	111	1195	528
V/C Ratio(X)	0.86	0.59	0.14	0.90	0.87	0.87	0.82	0.73	0.61	0.81	0.42	0.40
Avail Cap(c_a), veh/h	242	1594	473	408	1339	700	204	1220	533	153	1195	528
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.9	39.7	33.7	57.1	40.4	40.4	63.2	39.3	37.3	63.8	35.0	34.7
Incr Delay (d2), s/veh	21.1	0.6	0.1	16.5	6.0	10.8	12.2	3.8	5.2	19.8	1.1	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	10.1	1.8	10.5	20.0	21.8	4.2	15.4	11.1	4.0	7.6	6.5
LnGrp Delay(d), s/veh	82.0	40.2	33.9	73.6	46.4	51.2	75.4	43.1	42.4	83.6	36.1	37.0
LnGrp LOS	F	D	C	E	D	D	E	D	D	F	D	D
Approach Vol, veh/h		1168			1888			1315			809	
Approach Delay, s/veh		45.5			51.4			45.4			41.6	
Approach LOS		D			D			D			D	

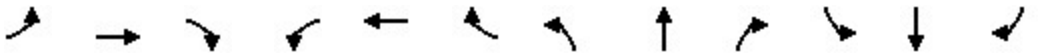
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	52.0	25.5	47.7	13.7	51.0	18.3	54.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	48.0	32.0	42.0	16.0	44.0	19.0	55.0
Max Q Clear Time (g_c+I1), s	9.0	32.5	21.0	23.8	9.8	17.3	14.1	43.1
Green Ext Time (p_c), s	0.0	6.4	0.5	6.2	0.1	3.9	0.2	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1090	60	90	1640	0	30	0	10	10	0	10
Future Volume (vph)	10	1090	60	90	1640	0	30	0	10	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	
Frt		0.99		1.00	1.00		1.00		0.85		0.93	
Flt Protected		1.00		0.95	1.00		0.95		1.00		0.98	
Satd. Flow (prot)		4983		1752	5036		1752		1538		1695	
Flt Permitted		0.91		0.12	1.00		0.74		1.00		0.98	
Satd. Flow (perm)		4554		221	5036		1371		1538		1695	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1185	65	98	1783	0	33	0	11	11	0	11
RTOR Reduction (vph)	0	6	0	0	0	0	0	0	7	0	15	0
Lane Group Flow (vph)	0	1255	0	98	1783	0	33	0	4	0	7	0
Confl. Peds. (#/hr)			10	10					5			
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	2%	3%	3%	3%	3%	2%	3%	2%	3%	2%	2%	2%
Turn Type	Perm	NA		pm+pt	NA		Perm		Perm	Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		31.1		41.1	41.1		25.2		25.2		25.2	
Effective Green, g (s)		31.1		41.1	41.1		25.2		25.2		25.2	
Actuated g/C Ratio		0.42		0.55	0.55		0.34		0.34		0.34	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)		1906		245	2785		464		521		574	
v/s Ratio Prot				0.03	c0.35							
v/s Ratio Perm		0.28		0.19			c0.02		0.00		0.00	
v/c Ratio		0.66		0.40	0.64		0.07		0.01		0.01	
Uniform Delay, d1		17.3		9.9	11.5		16.6		16.3		16.3	
Progression Factor		1.00		1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2		0.8		1.1	0.5		0.3		0.0		0.0	
Delay (s)		18.2		10.9	12.0		16.9		16.3		16.3	
Level of Service		B		B	B		B		B		B	
Approach Delay (s/veh)		18.2			11.9			16.8			16.3	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	74.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1140	60	30	1650	10	50	0	20	0	0	0
Future Volume (vph)	0	1140	60	30	1650	10	50	0	20	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Lane Util. Factor		0.91		1.00	0.91		0.95	0.91	0.95			
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00			
Flpb, ped/bikes		1.00		1.00	1.00		0.99	0.99	1.00			
Frt		0.99		1.00	1.00		1.00	0.99	0.85			
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00			
Satd. Flow (prot)		4935		1735	4982		1637	1562	1475			
Flt Permitted		1.00		0.12	1.00		0.76	0.84	1.00			
Satd. Flow (perm)		4935		228	4982		1305	1373	1475			
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1267	67	33	1833	11	56	0	22	0	0	0
RTOR Reduction (vph)	0	6	0	0	1	0	0	20	13	0	0	0
Lane Group Flow (vph)	0	1328	0	33	1843	0	29	9	7	0	0	0
Confl. Peds. (#/hr)	3		12	12		3	5					5
Confl. Bikes (#/hr)			14			4						1
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm			
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		37.7		44.1	44.1		25.2	25.2	25.2			
Effective Green, g (s)		37.7		44.1	44.1		25.2	25.2	25.2			
Actuated g/C Ratio		0.49		0.57	0.57		0.33	0.33	0.33			
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0	4.0			
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)		2406		176	2842		425	447	480			
v/s Ratio Prot		0.27		0.01	c0.37							
v/s Ratio Perm				0.10			c0.02	0.01	0.00			
v/c Ratio		0.55		0.19	0.65		0.07	0.02	0.01			
Uniform Delay, d1		13.9		8.8	11.3		18.0	17.7	17.6			
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00			
Incremental Delay, d2		0.3		0.5	0.5		0.3	0.1	0.1			
Delay (s)		14.2		9.3	11.8		18.3	17.8	17.7			
Level of Service		B		A	B		B	B	B			
Approach Delay (s/veh)		14.2			11.8			17.9			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	77.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	52.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Future Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	129	710	161	86	1527	75	172	538	65	22	484	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	962	107
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	316	3539	1562	633	3539	1561	864	3539	1559	813	3206	356
Grp Volume(v), veh/h	129	710	161	86	1527	75	172	538	65	22	266	272
Grp Sat Flow(s),veh/h/ln	316	1770	1562	633	1770	1561	864	1770	1559	813	1770	1793
Q Serve(g_s), s	56.8	13.3	6.1	10.4	40.2	2.7	26.2	18.8	4.6	3.4	18.6	18.8
Cycle Q Clear(g_c), s	97.0	13.3	6.1	23.7	40.2	2.7	45.0	18.8	4.6	22.3	18.6	18.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
V/C Ratio(X)	0.77	0.31	0.16	0.21	0.67	0.07	0.86	0.51	0.14	0.12	0.50	0.51
Avail Cap(c_a), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	11.7	10.4	17.0	16.5	9.8	63.5	43.3	38.3	52.5	43.3	43.3
Incr Delay (d2), s/veh	19.4	0.1	0.1	0.3	0.8	0.0	36.1	1.7	0.6	1.2	3.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.5	2.6	1.8	19.8	1.2	9.1	9.4	2.0	0.8	9.6	9.8
LnGrp Delay(d), s/veh	68.0	11.8	10.5	17.2	17.2	9.9	99.6	45.1	39.0	53.8	46.6	46.7
LnGrp LOS	E	B	B	B	B	A	F	D	D	D	D	D
Approach Vol, veh/h		1000			1688			775			560	
Approach Delay, s/veh		18.8			16.9			56.7			46.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		101.0		49.0		101.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		97.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		47.0		99.0		24.3		42.2
Green Ext Time (p_c), s		0.0		0.0		3.1		18.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	960	60	20	1500	150	60	40	20	220	60	140
Future Volume (veh/h)	110	960	60	20	1500	150	60	40	20	220	60	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	115	1000	62	21	1562	156	62	42	21	229	62	146
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	141	2383	147	29	1990	198	399	440	366	548	581	484
Arrive On Green	0.08	0.50	0.50	0.02	0.43	0.43	0.04	0.24	0.24	0.11	0.32	0.32
Sat Flow, veh/h	1740	4793	297	1740	4597	459	1740	1827	1520	1740	1827	1523
Grp Volume(v), veh/h	115	693	369	21	1129	589	62	42	21	229	62	146
Grp Sat Flow(s),veh/h/ln	1740	1663	1764	1740	1663	1730	1740	1827	1520	1740	1827	1523
Q Serve(g_s), s	8.0	16.2	16.3	1.5	35.8	35.9	3.3	2.2	1.3	11.7	2.9	8.9
Cycle Q Clear(g_c), s	8.0	16.2	16.3	1.5	35.8	35.9	3.3	2.2	1.3	11.7	2.9	8.9
Prop In Lane	1.00		0.17	1.00		0.27	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	141	1653	877	29	1439	749	399	440	366	548	581	484
V/C Ratio(X)	0.82	0.42	0.42	0.72	0.78	0.79	0.16	0.10	0.06	0.42	0.11	0.30
Avail Cap(c_a), veh/h	284	2277	1208	85	1897	987	404	440	366	661	581	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.5	19.6	19.6	60.0	29.9	29.9	33.1	36.2	35.8	28.0	29.5	31.6
Incr Delay (d2), s/veh	10.8	0.2	0.3	28.6	1.6	3.1	0.2	0.4	0.3	0.5	0.4	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	7.5	8.0	0.9	16.6	17.7	1.6	1.2	0.6	5.7	1.5	3.9
LnGrp Delay(d), s/veh	66.2	19.8	19.9	88.7	31.5	33.0	33.3	36.6	36.1	28.5	29.9	33.2
LnGrp LOS	E	B	B	F	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1177			1739			125			437	
Approach Delay, s/veh		24.3			32.7			34.9			30.2	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.1	33.6	6.0	65.0	8.6	43.0	13.9	57.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	22.0	6.0	84.0	5.0	39.0	20.0	70.0
Max Q Clear Time (g_c+I1), s	13.7	4.2	3.5	18.3	5.3	10.9	10.0	37.9
Green Ext Time (p_c), s	0.4	0.2	0.0	8.4	0.0	0.8	0.2	15.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	950	120	50	1100	10	110	20	20	20	60	590
Future Volume (veh/h)	200	950	120	50	1100	10	110	20	20	20	60	590
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	206	979	124	52	1134	10	113	21	21	21	62	608
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	282	1552	196	67	1541	14	430	915	775	726	915	1365
Arrive On Green	0.08	0.35	0.35	0.04	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	3375	4467	564	1740	5099	45	749	1827	1548	1329	1827	2725
Grp Volume(v), veh/h	206	728	375	52	739	405	113	21	21	21	62	608
Grp Sat Flow(s),veh/h/ln	1688	1663	1707	1740	1663	1819	749	1827	1548	1329	1827	1362
Q Serve(g_s), s	6.3	19.4	19.5	3.1	21.1	21.1	9.7	0.6	0.7	0.9	1.9	15.2
Cycle Q Clear(g_c), s	6.3	19.4	19.5	3.1	21.1	21.1	11.6	0.6	0.7	1.5	1.9	15.2
Prop In Lane	1.00		0.33	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	282	1155	593	67	1005	550	430	915	775	726	915	1365
V/C Ratio(X)	0.73	0.63	0.63	0.78	0.74	0.74	0.26	0.02	0.03	0.03	0.07	0.45
Avail Cap(c_a), veh/h	734	2168	1113	263	1948	1066	430	915	775	726	915	1365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	28.9	28.9	50.4	33.1	33.1	16.6	13.3	13.4	13.7	13.6	17.0
Incr Delay (d2), s/veh	3.7	0.6	1.1	17.4	1.1	1.9	1.5	0.0	0.1	0.1	0.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	9.0	9.4	1.8	9.8	10.9	2.2	0.3	0.3	0.3	1.0	5.8
LnGrp Delay(d), s/veh	51.0	29.4	30.0	67.8	34.2	35.1	18.1	13.4	13.4	13.8	13.8	18.0
LnGrp LOS	D	C	C	E	C	D	B	B	B	B	B	B
Approach Vol, veh/h		1309			1196			155			691	
Approach Delay, s/veh		33.0			35.9			16.8			17.5	
Approach LOS		C			D			B			B	

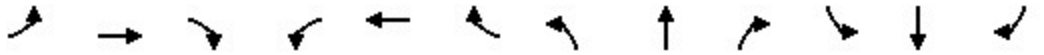
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	8.1	40.8		57.0	12.8	36.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	16.0	69.0		53.0	23.0	62.0
Max Q Clear Time (g_c+I1), s		13.6	5.1	21.5		17.2	8.3	23.1
Green Ext Time (p_c), s		1.1	0.1	8.8		3.1	0.5	8.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Future Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	583	21	198	677	125	104	573	104	83	1448	198
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1104	488	226	1021	446	127	1660	295	104	1669	228
Arrive On Green	0.15	0.31	0.31	0.13	0.29	0.29	0.07	0.38	0.38	0.06	0.37	0.37
Sat Flow, veh/h	1774	3539	1565	1774	3539	1544	1774	4325	770	1774	4501	615
Grp Volume(v), veh/h	240	583	21	198	677	125	104	447	230	83	1090	556
Grp Sat Flow(s),veh/h/ln	1774	1770	1565	1774	1770	1544	1774	1695	1704	1774	1695	1725
Q Serve(g_s), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Cycle Q Clear(g_c), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.36
Lane Grp Cap(c), veh/h	267	1104	488	226	1021	446	127	1301	654	104	1257	640
V/C Ratio(X)	0.90	0.53	0.04	0.88	0.66	0.28	0.82	0.34	0.35	0.80	0.87	0.87
Avail Cap(c_a), veh/h	354	1104	488	354	1021	446	184	1380	694	171	1355	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	38.3	32.4	57.9	42.3	37.2	61.9	29.6	29.7	62.8	39.4	39.5
Incr Delay (d2), s/veh	20.4	1.8	0.2	14.1	3.4	1.6	16.8	0.2	0.3	12.8	5.9	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	9.3	0.6	8.1	11.6	3.8	4.4	5.9	6.2	3.4	19.8	21.2
LnGrp Delay(d), s/veh	76.8	40.1	32.6	72.0	45.7	38.8	78.7	29.7	30.0	75.7	45.3	50.4
LnGrp LOS	E	D	C	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		844			1000			781			1729	
Approach Delay, s/veh		50.3			50.0			36.3			48.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	46.2	11.9	55.9	24.3	43.0	13.7	54.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	39.0	13.0	55.0	27.0	39.0	14.0	54.0
Max Q Clear Time (g_c+I1), s	16.8	20.3	8.2	15.0	20.0	24.7	9.8	42.4
Green Ext Time (p_c), s	0.4	3.7	0.1	4.6	0.4	4.2	0.1	7.7

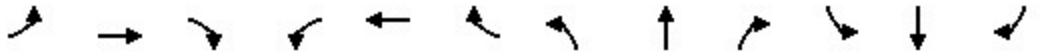
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Future Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
Arrive On Green	0.08	0.42	0.42	0.10	0.44	0.44	0.10	0.34	0.34	0.03	0.27	0.27
Sat Flow, veh/h	1774	3539	1553	1774	3539	1574	1774	3539	1550	1774	3539	1521
Grp Volume(v), veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1574	1774	1770	1550	1774	1770	1521
Q Serve(g_s), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Cycle Q Clear(g_c), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
V/C Ratio(X)	0.84	0.34	0.13	0.86	0.92	0.04	0.75	0.54	0.24	0.18	0.76	0.28
Avail Cap(c_a), veh/h	161	1499	658	261	1660	738	303	1214	532	246	960	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	27.7	25.1	63.6	37.4	22.7	35.2	37.8	33.5	36.7	47.8	41.0
Incr Delay (d2), s/veh	27.0	0.1	0.1	15.7	8.4	0.0	9.4	1.7	1.0	0.4	5.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.8	2.0	6.4	28.4	0.7	6.4	10.8	3.7	1.2	13.9	3.8
LnGrp Delay(d), s/veh	92.0	27.9	25.2	79.3	45.8	22.7	44.6	39.6	34.6	37.0	53.4	42.7
LnGrp LOS	F	C	C	E	D	C	D	D	C	D	D	D
Approach Vol, veh/h		708			1615			989			886	
Approach Delay, s/veh		38.0			48.4			40.0			51.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	53.0	17.7	64.5	17.8	42.8	15.1	67.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0	21.0	59.0	16.0	38.0	13.0	67.0
Max Q Clear Time (g_c+I1), s	4.4	23.3	13.6	15.9	13.7	29.0	11.1	56.5
Green Ext Time (p_c), s	0.0	5.1	0.2	3.8	0.1	3.5	0.0	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Future Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	756	3539	1562	1141	3539	1562	678	3539	1560	665	3539	1559
Grp Volume(v), veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Grp Sat Flow(s),veh/h/ln	756	1770	1562	1141	1770	1562	678	1770	1560	665	1770	1559
Q Serve(g_s), s	4.1	4.9	1.0	31.4	16.4	2.7	3.3	12.3	5.5	13.8	14.0	1.8
Cycle Q Clear(g_c), s	20.5	4.9	1.0	36.2	16.4	2.7	17.3	12.3	5.5	26.1	14.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
V/C Ratio(X)	0.14	0.16	0.04	0.73	0.48	0.09	0.09	0.34	0.17	0.32	0.37	0.06
Avail Cap(c_a), veh/h	421	2173	959	714	2173	959	364	1997	880	367	1997	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	25.5	24.3	37.7	29.1	24.8	19.3	14.1	12.7	21.1	14.5	11.8
Incr Delay (d2), s/veh	0.3	0.1	0.0	2.4	0.3	0.1	0.5	0.5	0.4	2.3	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.4	0.5	10.1	8.1	1.2	0.7	6.1	2.5	2.8	7.0	0.8
LnGrp Delay(d), s/veh	37.2	25.6	24.3	40.1	29.4	24.9	19.8	14.6	13.1	23.4	15.0	12.0
LnGrp LOS	D	C	C	D	C	C	B	B	B	C	B	B
Approach Vol, veh/h		266			1000			851			915	
Approach Delay, s/veh		26.9			32.6			14.5			15.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		48.5		72.0		48.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		74.0		68.0		74.0
Max Q Clear Time (g_c+I1), s		19.3		22.5		28.1		38.2
Green Ext Time (p_c), s		6.1		1.7		7.5		6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	150	150	990	50	180	670	70	90	870	40
Future Volume (veh/h)	80	780	150	150	990	50	180	670	70	90	870	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	848	163	163	1076	54	196	728	76	98	946	43
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	109	1013	193	189	1400	70	330	1726	762	368	1618	714
Arrive On Green	0.06	0.24	0.24	0.11	0.29	0.29	0.07	0.49	0.49	0.04	0.46	0.46
Sat Flow, veh/h	1757	4233	808	1757	4911	246	1757	3505	1547	1757	3505	1546
Grp Volume(v), veh/h	87	671	340	163	735	395	196	728	76	98	946	43
Grp Sat Flow(s),veh/h/ln	1757	1679	1684	1757	1679	1800	1757	1752	1547	1757	1752	1546
Q Serve(g_s), s	6.6	25.9	26.1	12.4	27.3	27.3	7.7	18.1	3.6	4.0	27.1	2.1
Cycle Q Clear(g_c), s	6.6	25.9	26.1	12.4	27.3	27.3	7.7	18.1	3.6	4.0	27.1	2.1
Prop In Lane	1.00		0.48	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	109	803	403	189	957	513	330	1726	762	368	1618	714
V/C Ratio(X)	0.80	0.84	0.84	0.86	0.77	0.77	0.59	0.42	0.10	0.27	0.58	0.06
Avail Cap(c_a), veh/h	194	938	470	297	1135	609	459	1726	762	371	1618	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.0	49.2	49.3	59.7	44.5	44.5	20.3	22.1	18.4	18.5	27.0	20.3
Incr Delay (d2), s/veh	12.7	5.9	11.6	14.2	2.7	5.0	1.7	0.8	0.3	0.4	1.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	12.7	13.5	6.8	13.0	14.3	3.9	8.9	1.6	2.0	13.5	0.9
LnGrp Delay(d), s/veh	75.7	55.1	60.9	73.9	47.2	49.5	22.0	22.9	18.7	18.9	28.5	20.4
LnGrp LOS	E	E	E	E	D	D	C	C	B	B	C	C
Approach Vol, veh/h		1098			1293			1000			1087	
Approach Delay, s/veh		58.5			51.3			22.4			27.4	
Approach LOS		E			D			C			C	

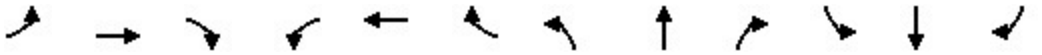
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	71.0	18.6	36.5	14.0	66.8	12.4	42.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	67.0	23.0	38.0	20.0	53.0	15.0	46.0
Max Q Clear Time (g_c+I1), s	6.0	20.1	14.4	28.1	9.7	29.1	8.6	29.3
Green Ext Time (p_c), s	0.0	5.5	0.3	4.4	0.4	7.2	0.1	6.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Future Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	32	484	179	158	1316	137	84	632	0	379	1211	53
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	116	1439	641	409	1460	151	105	967	0	408	1801	79
Arrive On Green	0.02	0.40	0.40	0.06	0.45	0.45	0.06	0.19	0.00	0.23	0.36	0.36
Sat Flow, veh/h	1792	3574	1592	1792	3268	339	1792	5305	0	1792	5043	221
Grp Volume(v), veh/h	32	484	179	158	717	736	84	632	0	379	822	442
Grp Sat Flow(s),veh/h/ln	1792	1787	1592	1792	1787	1820	1792	1712	0	1792	1712	1840
Q Serve(g_s), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Cycle Q Clear(g_c), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.00	1.00		0.12
Lane Grp Cap(c), veh/h	116	1439	641	409	799	813	105	967	0	408	1223	657
V/C Ratio(X)	0.28	0.34	0.28	0.39	0.90	0.90	0.80	0.65	0.00	0.93	0.67	0.67
Avail Cap(c_a), veh/h	131	1589	708	423	873	889	183	967	0	522	1223	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	28.3	27.6	21.2	35.1	35.2	63.8	51.5	0.0	51.9	37.3	37.3
Incr Delay (d2), s/veh	1.3	0.1	0.2	0.6	11.4	12.0	12.7	3.4	0.0	20.2	3.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.3	4.6	3.4	27.6	28.5	3.5	7.7	0.0	16.4	13.6	15.1
LnGrp Delay(d), s/veh	32.8	28.5	27.8	21.8	46.5	47.3	76.4	55.0	0.0	72.1	40.3	42.7
LnGrp LOS	C	C	C	C	D	D	E	D		E	D	D
Approach Vol, veh/h		695			1611			716			1643	
Approach Delay, s/veh		28.5			44.4			57.5			48.3	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	53.0	12.9	59.2	35.2	29.8	6.8	65.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	49.0	10.0	61.0	40.0	23.0	4.0	67.0
Max Q Clear Time (g_c+I1), s	8.4	29.9	8.9	14.8	30.4	17.6	3.4	53.5
Green Ext Time (p_c), s	0.1	7.7	0.0	4.0	0.8	1.8	0.0	7.8

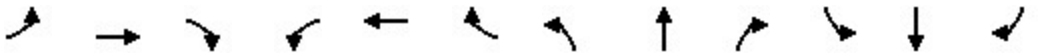
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.4
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1220	120	50	1100	620	640	250	20	0	0	0
Future Volume (veh/h)	200	1220	120	50	1100	620	640	250	20	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	217	1326	130	54	1196	674	696	272	22			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	267	2360	231	69	2353	733	670	668	598			
Arrive On Green	0.08	0.50	0.50	0.04	0.46	0.46	0.38	0.38	0.38			
Sat Flow, veh/h	3442	4710	462	1774	5085	1583	1774	1770	1583			
Grp Volume(v), veh/h	217	954	502	54	1196	674	696	272	22			
Grp Sat Flow(s),veh/h/ln	1721	1695	1781	1774	1695	1583	1774	1770	1583			
Q Serve(g_s), s	9.0	28.5	28.5	4.4	24.1	58.0	55.0	16.5	1.3			
Cycle Q Clear(g_c), s	9.0	28.5	28.5	4.4	24.1	58.0	55.0	16.5	1.3			
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	267	1699	892	69	2353	733	670	668	598			
V/C Ratio(X)	0.81	0.56	0.56	0.78	0.51	0.92	1.04	0.41	0.04			
Avail Cap(c_a), veh/h	354	1699	892	122	2373	739	670	668	598			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	66.2	25.2	25.2	69.4	27.5	36.6	45.3	33.4	28.6			
Incr Delay (d2), s/veh	10.3	1.3	2.6	16.9	0.2	16.7	45.4	0.4	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.7	13.6	14.6	2.5	11.3	28.7	35.2	8.1	0.6			
LnGrp Delay(d), s/veh	76.5	26.6	27.8	86.2	27.7	53.3	90.7	33.8	28.7			
LnGrp LOS	E	C	C	F	C	D	F	C	C			
Approach Vol, veh/h		1673			1924			990				
Approach Delay, s/veh		33.4			38.3			73.7				
Approach LOS		C			D			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.7	77.0			15.3	71.4		59.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	73.0			15.0	68.0		55.0
Max Q Clear Time (g_c+I1), s	6.4	30.5			11.0	60.0		57.0
Green Ext Time (p_c), s	0.0	13.0			0.2	5.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	970	170	180	1710	0	0	0	0	580	50	30
Future Volume (vph)	0	970	170	180	1710	0	0	0	0	580	50	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3251	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3251	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1054	185	196	1859	0	0	0	0	630	54	33
RTOR Reduction (vph)	0	0	62	0	0	0	0	0	0	0	0	25
Lane Group Flow (vph)	0	1054	123	196	1859	0	0	0	0	315	369	8
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		70.0	70.0	12.4	86.4					30.7	30.7	30.7
Effective Green, g (s)		70.0	70.0	12.4	86.4					30.7	30.7	30.7
Actuated g/C Ratio		0.56	0.56	0.10	0.69					0.25	0.25	0.25
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2845	885	340	3511					395	797	388
v/s Ratio Prot		0.21		0.06	c0.37					c0.20	0.11	
v/s Ratio Perm			0.08									0.01
v/c Ratio		0.37	0.14	0.58	0.53					0.80	0.46	0.02
Uniform Delay, d1		15.3	13.2	53.8	9.4					44.3	40.2	35.8
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	2.4	0.6					10.7	0.4	0.0
Delay (s)		15.4	13.2	56.2	10.0					55.0	40.6	35.8
Level of Service		B	B	E	B					D	D	D
Approach Delay (s/veh)		15.1			14.4			0.0			46.7	
Approach LOS		B			B			A			D	

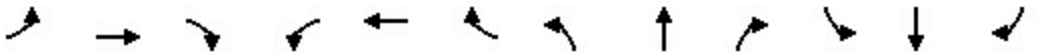
Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	125.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	50	60	870	640	210	600	0	0	940	20
Future Volume (veh/h)	40	0	50	60	870	640	210	600	0	0	940	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	54	65	946	696	228	652	0	0	1022	22
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	109	1672	779	285	2266	0	0	1699	37
Arrive On Green	0.00	0.00	0.00	0.49	0.49	0.49	0.08	0.45	0.00	0.00	0.33	0.33
Sat Flow, veh/h		0		222	3399	1583	3442	5253	0	0	5291	110
Grp Volume(v), veh/h		0.0		542	469	696	228	652	0	0	676	368
Grp Sat Flow(s),veh/h/ln				1852	1770	1583	1721	1695	0	0	1695	1843
Q Serve(g_s), s				26.9	23.5	51.0	8.3	10.4	0.0	0.0	21.3	21.3
Cycle Q Clear(g_c), s				26.9	23.5	51.0	8.3	10.4	0.0	0.0	21.3	21.3
Prop In Lane				0.12		1.00	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h				911	870	779	285	2266	0	0	1124	611
V/C Ratio(X)				0.59	0.54	0.89	0.80	0.29	0.00	0.00	0.60	0.60
Avail Cap(c_a), veh/h				1071	1024	916	377	2266	0	0	1124	611
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.3	22.5	29.5	57.6	22.5	0.0	0.0	35.7	35.7
Incr Delay (d2), s/veh				0.6	0.5	10.0	8.9	0.3	0.0	0.0	2.4	4.3
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.9	11.6	24.4	4.3	5.0	0.0	0.0	10.3	11.6
LnGrp Delay(d), s/veh				24.0	23.0	39.5	66.5	22.9	0.0	0.0	38.1	40.0
LnGrp LOS				C	C	D	E	C			D	D
Approach Vol, veh/h					1707			880			1044	
Approach Delay, s/veh					30.0			34.2			38.8	
Approach LOS					C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.0			14.6	46.4		66.9
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		57.0			14.0	39.0		74.0
Max Q Clear Time (g_c+I1), s		12.4			10.3	23.3		53.0
Green Ext Time (p_c), s		5.0			0.3	6.1		9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.5
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	30	160	0	0	0	0	710	260	460	600	0
Future Volume (vph)	40	30	160	0	0	0	0	710	260	460	600	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.89	0.85					0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	3022	1441					4881		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	3022	1441					4881		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	33	174	0	0	0	0	772	283	500	652	0
RTOR Reduction (vph)	0	81	81	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	43	39	6	0	0	0	0	1028	0	500	652	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	8.7	8.7	8.7					89.2		24.8	118.0	
Effective Green, g (s)	8.7	8.7	8.7					89.2		24.8	118.0	
Actuated g/C Ratio	0.06	0.06	0.06					0.66		0.18	0.88	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	114	195	93					3232		632	4454	
v/s Ratio Prot	c0.02	0.01						c0.21		c0.15	0.13	
v/s Ratio Perm			0.00									
v/c Ratio	0.38	0.20	0.06					0.32		0.79	0.15	
Uniform Delay, d1	60.4	59.7	59.2					9.7		52.5	1.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	2.1	0.5	0.3					0.3		6.7	0.1	
Delay (s)	62.5	60.2	59.4					10.0		59.2	1.3	
Level of Service	E	E	E					A		E	A	
Approach Delay (s/veh)		60.3			0.0			10.0			26.4	
Approach LOS		E			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	134.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Future Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	115	646	458	365	1427	42	448	417	219	31	438	52
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1880	866	237	2814	83	305	859	446	238	1221	144
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	356	3357	1546	504	5026	148	894	2221	1153	781	3158	373
Grp Volume(v), veh/h	115	646	458	365	953	516	448	328	308	31	242	248
Grp Sat Flow(s),veh/h/ln	356	1679	1546	504	1679	1816	894	1752	1622	781	1752	1778
Q Serve(g_s), s	44.1	15.7	27.8	56.2	26.2	26.2	43.1	21.2	21.6	4.7	14.7	14.9
Cycle Q Clear(g_c), s	70.2	15.7	27.8	84.0	26.2	26.2	58.0	21.2	21.6	26.3	14.7	14.9
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.71	1.00		0.21
Lane Grp Cap(c), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
V/C Ratio(X)	0.62	0.34	0.53	1.54	0.51	0.51	1.47	0.48	0.49	0.13	0.36	0.36
Avail Cap(c_a), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	18.0	20.6	52.6	20.3	20.3	56.8	34.7	34.8	44.8	32.7	32.8
Incr Delay (d2), s/veh	6.3	0.1	0.6	263.9	0.2	0.4	228.4	2.5	2.7	1.1	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	7.3	12.0	27.1	12.1	13.2	32.0	10.7	10.1	1.1	7.4	7.6
LnGrp Delay(d), s/veh	48.1	18.1	21.2	316.5	20.5	20.7	285.3	37.2	37.6	45.9	34.2	34.3
LnGrp LOS	D	B	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1219			1834			1084			521	
Approach Delay, s/veh		22.1			79.5			139.8			34.9	
Approach LOS		C			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		88.0		62.0		88.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		60.0		72.2		28.3		86.0
Green Ext Time (p_c), s		0.0		6.8		3.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Future Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	140	86	43	204	65	269	22	602	151	172	398	118
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	151	69	254	72	289	472	1487	372	341	1892	831
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	522	373	170	535	179	713	878	2781	696	707	3539	1555
Grp Volume(v), veh/h	269	0	0	538	0	0	22	382	371	172	398	118
Grp Sat Flow(s),veh/h/ln	1066	0	0	1426	0	0	878	1770	1707	707	1770	1555
Q Serve(g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	1.8	17.0	17.1	25.4	7.8	5.1
Cycle Q Clear(g_c), s	26.8	0.0	0.0	48.1	0.0	0.0	9.6	17.0	17.1	42.5	7.8	5.1
Prop In Lane	0.52		0.16	0.38		0.50	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	473	0	0	615	0	0	472	946	912	341	1892	831
V/C Ratio(X)	0.57	0.00	0.00	0.87	0.00	0.00	0.05	0.40	0.41	0.50	0.21	0.14
Avail Cap(c_a), veh/h	640	0	0	804	0	0	472	946	912	341	1892	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	0.0	38.0	0.0	0.0	18.7	18.4	18.4	31.0	16.2	15.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	8.5	0.0	0.0	0.2	1.3	1.3	5.2	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	0.0	20.3	0.0	0.0	0.5	8.6	8.4	5.5	3.9	2.2
LnGrp Delay(d), s/veh	32.0	0.0	0.0	46.5	0.0	0.0	18.9	19.6	19.7	36.3	16.5	15.9
LnGrp LOS	C			D			B	B	B	D	B	B
Approach Vol, veh/h		269			538			775			688	
Approach Delay, s/veh		32.0			46.5			19.7			21.3	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		57.8		75.0		57.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		71.0		71.0		71.0
Max Q Clear Time (g_c+I1), s		19.1		28.8		44.5		50.1
Green Ext Time (p_c), s		5.3		2.2		4.5		3.8

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		28.0
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Future Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	196	22	87	304	141	152	1022	174	98	1043	174
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	58	236	24	164	475	401	301	2405	1050	308	2405	1051
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	111	917	95	1147	1845	1561	452	3505	1530	462	3505	1531
Grp Volume(v), veh/h	261	0	0	87	304	141	152	1022	174	98	1043	174
Grp Sat Flow(s),veh/h/ln	1123	0	0	1147	1845	1561	452	1752	1530	462	1752	1531
Q Serve(g_s), s	12.6	0.0	0.0	0.0	20.7	10.4	32.0	18.3	5.7	16.9	18.8	5.7
Cycle Q Clear(g_c), s	33.3	0.0	0.0	31.8	20.7	10.4	50.8	18.3	5.7	35.1	18.8	5.7
Prop In Lane	0.16		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	0	0	164	475	401	301	2405	1050	308	2405	1051
V/C Ratio(X)	0.82	0.00	0.00	0.53	0.64	0.35	0.50	0.42	0.17	0.32	0.43	0.17
Avail Cap(c_a), veh/h	414	0	0	234	587	497	301	2405	1050	308	2405	1051
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	0.0	50.8	46.7	42.9	21.3	9.8	7.9	17.6	9.9	7.9
Incr Delay (d2), s/veh	9.6	0.0	0.0	2.7	1.6	0.5	5.9	0.6	0.3	2.7	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	0.0	3.4	10.8	4.6	4.5	9.0	2.5	2.4	9.2	2.5
LnGrp Delay(d), s/veh	61.2	0.0	0.0	53.4	48.3	43.4	27.2	10.4	8.2	20.3	10.5	8.2
LnGrp LOS	E			D	D	D	C	B	A	C	B	A
Approach Vol, veh/h		261			532			1348			1315	
Approach Delay, s/veh		61.2			47.9			12.0			10.9	
Approach LOS		E			D			B			B	

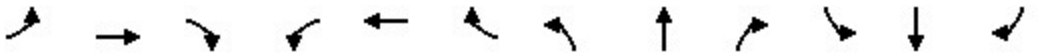
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		101.0		40.4		101.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		97.0		45.0		97.0		45.0
Max Q Clear Time (g_c+I1), s		52.8		35.3		37.1		33.8
Green Ext Time (p_c), s		13.4		1.0		12.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Future Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1130	359	1098	1239	0	0	0	0	272	0	554
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1071	340	1101	2218	0	0	596	0	1197	0	507
Arrive On Green	0.00	0.28	0.28	0.32	0.63	0.00	0.00	0.00	0.00	0.32	0.00	0.32
Sat Flow, veh/h	0	3991	1215	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1002	487	1098	1239	0	0	0	0	272	0	554
Grp Sat Flow(s),veh/h/ln	0	1695	1648	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Cycle Q Clear(g_c), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Prop In Lane	0.00		0.74	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
V/C Ratio(X)	0.00	1.06	1.06	1.00	0.56	0.00	0.00	0.00	0.00	0.23	0.00	1.09
Avail Cap(c_a), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	54.0	54.0	50.9	16.1	0.0	0.0	0.0	0.0	37.7	0.0	51.0
Incr Delay (d2), s/veh	0.0	45.0	57.3	26.3	0.3	0.0	0.0	0.0	0.0	0.4	0.0	67.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	25.6	26.4	26.8	14.7	0.0	0.0	0.0	0.0	4.2	0.0	30.5
LnGrp Delay(d), s/veh	0.0	99.0	111.3	77.3	16.4	0.0	0.0	0.0	0.0	38.1	0.0	118.8
LnGrp LOS		F	F	E	B					D		F
Approach Vol, veh/h		1489			2337			0			826	
Approach Delay, s/veh		103.0			45.0			0.0			92.2	
Approach LOS		F			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		52.0	52.0	46.0		52.0		98.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		48.0	48.0	42.0		48.0		94.0
Max Q Clear Time (g_c+I1), s		0.0	49.8	44.0		50.0		32.2
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0		12.0

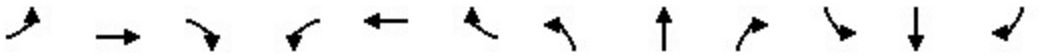
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Future Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3378	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.61	1.00	0.65	1.00	
Satd. Flow (perm)	1770	3378	1441	3433	3536		1681	1074	2787	1210	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1022	261	239	1978	11	315	11	228	11	11	11
RTOR Reduction (vph)	0	1	114	0	0	0	0	0	160	0	9	0
Lane Group Flow (vph)	11	1047	121	239	1989	0	164	162	68	11	13	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Effective Green, g (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Actuated g/C Ratio	0.01	0.51	0.51	0.10	0.60		0.13	0.30	0.30	0.15	0.15	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1738	741	343	2135		211	399	836	176	251	
v/s Ratio Prot	0.01	0.31		c0.07	c0.56		c0.10	0.05			0.01	
v/s Ratio Perm			0.08					c0.07	0.02	0.01		
v/c Ratio	0.61	0.60	0.16	0.70	0.93		0.78	0.41	0.08	0.06	0.05	
Uniform Delay, d1	69.4	24.1	18.1	61.3	25.3		59.7	39.3	35.4	51.8	51.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	0.6	0.1	6.1	8.1		16.3	0.7	0.2	0.7	0.4	
Delay (s)	118.1	24.7	18.2	67.4	33.3		76.0	40.0	35.6	52.5	52.1	
Level of Service	F	C	B	E	C		E	D	D	D	D	
Approach Delay (s/veh)		24.3			37.0			48.8			52.2	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Future Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.97			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1668			1745		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.87			0.95		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1496			1669		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	11	11	11	22	22	641	413	11	22	250	359
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	4	0	0	253
Lane Group Flow (vph)	61	54	0	0	41	0	641	413	7	22	250	106
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Effective Green, g (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Actuated g/C Ratio	0.06	0.22			0.13		0.40	0.67	0.67	0.02	0.29	0.29
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	106	341			216		710	2374	1062	43	1040	465
v/s Ratio Prot	c0.04	0.01					c0.36	0.12		0.01	c0.07	
v/s Ratio Perm		0.03			c0.02				0.00			0.07
v/c Ratio	0.58	0.16			0.19		0.90	0.17	0.01	0.51	0.24	0.23
Uniform Delay, d1	65.3	45.1			55.7		40.3	8.8	7.8	69.2	38.5	38.3
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.4	0.2			0.4		14.8	0.2	0.0	9.9	0.5	1.1
Delay (s)	72.7	45.4			56.2		55.1	8.9	7.8	79.1	39.0	39.4
Level of Service	E	D			E		E	A	A	E	D	D
Approach Delay (s/veh)		59.2			56.2			36.7			40.7	
Approach LOS		E			E			D			D	

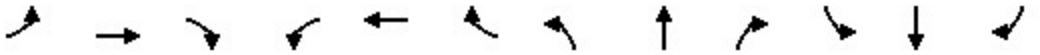
Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	143.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Future Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	152	1163	76	174	1913	185	207	22	272			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	199	2080	136	199	2374	1062	303	32	298			
Arrive On Green	0.06	0.62	0.62	0.11	0.67	0.67	0.19	0.19	0.19			
Sat Flow, veh/h	3442	3373	220	1774	3539	1583	1611	171	1583			
Grp Volume(v), veh/h	152	610	629	174	1913	185	229	0	272			
Grp Sat Flow(s),veh/h/ln	1721	1770	1824	1774	1770	1583	1782	0	1583			
Q Serve(g_s), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Cycle Q Clear(g_c), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Prop In Lane	1.00		0.12	1.00		1.00	0.90		1.00			
Lane Grp Cap(c), veh/h	199	1091	1125	199	2374	1062	336	0	298			
V/C Ratio(X)	0.76	0.56	0.56	0.87	0.81	0.17	0.68	0.00	0.91			
Avail Cap(c_a), veh/h	262	1091	1125	294	2374	1062	370	0	328			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	67.1	16.2	16.2	63.2	17.1	8.9	54.7	0.0	57.5			
Incr Delay (d2), s/veh	9.1	2.1	2.0	17.4	3.0	0.4	4.5	0.0	27.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.3	14.9	15.3	7.8	28.1	2.8	8.9	0.0	12.9			
LnGrp Delay(d), s/veh	76.2	18.3	18.2	80.6	20.1	9.2	59.2	0.0	84.7			
LnGrp LOS	E	B	B	F	C	A	E		F			
Approach Vol, veh/h		1391			2272			501				
Approach Delay, s/veh		24.6			23.8			73.0				
Approach LOS		C			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	20.2	93.2			12.4	101.0		31.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	84.0			11.0	97.0		30.0
Max Q Clear Time (g_c+I1), s	16.0	31.2			8.3	58.0		26.3
Green Ext Time (p_c), s	0.3	10.5			0.1	23.3		0.9

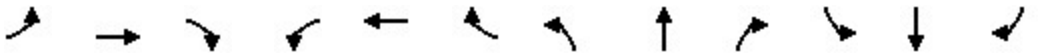
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Future Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	11	1446	0	0	2000	783	304	11	250			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	35	3793	0	0	3591	1118	345	362	308			
Arrive On Green	0.01	0.75	0.00	0.00	0.71	0.71	0.19	0.19	0.19			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	11	1446	0	0	2000	783	304	11	250			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Cycle Q Clear(g_c), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	35	3793	0	0	3591	1118	345	362	308			
V/C Ratio(X)	0.32	0.38	0.00	0.00	0.56	0.70	0.88	0.03	0.81			
Avail Cap(c_a), veh/h	103	3793	0	0	3591	1118	556	584	496			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	65.9	6.0	0.0	0.0	9.5	11.5	52.5	43.8	51.7			
Incr Delay (d2), s/veh	5.2	0.3	0.0	0.0	0.6	3.7	9.5	0.0	5.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	6.4	0.0	0.0	12.1	17.9	11.9	0.3	9.3			
LnGrp Delay(d), s/veh	71.1	6.3	0.0	0.0	10.2	15.1	62.0	43.8	57.0			
LnGrp LOS	E	A			B	B	E	D	E			
Approach Vol, veh/h		1457			2783			565				
Approach Delay, s/veh		6.8			11.6			59.4				
Approach LOS		A			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		104.0			5.3	98.7		30.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		100.0			4.0	92.0		42.0
Max Q Clear Time (g_c+I1), s		15.5			2.4	40.5		24.3
Green Ext Time (p_c), s		15.2			0.0	33.5		1.7

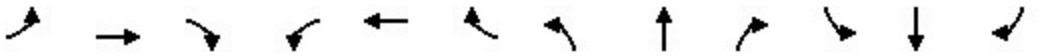
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Future Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	1402	109	11	2565	228	33	11	326	11	11	391
RTOR Reduction (vph)	0	4	0	0	6	0	0	0	200	0	0	191
Lane Group Flow (vph)	370	1507	0	11	2787	0	33	11	126	11	11	200
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Effective Green, g (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Actuated g/C Ratio	0.12	0.74		0.01	0.63		0.10	0.10	0.10	0.03	0.03	0.15
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	420	3735		19	3168		179	189	160	51	54	422
v/s Ratio Prot	c0.11	0.30		0.01	c0.55		0.02	0.01		0.01	0.01	c0.06
v/s Ratio Perm									c0.08			0.01
v/c Ratio	0.88	0.40		0.58	0.88		0.18	0.06	0.79	0.22	0.20	0.47
Uniform Delay, d1	59.5	6.5		67.9	21.1		56.7	56.0	60.5	65.4	65.4	53.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.9	0.3		36.3	3.9		0.5	0.1	21.9	2.1	1.9	0.8
Delay (s)	78.4	6.8		104.2	25.0		57.2	56.1	82.4	67.5	67.3	54.3
Level of Service	E	A		F	C		E	E	F	E	E	D
Approach Delay (s/veh)		20.9			25.3			79.3			55.0	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	137.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

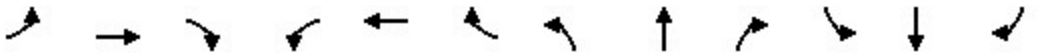
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1190	0	10	1360	620	10	20	10	70	10	260
Future Volume (vph)	210	1190	0	10	1360	620	10	20	10	70	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.98	0.85		0.97			0.92	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1764	4713	1332		1780			1594	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1764	4713	1332		1780			1594	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	219	1240	0	10	1417	646	10	21	10	73	10	271
RTOR Reduction (vph)	0	0	0	0	10	190	0	7	0	0	29	149
Lane Group Flow (vph)	219	1240	0	10	1588	275	0	34	0	0	152	24
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	21.2	80.3		0.7	59.8	59.8		12.4			17.3	17.3
Effective Green, g (s)	21.2	80.3		0.7	59.8	59.8		12.4			17.3	17.3
Actuated g/C Ratio	0.17	0.63		0.01	0.47	0.47		0.10			0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	296	3222		9	2224	628		174			217	205
v/s Ratio Prot	c0.12	0.24		0.01	c0.34			c0.02			c0.10	
v/s Ratio Perm						0.21						0.02
v/c Ratio	0.74	0.38		1.11	0.71	0.44		0.19			0.70	0.12
Uniform Delay, d1	50.1	11.2		63.0	26.6	22.3		52.6			52.2	48.0
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	9.3	0.1		342.2	1.1	0.5		2.5			9.4	0.3
Delay (s)	59.5	11.3		405.2	27.8	22.8		55.0			61.6	48.2
Level of Service	E	B		F	C	C		E			E	D
Approach Delay (s/veh)		18.5			28.5			55.0			55.1	
Approach LOS		B			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	126.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1000	230	330	1700	40	310	140	310	20	30	40
Future Volume (vph)	90	1000	230	330	1700	40	310	140	310	20	30	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00		1.00	0.96	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	4877		1752	5015		1665	1567	1404	1665	1747	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	4877		1752	5015		1665	1567	1404	1665	1747	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1053	242	347	1789	42	326	147	326	21	32	42
RTOR Reduction (vph)	0	25	0	0	2	0	0	9	176	0	0	40
Lane Group Flow (vph)	95	1270	0	347	1829	0	274	268	72	19	34	2
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.2	42.8		32.3	62.9		40.3	40.3	40.3	8.1	8.1	8.1
Effective Green, g (s)	12.2	42.8		32.3	62.9		40.3	40.3	40.3	8.1	8.1	8.1
Actuated g/C Ratio	0.09	0.31		0.23	0.45		0.29	0.29	0.29	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	153	1496		405	2261		481	452	405	96	101	91
v/s Ratio Prot	0.05	0.26		c0.20	c0.36		0.16	c0.17		0.01	c0.02	
v/s Ratio Perm									0.05			0.00
v/c Ratio	0.62	0.85		0.86	0.81		0.57	0.59	0.18	0.20	0.34	0.03
Uniform Delay, d1	61.4	45.3		51.4	33.1		42.2	42.6	37.2	62.6	63.1	62.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	4.7		16.2	2.2		4.8	5.6	1.0	4.6	8.8	0.5
Delay (s)	69.0	50.0		67.5	35.3		47.1	48.2	38.1	67.2	71.9	62.5
Level of Service	E	D		E	D		D	D	D	E	E	E
Approach Delay (s/veh)		51.3			40.5			44.7			66.8	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	139.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	380	390	210	150	450	440
Future Volume (veh/h)	380	390	210	150	450	440
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	432	0	239	170	511	500
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	523	241	273	2730	2067	905
Arrive On Green	0.15	0.00	0.16	0.78	0.59	0.59
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	432	0	239	170	511	500
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	14.5	0.0	15.7	1.3	8.3	23.4
Cycle Q Clear(g_c), s	14.5	0.0	15.7	1.3	8.3	23.4
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	523	241	273	2730	2067	905
V/C Ratio(X)	0.83	0.00	0.88	0.06	0.25	0.55
Avail Cap(c_a), veh/h	1443	664	535	2730	2067	905
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	0.0	48.8	3.0	11.6	14.7
Incr Delay (d2), s/veh	3.4	0.0	8.8	0.0	0.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.1	0.0	8.3	0.7	4.1	10.5
LnGrp Delay(d), s/veh	51.8	0.0	57.6	3.1	11.9	17.2
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	432			409	1011	
Approach Delay, s/veh	51.8			34.9	14.5	
Approach LOS	D			C	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		96.0		22.1	22.3	73.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		92.0		50.0	36.0	52.0		
Max Q Clear Time (g_c+I1), s		3.3		16.5	17.7	25.4		
Green Ext Time (p_c), s		1.1		1.6	0.6	5.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.7
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	780	570	310	840	470	350
Future Volume (veh/h)	780	570	310	840	470	350
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	857	0	341	923	516	385
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	954	439	371	2386	1542	669
Arrive On Green	0.27	0.00	0.21	0.67	0.43	0.43
Sat Flow, veh/h	3476	1599	1792	3668	3668	1549
Grp Volume(v), veh/h	857	0	341	923	516	385
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1549
Q Serve(g_s), s	32.7	0.0	25.7	16.0	13.2	25.9
Cycle Q Clear(g_c), s	32.7	0.0	25.7	16.0	13.2	25.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	954	439	371	2386	1542	669
V/C Ratio(X)	0.90	0.00	0.92	0.39	0.33	0.58
Avail Cap(c_a), veh/h	1261	580	533	2386	1542	669
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.2	0.0	53.5	10.3	26.0	29.6
Incr Delay (d2), s/veh	7.2	0.0	16.6	0.5	0.6	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	0.0	14.4	8.0	6.6	11.7
LnGrp Delay(d), s/veh	55.3	0.0	70.1	10.7	26.6	33.2
LnGrp LOS	E		E	B	C	C
Approach Vol, veh/h	857			1264	901	
Approach Delay, s/veh	55.3			26.8	29.4	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		96.0		41.8	32.5	63.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		92.0		50.0	41.0	47.0		
Max Q Clear Time (g_c+I1), s		18.0		34.7	27.7	27.9		
Green Ext Time (p_c), s		7.6		3.1	0.8	4.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	910	240	180	1570	30	240	810	580	60	300	250
Future Volume (veh/h)	160	910	240	180	1570	30	240	810	580	60	300	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	182	1034	273	205	1784	34	273	920	659	68	341	284
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	202	1776	526	230	1874	36	296	1324	576	71	877	378
Arrive On Green	0.11	0.35	0.35	0.13	0.37	0.37	0.17	0.37	0.37	0.04	0.25	0.25
Sat Flow, veh/h	1774	5085	1506	1774	5133	98	1774	3539	1540	1774	3539	1525
Grp Volume(v), veh/h	182	1034	273	205	1178	640	273	920	659	68	341	284
Grp Sat Flow(s),veh/h/ln	1774	1695	1506	1774	1695	1840	1774	1770	1540	1774	1770	1525
Q Serve(g_s), s	15.2	24.9	21.6	17.0	50.6	50.6	22.7	32.9	56.0	5.7	12.0	25.8
Cycle Q Clear(g_c), s	15.2	24.9	21.6	17.0	50.6	50.6	22.7	32.9	56.0	5.7	12.0	25.8
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	202	1776	526	230	1238	672	296	1324	576	71	877	378
V/C Ratio(X)	0.90	0.58	0.52	0.89	0.95	0.95	0.92	0.69	1.14	0.96	0.39	0.75
Avail Cap(c_a), veh/h	202	1776	526	332	1246	676	332	1324	576	71	877	378
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.5	39.8	38.7	64.1	46.2	46.2	61.4	39.6	46.8	71.7	46.9	52.0
Incr Delay (d2), s/veh	37.8	0.5	0.9	18.8	15.3	23.4	28.8	3.0	83.7	91.3	1.3	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	11.8	9.1	9.6	26.4	30.1	13.5	16.7	37.2	4.6	6.0	12.2
LnGrp Delay(d), s/veh	103.3	40.2	39.6	82.9	61.5	69.6	90.3	42.6	130.6	163.0	48.2	65.0
LnGrp LOS	F	D	D	F	E	E	F	D	F	F	D	E
Approach Vol, veh/h		1489			2023			1852			693	
Approach Delay, s/veh		47.8			66.3			80.9			66.3	
Approach LOS		D			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	60.0	23.4	56.3	28.9	41.1	21.0	58.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	56.0	28.0	44.0	28.0	34.0	17.0	55.0
Max Q Clear Time (g_c+I1), s	7.7	58.0	19.0	26.9	24.7	27.8	17.2	52.6
Green Ext Time (p_c), s	0.0	0.0	0.4	7.4	0.3	1.7	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.2
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	20	1370	0	0	570
Future Volume (veh/h)	30	20	1370	0	0	570
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	33	22	1489	0	0	620
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	90	34	3157	0	1	3157
Arrive On Green	0.05	0.05	0.89	0.00	0.00	0.89
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	33	22	1489	0	0	620
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	2.5	5.9	10.9	0.0	0.0	3.2
Cycle Q Clear(g_c), s	2.5	5.9	10.9	0.0	0.0	3.2
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	90	34	3157	0	1	3157
V/C Ratio(X)	0.37	0.64	0.47	0.00	0.00	0.20
Avail Cap(c_a), veh/h	230	159	3157	0	51	3157
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	63.9	353.2	1.4	0.0	0.0	1.0
Incr Delay (d2), s/veh	2.5	18.0	0.5	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	5.4	0.0	0.0	1.6
LnGrp Delay(d), s/veh	66.4	371.2	1.9	0.0	0.0	1.1
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	55		1489			620
Approach Delay, s/veh	188.3		1.9			1.1
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	128.0				128.0		11.0
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	116.0				124.0		18.0
Max Q Clear Time (g_c+I1), s	0.0	12.9				5.2		7.9
Green Ext Time (p_c), s	0.0	17.6				4.5		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.4
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	390	400	660	470	130
Future Volume (veh/h)	120	390	400	660	470	130
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	424	435	717	511	141
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	296	264	615	2761	2142	588
Arrive On Green	0.17	0.17	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1774	1583	777	3632	2839	754
Grp Volume(v), veh/h	130	424	435	717	328	324
Grp Sat Flow(s),veh/h/ln	1774	1583	777	1770	1770	1730
Q Serve(g_s), s	9.9	25.0	51.6	8.4	7.5	7.6
Cycle Q Clear(g_c), s	9.9	25.0	59.2	8.4	7.5	7.6
Prop In Lane	1.00	1.00	1.00			0.44
Lane Grp Cap(c), veh/h	296	264	615	2761	1380	1349
V/C Ratio(X)	0.44	1.61	0.71	0.26	0.24	0.24
Avail Cap(c_a), veh/h	296	264	615	2761	1380	1349
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.2	62.5	12.5	4.6	4.5	4.5
Incr Delay (d2), s/veh	1.0	290.0	6.7	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	32.2	12.0	4.2	3.8	3.8
LnGrp Delay(d), s/veh	57.2	352.5	19.2	4.8	4.9	4.9
LnGrp LOS	E	F	B	A	A	A
Approach Vol, veh/h	554			1152	652	
Approach Delay, s/veh	283.2			10.2	4.9	
Approach LOS	F			B	A	

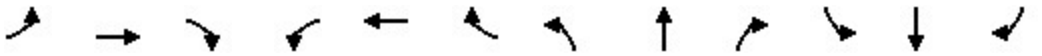
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		121.0		29.0		121.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		117.0		25.0		117.0		
Max Q Clear Time (g_c+I1), s		61.2		27.0		9.6		
Green Ext Time (p_c), s		10.7		0.0		4.3		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	750	130	670	810	240	190	310	430	480	290	90
Future Volume (veh/h)	90	750	130	670	810	240	190	310	430	480	290	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	815	141	728	880	261	207	337	467	522	315	98
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	120	1217	544	806	1805	1897	234	483	587	587	620	277
Arrive On Green	0.07	0.34	0.34	0.23	0.51	0.51	0.13	0.14	0.14	0.17	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	98	815	141	728	880	261	207	337	467	522	315	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.6	27.3	8.9	28.6	22.6	4.6	16.0	12.6	19.0	20.6	11.2	7.6
Cycle Q Clear(g_c), s	7.6	27.3	8.9	28.6	22.6	4.6	16.0	12.6	19.0	20.6	11.2	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1217	544	806	1805	1897	234	483	587	587	620	277
V/C Ratio(X)	0.81	0.67	0.26	0.90	0.49	0.14	0.89	0.70	0.80	0.89	0.51	0.35
Avail Cap(c_a), veh/h	191	1217	544	989	1805	1897	357	483	587	717	620	277
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.0	38.9	32.9	51.7	22.2	7.8	59.4	57.3	39.1	56.4	52.0	50.5
Incr Delay (d2), s/veh	13.3	2.9	1.2	9.9	0.9	0.2	15.6	8.1	10.7	11.5	3.0	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	13.9	4.1	14.7	11.2	1.8	8.8	6.7	17.8	10.7	5.7	3.6
LnGrp Delay(d), s/veh	77.3	41.9	34.1	61.7	23.2	8.0	75.0	65.5	49.8	68.0	54.9	54.0
LnGrp LOS	E	D	C	E	C	A	E	E	D	E	D	D
Approach Vol, veh/h		1054			1869			1011			935	
Approach Delay, s/veh		44.1			36.0			60.2			62.1	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.6	51.8	22.3	28.4	13.5	75.0	27.7	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	40.0	46.0	28.0	20.0	15.0	71.0	29.0	19.0
Max Q Clear Time (g_c+I1), s	30.6	29.3	18.0	13.2	9.6	24.6	22.6	21.0
Green Ext Time (p_c), s	2.0	5.4	0.4	1.2	0.1	8.5	1.1	0.0

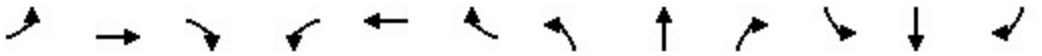
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1140	0	0	1310	110	350	20	70	0	0	0
Future Volume (vph)	110	1140	0	0	1310	110	350	20	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1694	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1694	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1239	0	0	1424	120	380	22	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	64	0	0	0
Lane Group Flow (vph)	120	1239	0	0	1424	120	201	201	12	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.1	102.2			84.1	84.1	21.5	21.5	21.5			
Effective Green, g (s)	14.1	102.2			84.1	84.1	21.5	21.5	21.5			
Actuated g/C Ratio	0.11	0.78			0.64	0.64	0.16	0.16	0.16			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	189	2746			3247	1010	274	276	258			
v/s Ratio Prot	c0.07	c0.35			0.28		c0.12	0.12				
v/s Ratio Perm						0.08			0.01			
v/c Ratio	0.63	0.45			0.44	0.12	0.73	0.73	0.05			
Uniform Delay, d1	56.3	5.1			11.9	9.3	52.4	52.3	46.5			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.8	0.5			0.4	0.2	9.7	9.2	0.1			
Delay (s)	63.1	5.6			12.4	9.5	62.1	61.6	46.5			
Level of Service	E	A			B	A	E	E	D			
Approach Delay (s/veh)		10.7			12.2			59.4			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	131.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1150	510	140	1630	0	0	0	0	110	20	80
Future Volume (vph)	0	1150	510	140	1630	0	0	0	0	110	20	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1711	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1711	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1250	554	152	1772	0	0	0	0	120	22	87
RTOR Reduction (vph)	0	0	263	0	0	0	0	0	0	0	0	43
Lane Group Flow (vph)	0	1250	291	152	1772	0	0	0	0	71	71	44
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		49.7	49.7	14.4	68.1					22.7	22.7	22.7
Effective Green, g (s)		49.7	49.7	14.4	68.1					22.7	22.7	22.7
Actuated g/C Ratio		0.50	0.50	0.15	0.69					0.23	0.23	0.23
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1780	796	257	3504					386	393	363
v/s Ratio Prot		c0.35		c0.09	0.35					c0.04	0.04	0.03
v/s Ratio Perm			0.18									
v/c Ratio		0.70	0.37	0.59	0.51					0.18	0.18	0.12
Uniform Delay, d1		18.9	15.0	39.5	7.3					30.6	30.6	30.1
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.3	0.3	3.6	0.1					1.0	1.0	0.7
Delay (s)		20.1	15.2	43.1	7.4					31.6	31.6	30.8
Level of Service		C	B	D	A					C	C	C
Approach Delay (s/veh)		18.6			10.3			0.0			31.3	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	98.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.1%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Future Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.90	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	255	1000	160	234	1191	138	138	372	170	160	362	160
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	287	1183	500	265	1480	171	166	619	276	189	659	284
Arrive On Green	0.16	0.34	0.34	0.15	0.33	0.33	0.09	0.27	0.27	0.11	0.29	0.29
Sat Flow, veh/h	1757	3505	1483	1757	4551	527	1757	2275	1014	1757	2309	994
Grp Volume(v), veh/h	255	1000	160	234	878	451	138	284	258	160	272	250
Grp Sat Flow(s),veh/h/ln	1757	1752	1483	1757	1679	1721	1757	1752	1536	1757	1752	1551
Q Serve(g_s), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Cycle Q Clear(g_c), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.66	1.00		0.64
Lane Grp Cap(c), veh/h	287	1183	500	265	1092	560	166	477	418	189	500	442
V/C Ratio(X)	0.89	0.85	0.32	0.88	0.80	0.81	0.83	0.60	0.62	0.85	0.54	0.56
Avail Cap(c_a), veh/h	449	1475	624	420	1357	696	290	477	418	304	500	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	37.2	29.8	50.4	37.4	37.4	53.9	38.3	38.6	53.1	36.7	36.9
Incr Delay (d2), s/veh	13.0	3.9	0.4	12.6	2.9	5.6	10.2	5.4	6.7	11.6	4.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	16.2	4.0	8.6	13.9	14.6	5.0	9.0	8.3	5.9	8.3	7.8
LnGrp Delay(d), s/veh	62.6	41.1	30.2	63.0	40.3	43.0	64.1	43.7	45.2	64.7	40.9	42.0
LnGrp LOS	E	D	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1415			1563			680			682	
Approach Delay, s/veh		43.8			44.5			48.4			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	37.0	22.3	44.9	15.4	38.6	23.8	43.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	33.0	29.0	51.0	20.0	34.0	31.0	49.0
Max Q Clear Time (g_c+I1), s	12.8	19.8	17.8	34.1	11.4	18.6	19.2	31.0
Green Ext Time (p_c), s	0.2	2.7	0.5	6.8	0.2	2.9	0.5	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	160	190	140	230	110
Future Vol, veh/h	140	160	190	140	230	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	152	174	207	152	250	120

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	816	250	370	0	-	0
Stage 1	250	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	347	789	1189	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	287	789	1189	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	20.2	5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1189	-	287	789	-	-
HCM Lane V/C Ratio	0.174	-	0.53	0.22	-	-
HCM Control Delay (s/veh)	8.7	-	30.9	10.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	2.9	0.8	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	250	60	20	250	40	10
Future Vol, veh/h	250	60	20	250	40	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	272	65	22	272	43	11

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	119	22	0	0	294	0
Stage 1	22	-	-	-	-	-
Stage 2	97	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	877	1055	-	-	1268	-
Stage 1	1001	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	847	1055	-	-	1268	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10.7	0	6.4
HCM LOS	B		

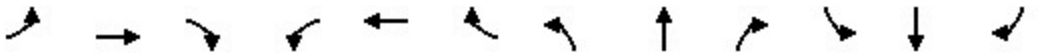
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	847	1055	1268	-	-	-
HCM Lane V/C Ratio	0.321	0.062	0.034	-	-	-
HCM Control Delay (s/veh)	11.2	8.6	7.9	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	1.4	0.2	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	840	70	60	890	100	110	740	60	190	690	450
Future Volume (veh/h)	360	840	70	60	890	100	110	740	60	190	690	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	387	903	75	65	957	108	118	796	65	204	742	484
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	449	1086	90	83	1133	127	142	1263	564	231	1439	842
Arrive On Green	0.13	0.34	0.34	0.05	0.25	0.25	0.08	0.36	0.36	0.13	0.41	0.41
Sat Flow, veh/h	3375	3238	269	1740	4534	510	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	387	484	494	65	701	364	118	796	65	204	742	484
Grp Sat Flow(s),veh/h/ln	1688	1736	1771	1740	1663	1719	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	25.1	3.7	15.3	21.1	27.7
Cycle Q Clear(g_c), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	25.1	3.7	15.3	21.1	27.7
Prop In Lane	1.00		0.15	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	449	582	594	83	831	430	142	1263	564	231	1439	842
V/C Ratio(X)	0.86	0.83	0.83	0.79	0.84	0.85	0.83	0.63	0.12	0.88	0.52	0.57
Avail Cap(c_a), veh/h	585	667	681	131	953	492	236	1263	564	341	1439	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	40.6	40.6	62.5	47.3	47.3	60.0	34.8	28.0	56.5	28.9	19.8
Incr Delay (d2), s/veh	10.1	7.9	7.7	15.0	6.3	11.7	11.5	2.4	0.4	16.6	1.3	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	17.5	17.9	2.7	12.9	14.0	4.7	12.5	1.6	8.4	10.4	12.4
LnGrp Delay(d), s/veh	66.5	48.5	48.4	77.5	53.6	59.1	71.5	37.2	28.4	73.1	30.2	22.7
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		1365			1130			979			1430	
Approach Delay, s/veh		53.5			56.7			40.8			33.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	52.2	10.3	48.5	14.9	59.0	21.6	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	47.0	10.0	51.0	18.0	55.0	23.0	38.0
Max Q Clear Time (g_c+I1), s	17.3	27.1	6.9	36.1	10.9	29.7	16.9	28.7
Green Ext Time (p_c), s	0.3	5.2	0.0	5.3	0.1	7.1	0.7	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

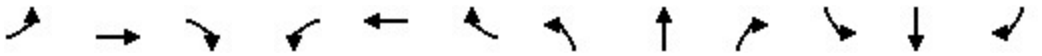
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	150	0	110	90	510	0	0	630	220
Future Volume (vph)	0	0	0	150	0	110	90	510	0	0	630	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.36	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1318	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	163	0	120	98	554	0	0	685	239
RTOR Reduction (vph)	0	0	0	0	0	103	0	0	0	0	0	51
Lane Group Flow (vph)	0	0	0	163	0	17	98	554	0	0	685	188
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				15.1		15.1	85.1	85.1			85.1	85.1
Effective Green, g (s)				15.1		15.1	85.1	85.1			85.1	85.1
Actuated g/C Ratio				0.14		0.14	0.79	0.79			0.79	0.79
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				247		220	1036	3999			5039	1245
v/s Ratio Prot								0.11			0.11	
v/s Ratio Perm				c0.09		0.01	0.07					c0.12
v/c Ratio				0.66		0.08	0.09	0.14			0.14	0.15
Uniform Delay, d1				44.1		40.5	2.7	2.8			2.8	2.8
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				6.2		0.1	0.2	0.1			0.1	0.3
Delay (s)				50.4		40.6	2.8	2.8			2.8	3.1
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			46.2			2.8			2.9	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.5	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	108.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

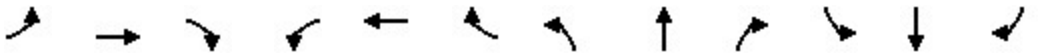
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	90	0	0	0	0	480	90	260	850	0
Future Volume (vph)	150	0	90	0	0	0	0	480	90	260	850	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.43	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1572	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	98	0	0	0	0	522	98	283	924	0
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	163	0	13	0	0	0	0	522	78	283	924	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	16.0		16.0					93.5	93.5	93.5	93.5	
Effective Green, g (s)	16.0		16.0					93.5	93.5	93.5	93.5	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	241		379					5099	1259	1250	4046	
v/s Ratio Prot								0.08			c0.18	
v/s Ratio Perm	c0.09		0.00						0.05	0.18		
v/c Ratio	0.68		0.04					0.10	0.06	0.23	0.23	
Uniform Delay, d1	48.3		44.1					2.7	2.6	3.0	3.0	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.3		0.0					0.0	0.1	0.4	0.1	
Delay (s)	55.6		44.1					2.7	2.7	3.4	3.1	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		51.3			0.0			2.7			3.2	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.29		
Actuated Cycle Length (s)	117.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.3%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	450	10	90	0	960	570	150	970	0
Future Volume (vph)	10	10	10	450	10	90	0	960	570	150	970	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1718		1665	1672	1473		5036	1518	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1672	1473		5036	1518	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	500	11	100	0	1067	633	167	1078	0
RTOR Reduction (vph)	0	10	0	0	0	76	0	0	182	0	0	0
Lane Group Flow (vph)	0	23	0	255	256	24	0	1067	451	167	1078	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		30.8	30.8	30.8		59.0	89.8	17.6	80.6	
Effective Green, g (s)		7.5		30.8	30.8	30.8		59.0	89.8	17.6	80.6	
Actuated g/C Ratio		0.06		0.24	0.24	0.24		0.45	0.69	0.13	0.62	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		391	393	346		2269	1041	235	3100	
v/s Ratio Prot				c0.15	0.15			c0.21	0.10	c0.10	0.21	
v/s Ratio Perm		c0.04				0.02			0.20			
v/c Ratio		0.65		0.65	0.65	0.07		0.47	0.43	0.71	0.35	
Uniform Delay, d1		60.4		45.2	45.2	38.9		25.1	9.2	54.2	12.3	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.4		3.9	3.8	0.1		0.7	0.3	9.7	0.3	
Delay (s)		94.8		49.1	49.0	39.0		25.8	9.5	63.9	12.6	
Level of Service		F		D	D	D		C	A	E	B	
Approach Delay (s/veh)		94.8			47.4			19.7			19.5	
Approach LOS		F			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	130.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	20	120	30	60	20	190	790	10	20	350	300
Future Volume (veh/h)	310	20	120	30	60	20	190	790	10	20	350	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	369	24	143	36	71	24	226	940	12	24	417	357
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	480	27	561	0	671	562	298	1816	23	34	1558	684
Arrive On Green	0.36	0.36	0.36	0.00	0.36	0.36	0.09	0.51	0.51	0.02	0.44	0.44
Sat Flow, veh/h	1150	75	1557	0	1863	1559	3442	3577	46	1774	3539	1553
Grp Volume(v), veh/h	393	0	143	0	71	24	226	465	487	24	417	357
Grp Sat Flow(s),veh/h/ln	1225	0	1557	0	1863	1559	1721	1770	1853	1774	1770	1553
Q Serve(g_s), s	30.1	0.0	6.9	0.0	2.7	1.1	6.8	18.7	18.7	1.4	8.0	17.8
Cycle Q Clear(g_c), s	32.8	0.0	6.9	0.0	2.7	1.1	6.8	18.7	18.7	1.4	8.0	17.8
Prop In Lane	0.94		1.00	0.00		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	507	0	561	0	671	562	298	898	941	34	1558	684
V/C Ratio(X)	0.77	0.00	0.25	0.00	0.11	0.04	0.76	0.52	0.52	0.71	0.27	0.52
Avail Cap(c_a), veh/h	899	0	1024	0	1366	1143	518	898	941	100	1558	684
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	24.0	0.0	22.6	22.1	47.5	17.5	17.5	51.9	18.9	21.6
Incr Delay (d2), s/veh	2.6	0.0	0.2	0.0	0.1	0.0	3.9	2.1	2.0	23.6	0.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	0.0	3.0	0.0	1.4	0.5	3.4	9.6	10.0	0.9	4.0	8.2
LnGrp Delay(d), s/veh	36.1	0.0	24.2	0.0	22.7	22.1	51.4	19.6	19.5	75.5	19.3	24.5
LnGrp LOS	D		C		C	C	D	B	B	E	B	C
Approach Vol, veh/h		536			95			1178			798	
Approach Delay, s/veh		32.9			22.5			25.7			23.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.0	58.0	0.0	42.3	13.2	50.8		42.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	54.0	4.0	70.0	16.0	44.0		78.0
Max Q Clear Time (g_c+I1), s	3.4	20.7	0.0	34.8	8.8	19.8		4.7
Green Ext Time (p_c), s	0.0	6.5	0.0	3.6	0.4	4.0		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	80	40	60	70	240	20	660	20	180	270	20
Future Volume (veh/h)	30	80	40	60	70	240	20	660	20	180	270	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.87	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	36	96	48	72	84	289	24	795	24	217	325	24
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	124	53	118	126	338	744	2515	1109	464	2515	1086
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	89	510	218	342	521	1391	1032	3574	1576	671	3574	1544
Grp Volume(v), veh/h	180	0	0	156	0	289	24	795	24	217	325	24
Grp Sat Flow(s),veh/h/ln	816	0	0	863	0	1391	1032	1787	1576	671	1787	1544
Q Serve(g_s), s	8.7	0.0	0.0	0.0	0.0	29.6	1.2	12.7	0.7	27.2	4.4	0.7
Cycle Q Clear(g_c), s	34.2	0.0	0.0	25.4	0.0	29.6	5.6	12.7	0.7	39.8	4.4	0.7
Prop In Lane	0.20		0.27	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	0	245	0	338	744	2515	1109	464	2515	1086
V/C Ratio(X)	0.79	0.00	0.00	0.64	0.00	0.86	0.03	0.32	0.02	0.47	0.13	0.02
Avail Cap(c_a), veh/h	235	0	0	253	0	345	744	2515	1109	464	2515	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	0.0	0.0	51.1	0.0	54.0	8.1	8.4	6.7	16.0	7.2	6.7
Incr Delay (d2), s/veh	16.3	0.0	0.0	5.0	0.0	18.4	0.1	0.3	0.0	3.4	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	0.0	6.3	0.0	13.1	0.3	6.3	0.3	5.4	2.2	0.3
LnGrp Delay(d), s/veh	71.6	0.0	0.0	56.1	0.0	72.4	8.2	8.8	6.7	19.4	7.3	6.7
LnGrp LOS	E			E		E	A	A	A	B	A	A
Approach Vol, veh/h		180			445			843			566	
Approach Delay, s/veh		71.6			66.7			8.7			11.9	
Approach LOS		E			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		109.0		40.2		109.0		40.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		105.0		37.0		105.0		37.0
Max Q Clear Time (g_c+I1), s		14.7		36.2		41.8		31.6
Green Ext Time (p_c), s		6.4		0.1		4.6		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	17.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Future Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	306	42	69	0	42	14	97	83	14	14	69	319
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	20.5	10.3	13.2	16.9
HCM LOS	C	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	54%	0%	73%	0%	3%
Vol Thru, %	46%	0%	10%	75%	17%
Vol Right, %	0%	100%	17%	25%	79%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	10	300	40	290
LT Vol	70	0	220	0	10
Through Vol	60	0	30	30	50
RT Vol	0	10	50	10	230
Lane Flow Rate	181	14	417	56	403
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.348	0.023	0.678	0.102	0.612
Departure Headway (Hd)	6.941	5.952	5.856	6.585	5.469
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	515	595	613	548	657
Service Time	4.74	3.75	3.929	4.585	3.551
HCM Lane V/C Ratio	0.351	0.024	0.68	0.102	0.613
HCM Control Delay, s/veh	13.5	8.9	20.5	10.3	16.9
HCM Lane LOS	B	A	C	B	C
HCM 95th-tile Q	1.5	0.1	5.2	0.3	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	90	20	10	20	140	920	100	40	1080	20
Future Volume (veh/h)	10	20	90	20	10	20	140	920	100	40	1080	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	11	22	100	22	11	22	156	1022	111	44	1200	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	66	107	125	110	47	102	184	2763	1208	56	2509	1108
Arrive On Green	0.08	0.08	0.08	0.08	0.08	0.08	0.11	0.80	0.80	0.03	0.72	0.72
Sat Flow, veh/h	363	1334	1553	784	583	1270	1740	3471	1518	1740	3471	1533
Grp Volume(v), veh/h	33	0	100	30	0	25	156	1022	111	44	1200	22
Grp Sat Flow(s),veh/h/ln	1697	0	1553	1198	0	1438	1740	1736	1518	1740	1736	1533
Q Serve(g_s), s	0.0	0.0	8.3	1.8	0.0	2.1	11.6	11.2	2.1	3.3	19.3	0.5
Cycle Q Clear(g_c), s	2.2	0.0	8.3	4.0	0.0	2.1	11.6	11.2	2.1	3.3	19.3	0.5
Prop In Lane	0.33		1.00	0.73		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	173	0	125	144	0	116	184	2763	1208	56	2509	1108
V/C Ratio(X)	0.19	0.00	0.80	0.21	0.00	0.22	0.85	0.37	0.09	0.78	0.48	0.02
Avail Cap(c_a), veh/h	289	0	235	240	0	218	409	2763	1208	172	2509	1108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.8	0.0	59.6	57.7	0.0	56.7	57.9	3.9	3.0	63.3	7.7	5.1
Incr Delay (d2), s/veh	0.5	0.0	11.1	0.7	0.0	0.9	10.3	0.4	0.2	20.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	4.0	1.1	0.0	0.9	6.1	5.4	0.9	1.9	9.4	0.2
LnGrp Delay(d), s/veh	57.3	0.0	70.7	58.5	0.0	57.7	68.2	4.3	3.1	83.6	8.4	5.2
LnGrp LOS	E		E	E		E	E	A	A	F	A	A
Approach Vol, veh/h		133			55			1289			1266	
Approach Delay, s/veh		67.4			58.1			11.9			11.0	
Approach LOS		E			E			B			B	

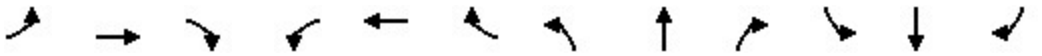
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	109.0		14.6	17.9	99.3		14.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	105.0		20.0	31.0	87.0		20.0
Max Q Clear Time (g_c+I1), s	5.3	13.2		10.3	13.6	21.3		6.0
Green Ext Time (p_c), s	0.0	10.7		0.3	0.4	12.3		0.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.1
HCM 2010 LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1330	70	580	1630	310	460
Future Volume (veh/h)	1330	70	580	1630	310	460
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1385	73	604	1698	323	479
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1560	1115	673	3384	490	438
Arrive On Green	0.44	0.44	0.20	0.67	0.28	0.28
Sat Flow, veh/h	3632	1537	3442	5253	1774	1583
Grp Volume(v), veh/h	1385	73	604	1698	323	479
Grp Sat Flow(s),veh/h/ln	1770	1537	1721	1695	1774	1583
Q Serve(g_s), s	49.4	1.9	23.5	23.1	22.1	38.0
Cycle Q Clear(g_c), s	49.4	1.9	23.5	23.1	22.1	38.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1560	1115	673	3384	490	438
V/C Ratio(X)	0.89	0.07	0.90	0.50	0.66	1.09
Avail Cap(c_a), veh/h	1751	1198	801	3847	490	438
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.3	5.8	53.9	11.6	44.0	49.7
Incr Delay (d2), s/veh	5.5	0.0	11.5	0.1	6.8	71.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.2	1.6	12.2	10.7	11.8	25.2
LnGrp Delay(d), s/veh	40.9	5.8	65.4	11.7	50.8	120.7
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1458			2302	802	
Approach Delay, s/veh	39.1			25.8	92.6	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		42.0	30.9	64.6				95.5
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		38.0	32.0	68.0				104.0
Max Q Clear Time (g_c+I1), s		40.0	25.5	51.4				25.1
Green Ext Time (p_c), s		0.0	1.4	9.1				23.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.8
HCM 2010 LOS	D



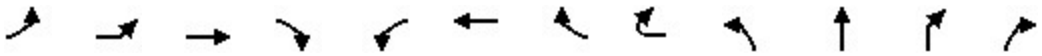
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	850	480	70	1100	60	10	10	20	580	30	280
Future Volume (vph)	20	850	480	70	1100	60	10	10	20	580	30	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1545	1787	3574	1547		1715		1698	1620	1519
Flt Permitted	0.14	1.00	1.00	0.95	1.00	1.00		0.90		0.95	0.71	1.00
Satd. Flow (perm)	270	3574	1545	1787	3574	1547		1566		1698	1192	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	21	876	495	72	1134	62	10	10	21	598	31	289
RTOR Reduction (vph)	0	0	112	0	0	35	0	16	0	0	2	42
Lane Group Flow (vph)	21	876	383	72	1134	27	0	25	0	329	327	218
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	42.5	42.5	42.5	8.2	54.7	54.7		28.1		29.2	61.3	61.3
Effective Green, g (s)	42.5	42.5	42.5	8.2	54.7	54.7		28.1		29.2	61.3	61.3
Actuated g/C Ratio	0.34	0.34	0.34	0.07	0.44	0.44		0.23		0.24	0.49	0.49
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	92	1224	529	118	1576	682		354		399	690	750
v/s Ratio Prot		0.25		0.04	c0.32					c0.19	0.11	
v/s Ratio Perm	0.08		0.25			0.02		0.02			c0.12	0.14
v/c Ratio	0.23	0.72	0.72	0.61	0.72	0.04		0.07		0.82	0.47	0.29
Uniform Delay, d1	29.1	35.5	35.6	56.3	28.4	19.7		37.7		45.0	20.7	18.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	2.0	4.9	9.0	1.6	0.0		0.1		13.0	0.5	1.0
Delay (s)	30.3	37.5	40.5	65.3	30.0	19.7		37.8		57.9	21.2	19.5
Level of Service	C	D	D	E	C	B		D		E	C	B
Approach Delay (s/veh)		38.5			31.5			37.8			33.9	
Approach LOS		D			C			D			C	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	34.9	HCM 2000 Level of Service	C		
HCM 2000 Volume to Capacity ratio	0.72				
Actuated Cycle Length (s)	124.0	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	70.1%	ICU Level of Service	C		
Analysis Period (min)	15				
c Critical Lane Group					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	980	310	250	1270	220	320	710	180	170	500	260
Future Volume (veh/h)	170	980	310	250	1270	220	320	710	180	170	500	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	183	1054	333	269	1366	237	344	763	194	183	538	280
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	207	1152	501	293	1623	281	368	1026	441	207	703	302
Arrive On Green	0.12	0.32	0.32	0.16	0.37	0.37	0.21	0.29	0.29	0.12	0.20	0.20
Sat Flow, veh/h	1792	3574	1554	1792	4383	760	1792	3574	1536	1792	3574	1533
Grp Volume(v), veh/h	183	1054	333	269	1067	536	344	763	194	183	538	280
Grp Sat Flow(s),veh/h/ln	1792	1787	1554	1792	1712	1719	1792	1787	1536	1792	1787	1533
Q Serve(g_s), s	14.4	40.5	26.4	21.1	40.7	40.8	27.0	27.6	14.7	14.4	20.3	25.6
Cycle Q Clear(g_c), s	14.4	40.5	26.4	21.1	40.7	40.8	27.0	27.6	14.7	14.4	20.3	25.6
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	1152	501	293	1268	636	368	1026	441	207	703	302
V/C Ratio(X)	0.89	0.91	0.66	0.92	0.84	0.84	0.93	0.74	0.44	0.89	0.77	0.93
Avail Cap(c_a), veh/h	238	1201	522	326	1318	662	414	1026	441	238	703	302
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.3	46.5	41.8	58.8	41.2	41.2	55.8	46.2	41.6	62.3	54.3	56.4
Incr Delay (d2), s/veh	27.8	10.6	3.0	28.5	4.9	9.4	26.7	4.9	3.2	27.8	7.8	36.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	21.8	11.8	12.8	20.1	21.0	16.1	14.4	6.6	8.7	10.8	13.9
LnGrp Delay(d), s/veh	90.1	57.2	44.8	87.3	46.1	50.5	82.5	51.1	44.7	90.1	62.0	92.8
LnGrp LOS	F	E	D	F	D	D	F	D	D	F	E	F
Approach Vol, veh/h		1570			1872			1301			1001	
Approach Delay, s/veh		58.4			53.3			58.4			75.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	45.0	27.3	50.0	33.4	32.1	20.5	56.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	41.0	26.0	48.0	33.0	27.0	19.0	55.0
Max Q Clear Time (g_c+I1), s	16.4	29.6	23.1	42.5	29.0	27.6	16.4	42.8
Green Ext Time (p_c), s	0.1	4.3	0.2	3.6	0.4	0.0	0.1	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.8
HCM 2010 LOS	E



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	30	250	820	80	40	700	240	120	100	510	370	10
Future Volume (vph)	30	250	820	80	40	700	240	120	100	510	370	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.97	1.00	0.99			1.00	0.98	0.91	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.95			1.00	0.97	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	3539	1534	1770	4771			1770	3250	1310	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	3539	1534	1770	4771			1770	3250	1310	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	32	266	872	85	43	745	255	128	106	543	394	11
RTOR Reduction (vph)	0	0	0	58	0	10	0	0	0	0	121	0
Lane Group Flow (vph)	0	298	872	27	43	1118	0	0	106	657	170	0
Confl. Peds. (#/hr)		7		7	7		7		2		27	
Confl. Bikes (#/hr)							2				4	
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		22.0	48.0	48.0	4.8	30.8			13.5	32.0	32.0	
Effective Green, g (s)		22.0	48.0	48.0	4.8	30.8			13.5	32.0	32.0	
Actuated g/C Ratio		0.15	0.32	0.32	0.03	0.20			0.09	0.21	0.21	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		258	1126	488	56	974			158	689	277	
v/s Ratio Prot		c0.17	0.25		0.02	c0.23			0.06	c0.20		
v/s Ratio Perm				0.02							0.13	
v/c Ratio		1.16	0.77	0.06	0.77	1.15			0.67	0.95	0.62	
Uniform Delay, d1		64.4	46.5	35.7	72.4	60.0			66.5	58.7	53.8	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		104.5	3.4	0.0	46.0	78.5			10.7	24.6	9.8	
Delay (s)		168.9	49.9	35.7	118.5	138.5			77.2	83.3	63.7	
Level of Service		F	D	D	F	F			E	F	E	
Approach Delay (s/veh)			77.2			137.8				77.3		
Approach LOS			E			F				E		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	101.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	24.0
Intersection Capacity Utilization	99.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Future Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1015	1827	1541	1158	1827	1541	741	3471	1518	681	3471	1517
Grp Volume(v), veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Grp Sat Flow(s),veh/h/ln	1015	1827	1541	1158	1827	1541	741	1736	1518	681	1736	1517
Q Serve(g_s), s	7.9	6.7	7.2	9.0	18.1	7.2	31.0	9.5	1.4	2.4	7.3	2.6
Cycle Q Clear(g_c), s	25.9	6.7	7.2	15.7	18.1	7.2	38.4	9.5	1.4	11.9	7.3	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
V/C Ratio(X)	0.46	0.28	0.29	0.35	0.68	0.29	0.54	0.28	0.05	0.07	0.22	0.09
Avail Cap(c_a), veh/h	178	461	389	288	461	389	563	2581	1129	511	2581	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	48.3	48.4	54.9	52.8	48.4	11.5	5.9	4.9	7.8	5.6	5.0
Incr Delay (d2), s/veh	2.6	0.4	0.5	0.9	2.9	0.5	3.8	0.3	0.1	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.4	3.1	2.9	9.4	3.1	6.9	4.6	0.6	0.5	3.5	1.2
LnGrp Delay(d), s/veh	67.4	48.7	49.0	55.9	55.7	49.0	15.3	6.2	5.0	8.1	5.8	5.2
LnGrp LOS	E	D	D	E	E	D	B	A	A	A	A	A
Approach Vol, veh/h		250			421			1080			716	
Approach Delay, s/veh		53.1			54.3			8.7			5.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		110.0		32.5		110.0		32.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		106.0		36.0		106.0		36.0
Max Q Clear Time (g_c+I1), s		40.4		27.9		13.9		20.1
Green Ext Time (p_c), s		9.5		0.6		4.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Future Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	66	55	99	44	143	44	187	912	22	66	890	121
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	20	333	30	79	333	391	2523	1081	415	2523	1104
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	90	1468	0	349	1467	550	3505	1502	591	3505	1533
Grp Volume(v), veh/h	121	0	99	187	0	44	187	912	22	66	890	121
Grp Sat Flow(s),veh/h/ln	90	0	1468	349	0	1467	550	1752	1502	591	1752	1533
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	3.6	29.0	14.8	0.6	7.1	14.3	3.6
Cycle Q Clear(g_c), s	34.0	0.0	8.4	34.0	0.0	3.6	43.3	14.8	0.6	21.9	14.3	3.6
Prop In Lane	0.55		1.00	0.24		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
V/C Ratio(X)	2.10	0.00	0.30	1.72	0.00	0.13	0.48	0.36	0.02	0.16	0.35	0.11
Avail Cap(c_a), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	0.0	48.1	52.6	0.0	46.2	16.0	7.9	6.0	12.1	7.9	6.4
Incr Delay (d2), s/veh	549.3	0.0	0.5	359.4	0.0	0.2	4.1	0.4	0.0	0.8	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	3.5	15.4	0.0	1.5	4.8	7.2	0.3	1.2	6.9	1.6
LnGrp Delay(d), s/veh	612.5	0.0	48.6	412.1	0.0	46.4	20.1	8.4	6.0	12.9	8.3	6.6
LnGrp LOS	F		D	F		D	C	A	A	B	A	A
Approach Vol, veh/h		220			231			1121			1077	
Approach Delay, s/veh		358.7			342.4			10.3			8.4	
Approach LOS		F			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		45.3		36.0		23.9		36.0
Green Ext Time (p_c), s		11.9		0.0		9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.4
HCM 2010 LOS	E

NORWALK STATION NO PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1140	380	20	1380	380	390	540	0	370	710	10
Future Volume (vph)	0	1140	380	20	1380	380	390	540	0	370	710	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)		4876		1770	5085	1551	1522	4751		1522	4775	1560
Flt Permitted		1.00		0.09	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)		4876		162	5085	1551	1522	4751		1522	4775	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1267	422	22	1533	422	433	600	0	411	789	11
RTOR Reduction (vph)	0	40	0	0	0	83	0	0	0	0	0	9
Lane Group Flow (vph)	0	1649	0	22	1533	339	251	782	0	292	908	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Effective Green, g (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Actuated g/C Ratio		0.57		0.57	0.57	0.57	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2795		92	2915	889	294	918		233	732	239
v/s Ratio Prot		c0.34			0.30		c0.16	0.16		c0.19	0.19	
v/s Ratio Perm				0.14		0.22						0.00
v/c Ratio		0.59		0.24	0.53	0.38	0.85	0.85		1.25	1.24	0.01
Uniform Delay, d1		20.6		15.8	19.5	17.5	58.5	58.4		63.5	63.5	53.8
Progression Factor		0.90		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		1.3	0.2	0.3	25.7	9.8		144.2	119.7	0.1
Delay (s)		18.5		17.2	19.7	17.8	84.2	68.3		207.7	183.2	53.9
Level of Service		B		B	B	B	F	E		F	F	D
Approach Delay (s/veh)		18.5			19.3			72.1			187.9	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	62.8	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Future Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.88	0.97		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
Arrive On Green	0.04	0.48	0.48	0.06	0.50	0.50	0.09	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1757	3505	1522	1757	3505	1544	3408	3505	1382	1757	3505	1379
Grp Volume(v), veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1522	1757	1752	1544	1704	1752	1382	1757	1752	1379
Q Serve(g_s), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Cycle Q Clear(g_c), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
V/C Ratio(X)	0.45	0.86	0.37	0.81	0.83	0.11	0.81	0.39	0.33	0.31	0.52	0.31
Avail Cap(c_a), veh/h	213	1997	867	309	2216	976	399	985	388	342	875	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	29.6	21.3	28.0	27.1	16.7	57.5	37.2	36.5	33.1	41.4	39.1
Incr Delay (d2), s/veh	1.9	3.4	0.3	8.6	2.3	0.1	8.5	1.2	2.3	0.6	2.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	23.0	6.1	3.3	22.7	1.6	4.5	5.7	3.9	2.6	7.2	3.4
LnGrp Delay(d), s/veh	27.1	33.0	21.6	36.6	29.5	16.7	65.9	38.4	38.8	33.6	43.6	41.5
LnGrp LOS	C	C	C	D	C	B	E	D	D	C	D	D
Approach Vol, veh/h		1774			1720			753			657	
Approach Delay, s/veh		31.0			29.5			47.1			41.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	40.0	12.0	65.1	15.0	36.0	8.5	68.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	36.0	16.0	73.0	15.0	30.0	8.0	81.0
Max Q Clear Time (g_c+I1), s	7.2	13.4	7.8	48.2	10.7	16.2	4.8	48.0
Green Ext Time (p_c), s	0.0	2.8	0.2	12.9	0.3	2.7	0.0	14.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1010	100	170	1220	80	70	590	120	100	510	280
Future Volume (veh/h)	310	1010	100	170	1220	80	70	590	120	100	510	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	320	1041	103	175	1258	82	72	608	124	103	526	289
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	354	2017	615	205	1590	490	92	1103	489	154	1078	478
Arrive On Green	0.20	0.40	0.40	0.12	0.31	0.31	0.05	0.31	0.31	0.04	0.30	0.30
Sat Flow, veh/h	1774	5085	1551	1774	5085	1567	1774	3539	1570	3442	3539	1569
Grp Volume(v), veh/h	320	1041	103	175	1258	82	72	608	124	103	526	289
Grp Sat Flow(s),veh/h/ln	1774	1695	1551	1774	1695	1567	1774	1770	1570	1721	1770	1569
Q Serve(g_s), s	21.5	18.9	5.2	11.8	27.5	4.6	4.9	17.4	7.2	3.6	14.8	19.1
Cycle Q Clear(g_c), s	21.5	18.9	5.2	11.8	27.5	4.6	4.9	17.4	7.2	3.6	14.8	19.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	354	2017	615	205	1590	490	92	1103	489	154	1078	478
V/C Ratio(X)	0.90	0.52	0.17	0.85	0.79	0.17	0.78	0.55	0.25	0.67	0.49	0.60
Avail Cap(c_a), veh/h	582	2670	814	349	2003	617	175	1103	489	226	1078	478
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	27.9	23.8	52.9	38.3	30.4	57.1	34.9	31.3	57.3	34.6	36.1
Incr Delay (d2), s/veh	11.2	0.2	0.1	9.8	1.8	0.2	13.3	2.0	1.2	4.9	1.6	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	8.9	2.3	6.3	13.2	2.0	2.7	8.8	3.3	1.8	7.5	9.0
LnGrp Delay(d), s/veh	58.9	28.1	23.9	62.7	40.0	30.5	70.4	36.8	32.6	62.2	36.2	41.7
LnGrp LOS	E	C	C	E	D	C	E	D	C	E	D	D
Approach Vol, veh/h		1464			1515			804			918	
Approach Delay, s/veh		34.5			42.1			39.2			40.8	
Approach LOS		C			D			D			D	

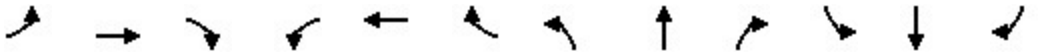
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	42.0	18.1	52.3	10.3	41.1	28.3	42.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	38.0	24.0	64.0	12.0	34.0	40.0	48.0
Max Q Clear Time (g_c+I1), s	5.6	19.4	13.8	20.9	6.9	21.1	23.5	29.5
Green Ext Time (p_c), s	0.1	4.1	0.3	9.1	0.0	3.6	0.8	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Future Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	105	1305	211	105	1189	105	179	526	95	147	758	242
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	129	1595	487	129	1490	132	207	1325	583	174	1259	676
Arrive On Green	0.07	0.32	0.32	0.07	0.32	0.32	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	1740	4988	1524	1740	4659	411	1740	3471	1527	1740	3471	1548
Grp Volume(v), veh/h	105	1305	211	105	848	446	179	526	95	147	758	242
Grp Sat Flow(s),veh/h/ln	1740	1663	1524	1740	1663	1745	1740	1736	1527	1740	1736	1548
Q Serve(g_s), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Cycle Q Clear(g_c), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	1595	487	129	1063	558	207	1325	583	174	1259	676
V/C Ratio(X)	0.81	0.82	0.43	0.81	0.80	0.80	0.87	0.40	0.16	0.85	0.60	0.36
Avail Cap(c_a), veh/h	217	1865	570	217	1243	653	339	1325	583	285	1259	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	40.2	34.5	58.6	39.9	39.9	55.5	28.9	26.2	56.8	33.3	24.1
Incr Delay (d2), s/veh	11.6	2.6	0.6	11.6	3.2	6.0	12.2	0.9	0.6	11.8	2.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	14.6	6.0	4.1	14.1	15.4	6.9	7.0	2.3	5.7	11.3	6.0
LnGrp Delay(d), s/veh	70.2	42.8	35.1	70.2	43.1	45.9	67.7	29.8	26.8	68.6	35.5	25.6
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	D	C
Approach Vol, veh/h		1621			1399			800			1147	
Approach Delay, s/veh		43.6			46.0			37.9			37.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	53.0	13.5	45.0	19.3	50.6	13.5	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	16.0	48.0	25.0	45.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	12.7	16.2	9.6	32.9	15.0	24.9	9.6	31.9
Green Ext Time (p_c), s	0.2	3.8	0.1	8.1	0.3	5.6	0.1	7.3

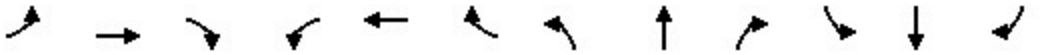
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Future Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
Arrive On Green	0.07	0.44	0.44	0.06	0.44	0.44	0.09	0.31	0.31	0.07	0.28	0.28
Sat Flow, veh/h	1740	3471	1524	1740	3471	1526	1740	3471	1547	1740	3471	1527
Grp Volume(v), veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Grp Sat Flow(s),veh/h/ln	1740	1736	1524	1740	1736	1526	1740	1736	1547	1740	1736	1527
Q Serve(g_s), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Cycle Q Clear(g_c), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
V/C Ratio(X)	0.70	0.91	0.22	0.86	0.76	0.07	0.76	0.53	0.29	0.46	0.79	0.39
Avail Cap(c_a), veh/h	308	1636	718	234	1587	698	294	1066	475	325	987	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	36.4	23.9	31.8	33.0	22.6	34.6	40.2	36.8	32.8	46.3	40.4
Incr Delay (d2), s/veh	5.1	8.0	0.2	21.8	2.2	0.0	9.4	1.9	1.5	1.1	6.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	27.1	3.6	4.4	19.5	1.0	5.8	9.4	4.2	3.8	14.9	5.6
LnGrp Delay(d), s/veh	32.9	44.3	24.1	53.6	35.2	22.6	44.0	42.1	38.4	33.9	52.9	43.0
LnGrp LOS	C	D	C	D	D	C	D	D	D	C	D	D
Approach Vol, veh/h		1727			1374			897			1090	
Approach Delay, s/veh		41.5			37.0			41.9			49.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	47.0	13.1	66.2	16.9	43.8	13.6	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	43.0	13.0	66.0	16.0	39.0	15.0	64.0
Max Q Clear Time (g_c+I1), s	9.7	21.0	9.0	55.1	12.7	31.2	9.4	41.8
Green Ext Time (p_c), s	0.1	4.1	0.1	7.1	0.2	3.3	0.2	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	920	560	670	1360	70	680	840	420	100	1130	150
Future Volume (veh/h)	160	920	560	670	1360	70	680	840	420	100	1130	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	168	968	589	705	1432	74	716	884	442	105	1189	158
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	189	873	260	457	1639	496	457	1360	1002	126	1007	303
Arrive On Green	0.11	0.17	0.17	0.26	0.33	0.33	0.26	0.39	0.39	0.07	0.20	0.20
Sat Flow, veh/h	1757	5036	1502	1757	5036	1524	1757	3505	1532	1757	5036	1515
Grp Volume(v), veh/h	168	968	589	705	1432	74	716	884	442	105	1189	158
Grp Sat Flow(s),veh/h/ln	1757	1679	1502	1757	1679	1524	1757	1752	1532	1757	1679	1515
Q Serve(g_s), s	14.2	26.0	26.0	39.0	40.2	5.2	39.0	31.0	21.4	8.8	30.0	14.0
Cycle Q Clear(g_c), s	14.2	26.0	26.0	39.0	40.2	5.2	39.0	31.0	21.4	8.8	30.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	189	873	260	457	1639	496	457	1360	1002	126	1007	303
V/C Ratio(X)	0.89	1.11	2.26	1.54	0.87	0.15	1.57	0.65	0.44	0.83	1.18	0.52
Avail Cap(c_a), veh/h	199	873	260	457	1639	496	457	1360	1002	187	1007	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	62.0	62.0	55.5	47.7	35.9	55.5	37.6	13.1	68.7	60.0	53.6
Incr Delay (d2), s/veh	33.8	64.9	580.0	255.3	5.5	0.1	265.8	2.4	1.4	17.6	91.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.6	17.3	52.7	51.3	19.5	2.2	52.6	15.4	9.5	4.9	22.4	6.4
LnGrp Delay(d), s/veh	99.8	126.9	642.0	310.8	53.2	36.0	321.3	40.0	14.5	86.3	151.6	59.9
LnGrp LOS	F	F	F	F	D	D	F	D	B	F	F	E
Approach Vol, veh/h		1725			2211			2042			1452	
Approach Delay, s/veh		300.1			134.8			133.1			136.9	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	62.2	43.0	30.0	43.0	34.0	20.2	52.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	53.0	39.0	26.0	39.0	30.0	17.0	48.0
Max Q Clear Time (g_c+I1), s	10.8	33.0	41.0	28.0	41.0	32.0	16.2	42.2
Green Ext Time (p_c), s	0.1	7.9	0.0	0.0	0.0	0.0	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	173.1
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Future Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
Arrive On Green	0.12	0.31	0.31	0.04	0.23	0.23	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1757	5036	1541	1757	5036	1538	613	3505	1547	725	3505	1546
Grp Volume(v), veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Grp Sat Flow(s),veh/h/ln	1757	1679	1541	1757	1679	1538	613	1752	1547	725	1752	1546
Q Serve(g_s), s	12.2	26.2	6.2	3.7	17.9	4.0	13.7	12.2	2.7	12.7	11.8	11.8
Cycle Q Clear(g_c), s	12.2	26.2	6.2	3.7	17.9	4.0	25.5	12.2	2.7	25.0	11.8	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
V/C Ratio(X)	0.85	0.77	0.22	0.78	0.70	0.18	0.31	0.33	0.09	0.30	0.32	0.32
Avail Cap(c_a), veh/h	444	2383	729	172	1602	489	340	1944	858	389	1944	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	38.4	31.5	58.4	43.4	38.1	21.7	14.9	12.8	21.7	14.8	14.8
Incr Delay (d2), s/veh	9.5	0.8	0.2	16.9	0.8	0.2	2.3	0.5	0.2	2.0	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	12.2	2.7	2.1	8.4	1.7	2.5	6.0	1.2	2.8	5.8	5.2
LnGrp Delay(d), s/veh	62.5	39.2	31.7	75.3	44.2	38.3	24.0	15.3	13.0	23.6	15.2	15.7
LnGrp LOS	E	D	C	E	D	D	C	B	B	C	B	B
Approach Vol, veh/h		1473			916			821			1011	
Approach Delay, s/veh		41.5			45.6			16.2			16.3	
Approach LOS		D			D			B			B	

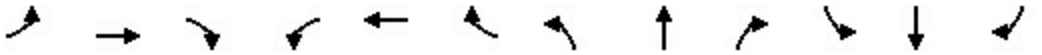
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		72.0	8.8	41.8		72.0	18.6	32.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	12.0	58.0		68.0	31.0	39.0
Max Q Clear Time (g_c+I1), s		27.5	5.7	28.2		27.0	14.2	19.9
Green Ext Time (p_c), s		6.0	0.0	9.6		6.6	0.4	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Future Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
Arrive On Green	0.07	0.44	0.44	0.08	0.45	0.45	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1757	3505	1547	1757	3505	1547	686	3505	1545	584	3505	1544
Grp Volume(v), veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Grp Sat Flow(s),veh/h/ln	1757	1752	1547	1757	1752	1547	686	1752	1545	584	1752	1544
Q Serve(g_s), s	7.4	49.5	4.5	9.0	31.4	2.2	18.7	21.0	15.8	17.8	18.6	8.2
Cycle Q Clear(g_c), s	7.4	49.5	4.5	9.0	31.4	2.2	37.3	21.0	15.8	38.8	18.6	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
V/C Ratio(X)	0.81	0.89	0.12	0.83	0.65	0.06	0.46	0.51	0.40	0.44	0.46	0.23
Avail Cap(c_a), veh/h	191	1757	775	191	1757	776	228	1375	606	192	1375	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	35.4	22.8	62.4	29.2	21.2	44.9	31.8	30.2	46.5	31.1	27.9
Incr Delay (d2), s/veh	12.5	5.5	0.1	19.9	0.7	0.0	6.6	1.4	2.0	7.2	1.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	25.0	1.9	5.2	15.4	0.9	4.0	10.4	7.1	3.3	9.3	3.7
LnGrp Delay(d), s/veh	75.9	40.9	22.9	82.3	29.9	21.2	51.6	33.1	32.2	53.7	32.2	28.8
LnGrp LOS	E	D	C	F	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1553			1192			1053			861	
Approach Delay, s/veh		42.0			34.7			34.8			33.8	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	15.0	64.7		58.0	13.3	66.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	15.0	69.0		54.0	15.0	69.0
Max Q Clear Time (g_c+I1), s		39.3	11.0	51.5		40.8	9.4	33.4
Green Ext Time (p_c), s		5.3	0.1	9.1		4.3	0.1	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Future Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	985	1845	1546	1005	1845	1566	669	3505	1529	604	3505	1530
Grp Volume(v), veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Grp Sat Flow(s),veh/h/ln	985	1845	1546	1005	1845	1566	669	1752	1529	604	1752	1530
Q Serve(g_s), s	11.5	20.1	2.8	11.1	20.9	3.5	16.8	13.7	2.7	11.4	11.4	2.7
Cycle Q Clear(g_c), s	32.4	20.1	2.8	31.2	20.9	3.5	28.2	13.7	2.7	25.2	11.4	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
V/C Ratio(X)	0.52	0.63	0.10	0.49	0.65	0.13	0.35	0.35	0.09	0.25	0.31	0.09
Avail Cap(c_a), veh/h	300	751	630	311	751	638	441	2326	1015	392	2326	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	42.0	35.8	55.7	42.3	36.0	15.4	9.8	8.0	15.3	9.4	8.0
Incr Delay (d2), s/veh	2.4	1.3	0.1	2.1	1.4	0.1	2.2	0.4	0.2	1.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	10.4	1.2	3.2	10.8	1.5	3.3	6.8	1.2	2.1	5.6	1.2
LnGrp Delay(d), s/veh	59.0	43.3	35.9	57.7	43.7	36.1	17.6	10.2	8.1	16.9	9.8	8.1
LnGrp LOS	E	D	D	E	D	D	B	B	A	B	A	A
Approach Vol, veh/h		451			473			1066			901	
Approach Delay, s/veh		45.6			45.4			11.1			10.4	
Approach LOS		D			D			B			B	

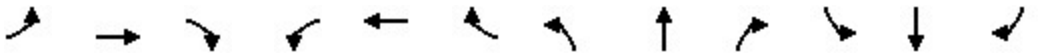
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		40.6		92.0		40.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		54.0		88.0		54.0
Max Q Clear Time (g_c+I1), s		30.2		34.4		27.2		33.2
Green Ext Time (p_c), s		8.7		2.2		6.9		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	980	90	220	1150	100	120	560	430	160	680	180
Future Volume (veh/h)	90	980	90	220	1150	100	120	560	430	160	680	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	101	1101	101	247	1292	112	135	629	483	180	764	202
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	124	1274	375	274	1591	138	160	1246	545	206	1337	592
Arrive On Green	0.07	0.25	0.25	0.16	0.34	0.34	0.09	0.36	0.36	0.12	0.38	0.38
Sat Flow, veh/h	1757	5036	1482	1757	4700	407	1757	3505	1531	1757	3505	1552
Grp Volume(v), veh/h	101	1101	101	247	923	481	135	629	483	180	764	202
Grp Sat Flow(s),veh/h/ln	1757	1679	1482	1757	1679	1750	1757	1752	1531	1757	1752	1552
Q Serve(g_s), s	7.7	28.2	7.4	18.6	33.9	33.9	10.2	19.0	40.1	13.6	23.3	12.5
Cycle Q Clear(g_c), s	7.7	28.2	7.4	18.6	33.9	33.9	10.2	19.0	40.1	13.6	23.3	12.5
Prop In Lane	1.00		1.00	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	124	1274	375	274	1136	592	160	1246	545	206	1337	592
V/C Ratio(X)	0.82	0.86	0.27	0.90	0.81	0.81	0.84	0.50	0.89	0.88	0.57	0.34
Avail Cap(c_a), veh/h	169	1380	406	364	1293	674	247	1246	545	273	1337	592
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.9	48.2	40.4	56.0	40.7	40.7	60.4	34.2	40.9	58.6	33.0	29.7
Incr Delay (d2), s/veh	19.4	5.6	0.4	20.4	3.6	6.7	14.5	1.5	18.9	20.9	1.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	13.7	3.1	10.6	16.2	17.4	5.6	9.4	19.8	7.8	11.6	5.6
LnGrp Delay(d), s/veh	81.3	53.8	40.8	76.4	44.3	47.4	74.9	35.6	59.8	79.5	34.8	31.2
LnGrp LOS	F	D	D	E	D	D	E	D	E	E	C	C
Approach Vol, veh/h		1303			1651			1247			1146	
Approach Delay, s/veh		54.9			50.0			49.2			41.2	
Approach LOS		D			D			D			D	

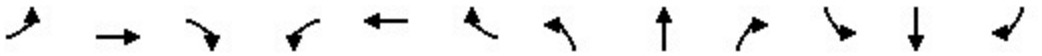
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.8	52.0	25.0	38.1	16.3	55.5	13.5	49.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	48.0	28.0	37.0	19.0	50.0	13.0	52.0
Max Q Clear Time (g_c+I1), s	15.6	42.1	20.6	30.2	12.2	25.3	9.7	35.9
Green Ext Time (p_c), s	0.2	2.9	0.4	3.9	0.2	5.8	0.1	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1540	20	10	1380	0	40	0	70	10	0	10
Future Volume (vph)	0	1540	20	10	1380	0	40	0	70	10	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Lane Util. Factor		0.91		1.00	0.91		1.00		1.00		1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00		0.98		1.00	
Flpb, ped/bikes		1.00		1.00	1.00		1.00		1.00		1.00	
Frt		1.00		1.00	1.00		1.00		0.85		0.93	
Flt Protected		1.00		0.95	1.00		0.95		1.00		0.98	
Satd. Flow (prot)		5023		1752	5036		1752		1537		1695	
Flt Permitted		1.00		0.09	1.00		0.74		1.00		0.98	
Satd. Flow (perm)		5023		170	5036		1371		1537		1695	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1674	22	11	1500	0	43	0	76	11	0	11
RTOR Reduction (vph)	0	2	0	0	0	0	0	0	49	0	14	0
Lane Group Flow (vph)	0	1694	0	11	1500	0	43	0	27	0	8	0
Confl. Peds. (#/hr)			10	10					5			
Confl. Bikes (#/hr)			4									
Heavy Vehicles (%)	2%	3%	3%	3%	3%	2%	3%	2%	3%	2%	2%	2%
Turn Type		NA		pm+pt	NA		Perm		Perm	Perm	NA	
Protected Phases		4		3	8						6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		39.5		44.5	44.5		28.6		28.6		28.6	
Effective Green, g (s)		39.5		44.5	44.5		28.6		28.6		28.6	
Actuated g/C Ratio		0.49		0.55	0.55		0.35		0.35		0.35	
Clearance Time (s)		4.0		4.0	4.0		4.0		4.0		4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0		3.0		3.0	
Lane Grp Cap (vph)		2446		112	2763		483		542		597	
v/s Ratio Prot		c0.34		0.00	c0.30							
v/s Ratio Perm				0.05			c0.03		0.02		0.00	
v/c Ratio		0.69		0.10	0.54		0.09		0.05		0.01	
Uniform Delay, d1		16.1		11.4	11.8		17.5		17.3		17.1	
Progression Factor		1.00		1.00	1.00		1.00		1.00		1.00	
Incremental Delay, d2		0.9		0.4	0.2		0.4		0.2		0.0	
Delay (s)		17.0		11.8	12.0		17.9		17.5		17.1	
Level of Service		B		B	B		B		B		B	
Approach Delay (s/veh)		17.0			12.0			17.6			17.1	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	81.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	56.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



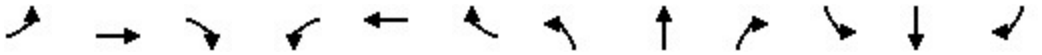
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1510	50	20	1410	10	60	0	40	0	0	10
Future Volume (vph)	0	1510	50	20	1410	10	60	0	40	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor		0.91		1.00	0.91		0.95	0.91	0.95		1.00	
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00	1.00		0.98	
Flpb, ped/bikes		1.00		1.00	1.00		0.99	0.99	1.00		1.00	
Frt		1.00		1.00	1.00		1.00	0.96	0.85		0.87	
Flt Protected		1.00		0.95	1.00		0.95	0.96	1.00		1.00	
Satd. Flow (prot)		4954		1736	4981		1636	1531	1475		1548	
Flt Permitted		1.00		0.09	1.00		0.75	0.86	1.00		1.00	
Satd. Flow (perm)		4954		159	4981		1292	1365	1475		1548	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1678	56	22	1567	11	67	0	44	0	0	11
RTOR Reduction (vph)	0	3	0	0	1	0	0	24	23	0	7	0
Lane Group Flow (vph)	0	1731	0	22	1577	0	39	14	11	0	4	0
Confl. Peds. (#/hr)	3		12	12		3	5					5
Confl. Bikes (#/hr)			14			4						1
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA		pm+pt	NA		Perm	NA	Perm		NA	
Protected Phases		4		3	8			2			6	
Permitted Phases	4			8			2		2	6		
Actuated Green, G (s)		42.1		48.2	48.2		27.8	27.8	27.8		27.8	
Effective Green, g (s)		42.1		48.2	48.2		27.8	27.8	27.8		27.8	
Actuated g/C Ratio		0.50		0.57	0.57		0.33	0.33	0.33		0.33	
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)		2482		130	2858		427	451	488		512	
v/s Ratio Prot		c0.35		0.00	c0.32						0.00	
v/s Ratio Perm				0.09			c0.03	0.01	0.01			
v/c Ratio		0.70		0.17	0.55		0.09	0.03	0.02		0.01	
Uniform Delay, d1		16.1		11.1	11.2		19.4	19.0	18.9		18.8	
Progression Factor		1.00		1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2		0.9		0.6	0.2		0.4	0.1	0.1		0.0	
Delay (s)		16.9		11.7	11.4		19.8	19.1	19.0		18.9	
Level of Service		B		B	B		B	B	B		B	
Approach Delay (s/veh)		16.9			11.4			19.3			18.9	
Approach LOS		B			B			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.47		
Actuated Cycle Length (s)	84.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Future Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	1430	204	54	903	54	118	398	86	65	516	161
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1898	838	119	1898	837	250	1442	636	352	1080	335
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	584	3539	1562	306	3539	1561	759	3539	1560	907	2649	822
Grp Volume(v), veh/h	65	1430	204	54	903	54	118	398	86	65	344	333
Grp Sat Flow(s),veh/h/ln	584	1770	1562	306	1770	1561	759	1770	1560	907	1770	1702
Q Serve(g_s), s	11.1	44.7	9.9	23.7	22.6	2.4	19.3	10.7	4.9	7.3	20.3	20.5
Cycle Q Clear(g_c), s	33.7	44.7	9.9	68.5	22.6	2.4	39.8	10.7	4.9	18.0	20.3	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	271	1898	838	119	1898	837	250	1442	636	352	721	694
V/C Ratio(X)	0.24	0.75	0.24	0.46	0.48	0.06	0.47	0.28	0.14	0.18	0.48	0.48
Avail Cap(c_a), veh/h	303	2089	922	135	2089	921	250	1442	636	352	721	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	25.7	17.6	52.3	20.5	15.9	45.7	28.1	26.4	34.2	31.0	31.1
Incr Delay (d2), s/veh	0.5	1.4	0.1	2.7	0.2	0.0	6.2	0.5	0.4	1.2	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.2	4.3	2.1	11.1	1.0	4.5	5.3	2.2	2.0	10.4	10.1
LnGrp Delay(d), s/veh	31.5	27.1	17.8	55.0	20.7	15.9	52.0	28.6	26.9	35.3	33.3	33.4
LnGrp LOS	C	C	B	E	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1699			1011			602			742	
Approach Delay, s/veh		26.2			22.3			32.9			33.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		80.3		62.0		80.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		41.8		46.7		22.5		70.5
Green Ext Time (p_c), s		3.2		15.6		4.8		5.9

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		27.6
HCM 2010 LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1440	50	30	1200	150	90	60	20	230	50	90
Future Volume (veh/h)	120	1440	50	30	1200	150	90	60	20	230	50	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	125	1500	52	31	1250	156	94	62	21	240	52	94
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	155	2162	75	39	1659	207	493	505	420	591	620	517
Arrive On Green	0.09	0.44	0.44	0.02	0.37	0.37	0.05	0.28	0.28	0.12	0.34	0.34
Sat Flow, veh/h	1740	4944	171	1740	4475	558	1740	1827	1521	1740	1827	1524
Grp Volume(v), veh/h	125	1009	543	31	929	477	94	62	21	240	52	94
Grp Sat Flow(s),veh/h/ln	1740	1663	1790	1740	1663	1708	1740	1827	1521	1740	1827	1524
Q Serve(g_s), s	7.7	26.7	26.7	1.9	26.6	26.6	4.2	2.8	1.1	10.3	2.1	4.7
Cycle Q Clear(g_c), s	7.7	26.7	26.7	1.9	26.6	26.6	4.2	2.8	1.1	10.3	2.1	4.7
Prop In Lane	1.00		0.10	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	155	1454	783	39	1232	633	493	505	420	591	620	517
V/C Ratio(X)	0.81	0.69	0.69	0.80	0.75	0.75	0.19	0.12	0.05	0.41	0.08	0.18
Avail Cap(c_a), veh/h	367	2350	1265	144	1923	988	575	505	420	802	620	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	24.8	24.8	53.0	29.9	29.9	25.8	29.5	28.9	22.0	24.5	25.3
Incr Delay (d2), s/veh	9.5	0.6	1.1	29.7	1.0	1.8	0.2	0.5	0.2	0.4	0.3	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	12.3	13.4	1.3	12.3	12.8	2.0	1.5	0.5	4.9	1.1	2.1
LnGrp Delay(d), s/veh	58.3	25.4	25.9	82.7	30.9	31.8	26.0	30.0	29.2	22.4	24.7	26.1
LnGrp LOS	E	C	C	F	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1677			1437			177			386	
Approach Delay, s/veh		28.0			32.3			27.8			23.6	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	34.1	6.4	51.6	9.9	41.0	13.7	44.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	22.0	9.0	77.0	11.0	37.0	23.0	63.0
Max Q Clear Time (g_c+I1), s	12.3	4.8	3.9	28.7	6.2	6.7	9.7	28.6
Green Ext Time (p_c), s	0.5	0.3	0.0	14.8	0.1	0.5	0.2	11.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	540	1090	120	60	890	40	130	60	40	10	40	320
Future Volume (veh/h)	540	1090	120	60	890	40	130	60	40	10	40	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	557	1124	124	62	918	41	134	62	41	10	41	330
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	675	1890	208	80	1281	57	469	756	641	569	756	1127
Arrive On Green	0.20	0.42	0.42	0.05	0.26	0.26	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	3375	4545	501	1740	4894	218	986	1827	1547	1258	1827	2723
Grp Volume(v), veh/h	557	822	426	62	623	336	134	62	41	10	41	330
Grp Sat Flow(s),veh/h/ln	1688	1663	1721	1740	1663	1787	986	1827	1547	1258	1827	1362
Q Serve(g_s), s	15.3	18.5	18.6	3.4	16.5	16.5	9.1	2.0	1.5	0.5	1.3	7.8
Cycle Q Clear(g_c), s	15.3	18.5	18.6	3.4	16.5	16.5	10.4	2.0	1.5	2.5	1.3	7.8
Prop In Lane	1.00		0.29	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	675	1382	716	80	870	468	469	756	641	569	756	1127
V/C Ratio(X)	0.82	0.59	0.60	0.77	0.72	0.72	0.29	0.08	0.06	0.02	0.05	0.29
Avail Cap(c_a), veh/h	1677	2753	1425	324	1721	925	469	756	641	569	756	1127
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	21.9	21.9	45.6	32.4	32.4	20.1	17.2	17.0	17.9	17.0	18.9
Incr Delay (d2), s/veh	2.6	0.4	0.8	14.6	1.1	2.1	1.5	0.2	0.2	0.1	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	8.5	8.9	2.0	7.7	8.4	2.7	1.0	0.7	0.2	0.7	3.0
LnGrp Delay(d), s/veh	39.6	22.3	22.7	60.1	33.5	34.5	21.6	17.4	17.2	18.0	17.1	19.5
LnGrp LOS	D	C	C	E	C	C	C	B	B	B	B	B
Approach Vol, veh/h		1805			1021			237			381	
Approach Delay, s/veh		27.8			35.5			19.7			19.2	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	8.4	44.2		44.0	23.3	29.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	18.0	80.0		40.0	48.0	50.0
Max Q Clear Time (g_c+I1), s		12.4	5.4	20.6		9.8	17.3	18.5
Green Ext Time (p_c), s		1.1	0.1	10.8		1.6	2.1	6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.5
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Future Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	198	760	125	219	594	115	188	854	250	188	1010	135
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	1206	534	249	1248	545	217	1048	305	217	1219	162
Arrive On Green	0.13	0.34	0.34	0.14	0.35	0.35	0.12	0.27	0.27	0.12	0.27	0.27
Sat Flow, veh/h	1774	3539	1567	1774	3539	1548	1774	3879	1128	1774	4510	601
Grp Volume(v), veh/h	198	760	125	219	594	115	188	746	358	188	759	386
Grp Sat Flow(s),veh/h/ln	1774	1770	1567	1774	1770	1548	1774	1695	1616	1774	1695	1721
Q Serve(g_s), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Cycle Q Clear(g_c), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.70	1.00		0.35
Lane Grp Cap(c), veh/h	228	1206	534	249	1248	545	217	916	437	217	916	465
V/C Ratio(X)	0.87	0.63	0.23	0.88	0.48	0.21	0.87	0.81	0.82	0.87	0.83	0.83
Avail Cap(c_a), veh/h	379	1206	534	379	1248	545	337	1074	512	337	1074	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	34.9	29.8	53.2	31.8	28.6	54.4	43.1	43.2	54.4	43.3	43.3
Incr Delay (d2), s/veh	11.1	2.5	1.0	14.2	1.3	0.9	13.5	4.3	9.0	13.5	4.8	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	11.5	3.3	8.5	8.3	2.9	7.2	12.7	12.8	7.2	13.0	13.9
LnGrp Delay(d), s/veh	65.1	37.4	30.8	67.5	33.1	29.5	67.9	47.3	52.1	67.9	48.1	52.6
LnGrp LOS	E	D	C	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1083			928			1292			1333	
Approach Delay, s/veh		41.7			40.8			51.7			52.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	47.0	19.4	38.1	20.2	48.5	19.4	38.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	43.0	24.0	40.0	27.0	43.0	24.0	40.0
Max Q Clear Time (g_c+I1), s	17.3	24.8	15.1	28.2	15.8	18.5	15.1	28.7
Green Ext Time (p_c), s	0.4	5.3	0.3	5.4	0.4	4.5	0.3	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Future Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
Arrive On Green	0.13	0.40	0.40	0.10	0.37	0.37	0.05	0.34	0.34	0.05	0.33	0.33
Sat Flow, veh/h	1774	3539	1552	1774	3539	1572	1774	3539	1549	1774	3539	1529
Grp Volume(v), veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1572	1774	1770	1549	1774	1770	1529
Q Serve(g_s), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Cycle Q Clear(g_c), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
V/C Ratio(X)	0.88	0.87	0.22	0.85	0.49	0.07	0.39	0.70	0.44	0.45	0.57	0.25
Avail Cap(c_a), veh/h	344	1635	717	251	1451	644	306	1187	520	229	1172	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	37.1	26.4	59.7	32.6	27.4	29.0	38.8	34.8	30.6	37.0	32.7
Incr Delay (d2), s/veh	15.1	5.1	0.2	16.5	0.3	0.1	0.9	3.5	2.7	1.5	2.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	22.2	3.3	6.1	9.3	1.0	2.6	14.0	7.0	2.4	10.5	3.5
LnGrp Delay(d), s/veh	72.7	42.2	26.6	76.2	32.9	27.4	29.9	42.2	37.5	32.1	39.0	33.9
LnGrp LOS	E	D	C	E	C	C	C	D	D	C	D	C
Approach Vol, veh/h		1573			834			1166			886	
Approach Delay, s/veh		44.7			40.2			40.2			37.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	17.0	57.7	11.1	48.4	21.1	53.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	19.0	62.0	10.0	43.0	26.0	55.0
Max Q Clear Time (g_c+I1), s	6.7	29.5	12.9	45.4	7.2	22.8	16.7	20.9
Green Ext Time (p_c), s	0.0	5.8	0.2	8.3	0.1	4.8	0.3	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Future Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	957	3539	1562	852	3539	1562	699	3539	1560	371	3539	1558
Grp Volume(v), veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Grp Sat Flow(s),veh/h/ln	957	1770	1562	852	1770	1562	699	1770	1560	371	1770	1558
Q Serve(g_s), s	10.8	15.2	1.8	36.6	9.0	5.8	5.2	28.0	19.4	42.5	15.6	3.2
Cycle Q Clear(g_c), s	19.9	15.2	1.8	51.8	9.0	5.8	20.8	28.0	19.4	70.4	15.6	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
V/C Ratio(X)	0.26	0.38	0.05	0.76	0.24	0.16	0.12	0.55	0.42	0.64	0.35	0.09
Avail Cap(c_a), veh/h	402	1522	672	326	1522	672	363	1964	866	184	1964	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	31.5	27.4	50.0	29.6	28.6	23.5	20.5	18.6	43.0	17.7	15.0
Incr Delay (d2), s/veh	0.4	0.2	0.0	9.2	0.1	0.1	0.7	1.1	1.5	15.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.5	0.8	9.4	4.5	2.5	1.1	13.9	8.7	5.2	7.7	1.4
LnGrp Delay(d), s/veh	36.7	31.7	27.5	59.3	29.7	28.7	24.2	21.6	20.1	58.7	18.2	15.2
LnGrp LOS	D	C	C	E	C	C	C	C	C	E	B	B
Approach Vol, veh/h		649			649			1479			882	
Approach Delay, s/veh		32.2			39.7			21.3			23.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		84.0		60.2		84.0		60.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		80.0		62.0		80.0		62.0
Max Q Clear Time (g_c+I1), s		30.0		21.9		72.4		53.8
Green Ext Time (p_c), s		12.9		4.3		3.8		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	890	150	130	730	120	190	1150	110	110	730	70
Future Volume (veh/h)	130	890	150	130	730	120	190	1150	110	110	730	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	141	967	163	141	793	130	207	1250	120	120	793	76
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	166	1118	188	165	1125	183	373	1683	743	217	1590	702
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.26	0.08	0.48	0.48	0.05	0.45	0.45
Sat Flow, veh/h	1757	4330	728	1757	4362	710	1757	3505	1547	1757	3505	1546
Grp Volume(v), veh/h	141	749	381	141	609	314	207	1250	120	120	793	76
Grp Sat Flow(s),veh/h/ln	1757	1679	1700	1757	1679	1715	1757	1752	1547	1757	1752	1546
Q Serve(g_s), s	10.9	29.3	29.4	10.9	22.6	22.9	8.4	39.6	6.0	5.0	22.0	3.9
Cycle Q Clear(g_c), s	10.9	29.3	29.4	10.9	22.6	22.9	8.4	39.6	6.0	5.0	22.0	3.9
Prop In Lane	1.00		0.43	1.00		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	867	439	165	866	442	373	1683	743	217	1590	702
V/C Ratio(X)	0.85	0.86	0.87	0.85	0.70	0.71	0.55	0.74	0.16	0.55	0.50	0.11
Avail Cap(c_a), veh/h	268	953	482	230	879	449	442	1683	743	268	1590	702
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.3	48.7	48.7	61.3	46.2	46.3	19.3	28.9	20.1	24.9	26.5	21.6
Incr Delay (d2), s/veh	13.0	7.8	14.5	19.1	2.5	5.1	1.3	3.0	0.5	2.2	1.1	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	14.6	15.6	6.2	10.8	11.4	4.2	19.8	2.6	2.5	10.8	1.7
LnGrp Delay(d), s/veh	74.3	56.5	63.2	80.4	48.7	51.4	20.6	31.9	20.6	27.1	27.6	21.9
LnGrp LOS	E	E	E	F	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1271			1064			1577			989	
Approach Delay, s/veh		60.5			53.7			29.5			27.1	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	70.0	16.9	39.5	14.6	66.4	17.0	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	66.0	18.0	39.0	16.0	61.0	21.0	36.0
Max Q Clear Time (g_c+I1), s	7.0	41.6	12.9	31.4	10.4	24.0	12.9	24.9
Green Ext Time (p_c), s	0.1	9.9	0.1	4.1	0.3	6.6	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Future Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	1168	432	179	600	105	200	1200	0	263	1042	126
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	307	1300	579	205	1228	214	225	1466	0	288	1490	180
Arrive On Green	0.04	0.36	0.36	0.08	0.40	0.40	0.13	0.29	0.00	0.16	0.32	0.32
Sat Flow, veh/h	1792	3574	1591	1792	3041	531	1792	5305	0	1792	4640	560
Grp Volume(v), veh/h	74	1168	432	179	352	353	200	1200	0	263	768	400
Grp Sat Flow(s),veh/h/ln	1792	1787	1591	1792	1787	1785	1792	1712	0	1792	1712	1777
Q Serve(g_s), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Cycle Q Clear(g_c), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Prop In Lane	1.00		1.00	1.00		0.30	1.00		0.00	1.00		0.32
Lane Grp Cap(c), veh/h	307	1300	579	205	722	721	225	1466	0	288	1099	570
V/C Ratio(X)	0.24	0.90	0.75	0.87	0.49	0.49	0.89	0.82	0.00	0.91	0.70	0.70
Avail Cap(c_a), veh/h	307	1377	613	248	803	802	268	1466	0	345	1099	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	42.2	39.0	32.9	31.0	31.1	60.4	46.7	0.0	57.8	41.7	41.7
Incr Delay (d2), s/veh	0.4	8.0	4.7	24.2	0.5	0.5	25.7	5.2	0.0	25.0	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.9	15.3	5.5	10.2	10.2	9.2	15.2	0.0	12.0	13.6	14.7
LnGrp Delay(d), s/veh	27.7	50.1	43.7	57.0	31.5	31.6	86.1	51.9	0.0	82.8	45.4	48.7
LnGrp LOS	C	D	D	E	C	C	F	D		F	D	D
Approach Vol, veh/h		1674			884			1400			1431	
Approach Delay, s/veh		47.5			36.7			56.8			53.2	
Approach LOS		D			D			E			D	

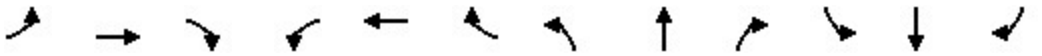
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	49.0	14.6	55.0	26.6	44.0	9.0	60.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	45.0	14.0	54.0	27.0	39.0	5.0	63.0
Max Q Clear Time (g_c+I1), s	17.4	29.6	10.5	45.3	22.2	32.5	5.6	22.6
Green Ext Time (p_c), s	0.2	6.4	0.1	5.7	0.3	3.8	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	510	1510	70	20	1040	420	130	320	40	0	0	0
Future Volume (veh/h)	510	1510	70	20	1040	420	130	320	40	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	554	1641	76	22	1130	457	141	348	43			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	634	3615	167	29	2837	883	167	441	269			
Arrive On Green	0.18	0.73	0.73	0.02	0.56	0.56	0.17	0.17	0.17			
Sat Flow, veh/h	3442	4982	231	1774	5085	1583	985	2598	1583			
Grp Volume(v), veh/h	554	1117	600	22	1130	457	260	229	43			
Grp Sat Flow(s),veh/h/ln	1721	1695	1822	1774	1695	1583	1814	1770	1583			
Q Serve(g_s), s	21.4	18.4	18.4	1.7	17.2	24.5	18.9	16.9	3.2			
Cycle Q Clear(g_c), s	21.4	18.4	18.4	1.7	17.2	24.5	18.9	16.9	3.2			
Prop In Lane	1.00		0.13	1.00		1.00	0.54		1.00			
Lane Grp Cap(c), veh/h	634	2460	1322	29	2837	883	308	301	269			
V/C Ratio(X)	0.87	0.45	0.45	0.75	0.40	0.52	0.84	0.76	0.16			
Avail Cap(c_a), veh/h	984	2460	1322	78	2837	883	439	428	383			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	54.1	7.7	7.7	66.8	17.1	18.8	54.9	54.0	48.3			
Incr Delay (d2), s/veh	5.6	0.6	1.1	30.8	0.1	0.5	9.9	5.0	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	10.7	8.7	9.6	1.1	8.1	10.8	10.4	8.7	1.4			
LnGrp Delay(d), s/veh	59.7	8.3	8.8	97.6	17.2	19.3	64.8	59.0	48.6			
LnGrp LOS	E	A	A	F	B	B	E	E	D			
Approach Vol, veh/h		2271			1609			532				
Approach Delay, s/veh		21.0			18.9			61.0				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.3	103.0			29.2	80.1		27.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	99.0			39.0	66.0		33.0
Max Q Clear Time (g_c+I1), s	3.7	20.4			23.4	26.5		20.9
Green Ext Time (p_c), s	0.0	19.3			1.8	12.3		2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1230	360	350	1130	0	0	0	0	570	50	110
Future Volume (vph)	0	1230	360	350	1130	0	0	0	0	570	50	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3252	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3252	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1337	391	380	1228	0	0	0	0	620	54	120
RTOR Reduction (vph)	0	0	107	0	0	0	0	0	0	0	0	58
Lane Group Flow (vph)	0	1337	284	380	1228	0	0	0	0	310	364	62
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		68.7	68.7	19.7	92.4					32.0	32.0	32.0
Effective Green, g (s)		68.7	68.7	19.7	92.4					32.0	32.0	32.0
Actuated g/C Ratio		0.52	0.52	0.15	0.70					0.24	0.24	0.24
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2638	821	510	3548					389	785	382
v/s Ratio Prot		c0.26		c0.11	0.24					c0.19	0.11	
v/s Ratio Perm			0.18									0.04
v/c Ratio		0.51	0.35	0.75	0.35					0.80	0.46	0.16
Uniform Delay, d1		20.8	18.7	53.9	8.0					47.1	42.9	39.6
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.2	0.3	5.9	0.3					10.8	0.4	0.2
Delay (s)		20.9	18.9	59.8	8.2					58.0	43.3	39.8
Level of Service		C	B	E	A					E	D	D
Approach Delay (s/veh)		20.5			20.4			0.0			48.5	
Approach LOS		C			C			A			D	

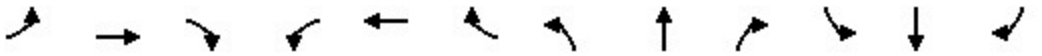
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	132.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	20	30	160	320	330	420	0	0	1210	70
Future Volume (veh/h)	60	0	20	30	160	320	330	420	0	0	1210	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	65	0	22	33	174	348	359	457	0	0	1315	76
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	131	732	379	430	3548	0	0	2662	154
Arrive On Green	0.00	0.00	0.00	0.24	0.24	0.24	0.13	0.70	0.00	0.00	0.54	0.54
Sat Flow, veh/h		0		549	3056	1583	3442	5253	0	0	5086	284
Grp Volume(v), veh/h		0.0		110	97	348	359	457	0	0	906	485
Grp Sat Flow(s),veh/h/ln				1835	1770	1583	1721	1695	0	0	1695	1813
Q Serve(g_s), s				6.2	5.6	27.3	13.0	3.8	0.0	0.0	21.4	21.4
Cycle Q Clear(g_c), s				6.2	5.6	27.3	13.0	3.8	0.0	0.0	21.4	21.4
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.16
Lane Grp Cap(c), veh/h				440	424	379	430	3548	0	0	1835	981
V/C Ratio(X)				0.25	0.23	0.92	0.83	0.13	0.00	0.00	0.49	0.49
Avail Cap(c_a), veh/h				504	486	434	701	3548	0	0	1835	981
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				39.2	39.0	47.3	54.5	6.4	0.0	0.0	18.3	18.3
Incr Delay (d2), s/veh				0.3	0.3	22.6	4.6	0.1	0.0	0.0	1.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.2	2.8	14.4	6.5	1.8	0.0	0.0	10.2	11.1
LnGrp Delay(d), s/veh				39.5	39.3	69.8	59.1	6.5	0.0	0.0	19.3	20.1
LnGrp LOS				D	D	E	E	A			B	C
Approach Vol, veh/h					555			816			1391	
Approach Delay, s/veh					58.5			29.7			19.6	
Approach LOS					E			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		93.0			20.0	73.0		34.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		89.0			26.0	59.0		35.0
Max Q Clear Time (g_c+I1), s		5.8			15.0	23.4		29.3
Green Ext Time (p_c), s		3.4			1.0	12.1		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	40	380	0	0	0	0	690	140	580	810	0
Future Volume (vph)	50	40	380	0	0	0	0	690	140	580	810	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.88	0.85					0.97		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2969	1441					4957		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2969	1441					4957		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	43	413	0	0	0	0	750	152	630	880	0
RTOR Reduction (vph)	0	190	189	0	0	0	0	12	0	0	0	0
Lane Group Flow (vph)	54	60	17	0	0	0	0	890	0	630	880	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	10.3	10.3	10.3					75.1		28.0	107.1	
Effective Green, g (s)	10.3	10.3	10.3					75.1		28.0	107.1	
Actuated g/C Ratio	0.08	0.08	0.08					0.60		0.22	0.85	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	145	243	118					2968		766	4342	
v/s Ratio Prot	c0.03	0.02						c0.18		c0.18	0.17	
v/s Ratio Perm			0.01									
v/c Ratio	0.37	0.25	0.14					0.30		0.82	0.20	
Uniform Delay, d1	54.5	53.9	53.5					12.3		46.3	1.6	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.6	0.5	0.6					0.3		7.1	0.1	
Delay (s)	56.1	54.5	54.0					12.6		53.5	1.7	
Level of Service	E	D	D					B		D	A	
Approach Delay (s/veh)		54.4			0.0			12.6			23.3	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.44		
Actuated Cycle Length (s)	125.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Future Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	104	1167	281	177	896	42	448	396	354	52	396	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	301	2155	519	173	2628	123	341	724	639	216	1223	224
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	589	4041	973	363	4927	230	911	1752	1546	702	2960	541
Grp Volume(v), veh/h	104	970	478	177	610	328	448	396	354	52	233	236
Grp Sat Flow(s),veh/h/ln	589	1679	1656	363	1679	1800	911	1752	1546	702	1752	1748
Q Serve(g_s), s	18.4	28.4	28.4	51.6	15.5	15.6	48.3	25.7	26.1	9.1	13.5	13.7
Cycle Q Clear(g_c), s	34.0	28.4	28.4	80.0	15.5	15.6	62.0	25.7	26.1	35.3	13.5	13.7
Prop In Lane	1.00		0.59	1.00		0.13	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
V/C Ratio(X)	0.35	0.54	0.54	1.02	0.34	0.34	1.31	0.55	0.55	0.24	0.32	0.33
Avail Cap(c_a), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	23.0	23.0	56.4	20.0	20.0	54.3	33.3	33.5	46.9	29.8	29.8
Incr Delay (d2), s/veh	0.7	0.3	0.7	75.1	0.1	0.2	160.1	3.0	3.4	2.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	13.3	13.2	10.8	7.2	7.8	29.3	13.0	11.7	1.9	6.8	6.9
LnGrp Delay(d), s/veh	30.3	23.3	23.6	131.7	20.1	20.2	214.4	36.3	36.9	49.5	30.9	31.0
LnGrp LOS	C	C	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1552			1115			1198			521	
Approach Delay, s/veh		23.9			37.8			103.1			32.8	
Approach LOS		C			D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		84.0		66.0		84.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		80.0		62.0		80.0
Max Q Clear Time (g_c+I1), s		64.0		36.0		37.3		82.0
Green Ext Time (p_c), s		0.0		15.4		3.1		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		50.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Future Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	86	65	43	226	97	237	22	269	97	183	538	86
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	187	112	290	110	260	397	1287	450	513	1791	786
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	487	443	265	580	260	616	795	2542	890	1006	3539	1554
Grp Volume(v), veh/h	194	0	0	560	0	0	22	185	181	183	538	86
Grp Sat Flow(s),veh/h/ln	1194	0	0	1456	0	0	795	1770	1662	1006	1770	1554
Q Serve(g_s), s	0.0	0.0	0.0	28.6	0.0	0.0	1.8	6.4	6.7	13.6	9.8	3.2
Cycle Q Clear(g_c), s	11.5	0.0	0.0	40.1	0.0	0.0	11.6	6.4	6.7	20.3	9.8	3.2
Prop In Lane	0.44		0.22	0.40		0.42	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	550	0	0	660	0	0	397	896	841	513	1791	786
V/C Ratio(X)	0.35	0.00	0.00	0.85	0.00	0.00	0.06	0.21	0.22	0.36	0.30	0.11
Avail Cap(c_a), veh/h	1027	0	0	1185	0	0	397	896	841	513	1791	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	0.0	30.3	0.0	0.0	19.3	15.1	15.1	20.8	15.9	14.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	3.2	0.0	0.0	0.3	0.5	0.6	1.9	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	16.6	0.0	0.0	0.4	3.2	3.2	4.0	4.9	1.4
LnGrp Delay(d), s/veh	21.9	0.0	0.0	33.5	0.0	0.0	19.6	15.6	15.7	22.7	16.3	14.6
LnGrp LOS	C			C			B	B	B	C	B	B
Approach Vol, veh/h		194			560			388			807	
Approach Delay, s/veh		21.9			33.5			15.9			17.6	
Approach LOS		C			C			B			B	

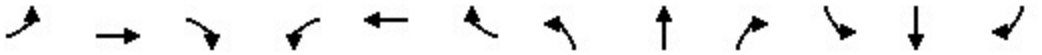
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		50.6		60.0		50.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		86.0		56.0		86.0
Max Q Clear Time (g_c+I1), s		13.6		13.5		22.3		42.1
Green Ext Time (p_c), s		2.4		1.6		5.0		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Future Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	141	22	141	283	174	65	815	152	87	1217	87
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	73	223	32	227	488	413	263	2373	1036	384	2373	1037
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	156	842	119	1206	1845	1561	416	3505	1530	573	3505	1531
Grp Volume(v), veh/h	206	0	0	141	283	174	65	815	152	87	1217	87
Grp Sat Flow(s),veh/h/ln	1117	0	0	1206	1845	1561	416	1752	1530	573	1752	1531
Q Serve(g_s), s	8.6	0.0	0.0	5.2	18.3	12.7	12.6	13.4	4.9	10.3	23.6	2.7
Cycle Q Clear(g_c), s	26.8	0.0	0.0	32.0	18.3	12.7	36.2	13.4	4.9	23.8	23.6	2.7
Prop In Lane	0.21		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	0	0	227	488	413	263	2373	1036	384	2373	1037
V/C Ratio(X)	0.63	0.00	0.00	0.62	0.58	0.42	0.25	0.34	0.15	0.23	0.51	0.08
Avail Cap(c_a), veh/h	465	0	0	338	658	557	263	2373	1036	384	2373	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	0.0	0.0	51.5	43.9	41.8	19.9	9.3	8.0	14.3	11.0	7.6
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.8	1.1	0.7	2.2	0.4	0.3	1.4	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.0	5.3	9.5	5.5	1.6	6.6	2.2	1.8	11.6	1.2
LnGrp Delay(d), s/veh	48.5	0.0	0.0	54.3	45.0	42.5	22.2	9.7	8.3	15.7	11.8	7.8
LnGrp LOS	D			D	D	D	C	A	A	B	B	A
Approach Vol, veh/h		206			598			1032			1391	
Approach Delay, s/veh		48.5			46.4			10.3			11.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		40.4		97.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		49.0		93.0		49.0
Max Q Clear Time (g_c+I1), s		38.2		28.8		25.8		34.0
Green Ext Time (p_c), s		8.7		1.1		14.3		2.3

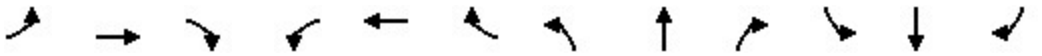
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Future Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1185	446	826	1043	0	0	0	0	359	0	457
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1276	480	890	2252	0	0	575	0	1161	0	489
Arrive On Green	0.00	0.35	0.35	0.26	0.64	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Sat Flow, veh/h	0	3810	1369	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1103	528	826	1043	0	0	0	0	359	0	457
Grp Sat Flow(s),veh/h/ln	0	1695	1621	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Cycle Q Clear(g_c), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Prop In Lane	0.00		0.84	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1188	568	890	2252	0	0	575	0	1161	0	489
V/C Ratio(X)	0.00	0.93	0.93	0.93	0.46	0.00	0.00	0.00	0.00	0.31	0.00	0.93
Avail Cap(c_a), veh/h	0	1210	578	968	2356	0	0	575	0	1161	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	45.6	45.6	52.7	13.7	0.0	0.0	0.0	0.0	38.9	0.0	48.9
Incr Delay (d2), s/veh	0.0	12.2	21.6	14.1	0.1	0.0	0.0	0.0	0.0	0.7	0.0	27.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	23.3	23.8	17.9	10.8	0.0	0.0	0.0	0.0	5.7	0.0	21.6
LnGrp Delay(d), s/veh	0.0	57.8	67.2	66.8	13.8	0.0	0.0	0.0	0.0	39.6	0.0	76.3
LnGrp LOS		E	E	E	B					D		E
Approach Vol, veh/h		1631			1869			0			816	
Approach Delay, s/veh		60.9			37.2			0.0			60.1	
Approach LOS		E			D						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		49.0	41.7	55.1		49.0		96.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0	41.0	52.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		0.0	36.1	47.8		42.9		24.1
Green Ext Time (p_c), s		0.0	1.5	3.3		0.9		9.2

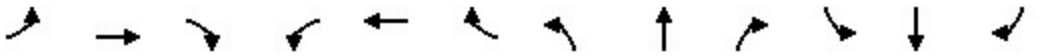
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Future Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3374	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.67	1.00	0.66	1.00	
Satd. Flow (perm)	1770	3374	1441	3433	3536		1681	1191	2787	1221	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1076	348	196	1576	11	293	11	1065	11	11	11
RTOR Reduction (vph)	0	2	152	0	1	0	0	0	184	0	8	0
Lane Group Flow (vph)	11	1109	161	196	1586	0	152	152	881	11	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Effective Green, g (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Actuated g/C Ratio	0.01	0.41	0.41	0.09	0.49		0.12	0.42	0.42	0.26	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1384	591	303	1725		205	556	1159	323	456	
v/s Ratio Prot	0.01	0.33		c0.06	c0.45		0.09	0.03			0.01	
v/s Ratio Perm			0.11					0.08	c0.32	0.01		
v/c Ratio	0.61	0.80	0.27	0.65	0.92		0.74	0.27	0.76	0.03	0.03	
Uniform Delay, d1	69.2	36.4	27.5	61.9	33.4		59.5	27.0	35.0	38.3	38.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	3.4	0.3	4.7	8.3		13.5	0.3	4.7	0.2	0.1	
Delay (s)	117.8	39.8	27.7	66.6	41.7		72.9	27.3	39.7	38.5	38.4	
Level of Service	F	D	C	E	D		E	C	D	D	D	
Approach Delay (s/veh)		37.8			44.4			42.0			38.4	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Future Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.94			0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1646			1682		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.98			0.96		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1625			1629		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	11	11	11	43	76	1272	11	33	239	315
RTOR Reduction (vph)	0	9	0	0	37	0	0	0	4	0	0	114
Lane Group Flow (vph)	28	18	0	0	28	0	76	1272	7	33	239	201
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Effective Green, g (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Actuated g/C Ratio	0.04	0.21			0.14		0.07	0.67	0.67	0.04	0.64	0.64
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	62	335			227		121	2378	1064	63	2262	1011
v/s Ratio Prot	c0.02	0.00					c0.04	c0.36		0.02	0.07	
v/s Ratio Perm		0.01			c0.02				0.00			0.13
v/c Ratio	0.45	0.05			0.12		0.63	0.53	0.01	0.52	0.11	0.20
Uniform Delay, d1	65.7	44.5			52.5		63.2	11.7	7.5	66.0	9.7	10.4
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	0.1			0.2		9.8	0.9	0.0	7.6	0.1	0.4
Delay (s)	70.9	44.5			52.7		72.9	12.6	7.5	73.7	9.8	10.8
Level of Service	E	D			D		E	B	A	E	A	B
Approach Delay (s/veh)		57.9			52.7			15.9			14.0	
Approach LOS		E			D			B			B	

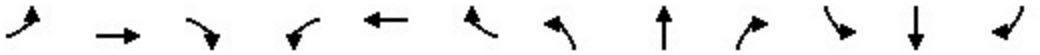
Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	139.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Future Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	359	1826	261	33	1500	152	130	33	239			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	415	2276	318	42	2239	1002	236	60	261			
Arrive On Green	0.12	0.73	0.73	0.02	0.63	0.63	0.17	0.17	0.17			
Sat Flow, veh/h	3442	3120	436	1774	3539	1583	1429	363	1583			
Grp Volume(v), veh/h	359	1017	1070	33	1500	152	163	0	239			
Grp Sat Flow(s),veh/h/ln	1721	1770	1786	1774	1770	1583	1791	0	1583			
Q Serve(g_s), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Cycle Q Clear(g_c), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Prop In Lane	1.00		0.24	1.00		1.00	0.80		1.00			
Lane Grp Cap(c), veh/h	415	1291	1303	42	2239	1002	296	0	261			
V/C Ratio(X)	0.87	0.79	0.82	0.78	0.67	0.15	0.55	0.00	0.91			
Avail Cap(c_a), veh/h	540	1291	1303	60	2239	1002	317	0	281			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.3	12.6	13.4	71.2	17.2	10.9	56.3	0.0	60.2			
Incr Delay (d2), s/veh	11.2	4.9	5.9	33.1	1.6	0.3	1.8	0.0	31.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.8	27.5	31.0	1.7	19.7	2.6	6.2	0.0	11.8			
LnGrp Delay(d), s/veh	74.5	17.5	19.3	104.3	18.8	11.3	58.0	0.0	91.5			
LnGrp LOS	E	B	B	F	B	B	E		F			
Approach Vol, veh/h		2446			1685			402				
Approach Delay, s/veh		26.7			19.8			77.9				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	7.5	111.0			21.7	96.8		28.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	107.0			23.0	89.0		26.0
Max Q Clear Time (g_c+I1), s	4.7	61.4			17.0	41.6		23.8
Green Ext Time (p_c), s	0.0	27.7			0.7	17.1		0.4

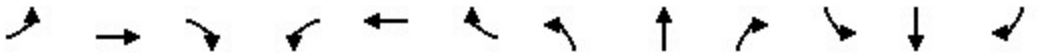
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Future Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	54	2076	0	0	1641	359	43	11	120			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	92	4305	0	0	4016	1250	165	173	147			
Arrive On Green	0.03	0.85	0.00	0.00	0.79	0.79	0.09	0.09	0.09			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	54	2076	0	0	1641	359	43	11	120			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Cycle Q Clear(g_c), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	92	4305	0	0	4016	1250	165	173	147			
V/C Ratio(X)	0.59	0.48	0.00	0.00	0.41	0.29	0.26	0.06	0.82			
Avail Cap(c_a), veh/h	234	4305	0	0	4016	1250	402	422	359			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	63.7	2.6	0.0	0.0	4.3	3.8	55.8	54.8	58.9			
Incr Delay (d2), s/veh	5.9	0.4	0.0	0.0	0.3	0.6	0.8	0.2	10.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	6.5	0.0	0.0	6.2	3.7	1.5	0.4	4.7			
LnGrp Delay(d), s/veh	69.5	3.0	0.0	0.0	4.6	4.4	56.6	54.9	69.3			
LnGrp LOS	E	A			A	A	E	D	E			
Approach Vol, veh/h		2130			2000			174				
Approach Delay, s/veh		4.7			4.6			65.3				
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		116.0			7.5	108.5		16.3
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		112.0			9.0	99.0		30.0
Max Q Clear Time (g_c+I1), s		16.0			4.1	15.3		11.8
Green Ext Time (p_c), s		33.2			0.0	23.6		0.5

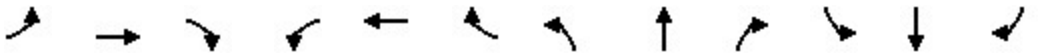
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.1
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Future Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1902	348	65	1978	98	109	11	163	130	11	283
RTOR Reduction (vph)	0	15	0	0	3	0	0	0	137	0	0	88
Lane Group Flow (vph)	98	2235	0	65	2073	0	109	11	26	130	11	195
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Effective Green, g (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Actuated g/C Ratio	0.06	0.63		0.06	0.63		0.09	0.09	0.09	0.11	0.11	0.17
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	214	3118		105	3156		167	176	149	187	197	468
v/s Ratio Prot	0.03	c0.45		c0.04	0.41		c0.06	0.01		c0.07	0.01	0.03
v/s Ratio Perm									0.02			0.04
v/c Ratio	0.46	0.72		0.62	0.66		0.65	0.06	0.18	0.70	0.06	0.42
Uniform Delay, d1	64.6	18.0		65.5	17.0		62.3	58.8	59.5	61.6	57.4	53.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	1.4		10.4	1.1		8.8	0.1	0.6	10.7	0.1	0.6
Delay (s)	66.1	19.4		75.9	18.1		71.2	59.0	60.0	72.3	57.5	53.7
Level of Service	E	B		E	B		E	E	E	E	E	D
Approach Delay (s/veh)		21.4			19.9			64.3			59.5	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	142.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

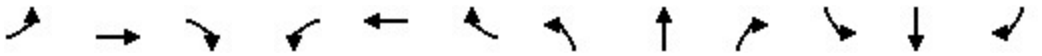
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	610	1660	0	40	1050	1070	20	20	30	90	20	280
Future Volume (vph)	610	1660	0	40	1050	1070	20	20	30	90	20	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	0.99	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.95	0.85		0.94			0.93	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1770	4526	1329		1731			1613	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1770	4526	1329		1731			1613	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	635	1729	0	42	1094	1115	21	21	31	94	21	292
RTOR Reduction (vph)	0	0	0	0	61	268	0	18	0	0	20	174
Lane Group Flow (vph)	635	1729	0	42	1591	289	0	55	0	0	191	22
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	54.0	99.9		6.9	52.8	52.8		11.0			17.0	17.0
Effective Green, g (s)	54.0	99.9		6.9	52.8	52.8		11.0			17.0	17.0
Actuated g/C Ratio	0.36	0.66		0.05	0.35	0.35		0.07			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	633	3368		80	1584	465		126			181	169
v/s Ratio Prot	c0.36	0.34		0.02	c0.35			c0.03			c0.12	
v/s Ratio Perm						0.22						0.01
v/c Ratio	1.00	0.51		0.53	1.00	0.62		0.44			1.05	0.13
Uniform Delay, d1	48.4	13.0		70.3	49.0	40.7		66.9			66.9	60.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	36.5	0.1		6.1	23.7	2.6		10.7			81.6	0.4
Delay (s)	84.9	13.2		76.4	72.7	43.3		77.7			148.5	60.6
Level of Service	F	B		E	E	D		E			F	E
Approach Delay (s/veh)		32.4			65.5			77.7			106.2	
Approach LOS		C			E			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1310	280	350	1430	120	500	240	490	90	60	120
Future Volume (vph)	190	1310	280	350	1430	120	500	240	490	90	60	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.96	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1752	4885		1752	4966		1665	1576	1400	1665	1734	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1752	4885		1752	4966		1665	1576	1400	1665	1734	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	200	1379	295	368	1505	126	526	253	516	95	63	126
RTOR Reduction (vph)	0	22	0	0	7	0	0	8	260	0	0	119
Lane Group Flow (vph)	200	1652	0	368	1624	0	442	443	142	78	80	7
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Effective Green, g (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Actuated g/C Ratio	0.13	0.33		0.21	0.41		0.30	0.30	0.30	0.05	0.05	0.05
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	231	1595		373	2026		499	472	420	88	92	83
v/s Ratio Prot	0.11	c0.34		c0.21	0.33		0.27	c0.28		c0.05	0.05	
v/s Ratio Perm									0.10			0.00
v/c Ratio	0.87	1.04		0.99	0.80		0.89	0.94	0.34	0.89	0.87	0.08
Uniform Delay, d1	63.8	50.5		58.8	39.1		50.0	51.1	40.9	70.5	70.5	67.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.0	32.3		42.6	2.4		20.1	28.5	2.2	68.3	62.9	1.9
Delay (s)	90.8	82.8		101.4	41.4		70.2	79.6	43.1	138.9	133.4	69.4
Level of Service	F	F		F	D		E	E	D	F	F	E
Approach Delay (s/veh)		83.7			52.5			65.0			106.5	
Approach LOS		F			D			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	69.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.8%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	600	80	320	530	230	460
Future Volume (veh/h)	600	80	320	530	230	460
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	682	0	364	602	261	523
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	765	352	394	2517	1630	713
Arrive On Green	0.22	0.00	0.22	0.72	0.47	0.47
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	682	0	364	602	261	523
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	27.0	0.0	28.2	8.1	6.0	38.5
Cycle Q Clear(g_c), s	27.0	0.0	28.2	8.1	6.0	38.5
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	765	352	394	2517	1630	713
V/C Ratio(X)	0.89	0.00	0.92	0.24	0.16	0.73
Avail Cap(c_a), veh/h	1028	473	593	2517	1630	713
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	52.8	6.7	21.5	30.2
Incr Delay (d2), s/veh	7.9	0.0	15.1	0.2	0.2	6.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.5	0.0	15.4	4.0	2.9	17.6
LnGrp Delay(d), s/veh	60.2	0.0	68.0	6.9	21.7	36.8
LnGrp LOS	E		E	A	C	D
Approach Vol, veh/h	682			966	784	
Approach Delay, s/veh	60.2			29.9	31.8	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		104.0		35.3	35.2	68.8		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		100.0		42.0	47.0	49.0		
Max Q Clear Time (g_c+I1), s		10.1		29.0	30.2	40.5		
Green Ext Time (p_c), s		4.6		2.2	1.0	2.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.0
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	770	630	230	640	660	180
Future Volume (veh/h)	770	630	230	640	660	180
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	846	0	253	703	725	198
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	964	443	285	2351	1666	723
Arrive On Green	0.28	0.00	0.16	0.66	0.47	0.47
Sat Flow, veh/h	3476	1599	1792	3668	3668	1551
Grp Volume(v), veh/h	846	0	253	703	725	198
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1551
Q Serve(g_s), s	28.6	0.0	17.0	10.3	16.7	9.6
Cycle Q Clear(g_c), s	28.6	0.0	17.0	10.3	16.7	9.6
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	964	443	285	2351	1666	723
V/C Ratio(X)	0.88	0.00	0.89	0.30	0.44	0.27
Avail Cap(c_a), veh/h	1722	792	480	2351	1666	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	50.7	9.0	22.0	20.1
Incr Delay (d2), s/veh	2.8	0.0	10.6	0.3	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.1	0.0	9.3	5.2	8.4	4.3
LnGrp Delay(d), s/veh	45.3	0.0	61.3	9.3	22.8	21.1
LnGrp LOS	D		E	A	C	C
Approach Vol, veh/h	846			956	923	
Approach Delay, s/veh	45.3			23.1	22.5	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		85.0		38.1	23.6	61.4		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		81.0		61.0	33.0	44.0		
Max Q Clear Time (g_c+I1), s		12.3		30.6	19.0	18.7		
Green Ext Time (p_c), s		5.3		3.5	0.6	5.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1290	320	200	1220	50	530	730	440	80	390	160
Future Volume (veh/h)	190	1290	320	200	1220	50	530	730	440	80	390	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	216	1466	364	227	1386	57	602	830	500	91	443	182
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	1458	428	225	1433	59	603	1476	643	112	495	209
Arrive On Green	0.13	0.29	0.29	0.13	0.29	0.29	0.34	0.42	0.42	0.06	0.14	0.14
Sat Flow, veh/h	1774	5085	1493	1774	4998	206	1774	3539	1543	1774	3539	1495
Grp Volume(v), veh/h	216	1466	364	227	940	503	602	830	500	91	443	182
Grp Sat Flow(s),veh/h/ln	1774	1695	1493	1774	1695	1813	1774	1770	1543	1774	1770	1495
Q Serve(g_s), s	18.2	43.0	34.5	19.0	41.1	41.1	50.8	26.8	41.9	7.6	18.5	17.9
Cycle Q Clear(g_c), s	18.2	43.0	34.5	19.0	41.1	41.1	50.8	26.8	41.9	7.6	18.5	17.9
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1458	428	225	972	520	603	1476	643	112	495	209
V/C Ratio(X)	0.96	1.01	0.85	1.01	0.97	0.97	1.00	0.56	0.78	0.81	0.89	0.87
Avail Cap(c_a), veh/h	225	1458	428	225	972	520	603	1476	643	177	495	209
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.1	53.5	50.5	65.5	52.8	52.8	49.5	33.3	37.7	69.4	63.4	63.2
Incr Delay (d2), s/veh	49.0	24.9	14.9	62.7	21.3	31.2	36.1	1.6	9.0	14.2	21.2	35.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	23.5	16.0	13.2	22.1	25.0	31.0	13.5	19.4	4.2	10.5	9.5
LnGrp Delay(d), s/veh	114.1	78.4	65.4	128.2	74.1	84.0	85.6	34.9	46.7	83.6	84.6	98.8
LnGrp LOS	F	F	E	F	E	F	F	C	D	F	F	F
Approach Vol, veh/h		2046			1670			1932			716	
Approach Delay, s/veh		79.9			84.4			53.7			88.1	
Approach LOS		E			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	66.5	23.0	47.0	55.0	25.0	23.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	57.0	19.0	43.0	51.0	21.0	19.0	43.0
Max Q Clear Time (g_c+I1), s	9.6	43.9	21.0	45.0	52.8	20.5	20.2	43.1
Green Ext Time (p_c), s	0.1	6.1	0.0	0.0	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	74.1
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	90	80	880	0	0	840
Future Volume (veh/h)	90	80	880	0	0	840
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	98	87	957	0	0	913
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	183	115	2960	0	1	2960
Arrive On Green	0.10	0.10	0.84	0.00	0.00	0.84
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	98	87	957	0	0	913
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	6.9	11.1	8.0	0.0	0.0	7.5
Cycle Q Clear(g_c), s	6.9	11.1	8.0	0.0	0.0	7.5
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	183	115	2960	0	1	2960
V/C Ratio(X)	0.54	0.76	0.32	0.00	0.00	0.31
Avail Cap(c_a), veh/h	432	337	2960	0	54	2960
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	56.0	128.4	2.4	0.0	0.0	2.4
Incr Delay (d2), s/veh	2.4	9.7	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.3	4.0	0.0	0.0	3.7
LnGrp Delay(d), s/veh	58.5	138.1	2.7	0.0	0.0	2.6
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	185		957			913
Approach Delay, s/veh	95.9		2.7			2.6
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	114.0				114.0		17.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	102.0				110.0		32.0
Max Q Clear Time (g_c+I1), s	0.0	10.0				9.5		13.1
Green Ext Time (p_c), s	0.0	8.1				7.5		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.1
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	340	450	590	610	240
Future Volume (veh/h)	80	340	450	590	610	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	370	489	641	663	261
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	189	169	519	2973	2085	821
Arrive On Green	0.11	0.11	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1774	1583	603	3632	2576	977
Grp Volume(v), veh/h	87	370	489	641	473	451
Grp Sat Flow(s),veh/h/ln	1774	1583	603	1770	1770	1690
Q Serve(g_s), s	6.9	16.0	117.3	5.3	8.7	8.7
Cycle Q Clear(g_c), s	6.9	16.0	126.0	5.3	8.7	8.7
Prop In Lane	1.00	1.00	1.00			0.58
Lane Grp Cap(c), veh/h	189	169	519	2973	1486	1420
V/C Ratio(X)	0.46	2.19	0.94	0.22	0.32	0.32
Avail Cap(c_a), veh/h	189	169	519	2973	1486	1420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	67.0	18.5	2.3	2.6	2.6
Incr Delay (d2), s/veh	1.7	554.8	27.5	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	33.0	24.2	2.7	4.4	4.2
LnGrp Delay(d), s/veh	64.7	621.8	46.0	2.5	3.2	3.2
LnGrp LOS	E	F	D	A	A	A
Approach Vol, veh/h	457			1130	924	
Approach Delay, s/veh	515.7			21.3	3.2	
Approach LOS	F			C	A	

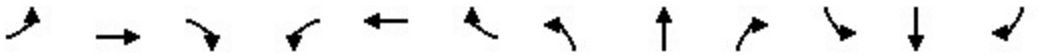
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		130.0		20.0		130.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		126.0		16.0		126.0		
Max Q Clear Time (g_c+I1), s		128.0		18.0		10.7		
Green Ext Time (p_c), s		0.0		0.0		6.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	110	270	660	260	320	540	450	440	370	140
Future Volume (veh/h)	80	780	110	270	660	260	320	540	450	440	370	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	87	848	120	293	717	283	348	587	489	478	402	152
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1372	614	357	1523	1637	376	838	539	541	643	288
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.21	0.24	0.24	0.16	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	87	848	120	293	717	283	348	587	489	478	402	152
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	6.8	26.9	7.0	11.6	20.2	6.5	26.8	21.2	33.0	19.0	14.6	12.1
Cycle Q Clear(g_c), s	6.8	26.9	7.0	11.6	20.2	6.5	26.8	21.2	33.0	19.0	14.6	12.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	1372	614	357	1523	1637	376	838	539	541	643	288
V/C Ratio(X)	0.80	0.62	0.20	0.82	0.47	0.17	0.92	0.70	0.91	0.88	0.63	0.53
Avail Cap(c_a), veh/h	178	1372	614	691	1523	1637	496	838	539	667	643	288
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.6	34.4	28.3	61.2	28.4	13.2	53.8	48.7	43.9	57.5	52.7	51.6
Incr Delay (d2), s/veh	12.8	2.1	0.7	4.7	1.0	0.2	19.8	4.9	21.6	11.6	4.5	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.5	3.2	5.8	10.1	2.5	15.2	10.9	21.2	9.9	7.6	5.9
LnGrp Delay(d), s/veh	77.4	36.5	29.0	65.9	29.4	13.4	73.6	53.5	65.4	69.1	57.2	58.4
LnGrp LOS	E	D	C	E	C	B	E	D	E	E	E	E
Approach Vol, veh/h		1055			1293			1424			1032	
Approach Delay, s/veh		39.0			34.2			62.5			62.9	
Approach LOS		D			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	58.1	33.6	29.3	12.5	64.0	25.9	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	46.0	39.0	21.0	14.0	60.0	27.0	33.0
Max Q Clear Time (g_c+I1), s	13.6	28.9	28.8	16.6	8.8	22.2	21.0	35.0
Green Ext Time (p_c), s	0.8	5.6	0.8	1.2	0.1	6.7	0.9	0.0

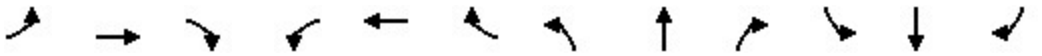
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1280	0	0	780	80	550	20	100	0	0	0
Future Volume (vph)	30	1280	0	0	780	80	550	20	100	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1691	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1691	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	1391	0	0	848	87	598	22	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	33	1391	0	0	848	87	311	309	71	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	4.9	93.1			84.2	84.2	30.6	30.6	30.6			
Effective Green, g (s)	4.9	93.1			84.2	84.2	30.6	30.6	30.6			
Actuated g/C Ratio	0.04	0.71			0.64	0.64	0.23	0.23	0.23			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	65	2501			3251	1012	390	392	367			
v/s Ratio Prot	0.02	c0.39			0.17		c0.18	0.18				
v/s Ratio Perm						0.05			0.04			
v/c Ratio	0.51	0.56			0.26	0.09	0.80	0.79	0.19			
Uniform Delay, d1	62.2	9.3			10.3	9.1	47.6	47.5	40.6			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.1	0.9			0.2	0.2	10.8	10.1	0.3			
Delay (s)	68.3	10.2			10.5	9.2	58.4	57.6	40.9			
Level of Service	E	B			B	A	E	E	D			
Approach Delay (s/veh)		11.6			10.4			55.5			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	131.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1270	400	50	1270	0	0	0	0	90	10	80
Future Volume (vph)	0	1270	400	50	1270	0	0	0	0	90	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1702	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1702	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1380	435	54	1380	0	0	0	0	98	11	87
RTOR Reduction (vph)	0	0	203	0	0	0	0	0	0	0	0	64
Lane Group Flow (vph)	0	1380	232	54	1380	0	0	0	0	54	55	23
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Effective Green, g (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Actuated g/C Ratio		0.53	0.53	0.07	0.65					0.27	0.27	0.27
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1885	843	127	3291					450	456	424
v/s Ratio Prot		c0.39		0.03	c0.27					0.03	c0.03	0.01
v/s Ratio Perm			0.15									
v/c Ratio		0.73	0.27	0.43	0.42					0.12	0.12	0.05
Uniform Delay, d1		16.9	12.1	41.9	8.1					26.1	26.1	25.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.5	0.2	2.3	0.1					0.5	0.5	0.2
Delay (s)		18.4	12.2	44.2	8.1					26.7	26.7	25.9
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		16.9			9.5			0.0			26.3	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	94.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.8%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Future Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	138	1170	160	245	1223	96	202	287	287	181	309	96
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	1309	556	271	2063	162	227	418	333	206	583	175
Arrive On Green	0.09	0.37	0.37	0.15	0.43	0.43	0.13	0.24	0.24	0.12	0.23	0.23
Sat Flow, veh/h	1757	3505	1488	1757	4746	372	1757	1752	1395	1757	2571	774
Grp Volume(v), veh/h	138	1170	160	245	865	454	202	287	287	181	207	198
Grp Sat Flow(s),veh/h/ln	1757	1752	1488	1757	1679	1761	1757	1752	1395	1757	1752	1593
Q Serve(g_s), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Cycle Q Clear(g_c), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	163	1309	556	271	1460	765	227	418	333	206	397	361
V/C Ratio(X)	0.85	0.89	0.29	0.91	0.59	0.59	0.89	0.69	0.86	0.88	0.52	0.55
Avail Cap(c_a), veh/h	257	1434	609	334	1521	798	270	418	333	257	397	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	40.3	30.1	56.9	29.4	29.5	58.6	47.5	50.0	59.4	46.4	46.7
Incr Delay (d2), s/veh	13.9	7.2	0.3	23.8	0.6	1.1	25.8	8.9	24.4	23.8	4.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	22.1	4.3	10.9	12.5	13.2	9.1	10.9	12.7	8.1	7.4	7.2
LnGrp Delay(d), s/veh	75.1	47.5	30.4	80.7	30.0	30.6	84.5	56.4	74.4	83.2	51.3	52.6
LnGrp LOS	E	D	C	F	C	C	F	E	E	F	D	D
Approach Vol, veh/h		1468			1564			776			586	
Approach Delay, s/veh		48.2			38.1			70.3			61.6	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	36.6	25.1	55.1	21.7	35.0	16.7	63.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	26.0	56.0	21.0	31.0	20.0	62.0
Max Q Clear Time (g_c+I1), s	15.9	29.0	20.8	45.0	17.5	17.0	12.6	28.9
Green Ext Time (p_c), s	0.2	1.1	0.3	6.2	0.2	2.1	0.2	10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	52.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	200	190	360	150	180	140
Future Vol, veh/h	200	190	360	150	180	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	217	207	391	163	196	152

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	196	348	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	222	845	1211	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 150	845	1211	-	-	-
Mov Cap-2 Maneuver	~ 150	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	378	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	154.3	6.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1211	-	150	845	-	-
HCM Lane V/C Ratio	0.323	-	1.449	0.244	-	-
HCM Control Delay (s/veh)	9.4	-	290.9	10.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	1.4	-	14.2	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	8.5

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	300	80	10	130	70	30
Future Vol, veh/h	300	80	10	130	70	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	326	87	11	141	76	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	11	0	0	152	0
Stage 1	11	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	793	1070	-	-	1429	-
Stage 1	1012	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	750	1070	-	-	1429	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	12.4	0	5.4
HCM LOS	B		

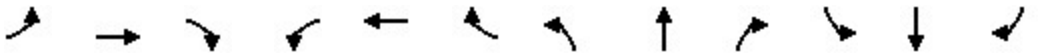
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	750	1070	1429	-	-	-
HCM Lane V/C Ratio	0.435	0.081	0.053	-	-	-
HCM Control Delay (s/veh)	13.4	8.7	7.7	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	2.2	0.3	0.2	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	460	950	70	60	860	140	180	910	90	170	680	460
Future Volume (veh/h)	460	950	70	60	860	140	180	910	90	170	680	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	495	1022	75	65	925	151	194	978	97	183	731	495
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	548	1152	85	82	1018	166	218	1286	575	206	1263	810
Arrive On Green	0.16	0.35	0.35	0.05	0.24	0.24	0.13	0.37	0.37	0.12	0.36	0.36
Sat Flow, veh/h	3375	3273	240	1740	4304	699	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	495	542	555	65	714	362	194	978	97	183	731	495
Grp Sat Flow(s),veh/h/ln	1688	1736	1777	1740	1663	1678	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	35.3	6.0	14.8	24.3	32.3
Cycle Q Clear(g_c), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	35.3	6.0	14.8	24.3	32.3
Prop In Lane	1.00		0.14	1.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	611	625	82	787	397	218	1286	575	206	1263	810
V/C Ratio(X)	0.90	0.89	0.89	0.79	0.91	0.91	0.89	0.76	0.17	0.89	0.58	0.61
Avail Cap(c_a), veh/h	614	643	659	97	814	411	268	1286	575	243	1263	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	43.7	43.7	67.4	53.1	53.1	61.6	39.4	30.2	62.1	36.6	23.7
Incr Delay (d2), s/veh	15.6	13.7	13.5	30.3	13.6	23.9	25.4	4.3	0.6	27.4	1.9	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	22.5	23.0	3.2	15.2	16.5	9.1	17.7	2.7	8.7	12.0	14.3
LnGrp Delay(d), s/veh	74.4	57.4	57.2	97.7	66.7	77.1	87.0	43.7	30.9	89.5	38.6	27.1
LnGrp LOS	E	E	E	F	E	E	F	D	C	F	D	C
Approach Vol, veh/h		1592			1141			1269			1409	
Approach Delay, s/veh		62.6			71.8			49.4			41.2	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	57.0	10.7	54.3	21.9	56.1	27.2	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	53.0	8.0	53.0	22.0	51.0	26.0	35.0
Max Q Clear Time (g_c+I1), s	16.8	37.3	7.3	44.1	17.7	34.3	22.6	32.1
Green Ext Time (p_c), s	0.1	6.0	0.0	4.4	0.2	6.1	0.7	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.8
HCM 2010 LOS	E

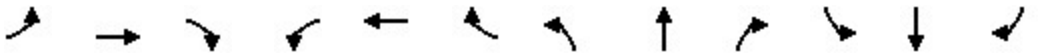
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	150	0	220	270	520	0	0	490	290
Future Volume (vph)	0	0	0	150	0	220	270	520	0	0	490	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.43	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1553	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	163	0	239	293	565	0	0	533	315
RTOR Reduction (vph)	0	0	0	0	0	206	0	0	0	0	0	67
Lane Group Flow (vph)	0	0	0	163	0	33	293	565	0	0	533	248
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				15.3		15.3	86.4	86.4			86.4	86.4
Effective Green, g (s)				15.3		15.3	86.4	86.4			86.4	86.4
Actuated g/C Ratio				0.14		0.14	0.79	0.79			0.79	0.79
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				246		220	1223	4004			5046	1246
v/s Ratio Prot								0.11			0.08	
v/s Ratio Perm				c0.09		0.02	c0.19					0.16
v/c Ratio				0.66		0.15	0.24	0.14			0.11	0.20
Uniform Delay, d1				44.8		41.5	3.0	2.8			2.7	2.9
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				6.6		0.3	0.5	0.1			0.0	0.4
Delay (s)				51.3		41.8	3.5	2.9			2.7	3.3
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			45.7			3.1			2.9	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.30		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		

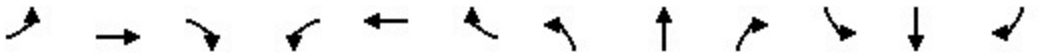
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	220	0	0	0	0	760	90	380	980	0
Future Volume (vph)	170	0	220	0	0	0	0	760	90	380	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1127	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	0	239	0	0	0	0	826	98	413	1065	0
RTOR Reduction (vph)	0	0	205	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	185	0	34	0	0	0	0	826	78	413	1065	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	19.4		19.4					109.1	109.1	109.1	109.1	
Effective Green, g (s)	19.4		19.4					109.1	109.1	109.1	109.1	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	251		396					5121	1265	900	4064	
v/s Ratio Prot								0.13			0.21	
v/s Ratio Perm	c0.10		0.01						0.05	c0.37		
v/c Ratio	0.74		0.09					0.16	0.06	0.46	0.26	
Uniform Delay, d1	56.1		50.8					3.2	2.9	4.3	3.5	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	10.7		0.1					0.1	0.1	1.7	0.2	
Delay (s)	66.8		50.9					3.2	3.0	6.0	3.6	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		57.9			0.0			3.2			4.3	
Approach LOS		E			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	136.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	490	0	210	0	790	490	200	1340	0
Future Volume (vph)	10	10	10	490	0	210	0	790	490	200	1340	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1719		1665	1665	1473		5036	1521	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1665	1473		5036	1521	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	544	0	233	0	878	544	222	1489	0
RTOR Reduction (vph)	0	10	0	0	0	175	0	0	183	0	0	0
Lane Group Flow (vph)	0	23	0	272	272	58	0	878	361	222	1489	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		32.7	32.7	32.7		53.8	86.5	21.8	79.6	
Effective Green, g (s)		7.5		32.7	32.7	32.7		53.8	86.5	21.8	79.6	
Actuated g/C Ratio		0.06		0.25	0.25	0.25		0.41	0.66	0.17	0.60	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		413	413	365		2055	998	289	3041	
v/s Ratio Prot				c0.16	0.16			0.17	0.09	c0.13	c0.30	
v/s Ratio Perm		c0.04				0.04			0.15			
v/c Ratio		0.65		0.66	0.66	0.16		0.43	0.36	0.77	0.49	
Uniform Delay, d1		60.9		44.5	44.5	38.8		28.0	10.2	52.6	14.7	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.3		3.8	3.8	0.2		0.7	0.2	11.6	0.6	
Delay (s)		95.2		48.3	48.3	39.0		28.6	10.4	64.2	15.2	
Level of Service		F		D	D	D		C	B	E	B	
Approach Delay (s/veh)		95.2			45.5			21.7			21.6	
Approach LOS		F			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	131.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	40	220	20	20	10	120	560	10	20	720	280
Future Volume (veh/h)	480	40	220	20	20	10	120	560	10	20	720	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	571	48	262	24	24	12	143	667	12	24	857	333
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	676	52	760	0	909	761	197	1403	25	32	1259	551
Arrive On Green	0.49	0.49	0.49	0.00	0.49	0.49	0.06	0.39	0.39	0.02	0.36	0.36
Sat Flow, veh/h	1268	107	1559	0	1863	1560	3442	3555	64	1774	3539	1551
Grp Volume(v), veh/h	619	0	262	0	24	12	143	332	347	24	857	333
Grp Sat Flow(s),veh/h/ln	1374	0	1559	0	1863	1560	1721	1770	1849	1774	1770	1551
Q Serve(g_s), s	50.2	0.0	12.5	0.0	0.8	0.5	4.9	16.9	16.9	1.6	24.9	21.3
Cycle Q Clear(g_c), s	51.0	0.0	12.5	0.0	0.8	0.5	4.9	16.9	16.9	1.6	24.9	21.3
Prop In Lane	0.92		1.00	0.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	728	0	760	0	909	761	197	698	730	32	1259	551
V/C Ratio(X)	0.85	0.00	0.34	0.00	0.03	0.02	0.73	0.48	0.48	0.74	0.68	0.60
Avail Cap(c_a), veh/h	958	0	1018	0	1340	1123	228	698	730	88	1259	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	19.1	0.0	16.1	16.0	56.1	27.3	27.3	59.1	33.1	32.0
Incr Delay (d2), s/veh	5.8	0.0	0.3	0.0	0.0	0.0	9.3	2.3	2.2	27.5	3.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.4	0.0	5.4	0.0	0.4	0.2	2.6	8.7	9.0	1.0	12.7	9.9
LnGrp Delay(d), s/veh	35.1	0.0	19.3	0.0	16.1	16.0	65.4	29.6	29.5	86.5	36.1	36.8
LnGrp LOS	D		B		B	B	E	C	C	F	D	D
Approach Vol, veh/h		881			36			822			1214	
Approach Delay, s/veh		30.4			16.0			35.8			37.3	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	51.7	0.0	63.0	10.9	47.0		63.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	45.0	4.0	79.0	8.0	43.0		87.0
Max Q Clear Time (g_c+I1), s	3.6	18.9	0.0	53.0	6.9	26.9		2.8
Green Ext Time (p_c), s	0.0	4.0	0.0	6.0	0.0	6.3		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	20	60	50	250	20	360	30	390	560	30
Future Volume (veh/h)	20	50	20	60	50	250	20	360	30	390	560	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.83	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	24	60	24	72	60	301	24	434	36	470	675	36
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	42	93	30	120	90	249	570	2716	1199	720	2716	1175
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	68	496	161	442	480	1334	741	3574	1578	925	3574	1546
Grp Volume(v), veh/h	108	0	0	132	0	301	24	434	36	470	675	36
Grp Sat Flow(s),veh/h/ln	725	0	0	922	0	1334	741	1787	1578	925	1787	1546
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	28.0	1.5	5.0	0.8	42.3	8.4	0.9
Cycle Q Clear(g_c), s	25.0	0.0	0.0	22.2	0.0	28.0	9.9	5.0	0.8	47.3	8.4	0.9
Prop In Lane	0.22		0.22	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	0	209	0	249	570	2716	1199	720	2716	1175
V/C Ratio(X)	0.66	0.00	0.00	0.63	0.00	1.21	0.04	0.16	0.03	0.65	0.25	0.03
Avail Cap(c_a), veh/h	165	0	0	209	0	249	570	2716	1199	720	2716	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	0.0	57.7	0.0	61.0	6.8	4.9	4.4	11.4	5.3	4.4
Incr Delay (d2), s/veh	9.0	0.0	0.0	6.0	0.0	125.3	0.1	0.1	0.0	4.6	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	5.6	0.0	19.0	0.3	2.5	0.4	11.6	4.2	0.4
LnGrp Delay(d), s/veh	65.1	0.0	0.0	63.7	0.0	186.3	6.9	5.0	4.5	15.9	5.5	4.5
LnGrp LOS	E			E		F	A	A	A	B	A	A
Approach Vol, veh/h		108			433			494			1181	
Approach Delay, s/veh		65.1			148.9			5.1			9.7	
Approach LOS		E			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		118.0		32.0		118.0		32.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		114.0		28.0		114.0		28.0
Max Q Clear Time (g_c+I1), s		11.9		27.0		49.3		30.0
Green Ext Time (p_c), s		3.3		0.0		9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.5
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	20.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Future Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	403	42	69	0	42	42	83	42	0	28	28	292
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	28.3	10.3	12.6	15.3
HCM LOS	D	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	0%	78%	0%	8%
Vol Thru, %	33%	100%	8%	50%	8%
Vol Right, %	0%	0%	14%	50%	84%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	0	370	60	250
LT Vol	60	0	290	0	20
Through Vol	30	0	30	30	20
RT Vol	0	0	50	30	210
Lane Flow Rate	125	0	514	83	347
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.257	0	0.807	0.144	0.543
Departure Headway (Hd)	7.4	7.059	5.651	6.204	5.634
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	488	0	637	581	635
Service Time	5.106	4.764	3.724	4.213	3.724
HCM Lane V/C Ratio	0.256	0	0.807	0.143	0.546
HCM Control Delay, s/veh	12.6	9.8	28.3	10.3	15.3
HCM Lane LOS	B	N	D	B	C
HCM 95th-tile Q	1	0	8.2	0.5	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	190	70	30	70	70	1360	40	50	960	20
Future Volume (veh/h)	30	30	190	70	30	70	70	1360	40	50	960	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	33	33	211	78	33	78	78	1511	44	56	1067	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	118	106	267	138	74	189	98	2441	1067	72	2389	1055
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.06	0.70	0.70	0.04	0.69	0.69
Sat Flow, veh/h	469	617	1553	523	429	1096	1740	3471	1517	1740	3471	1533
Grp Volume(v), veh/h	66	0	211	84	0	105	78	1511	44	56	1067	22
Grp Sat Flow(s),veh/h/ln	1086	0	1553	578	0	1469	1740	1736	1517	1740	1736	1533
Q Serve(g_s), s	3.4	0.0	18.7	10.2	0.0	9.1	6.4	32.9	1.3	4.6	19.9	0.7
Cycle Q Clear(g_c), s	12.5	0.0	18.7	22.7	0.0	9.1	6.4	32.9	1.3	4.6	19.9	0.7
Prop In Lane	0.50		1.00	0.92		0.75	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	0	267	148	0	253	98	2441	1067	72	2389	1055
V/C Ratio(X)	0.29	0.00	0.79	0.57	0.00	0.41	0.80	0.62	0.04	0.78	0.45	0.02
Avail Cap(c_a), veh/h	227	0	270	150	0	256	182	2441	1067	145	2389	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	0.0	57.0	64.3	0.0	53.0	67.0	11.2	6.5	68.2	10.1	7.1
Incr Delay (d2), s/veh	0.7	0.0	14.4	5.0	0.0	1.1	13.7	1.2	0.1	16.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	9.1	3.5	0.0	3.8	3.4	15.9	0.5	2.5	9.7	0.3
LnGrp Delay(d), s/veh	55.5	0.0	71.3	69.3	0.0	54.1	80.7	12.4	6.6	84.9	10.7	7.1
LnGrp LOS	E		E	E		D	F	B	A	F	B	A
Approach Vol, veh/h		277			189			1633			1145	
Approach Delay, s/veh		67.6			60.9			15.5			14.3	
Approach LOS		E			E			B			B	

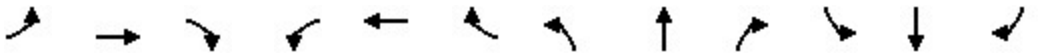
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	105.0		28.7	12.1	102.8		28.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	101.0		25.0	15.0	98.0		25.0
Max Q Clear Time (g_c+I1), s	6.6	34.9		20.7	8.4	21.9		24.7
Green Ext Time (p_c), s	0.0	20.1		0.4	0.1	10.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.1
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1230	100	470	1310	410	600
Future Volume (veh/h)	1230	100	470	1310	410	600
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1281	104	490	1365	427	625
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1412	1179	547	2980	635	567
Arrive On Green	0.40	0.40	0.16	0.59	0.36	0.36
Sat Flow, veh/h	3632	1536	3442	5253	1774	1583
Grp Volume(v), veh/h	1281	104	490	1365	427	625
Grp Sat Flow(s),veh/h/ln	1770	1536	1721	1695	1774	1583
Q Serve(g_s), s	48.6	2.5	19.9	21.6	29.0	51.0
Cycle Q Clear(g_c), s	48.6	2.5	19.9	21.6	29.0	51.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1412	1179	547	2980	635	567
V/C Ratio(X)	0.91	0.09	0.90	0.46	0.67	1.10
Avail Cap(c_a), veh/h	1515	1224	628	3247	635	567
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	4.5	58.8	16.7	38.7	45.7
Incr Delay (d2), s/veh	8.0	0.0	14.2	0.1	5.6	69.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.2	2.6	10.5	10.1	15.2	33.2
LnGrp Delay(d), s/veh	48.3	4.6	72.9	16.8	44.3	114.9
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1385			1855	1052	
Approach Delay, s/veh	45.0			31.6	86.2	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		55.0	26.7	60.8				87.5
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		51.0	26.0	61.0				91.0
Max Q Clear Time (g_c+I1), s		53.0	21.9	50.6				23.6
Green Ext Time (p_c), s		0.0	0.8	6.2				15.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	590	350	40	890	120	10	10	20	770	30	300
Future Volume (vph)	70	590	350	40	890	120	10	10	20	770	30	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1784	3574	1542	1787	3574	1547		1715		1698	1621	1519
Flt Permitted	0.17	1.00	1.00	0.95	1.00	1.00		0.89		0.95	0.71	1.00
Satd. Flow (perm)	319	3574	1542	1787	3574	1547		1544		1698	1192	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	72	608	361	41	918	124	10	10	21	794	31	309
RTOR Reduction (vph)	0	0	121	0	0	76	0	16	0	0	1	41
Lane Group Flow (vph)	72	608	240	41	918	48	0	25	0	429	426	237
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	33.9	33.9	33.9	6.0	43.9	43.9		32.4		35.6	72.0	72.0
Effective Green, g (s)	33.9	33.9	33.9	6.0	43.9	43.9		32.4		35.6	72.0	72.0
Actuated g/C Ratio	0.27	0.27	0.27	0.05	0.35	0.35		0.26		0.29	0.58	0.58
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	87	977	421	86	1266	548		403		487	815	882
v/s Ratio Prot		0.17		0.02	c0.26					c0.25	0.15	
v/s Ratio Perm	c0.23		0.16			0.03		0.02			c0.15	0.16
v/c Ratio	0.83	0.62	0.57	0.48	0.73	0.09		0.06		0.88	0.52	0.27
Uniform Delay, d1	42.3	39.4	38.7	57.4	34.8	26.7		34.4		42.1	15.6	12.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	44.8	1.2	1.9	4.1	2.1	0.1		0.1		16.8	0.6	0.7
Delay (s)	87.1	40.6	40.6	61.5	36.9	26.7		34.4		58.9	16.2	13.6
Level of Service	F	D	D	E	D	C		C		E	B	B
Approach Delay (s/veh)		43.8			36.6			34.4			31.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	123.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1050	390	330	1200	210	300	620	200	280	620	180
Future Volume (veh/h)	200	1050	390	330	1200	210	300	620	200	280	620	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	215	1129	419	355	1290	226	323	667	215	301	667	194
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	237	1120	487	346	1637	287	322	763	324	311	739	317
Arrive On Green	0.13	0.31	0.31	0.19	0.37	0.37	0.18	0.21	0.21	0.17	0.21	0.21
Sat Flow, veh/h	1792	3574	1553	1792	4375	766	1792	3574	1521	1792	3574	1535
Grp Volume(v), veh/h	215	1129	419	355	1010	506	323	667	215	301	667	194
Grp Sat Flow(s),veh/h/ln	1792	1787	1553	1792	1712	1718	1792	1787	1521	1792	1787	1535
Q Serve(g_s), s	17.7	47.0	38.1	29.0	39.3	39.3	27.0	27.1	19.4	25.0	27.3	17.2
Cycle Q Clear(g_c), s	17.7	47.0	38.1	29.0	39.3	39.3	27.0	27.1	19.4	25.0	27.3	17.2
Prop In Lane	1.00		1.00	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	1120	487	346	1281	643	322	763	324	311	739	317
V/C Ratio(X)	0.91	1.01	0.86	1.02	0.79	0.79	1.00	0.87	0.66	0.97	0.90	0.61
Avail Cap(c_a), veh/h	263	1120	487	346	1281	643	322	763	324	311	739	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.1	51.5	48.4	60.5	41.7	41.7	61.5	57.1	54.1	61.6	58.0	54.0
Incr Delay (d2), s/veh	30.4	28.9	14.5	54.9	3.4	6.5	50.5	13.3	10.2	42.6	16.5	8.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	27.7	18.3	19.6	19.1	19.7	17.9	14.8	9.1	16.1	15.2	8.1
LnGrp Delay(d), s/veh	94.5	80.4	63.0	115.4	45.0	48.2	112.0	70.4	64.3	104.2	74.5	62.5
LnGrp LOS	F	F	E	F	D	D	F	E	E	F	E	E
Approach Vol, veh/h		1763			1871			1205			1162	
Approach Delay, s/veh		78.0			59.2			80.5			80.2	
Approach LOS		E			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	36.0	33.0	51.0	31.0	35.0	23.9	60.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	32.0	29.0	47.0	27.0	31.0	22.0	54.0
Max Q Clear Time (g_c+I1), s	27.0	29.1	31.0	49.0	29.0	29.3	19.7	41.3
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.9	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.1
HCM 2010 LOS	E

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	80	150	600	90	60	720	120	20	120	520	220	20
Future Volume (vph)	80	150	600	90	60	720	120	20	120	520	220	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.97	1.00	0.99			1.00	1.00	0.91	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.98			1.00	0.99	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	3539	1534	1770	4934			1770	3358	1309	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	3539	1534	1770	4934			1770	3358	1309	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	160	638	96	64	766	128	21	128	553	234	21
RTOR Reduction (vph)	0	0	0	72	0	2	0	0	0	0	128	0
Lane Group Flow (vph)	0	245	638	24	64	913	0	0	128	576	104	0
Confl. Peds. (#/hr)		7		7	7		7		2		27	
Confl. Bikes (#/hr)							2				4	
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		19.0	38.0	38.0	7.8	26.8			11.0	25.0	25.0	
Effective Green, g (s)		19.0	38.0	38.0	7.8	26.8			11.0	25.0	25.0	
Actuated g/C Ratio		0.13	0.25	0.25	0.05	0.18			0.07	0.17	0.17	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		223	891	386	91	876			129	556	217	
v/s Ratio Prot		c0.14	0.18		0.04	c0.19			0.07	c0.17		
v/s Ratio Perm				0.02							0.08	
v/c Ratio		1.10	0.72	0.06	0.70	1.04			0.99	1.04	0.48	
Uniform Delay, d1		65.9	51.5	42.9	70.4	62.0			69.9	62.9	57.0	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		89.2	2.8	0.1	21.8	42.1			76.6	47.8	7.4	
Delay (s)		155.1	54.2	42.9	92.1	104.1			146.4	110.7	64.5	
Level of Service		F	D	D	F	F			F	F	E	
Approach Delay (s/veh)			78.4			103.3				104.1		
Approach LOS			E			F				F		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	94.6	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.04		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	24.0
Intersection Capacity Utilization	98.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Future Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1125	1827	1542	859	1827	1542	659	3471	1518	840	3471	1517
Grp Volume(v), veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Grp Sat Flow(s),veh/h/ln	1125	1827	1542	859	1827	1542	659	1736	1518	840	1736	1517
Q Serve(g_s), s	12.3	17.4	19.2	4.8	10.2	3.8	11.6	6.3	0.5	3.7	9.2	2.3
Cycle Q Clear(g_c), s	22.5	17.4	19.2	22.2	10.2	3.8	20.8	6.3	0.5	9.9	9.2	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
V/C Ratio(X)	0.54	0.69	0.75	0.27	0.43	0.17	0.28	0.21	0.02	0.11	0.29	0.08
Avail Cap(c_a), veh/h	421	737	622	285	737	622	484	2500	1093	621	2500	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	45.6	46.3	55.8	42.8	40.3	9.9	5.8	5.0	7.5	6.2	5.3
Incr Delay (d2), s/veh	2.2	2.2	3.4	1.2	0.7	0.2	1.4	0.2	0.0	0.4	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	9.0	8.4	1.2	5.2	1.6	2.3	3.0	0.2	0.9	4.5	1.0
LnGrp Delay(d), s/veh	54.7	47.8	49.7	57.0	43.5	40.5	11.3	6.0	5.1	7.8	6.5	5.4
LnGrp LOS	D	D	D	E	D	D	B	A	A	A	A	A
Approach Vol, veh/h		637			261			682			875	
Approach Delay, s/veh		49.7			44.6			7.0			6.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		31.3		95.0		31.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		51.0		91.0		51.0
Max Q Clear Time (g_c+I1), s		22.8		24.5		11.9		24.2
Green Ext Time (p_c), s		5.4		2.9		6.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Future Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	121	99	198	22	44	44	99	1143	33	66	912	55
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	12	498	32	49	498	322	2150	917	248	2150	937
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	0	37	1494	0	148	1493	573	3505	1496	470	3505	1527
Grp Volume(v), veh/h	220	0	198	66	0	44	99	1143	33	66	912	55
Grp Sat Flow(s),veh/h/ln	37	0	1494	148	0	1493	573	1752	1496	470	1752	1527
Q Serve(g_s), s	0.0	0.0	15.3	0.0	0.0	3.0	16.4	28.1	1.3	14.0	20.4	2.2
Cycle Q Clear(g_c), s	50.0	0.0	15.3	50.0	0.0	3.0	36.8	28.1	1.3	42.1	20.4	2.2
Prop In Lane	0.55		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
V/C Ratio(X)	4.44	0.00	0.40	0.81	0.00	0.09	0.31	0.53	0.04	0.27	0.42	0.06
Avail Cap(c_a), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	0.0	38.4	41.6	0.0	34.3	24.8	16.6	11.5	28.7	15.2	11.6
Incr Delay (d2), s/veh	1595.5	0.0	0.5	44.5	0.0	0.1	2.5	0.9	0.1	2.6	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.0	0.0	6.4	2.9	0.0	1.3	2.8	13.8	0.6	2.0	10.1	0.9
LnGrp Delay(d), s/veh	1658.2	0.0	38.9	86.1	0.0	34.4	27.2	17.6	11.5	31.3	15.8	11.8
LnGrp LOS	F		D	F		C	C	B	B	C	B	B
Approach Vol, veh/h		418			110			1275			1033	
Approach Delay, s/veh		891.2			65.5			18.2			16.6	
Approach LOS		F			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		54.0		96.0		54.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		38.8		52.0		44.1		52.0
Green Ext Time (p_c), s		13.2		0.0		9.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		148.1
HCM 2010 LOS		F

Shared Passenger Track Alternatives A/B

ALIGNMENT - 2040 PLUS PROJECT AM

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Future Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.95	1.00	1.00		1.00		0.95		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.97	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3276	1372	1770	3528		3433		1504		
Flt Permitted			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3276	1372	1770	3528		3433		1504		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	819	606	160	713	11	500	0	138	0	0
RTOR Reduction (vph)	0	0	14	278	0	1	0	0	0	82	0	0
Lane Group Flow (vph)	0	0	975	158	160	723	0	500	0	56	0	0
Confl. Peds. (#/hr)		9		16	16		9			18	18	
Confl. Bikes (#/hr)				5			2			2		
Turn Type	Prot		NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases				4						2		
Actuated Green, G (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Effective Green, g (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Actuated g/C Ratio			0.36	0.36	0.13	0.53		0.18		0.40		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1184	495	229	1857		631		605		
v/s Ratio Prot			c0.30		c0.09	0.20		c0.15				
v/s Ratio Perm				0.11						c0.04		
v/c Ratio			0.82	0.32	0.70	0.39		0.79		0.09		
Uniform Delay, d1			32.7	25.9	46.9	15.9		43.9		20.9		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			4.8	0.4	9.0	0.1		6.8		0.3		
Delay (s)			37.4	26.3	55.9	16.0		50.7		21.2		
Level of Service			D	C	E	B		D		C		
Approach Delay (s/veh)			34.0			23.2			44.3			37.7
Approach LOS			C			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1611
Flt Permitted	1.00
Satd. Flow (perm)	1611
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	20.6
Effective Green, g (s)	20.6
Actuated g/C Ratio	0.18
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	294
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	37.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	37.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	100	10	10	30	0	650	40	20	780
Future Volume (vph)	0	0	60	100	10	10	30	0	650	40	20	780
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.82	1.00	0.90		1.00		1.00	0.92	1.00	1.00
Flpb, ped/bikes			1.00	0.84	1.00		1.00		1.00	1.00	0.98	1.00
Frt			0.87	1.00	0.93		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1326	1481	1555		1770		3539	1461	1732	3539
Flt Permitted			1.00	0.95	1.00		0.33		1.00	1.00	0.38	1.00
Satd. Flow (perm)			1326	1481	1555		611		3539	1461	698	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	106	11	11	32	0	691	43	21	830
RTOR Reduction (vph)	0	0	56	0	10	0	0	0	0	9	0	0
Lane Group Flow (vph)	0	0	8	106	12	0	32	0	691	34	21	830
Confl. Peds. (#/hr)	93		85	85		93		2		18	18	
Confl. Bikes (#/hr)			4			6				2		
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			12.8	12.8	12.8		81.7		81.7	81.7	81.7	81.7
Effective Green, g (s)			12.8	12.8	12.8		81.7		81.7	81.7	81.7	81.7
Actuated g/C Ratio			0.12	0.12	0.12		0.80		0.80	0.80	0.80	0.80
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			165	184	194		487		2820	1164	556	2820
v/s Ratio Prot					0.01				0.20			c0.23
v/s Ratio Perm			0.01	c0.07			0.05			0.02	0.03	
v/c Ratio			0.05	0.58	0.06		0.07		0.25	0.03	0.04	0.29
Uniform Delay, d1			39.5	42.3	39.6		2.2		2.6	2.2	2.2	2.8
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	4.3	0.1		0.3		0.2	0.0	0.1	0.3
Delay (s)			39.6	46.6	39.7		2.5		2.8	2.2	2.3	3.0
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		39.6			45.4				2.8			3.0
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	102.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	30
Future Volume (vph)	30
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	0.97
Flpb, ped/bikes	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1542
Flt Permitted	1.00
Satd. Flow (perm)	1542
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	32
RTOR Reduction (vph)	2
Lane Group Flow (vph)	30
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	81.7
Effective Green, g (s)	81.7
Actuated g/C Ratio	0.80
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1229
v/s Ratio Prot	
v/s Ratio Perm	0.02
v/c Ratio	0.02
Uniform Delay, d1	2.2
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	2.2
Level of Service	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	900	130	320	1130	280	70	410	150	210	520	130
Future Volume (veh/h)	120	900	130	320	1130	280	70	410	150	210	520	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	947	137	337	1189	295	74	432	158	221	547	137
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1164	168	376	1548	384	302	932	405	395	1163	646
Arrive On Green	0.09	0.26	0.26	0.21	0.38	0.38	0.04	0.26	0.26	0.11	0.33	0.33
Sat Flow, veh/h	1774	4460	643	1774	4021	998	1774	3539	1537	1774	3539	1542
Grp Volume(v), veh/h	126	719	365	337	1002	482	74	432	158	221	547	137
Grp Sat Flow(s),veh/h/ln	1774	1695	1713	1774	1695	1629	1774	1770	1537	1774	1770	1542
Q Serve(g_s), s	7.2	20.6	20.7	19.1	26.7	26.7	3.1	10.6	8.7	9.0	12.7	5.9
Cycle Q Clear(g_c), s	7.2	20.6	20.7	19.1	26.7	26.7	3.1	10.6	8.7	9.0	12.7	5.9
Prop In Lane	1.00		0.38	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	885	447	376	1305	627	302	932	405	395	1163	646
V/C Ratio(X)	0.81	0.81	0.82	0.90	0.77	0.77	0.25	0.46	0.39	0.56	0.47	0.21
Avail Cap(c_a), veh/h	274	1016	513	566	1573	756	327	932	405	511	1163	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	35.8	35.9	39.7	27.8	27.8	26.1	32.0	31.3	22.9	27.6	19.3
Incr Delay (d2), s/veh	9.4	4.5	8.9	12.0	1.9	4.0	0.4	1.7	2.8	1.2	1.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	10.1	10.8	10.6	12.9	12.7	1.6	5.4	4.0	4.4	6.5	2.6
LnGrp Delay(d), s/veh	55.7	40.4	44.8	51.7	29.7	31.7	26.5	33.6	34.1	24.1	28.9	20.1
LnGrp LOS	E	D	D	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1210			1821			664			905	
Approach Delay, s/veh		43.3			34.3			32.9			26.4	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	31.2	25.9	31.0	8.5	38.0	13.1	43.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	22.0	33.0	31.0	6.0	34.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	11.0	12.6	21.1	22.7	5.1	14.7	9.2	28.7
Green Ext Time (p_c), s	0.3	2.3	0.8	4.3	0.0	3.9	0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	230	100	330	170	90	40	490	180	110	990	40
Future Volume (veh/h)	40	230	100	330	170	90	40	490	180	110	990	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	43	250	109	359	185	98	43	533	196	120	1076	43
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	505	614	268	444	572	303	142	1487	642	292	1455	58
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1080	1212	528	1008	1129	598	497	3505	1513	716	3430	137
Grp Volume(v), veh/h	43	0	359	359	0	283	43	533	196	120	550	569
Grp Sat Flow(s),veh/h/ln	1080	0	1740	1008	0	1727	497	1752	1513	716	1752	1815
Q Serve(g_s), s	2.8	0.0	14.8	39.7	0.0	11.2	9.2	11.9	9.9	15.8	30.4	30.4
Cycle Q Clear(g_c), s	14.0	0.0	14.8	54.5	0.0	11.2	39.6	11.9	9.9	27.7	30.4	30.4
Prop In Lane	1.00		0.30	1.00		0.35	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	505	0	881	444	0	874	142	1487	642	292	744	770
V/C Ratio(X)	0.09	0.00	0.41	0.81	0.00	0.32	0.30	0.36	0.31	0.41	0.74	0.74
Avail Cap(c_a), veh/h	547	0	949	483	0	942	142	1487	642	292	744	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	17.7	34.7	0.0	16.8	44.5	22.6	22.0	32.0	27.9	27.9
Incr Delay (d2), s/veh	0.1	0.0	0.3	9.3	0.0	0.2	5.4	0.7	1.2	4.2	6.5	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	7.2	12.2	0.0	5.4	1.5	5.9	4.4	3.4	16.0	16.5
LnGrp Delay(d), s/veh	21.0	0.0	18.0	44.0	0.0	17.0	49.9	23.2	23.2	36.2	34.4	34.2
LnGrp LOS	C		B	D		B	D	C	C	D	C	C
Approach Vol, veh/h		402			642			772			1239	
Approach Delay, s/veh		18.3			32.1			24.7			34.5	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		62.5		53.0		62.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		63.0		49.0		63.0
Max Q Clear Time (g_c+I1), s		41.6		16.8		32.4		56.5
Green Ext Time (p_c), s		2.8		2.6		7.6		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	100	30	10	20	40	580	30	10	1260	130
Future Volume (veh/h)	110	10	100	30	10	20	40	580	30	10	1260	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	115	10	104	31	10	21	42	604	31	10	1312	135
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	18	185	145	68	143	307	2812	1224	660	2569	263
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1350	136	1414	1259	522	1096	367	3539	1541	789	3233	331
Grp Volume(v), veh/h	115	0	114	31	0	31	42	604	31	10	715	732
Grp Sat Flow(s),veh/h/ln	1350	0	1550	1259	0	1618	367	1770	1541	789	1770	1795
Q Serve(g_s), s	8.8	0.0	7.4	2.5	0.0	1.8	4.8	4.5	0.5	0.3	14.9	15.1
Cycle Q Clear(g_c), s	10.6	0.0	7.4	9.9	0.0	1.8	19.9	4.5	0.5	4.9	14.9	15.1
Prop In Lane	1.00		0.91	1.00		0.68	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	221	0	203	145	0	212	307	2812	1224	660	1406	1426
V/C Ratio(X)	0.52	0.00	0.56	0.21	0.00	0.15	0.14	0.21	0.03	0.02	0.51	0.51
Avail Cap(c_a), veh/h	385	0	391	298	0	408	307	2812	1224	660	1406	1426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	0.0	43.6	48.3	0.0	41.2	7.3	2.7	2.3	3.3	3.8	3.8
Incr Delay (d2), s/veh	1.9	0.0	2.4	0.7	0.0	0.3	0.9	0.2	0.0	0.0	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.3	0.9	0.0	0.8	0.6	2.2	0.2	0.1	7.7	7.8
LnGrp Delay(d), s/veh	47.8	0.0	46.1	49.0	0.0	41.5	8.2	2.9	2.3	3.4	5.1	5.1
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		229			62			677			1457	
Approach Delay, s/veh		46.9			45.3			3.2			5.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		18.0		89.0		18.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		21.9		12.6		17.1		11.9
Green Ext Time (p_c), s		5.8		0.8		15.6		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Future Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	228	120	207	130	43	33	554	196	76	1380	33
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	431	227	296	709	578	162	1937	838	393	1937	838
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1190	1132	596	1029	1863	1517	379	3539	1532	708	3539	1532
Grp Volume(v), veh/h	43	0	348	207	130	43	33	554	196	76	1380	33
Grp Sat Flow(s),veh/h/ln	1190	0	1727	1029	1863	1517	379	1770	1532	708	1770	1532
Q Serve(g_s), s	2.8	0.0	17.4	21.8	5.2	2.0	7.9	9.4	7.4	7.2	32.2	1.1
Cycle Q Clear(g_c), s	8.0	0.0	17.4	39.2	5.2	2.0	40.1	9.4	7.4	16.5	32.2	1.1
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	0	658	296	709	578	162	1937	838	393	1937	838
V/C Ratio(X)	0.09	0.00	0.53	0.70	0.18	0.07	0.20	0.29	0.23	0.19	0.71	0.04
Avail Cap(c_a), veh/h	554	0	791	375	852	694	162	1937	838	393	1937	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	26.7	41.9	23.0	22.0	33.6	13.5	13.1	18.0	18.7	11.7
Incr Delay (d2), s/veh	0.1	0.0	0.7	4.1	0.1	0.1	2.8	0.4	0.7	1.1	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	8.4	6.5	2.7	0.8	1.0	4.6	3.3	1.5	16.3	0.5
LnGrp Delay(d), s/veh	25.7	0.0	27.4	46.0	23.1	22.0	36.4	13.9	13.7	19.1	21.0	11.8
LnGrp LOS	C		C	D	C	C	D	B	B	B	C	B
Approach Vol, veh/h		391			380			783			1489	
Approach Delay, s/veh		27.2			35.5			14.8			20.7	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		46.4		65.0		46.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		61.0		51.0		61.0		51.0
Max Q Clear Time (g_c+I1), s		42.1		19.4		34.2		41.2
Green Ext Time (p_c), s		4.7		2.4		12.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Future Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	186	649	103	175	598	113	113	763	134	82	577	186
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	894	384	211	727	137	143	1428	620	106	998	321
Arrive On Green	0.13	0.25	0.25	0.12	0.25	0.25	0.08	0.40	0.40	0.06	0.38	0.38
Sat Flow, veh/h	1774	3539	1519	1774	2953	556	1774	3539	1537	1774	2610	839
Grp Volume(v), veh/h	186	649	103	175	358	353	113	763	134	82	391	372
Grp Sat Flow(s),veh/h/ln	1774	1770	1519	1774	1770	1740	1774	1770	1537	1774	1770	1680
Q Serve(g_s), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Cycle Q Clear(g_c), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	223	894	384	211	435	428	143	1428	620	106	677	642
V/C Ratio(X)	0.84	0.73	0.27	0.83	0.82	0.83	0.79	0.53	0.22	0.78	0.58	0.58
Avail Cap(c_a), veh/h	385	1208	518	367	586	576	275	1428	620	220	677	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	33.1	29.0	41.6	34.4	34.5	43.7	21.9	18.9	44.8	23.7	23.7
Incr Delay (d2), s/veh	8.0	1.4	0.4	8.1	6.8	7.2	9.4	1.4	0.8	11.5	3.6	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	8.1	2.2	5.0	9.9	9.8	3.3	8.0	2.5	2.5	8.9	8.5
LnGrp Delay(d), s/veh	49.3	34.5	29.3	49.8	41.3	41.7	53.0	23.4	19.7	56.3	27.2	27.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	E	C	C
Approach Vol, veh/h		938			886			1010			845	
Approach Delay, s/veh		36.9			43.1			26.2			30.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	43.0	15.5	28.4	11.8	41.0	16.1	27.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	39.0	20.0	33.0	15.0	36.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	17.9	11.3	18.2	8.0	19.0	11.9	20.6
Green Ext Time (p_c), s	0.1	5.7	0.3	4.1	0.1	4.3	0.3	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	10	340	20	120	20	700	290	80	660	20
Future Volume (veh/h)	0	0	10	340	20	120	20	700	290	80	660	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	0.91		0.90	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	0	11	366	22	129	22	753	312	86	710	22
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	0	454	473	69	404	430	1449	600	292	2108	65
Arrive On Green	0.00	0.00	0.32	0.32	0.32	0.32	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1231	0	1417	1279	215	1259	720	2408	997	528	3503	109
Grp Volume(v), veh/h	0	0	11	366	0	151	22	553	512	86	359	373
Grp Sat Flow(s),veh/h/ln	1231	0	1417	1279	0	1474	720	1770	1636	528	1770	1842
Q Serve(g_s), s	0.0	0.0	0.5	28.3	0.0	8.0	1.6	18.7	18.7	11.6	10.4	10.4
Cycle Q Clear(g_c), s	0.0	0.0	0.5	28.8	0.0	8.0	12.1	18.7	18.7	30.3	10.4	10.4
Prop In Lane	1.00		1.00	1.00		0.85	1.00		0.61	1.00		0.06
Lane Grp Cap(c), veh/h	70	0	454	473	0	473	430	1065	984	292	1065	1108
V/C Ratio(X)	0.00	0.00	0.02	0.77	0.00	0.32	0.05	0.52	0.52	0.29	0.34	0.34
Avail Cap(c_a), veh/h	272	0	687	683	0	715	430	1065	984	292	1065	1108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	24.0	33.8	0.0	26.5	13.3	11.9	11.9	20.7	10.3	10.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.4	0.0	0.4	0.2	1.8	2.0	2.6	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	10.4	0.0	3.3	0.4	9.6	8.9	1.9	5.3	5.5
LnGrp Delay(d), s/veh	0.0	0.0	24.0	37.2	0.0	26.9	13.5	13.7	13.9	23.3	11.1	11.1
LnGrp LOS			C	D		C	B	B	B	C	B	B
Approach Vol, veh/h		11			517			1087			818	
Approach Delay, s/veh		24.0			34.2			13.8			12.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		37.1		66.0		37.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		50.0		62.0		50.0
Max Q Clear Time (g_c+I1), s		20.7		2.5		32.3		30.8
Green Ext Time (p_c), s		9.1		0.0		6.1		2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	460	790	150	240	1220	240	140	450	160	210	510	410
Future Volume (veh/h)	460	790	150	240	1220	240	140	450	160	210	510	410
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.92	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	474	814	155	247	1258	247	144	464	165	216	526	423
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	488	1481	633	278	1261	248	231	503	177	236	796	333
Arrive On Green	0.28	0.42	0.42	0.16	0.30	0.30	0.07	0.20	0.20	0.09	0.22	0.22
Sat Flow, veh/h	1774	3539	1512	1774	4203	825	1774	2517	885	1774	3539	1479
Grp Volume(v), veh/h	474	814	155	247	1015	490	144	325	304	216	526	423
Grp Sat Flow(s),veh/h/ln	1774	1770	1512	1774	1695	1638	1774	1770	1632	1774	1770	1479
Q Serve(g_s), s	31.7	20.8	8.0	16.4	35.9	35.9	7.8	21.6	22.0	11.0	16.2	27.0
Cycle Q Clear(g_c), s	31.7	20.8	8.0	16.4	35.9	35.9	7.8	21.6	22.0	11.0	16.2	27.0
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	488	1481	633	278	1017	491	231	354	326	236	796	333
V/C Ratio(X)	0.97	0.55	0.24	0.89	1.00	1.00	0.62	0.92	0.93	0.92	0.66	1.27
Avail Cap(c_a), veh/h	488	1481	633	384	1017	491	231	354	326	236	796	333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	26.3	22.6	49.6	42.0	42.0	36.1	47.0	47.2	37.0	42.3	46.5
Incr Delay (d2), s/veh	33.4	0.4	0.2	17.1	27.6	40.0	5.1	30.9	35.2	36.6	4.3	143.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.1	10.3	3.3	9.3	20.7	21.7	4.1	13.6	13.1	8.0	8.4	24.3
LnGrp Delay(d), s/veh	76.4	26.8	22.8	66.7	69.6	81.9	41.2	77.9	82.4	73.6	46.6	190.1
LnGrp LOS	E	C	C	E	E	F	D	E	F	E	D	F
Approach Vol, veh/h		1443			1752			773			1165	
Approach Delay, s/veh		42.7			72.6			72.8			103.7	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	28.0	22.8	54.2	12.0	31.0	37.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	24.0	26.0	43.0	8.0	27.0	33.0	36.0
Max Q Clear Time (g_c+I1), s	13.0	24.0	18.4	22.8	9.8	29.0	33.7	37.9
Green Ext Time (p_c), s	0.0	0.0	0.4	6.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	71.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	210	320	60	170	160	200	300	20	90	750	120
Future Volume (veh/h)	240	210	320	60	170	160	200	300	20	90	750	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	253	221	337	63	179	168	211	316	21	95	789	126
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	299	254	388	126	341	320	288	1804	119	566	1632	261
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1020	650	991	840	871	817	602	3330	220	1026	3014	481
Grp Volume(v), veh/h	253	0	558	63	0	347	211	165	172	95	459	456
Grp Sat Flow(s),veh/h/ln	1020	0	1640	840	0	1688	602	1752	1798	1026	1752	1742
Q Serve(g_s), s	28.1	0.0	37.6	9.0	0.0	18.9	40.2	5.7	5.8	6.2	19.5	19.5
Cycle Q Clear(g_c), s	47.0	0.0	37.6	46.6	0.0	18.9	59.7	5.7	5.8	12.0	19.5	19.5
Prop In Lane	1.00		0.60	1.00		0.48	1.00		0.12	1.00		0.28
Lane Grp Cap(c), veh/h	299	0	643	126	0	661	288	949	974	566	949	944
V/C Ratio(X)	0.85	0.00	0.87	0.50	0.00	0.52	0.73	0.17	0.18	0.17	0.48	0.48
Avail Cap(c_a), veh/h	299	0	643	126	0	661	288	949	974	566	949	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.7	0.0	33.7	55.1	0.0	27.9	35.6	13.9	13.9	17.0	17.1	17.1
Incr Delay (d2), s/veh	19.6	0.0	12.2	3.1	0.0	0.8	15.2	0.4	0.4	0.6	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	0.0	19.2	2.2	0.0	8.9	7.9	2.9	3.0	1.9	9.9	9.8
LnGrp Delay(d), s/veh	66.4	0.0	45.8	58.3	0.0	28.7	50.8	14.3	14.3	17.6	18.8	18.8
LnGrp LOS	E		D	E		C	D	B	B	B	B	B
Approach Vol, veh/h		811			410			548			1010	
Approach Delay, s/veh		52.2			33.2			28.4			18.7	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		51.0		69.0		51.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		61.7		49.0		21.5		48.6
Green Ext Time (p_c), s		1.2		0.0		7.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	80	90	20	170	30	310	40	190	890	20
Future Volume (veh/h)	30	30	80	90	20	170	30	310	40	190	890	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.98		0.94	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	32	32	85	96	21	181	32	330	43	202	947	21
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	113	74	195	191	27	233	350	1401	1148	762	1401	1175
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1160	425	1128	1228	156	1346	573	1845	1513	991	1845	1547
Grp Volume(v), veh/h	32	0	117	96	0	202	32	330	43	202	947	21
Grp Sat Flow(s),veh/h/ln	1160	0	1552	1228	0	1502	573	1845	1513	991	1845	1547
Q Serve(g_s), s	3.2	0.0	8.0	9.0	0.0	15.2	3.5	6.2	0.8	8.9	30.1	0.4
Cycle Q Clear(g_c), s	18.4	0.0	8.0	17.0	0.0	15.2	33.6	6.2	0.8	15.1	30.1	0.4
Prop In Lane	1.00		0.73	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	0	269	191	0	260	350	1401	1148	762	1401	1175
V/C Ratio(X)	0.28	0.00	0.44	0.50	0.00	0.78	0.09	0.24	0.04	0.27	0.68	0.02
Avail Cap(c_a), veh/h	127	0	288	206	0	279	350	1401	1148	762	1401	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	0.0	43.8	51.4	0.0	46.8	15.4	4.2	3.5	6.4	7.1	3.5
Incr Delay (d2), s/veh	1.4	0.0	1.1	2.0	0.0	12.2	0.5	0.4	0.1	0.9	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.5	3.1	0.0	7.2	0.6	3.3	0.4	2.6	16.0	0.2
LnGrp Delay(d), s/veh	57.0	0.0	44.9	53.5	0.0	59.0	15.9	4.6	3.6	7.2	9.7	3.5
LnGrp LOS	E		D	D		E	B	A	A	A	A	A
Approach Vol, veh/h		149			298			405			1170	
Approach Delay, s/veh		47.5			57.2			5.4			9.2	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		94.0		24.5		94.0		24.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		90.0		22.0		90.0		22.0
Max Q Clear Time (g_c+I1), s		35.6		20.4		32.1		19.0
Green Ext Time (p_c), s		2.6		0.1		11.6		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Future Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.88	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	102	245	224	71	204	71	71	214	51	82	929	112
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	501	396	212	342	119	339	1206	994	733	2057	248
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1085	1845	1458	904	1260	439	534	1845	1520	1095	3147	379
Grp Volume(v), veh/h	102	245	224	71	0	275	71	214	51	82	517	524
Grp Sat Flow(s),veh/h/ln	1085	1845	1458	904	0	1699	534	1845	1520	1095	1752	1774
Q Serve(g_s), s	9.7	11.9	14.2	7.7	0.0	15.1	8.1	4.9	1.3	3.4	15.5	15.5
Cycle Q Clear(g_c), s	24.7	11.9	14.2	19.6	0.0	15.1	23.6	4.9	1.3	8.3	15.5	15.5
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	209	501	396	212	0	462	339	1206	994	733	1145	1160
V/C Ratio(X)	0.49	0.49	0.57	0.33	0.00	0.60	0.21	0.18	0.05	0.11	0.45	0.45
Avail Cap(c_a), veh/h	340	723	572	321	0	666	339	1206	994	733	1145	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	32.8	33.6	41.0	0.0	33.9	14.9	7.3	6.6	8.9	9.1	9.1
Incr Delay (d2), s/veh	1.8	0.7	1.3	0.9	0.0	1.2	1.4	0.3	0.1	0.3	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	6.2	5.8	2.0	0.0	7.2	1.3	2.5	0.6	1.1	7.9	8.0
LnGrp Delay(d), s/veh	46.4	33.5	34.8	41.9	0.0	35.1	16.3	7.6	6.7	9.2	10.4	10.4
LnGrp LOS	D	C	C	D		D	B	A	A	A	B	B
Approach Vol, veh/h		571			346			336			1123	
Approach Delay, s/veh		36.3			36.5			9.3			10.3	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		33.1		74.0		33.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		25.6		26.7		17.5		21.6
Green Ext Time (p_c), s		2.3		2.4		9.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Future Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	191	489	117	106	415	96	106	521	64	106	915	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	292	679	299	235	532	230	363	2022	247	526	1849	150
Arrive On Green	0.11	0.19	0.19	0.07	0.15	0.15	0.04	0.63	0.63	0.55	0.55	0.55
Sat Flow, veh/h	1792	3574	1574	1792	3574	1546	1792	3196	391	830	3341	270
Grp Volume(v), veh/h	191	489	117	106	415	96	106	290	295	106	489	500
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1546	1792	1787	1800	830	1787	1824
Q Serve(g_s), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Cycle Q Clear(g_c), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.15
Lane Grp Cap(c), veh/h	292	679	299	235	532	230	363	1130	1139	526	989	1009
V/C Ratio(X)	0.65	0.72	0.39	0.45	0.78	0.42	0.29	0.26	0.26	0.20	0.49	0.49
Avail Cap(c_a), veh/h	383	964	425	301	765	331	471	1130	1139	526	989	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	40.8	38.1	35.7	44.1	41.5	10.8	8.7	8.7	12.3	14.8	14.8
Incr Delay (d2), s/veh	2.5	1.5	0.8	1.4	3.3	1.2	0.4	0.5	0.6	0.9	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	6.9	3.1	2.7	6.2	2.7	1.3	4.0	4.0	1.7	9.3	9.5
LnGrp Delay(d), s/veh	35.3	42.4	38.9	37.1	47.4	42.7	11.3	9.2	9.2	13.2	16.5	16.5
LnGrp LOS	D	D	D	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h		797			617			691			1095	
Approach Delay, s/veh		40.2			44.9			9.5			16.2	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		72.0	11.1	24.4	8.5	63.5	15.5	20.0
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	11.0	29.0	11.0	53.0	17.0	23.0
Max Q Clear Time (g_c+I1), s		9.7	7.3	15.8	4.6	20.1	11.3	14.0
Green Ext Time (p_c), s		3.9	0.1	2.9	0.1	8.3	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Future Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.93	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	217	207	87	272	163	141	511	109	109	707	185
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	404	331	265	330	189	308	1795	381	496	1160	1143
Arrive On Green	0.11	0.22	0.22	0.05	0.16	0.16	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	1774	1863	1524	1774	2108	1208	621	2883	611	798	1863	1545
Grp Volume(v), veh/h	207	217	207	87	226	209	141	313	307	109	707	185
Grp Sat Flow(s),veh/h/ln	1774	1863	1524	1774	1770	1546	621	1770	1724	798	1863	1545
Q Serve(g_s), s	10.6	11.6	13.8	4.6	13.9	14.8	20.1	9.1	9.2	8.2	25.9	4.0
Cycle Q Clear(g_c), s	10.6	11.6	13.8	4.6	13.9	14.8	46.0	9.1	9.2	17.4	25.9	4.0
Prop In Lane	1.00		1.00	1.00		0.78	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	290	404	331	265	277	242	308	1102	1074	496	1160	1143
V/C Ratio(X)	0.71	0.54	0.63	0.33	0.82	0.86	0.46	0.28	0.29	0.22	0.61	0.16
Avail Cap(c_a), veh/h	372	530	434	265	315	275	308	1102	1074	496	1160	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	39.0	39.9	37.0	45.9	46.2	26.9	9.7	9.7	13.7	12.9	4.4
Incr Delay (d2), s/veh	4.6	1.1	1.9	0.7	13.9	21.5	4.9	0.6	0.7	1.0	2.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.1	6.0	2.3	7.9	7.8	3.9	4.6	4.6	1.9	13.9	1.8
LnGrp Delay(d), s/veh	38.4	40.1	41.8	37.7	59.8	67.7	31.7	10.4	10.4	14.7	15.3	4.7
LnGrp LOS	D	D	D	D	E	E	C	B	B	B	B	A
Approach Vol, veh/h		631			522			761			1001	
Approach Delay, s/veh		40.1			59.3			14.3			13.3	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.0	10.0	28.4		74.0	16.8	21.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		70.0	6.0	32.0		70.0	18.0	20.0
Max Q Clear Time (g_c+I1), s		48.0	6.6	15.8		27.9	12.6	16.8
Green Ext Time (p_c), s		5.2	0.0	1.7		7.5	0.3	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Future Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	290	828	366	269	634	65	183	817	183	140	1118	215
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	955	393	310	837	86	244	1134	254	263	1367	560
Arrive On Green	0.14	0.27	0.27	0.13	0.26	0.26	0.08	0.40	0.40	0.06	0.39	0.39
Sat Flow, veh/h	1774	3539	1457	1774	3213	329	1774	2822	632	1774	3539	1449
Grp Volume(v), veh/h	290	828	366	269	349	350	183	512	488	140	1118	215
Grp Sat Flow(s),veh/h/ln	1774	1770	1457	1774	1770	1772	1774	1770	1684	1774	1770	1449
Q Serve(g_s), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Cycle Q Clear(g_c), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	363	955	393	310	461	462	244	711	677	263	1367	560
V/C Ratio(X)	0.80	0.87	0.93	0.87	0.76	0.76	0.75	0.72	0.72	0.53	0.82	0.38
Avail Cap(c_a), veh/h	408	968	398	341	461	462	271	711	677	272	1367	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	40.7	41.6	29.5	39.8	39.9	26.0	29.5	29.5	23.3	32.2	25.9
Incr Delay (d2), s/veh	9.7	8.3	28.3	19.1	7.0	7.2	10.0	6.2	6.5	1.9	5.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	13.9	14.6	7.8	11.3	11.3	4.1	15.2	14.5	2.8	17.2	5.3
LnGrp Delay(d), s/veh	38.1	49.0	69.9	48.6	46.8	47.0	36.0	35.7	36.0	25.1	37.7	27.8
LnGrp LOS	D	D	E	D	D	D	D	D	D	C	D	C
Approach Vol, veh/h		1484			968			1183			1473	
Approach Delay, s/veh		52.1			47.4			35.9			35.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	51.0	19.0	35.6	13.3	49.2	20.0	34.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	47.0	17.0	32.0	11.0	44.0	19.0	30.0
Max Q Clear Time (g_c+I1), s	7.5	30.5	14.8	30.7	9.2	35.1	15.8	23.3
Green Ext Time (p_c), s	0.0	6.0	0.2	0.9	0.1	5.3	0.3	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Future Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.88	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	299	1165	227	155	1144	93	258	691	113	216	1433	289
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1149	222	164	1132	447	241	1237	199	343	1455	421
Arrive On Green	0.17	0.39	0.39	0.09	0.32	0.32	0.10	0.28	0.28	0.10	0.28	0.28
Sat Flow, veh/h	1792	2933	566	1792	3574	1411	1792	4410	710	1792	5136	1487
Grp Volume(v), veh/h	299	705	687	155	1144	93	258	534	270	216	1433	289
Grp Sat Flow(s),veh/h/ln	1792	1787	1712	1792	1787	1411	1792	1712	1696	1792	1712	1487
Q Serve(g_s), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Cycle Q Clear(g_c), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	299	700	670	164	1132	447	241	960	476	343	1455	421
V/C Ratio(X)	1.00	1.01	1.02	0.94	1.01	0.21	1.07	0.56	0.57	0.63	0.98	0.69
Avail Cap(c_a), veh/h	299	700	670	164	1132	447	241	960	476	397	1455	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	36.5	36.5	54.2	41.0	30.0	33.4	36.8	36.9	27.6	42.7	38.2
Incr Delay (d2), s/veh	52.4	35.8	41.1	53.7	29.4	0.2	78.1	2.3	4.8	2.5	20.2	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	30.1	29.8	7.6	23.3	2.3	13.2	7.9	8.3	5.2	18.4	9.5
LnGrp Delay(d), s/veh	102.4	72.4	77.6	107.9	70.4	30.2	111.6	39.1	41.8	30.1	63.0	47.0
LnGrp LOS	F	F	F	F	F	C	F	D	D	C	E	D
Approach Vol, veh/h		1691			1392			1062			1938	
Approach Delay, s/veh		79.8			71.9			57.4			56.9	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	37.7	15.0	51.0	16.0	38.0	24.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	11.0	47.0	12.0	34.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	12.1	18.3	12.3	49.0	14.0	35.3	22.0	40.0
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Future Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.88	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	133	561	224	173	520	276	173	531	153	255	827	61
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	787	306	211	875	346	211	1234	341	297	1765	129
Arrive On Green	0.09	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.17	0.37	0.37
Sat Flow, veh/h	1774	3539	1376	1774	3539	1397	1774	3872	1070	1774	4804	352
Grp Volume(v), veh/h	133	561	224	173	520	276	173	462	222	255	582	306
Grp Sat Flow(s),veh/h/ln	1774	1770	1376	1774	1770	1397	1774	1695	1552	1774	1695	1766
Q Serve(g_s), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Cycle Q Clear(g_c), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.69	1.00		0.20
Lane Grp Cap(c), veh/h	166	787	306	211	875	346	211	1080	495	297	1246	649
V/C Ratio(X)	0.80	0.71	0.73	0.82	0.59	0.80	0.82	0.43	0.45	0.86	0.47	0.47
Avail Cap(c_a), veh/h	307	1071	416	403	1262	498	403	1080	495	556	1246	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	33.3	33.4	39.8	30.7	32.7	39.8	24.9	25.1	37.4	22.4	22.4
Incr Delay (d2), s/veh	8.6	1.4	4.3	7.7	0.6	5.8	7.7	1.2	2.9	7.1	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.8	5.7	4.8	5.9	7.1	4.8	4.8	4.9	6.9	5.9	6.4
LnGrp Delay(d), s/veh	49.6	34.7	37.7	47.6	31.4	38.5	47.6	26.1	28.0	44.6	23.6	24.8
LnGrp LOS	D	C	D	D	C	D	D	C	C	D	C	C
Approach Vol, veh/h		918			969			857			1143	
Approach Delay, s/veh		37.6			36.3			30.9			28.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	33.5	15.0	24.6	15.0	38.0	12.7	26.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	26.0	21.0	28.0	21.0	34.0	16.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	12.5	10.8	16.0	10.8	14.3	8.8	19.1
Green Ext Time (p_c), s	0.6	3.6	0.3	3.5	0.3	5.4	0.2	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Future Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	268	1000	165	423	1247	144	175	505	93	278	928	113
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	1570	258	502	1443	628	236	1270	375	346	1288	156
Arrive On Green	0.10	0.36	0.36	0.15	0.41	0.41	0.07	0.25	0.25	0.10	0.28	0.28
Sat Flow, veh/h	3442	4379	721	3442	3539	1540	3442	5085	1500	3442	4570	554
Grp Volume(v), veh/h	268	774	391	423	1247	144	175	505	93	278	687	354
Grp Sat Flow(s),veh/h/ln	1721	1695	1710	1721	1770	1540	1721	1695	1500	1721	1695	1734
Q Serve(g_s), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Cycle Q Clear(g_c), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Prop In Lane	1.00		0.42	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	332	1215	613	502	1443	628	236	1270	375	346	955	489
V/C Ratio(X)	0.81	0.64	0.64	0.84	0.86	0.23	0.74	0.40	0.25	0.80	0.72	0.72
Avail Cap(c_a), veh/h	407	1294	653	688	1641	714	282	1270	375	469	955	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	29.3	29.4	45.8	29.8	21.3	50.3	34.4	33.0	48.4	35.6	35.6
Incr Delay (d2), s/veh	9.5	1.0	1.9	6.9	4.6	0.2	8.4	0.9	1.6	7.1	4.7	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	9.9	10.2	6.8	18.2	2.9	2.9	4.4	2.4	4.5	10.0	10.9
LnGrp Delay(d), s/veh	58.2	30.3	31.3	52.7	34.4	21.5	58.7	35.3	34.6	55.5	40.3	44.7
LnGrp LOS	E	C	C	D	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1433			1814			773			1319	
Approach Delay, s/veh		35.8			37.6			40.5			44.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	31.5	20.1	43.4	11.5	35.0	14.6	48.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	25.0	22.0	42.0	9.0	31.0	13.0	51.0
Max Q Clear Time (g_c+I1), s	10.7	11.1	15.2	23.0	7.5	22.2	10.4	37.4
Green Ext Time (p_c), s	0.4	3.0	0.9	7.4	0.1	4.2	0.2	7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Future Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	205	102	330	23	114	68	205	830	11	45	1580	216
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	524	36	156	524	235	2760	37	58	1948	265
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.13	0.53	0.53	0.03	0.43	0.43
Sat Flow, veh/h	0	0	1562	0	465	1560	1792	5219	69	1792	4529	617
Grp Volume(v), veh/h	307	0	330	137	0	68	205	544	297	45	1193	603
Grp Sat Flow(s),veh/h/ln	0	0	1562	465	0	1560	1792	1712	1864	1792	1712	1722
Q Serve(g_s), s	0.0	0.0	20.7	0.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Cycle Q Clear(g_c), s	39.0	0.0	20.7	39.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Prop In Lane	0.67		1.00	0.17		1.00	1.00		0.04	1.00		0.36
Lane Grp Cap(c), veh/h	52	0	524	192	0	524	235	1811	986	58	1473	741
V/C Ratio(X)	5.94	0.00	0.63	0.71	0.00	0.13	0.87	0.30	0.30	0.78	0.81	0.81
Avail Cap(c_a), veh/h	52	0	524	192	0	524	293	1811	986	123	1473	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	32.5	31.4	0.0	26.8	49.6	15.3	15.3	55.8	29.0	29.0
Incr Delay (d2), s/veh	2265.5	0.0	2.4	11.7	0.0	0.1	20.6	0.4	0.8	19.4	4.9	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.2	0.0	9.3	3.8	0.0	1.5	7.8	4.9	5.5	1.8	17.7	18.9
LnGrp Delay(d), s/veh	2323.6	0.0	34.9	43.1	0.0	26.9	70.1	15.8	16.1	75.3	33.9	38.6
LnGrp LOS	F		C	D		C	E	B	B	E	C	D
Approach Vol, veh/h		637			205			1046			1841	
Approach Delay, s/veh		1137.9			37.7			26.5			36.4	
Approach LOS		F			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	65.5		43.0	19.2	54.0		43.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	61.0		39.0	19.0	50.0		39.0
Max Q Clear Time (g_c+I1), s	4.9	12.4		41.0	15.0	37.7		41.0
Green Ext Time (p_c), s	0.0	6.0		0.0	0.2	8.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		221.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Future Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.81		0.67	0.82		0.67	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	117	85	106	117	43	53	649	96	85	1532	21
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	353	201	198	353	201	259	2350	989	545	2388	33
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.03	0.66	0.66	0.03	0.67	0.67
Sat Flow, veh/h	992	1863	1063	967	1863	1063	1774	3539	1490	1774	3571	49
Grp Volume(v), veh/h	21	117	85	106	117	43	53	649	96	85	758	795
Grp Sat Flow(s),veh/h/ln	992	1863	1063	967	1863	1063	1774	1770	1490	1774	1770	1850
Q Serve(g_s), s	2.0	5.8	7.5	11.4	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Cycle Q Clear(g_c), s	7.8	5.8	7.5	17.2	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	201	353	201	198	353	201	259	2350	989	545	1183	1238
V/C Ratio(X)	0.10	0.33	0.42	0.54	0.33	0.21	0.20	0.28	0.10	0.16	0.64	0.64
Avail Cap(c_a), veh/h	310	557	318	304	557	318	306	2350	989	567	1183	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	37.5	38.2	44.9	37.5	36.6	9.0	7.4	6.4	5.5	10.3	10.3
Incr Delay (d2), s/veh	0.2	0.5	1.4	2.2	0.5	0.5	0.4	0.3	0.2	0.1	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.0	2.3	3.2	3.0	1.1	0.5	4.0	1.1	0.8	13.7	14.4
LnGrp Delay(d), s/veh	41.1	38.0	39.6	47.2	38.0	37.1	9.4	7.7	6.6	5.6	12.9	12.8
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	B
Approach Vol, veh/h		223			266			798			1638	
Approach Delay, s/veh		38.9			41.5			7.7			12.5	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	75.0		24.2	7.2	75.5		24.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	71.0		32.0	6.0	70.0		32.0
Max Q Clear Time (g_c+I1), s	3.6	10.1		9.8	3.0	28.7		19.2
Green Ext Time (p_c), s	0.0	5.4		1.1	0.0	16.7		1.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Future Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	146	385	167	62	1146	83	167	1177	31	73	969	250
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	164	1549	785	355	1163	84	197	1403	37	172	1009	259
Arrive On Green	0.06	0.45	0.45	0.36	0.36	0.36	0.07	0.41	0.41	0.04	0.38	0.38
Sat Flow, veh/h	1723	3438	1491	822	3242	235	1723	3420	90	1723	2686	691
Grp Volume(v), veh/h	146	385	167	62	607	622	167	592	616	73	619	600
Grp Sat Flow(s),veh/h/ln	1723	1719	1491	822	1719	1758	1723	1719	1791	1723	1719	1658
Q Serve(g_s), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Cycle Q Clear(g_c), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.05	1.00		0.42
Lane Grp Cap(c), veh/h	164	1549	785	355	617	631	197	706	735	172	646	623
V/C Ratio(X)	0.89	0.25	0.21	0.17	0.98	0.99	0.85	0.84	0.84	0.42	0.96	0.96
Avail Cap(c_a), veh/h	164	1549	785	355	617	631	199	706	735	177	646	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	20.4	15.3	26.6	38.1	38.1	28.1	31.8	31.8	26.9	36.5	36.6
Incr Delay (d2), s/veh	40.3	0.1	0.1	0.2	32.1	32.2	27.5	11.4	11.1	1.7	26.6	28.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	4.0	3.0	1.5	25.4	26.0	4.7	19.8	20.6	1.5	24.7	24.2
LnGrp Delay(d), s/veh	69.7	20.4	15.4	26.9	70.2	70.3	55.6	43.2	42.8	28.5	63.1	64.8
LnGrp LOS	E	C	B	C	E	E	E	D	D	C	E	E
Approach Vol, veh/h		698			1291			1375			1292	
Approach Delay, s/veh		29.5			68.2			44.5			62.0	
Approach LOS		C			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	53.2		58.0	12.8	49.0	11.0	47.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0		54.0	9.0	45.0	7.0	43.0
Max Q Clear Time (g_c+I1), s	5.1	39.1		10.3	8.9	44.5	8.3	44.1
Green Ext Time (p_c), s	0.0	5.3		3.2	0.0	0.4	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		53.7
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Future Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
Arrive On Green	0.11	0.32	0.32	0.04	0.25	0.25	0.20	0.46	0.00	0.05	0.31	0.00
Sat Flow, veh/h	1723	3438	1537	1723	3438	1536	1723	3438	1538	1723	3438	1538
Grp Volume(v), veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1537	1723	1719	1536	1723	1719	1538	1723	1719	1538
Q Serve(g_s), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Cycle Q Clear(g_c), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
V/C Ratio(X)	0.85	0.15	0.30	0.78	0.90	0.35	0.91	0.65	0.00	0.78	0.81	0.00
Avail Cap(c_a), veh/h	196	1088	486	136	904	404	393	1577	706	151	1055	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	28.0	29.4	54.4	41.5	35.3	44.8	23.9	0.0	53.9	36.5	0.0
Incr Delay (d2), s/veh	27.5	0.1	0.3	18.0	11.6	0.6	23.7	2.1	0.0	15.4	6.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.9	3.5	2.0	13.2	3.6	11.9	12.9	0.0	2.3	13.3	0.0
LnGrp Delay(d), s/veh	77.6	28.1	29.8	72.4	53.1	35.8	68.6	26.0	0.0	69.2	43.2	0.0
LnGrp LOS	E	C	C	E	D	D	E	C		E	D	
Approach Vol, veh/h		469			958			1343			916	
Approach Delay, s/veh		45.1			51.7			35.9			45.0	
Approach LOS		D			D			D			D	

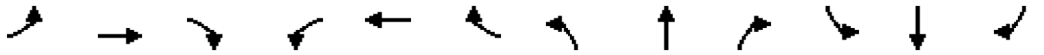
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	56.3	8.4	40.1	26.6	39.0	16.1	32.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	51.0	9.0	34.0	26.0	35.0	13.0	30.0
Max Q Clear Time (g_c+I1), s	6.1	28.4	5.4	10.2	22.2	28.1	12.1	26.8
Green Ext Time (p_c), s	0.0	7.4	0.0	1.4	0.3	3.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	180	630	200	160	790	20	220	560	100	30	550	130
Future Volume (veh/h)	180	630	200	160	790	20	220	560	100	30	550	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	189	663	0	168	832	21	232	589	105	32	579	137
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9	9	9	9	9	9	9
Cap, veh/h	219	1002	448	198	961	426	263	1640	287	39	891	386
Arrive On Green	0.13	0.30	0.00	0.12	0.29	0.29	0.16	0.40	0.40	0.02	0.27	0.27
Sat Flow, veh/h	1660	3312	1482	1660	3312	1469	1660	4058	710	1660	3312	1435
Grp Volume(v), veh/h	189	663	0	168	832	21	232	458	236	32	579	137
Grp Sat Flow(s),veh/h/ln	1660	1656	1482	1660	1656	1469	1660	1586	1596	1660	1656	1435
Q Serve(g_s), s	11.9	18.6	0.0	10.5	25.3	1.1	14.5	10.7	11.0	2.0	16.5	8.2
Cycle Q Clear(g_c), s	11.9	18.6	0.0	10.5	25.3	1.1	14.5	10.7	11.0	2.0	16.5	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	219	1002	448	198	961	426	263	1282	645	39	891	386
V/C Ratio(X)	0.86	0.66	0.00	0.85	0.87	0.05	0.88	0.36	0.37	0.83	0.65	0.35
Avail Cap(c_a), veh/h	297	1059	474	328	1121	497	359	1282	645	94	891	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	32.3	0.0	45.9	35.8	27.2	43.8	22.1	22.2	51.7	34.5	31.4
Incr Delay (d2), s/veh	17.5	1.4	0.0	10.3	6.5	0.0	17.1	0.8	1.6	33.8	3.7	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.7	0.0	5.4	12.4	0.5	7.9	4.8	5.1	1.3	8.0	3.5
LnGrp Delay(d), s/veh	62.7	33.8	0.0	56.1	42.3	27.2	60.9	22.8	23.8	85.5	38.1	34.0
LnGrp LOS	E	C		E	D	C	E	C	C	F	D	C
Approach Vol, veh/h		852			1021			926			748	
Approach Delay, s/veh		40.2			44.2			32.6			39.4	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	47.0	16.7	36.2	20.9	32.6	18.0	34.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	21.0	34.0	23.0	26.0	19.0	36.0
Max Q Clear Time (g_c+I1), s	4.0	13.0	12.5	20.6	16.5	18.5	13.9	27.3
Green Ext Time (p_c), s	0.0	4.7	0.3	3.5	0.3	2.5	0.2	3.5

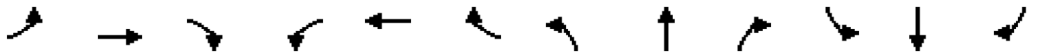
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Future Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1900
Adj Flow Rate, veh/h	74	432	211	105	979	21	168	484	32	42	526	21
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	94	1124	495	132	1200	535	202	1780	117	52	1407	56
Arrive On Green	0.06	0.34	0.34	0.08	0.36	0.36	0.12	0.39	0.39	0.03	0.30	0.30
Sat Flow, veh/h	1675	3343	1471	1675	3343	1490	1675	4600	301	1675	4735	188
Grp Volume(v), veh/h	74	432	211	105	979	21	168	335	181	42	355	192
Grp Sat Flow(s),veh/h/ln	1675	1671	1471	1675	1671	1490	1675	1601	1699	1675	1601	1721
Q Serve(g_s), s	4.2	9.4	10.6	5.9	25.4	0.9	9.4	6.9	7.0	2.4	8.4	8.5
Cycle Q Clear(g_c), s	4.2	9.4	10.6	5.9	25.4	0.9	9.4	6.9	7.0	2.4	8.4	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	94	1124	495	132	1200	535	202	1239	658	52	952	511
V/C Ratio(X)	0.79	0.38	0.43	0.80	0.82	0.04	0.83	0.27	0.27	0.81	0.37	0.38
Avail Cap(c_a), veh/h	193	1573	692	263	1713	764	386	1239	658	123	952	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	24.2	24.6	43.3	27.8	19.9	41.1	20.1	20.1	46.1	26.6	26.6
Incr Delay (d2), s/veh	13.6	0.2	0.6	10.4	2.1	0.0	8.5	0.5	1.0	25.0	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.4	4.4	3.1	12.0	0.4	4.8	3.1	3.4	1.5	3.8	4.3
LnGrp Delay(d), s/veh	58.2	24.4	25.2	53.7	29.9	20.0	49.6	20.6	21.1	71.0	27.7	28.7
LnGrp LOS	E	C	C	D	C	B	D	C	C	E	C	C
Approach Vol, veh/h		717			1105			684			589	
Approach Delay, s/veh		28.1			32.0			27.9			31.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	41.0	11.5	36.1	15.5	32.4	9.3	38.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	37.0	15.0	45.0	22.0	22.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	4.4	9.0	7.9	12.6	11.4	10.5	6.2	27.4
Green Ext Time (p_c), s	0.0	3.2	0.1	3.6	0.3	2.5	0.0	6.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	500	0	120	1340	0	0	0	0	570	0	110
Future Volume (vph)	0	500	0	120	1340	0	0	0	0	570	0	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3374		1684	4848					3273		1509
Flt Permitted		1.00		0.38	1.00					0.95		1.00
Satd. Flow (perm)		3374		665	4848					3273		1509
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	549	0	132	1473	0	0	0	0	626	0	121
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	549	0	132	1473	0	0	0	0	626	0	107
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		41.1		41.1	41.1					47.4		47.4
Effective Green, g (s)		41.1		41.1	41.1					47.4		47.4
Actuated g/C Ratio		0.43		0.43	0.43					0.49		0.49
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1437		283	2064					1607		741
v/s Ratio Prot		0.16			c0.30							
v/s Ratio Perm				0.20						c0.19		0.07
v/c Ratio		0.38		0.47	0.71					0.39		0.14
Uniform Delay, d1		19.0		19.8	22.8					15.4		13.4
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		1.2	1.2					0.7		0.4
Delay (s)		19.2		21.1	24.0					16.2		13.9
Level of Service		B		C	C					B		B
Approach Delay (s/veh)		19.2			23.8			0.0			15.8	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	96.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	790	160	20	1000	530	160	150	210	250	650	50
Future Volume (veh/h)	140	790	160	20	1000	530	160	150	210	250	650	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	147	832	168	21	1053	558	168	158	0	263	684	53
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	204	1203	243	30	1310	675	237	789	353	297	1138	498
Arrive On Green	0.06	0.43	0.43	0.02	0.38	0.38	0.07	0.23	0.00	0.17	0.33	0.33
Sat Flow, veh/h	3312	2807	567	1707	3406	1472	3312	3406	1524	1707	3406	1491
Grp Volume(v), veh/h	147	505	495	21	1053	558	168	158	0	263	684	53
Grp Sat Flow(s),veh/h/ln	1656	1703	1671	1707	1703	1472	1656	1703	1524	1707	1703	1491
Q Serve(g_s), s	4.7	26.0	26.0	1.3	29.7	35.8	5.4	4.0	0.0	16.2	18.1	2.6
Cycle Q Clear(g_c), s	4.7	26.0	26.0	1.3	29.7	35.8	5.4	4.0	0.0	16.2	18.1	2.6
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	204	730	716	30	1310	675	237	789	353	297	1138	498
V/C Ratio(X)	0.72	0.69	0.69	0.71	0.80	0.83	0.71	0.20	0.00	0.89	0.60	0.11
Avail Cap(c_a), veh/h	215	730	716	79	1357	696	675	789	353	459	1138	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	25.0	25.0	52.7	29.6	25.7	49.0	33.4	0.0	43.5	29.9	24.8
Incr Delay (d2), s/veh	10.7	2.8	2.8	26.8	3.5	7.9	3.9	0.6	0.0	12.5	2.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	12.8	12.5	0.8	14.5	16.0	2.6	1.9	0.0	8.7	8.8	1.1
LnGrp Delay(d), s/veh	60.4	27.8	27.9	79.5	33.1	33.6	52.9	34.0	0.0	56.0	32.3	25.2
LnGrp LOS	E	C	C	E	C	C	D	C		E	C	C
Approach Vol, veh/h		1147			1632			326			1000	
Approach Delay, s/veh		32.0			33.9			43.7			38.2	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	40.0	5.9	50.3	22.8	29.0	10.6	45.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	32.0	5.0	45.0	29.0	25.0	7.0	43.0
Max Q Clear Time (g_c+I1), s	7.4	20.1	3.3	28.0	18.2	6.0	6.7	37.8
Green Ext Time (p_c), s	0.4	3.5	0.0	5.8	0.5	0.7	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Future Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	167	771	42	62	1271	167	198	1135	21	219	1344	333
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	172	1577	86	79	1212	159	201	1232	547	230	1289	719
Arrive On Green	0.10	0.33	0.33	0.05	0.28	0.28	0.12	0.36	0.36	0.13	0.38	0.38
Sat Flow, veh/h	1723	4792	260	1723	4409	579	1723	3438	1525	1723	3438	1507
Grp Volume(v), veh/h	167	529	284	62	949	489	198	1135	21	219	1344	333
Grp Sat Flow(s),veh/h/ln	1723	1647	1758	1723	1647	1695	1723	1719	1525	1723	1719	1507
Q Serve(g_s), s	11.6	15.4	15.5	4.3	33.0	33.0	13.8	37.9	1.1	15.1	45.0	17.9
Cycle Q Clear(g_c), s	11.6	15.4	15.5	4.3	33.0	33.0	13.8	37.9	1.1	15.1	45.0	17.9
Prop In Lane	1.00		0.15	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	1084	579	79	906	466	201	1232	547	230	1289	719
V/C Ratio(X)	0.97	0.49	0.49	0.78	1.05	1.05	0.98	0.92	0.04	0.95	1.04	0.46
Avail Cap(c_a), veh/h	172	1084	579	144	906	466	201	1232	547	230	1289	719
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	32.2	32.2	56.7	43.5	43.5	52.9	36.9	25.0	51.6	37.5	21.2
Incr Delay (d2), s/veh	59.2	0.3	0.6	15.4	43.4	54.9	58.9	12.6	0.1	46.2	36.9	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	7.0	7.6	2.4	20.4	22.5	9.8	20.1	0.5	10.1	27.9	7.8
LnGrp Delay(d), s/veh	113.0	32.5	32.9	72.1	86.9	98.4	111.8	49.5	25.2	97.9	74.4	23.4
LnGrp LOS	F	C	C	E	F	F	F	D	C	F	F	C
Approach Vol, veh/h		980			1500			1354			1896	
Approach Delay, s/veh		46.3			90.0			58.2			68.1	
Approach LOS		D			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	47.0	9.5	43.5	18.0	49.0	16.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	43.0	10.0	35.0	14.0	45.0	12.0	33.0
Max Q Clear Time (g_c+I1), s	17.1	39.9	6.3	17.5	15.8	47.0	13.6	35.0
Green Ext Time (p_c), s	0.0	2.0	0.0	4.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	830	150	140	1470	120	100	410	60	100	510	190
Future Volume (veh/h)	110	830	150	140	1470	120	100	410	60	100	510	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.90	0.99		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	118	892	161	151	1581	129	108	441	65	108	548	204
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	144	1547	278	180	1813	148	233	1448	584	349	1002	371
Arrive On Green	0.08	0.37	0.37	0.10	0.39	0.39	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1723	4192	753	1723	4650	379	688	3438	1387	851	2379	881
Grp Volume(v), veh/h	118	700	353	151	1119	591	108	441	65	108	395	357
Grp Sat Flow(s),veh/h/ln	1723	1647	1651	1723	1647	1736	688	1719	1387	851	1719	1541
Q Serve(g_s), s	7.7	19.4	19.6	9.8	35.8	35.9	16.0	9.7	3.2	11.0	19.7	19.9
Cycle Q Clear(g_c), s	7.7	19.4	19.6	9.8	35.8	35.9	35.9	9.7	3.2	20.7	19.7	19.9
Prop In Lane	1.00		0.46	1.00		0.22	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	144	1215	609	180	1284	677	233	1448	584	349	724	649
V/C Ratio(X)	0.82	0.58	0.58	0.84	0.87	0.87	0.46	0.30	0.11	0.31	0.55	0.55
Avail Cap(c_a), veh/h	197	1215	609	287	1358	716	233	1448	584	349	724	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	28.8	28.9	50.1	32.1	32.1	38.3	21.9	20.0	28.8	24.8	24.8
Incr Delay (d2), s/veh	17.5	0.7	1.4	11.5	6.2	11.1	6.5	0.5	0.4	2.3	2.9	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	9.0	9.2	5.2	17.3	19.1	3.5	4.7	1.3	2.8	9.9	9.0
LnGrp Delay(d), s/veh	68.8	29.5	30.2	61.6	38.3	43.2	44.9	22.4	20.4	31.1	27.7	28.2
LnGrp LOS	E	C	C	E	D	D	D	C	C	C	C	C
Approach Vol, veh/h		1171			1861			614			860	
Approach Delay, s/veh		33.7			41.8			26.2			28.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	15.9	46.1		52.0	13.5	48.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	19.0	41.0		48.0	13.0	47.0
Max Q Clear Time (g_c+I1), s		37.9	11.8	21.6		22.7	9.7	37.9
Green Ext Time (p_c), s		3.0	0.2	6.7		6.2	0.1	6.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Future Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.88	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	151	925	54	129	1409	86	97	398	65	333	419	151
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	1642	96	157	1575	96	122	591	444	390	898	318
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.07	0.32	0.32	0.11	0.37	0.37
Sat Flow, veh/h	1757	4861	283	1757	4839	295	1757	1845	1387	3408	2458	870
Grp Volume(v), veh/h	151	638	341	129	977	518	97	398	65	333	297	273
Grp Sat Flow(s),veh/h/ln	1757	1679	1786	1757	1679	1777	1757	1845	1387	1704	1752	1575
Q Serve(g_s), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Cycle Q Clear(g_c), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Prop In Lane	1.00		0.16	1.00		0.17	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	179	1134	603	157	1092	578	122	591	444	390	640	575
V/C Ratio(X)	0.85	0.56	0.56	0.82	0.89	0.89	0.80	0.67	0.15	0.85	0.46	0.48
Avail Cap(c_a), veh/h	213	1134	603	243	1133	600	198	591	444	413	640	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	31.3	31.3	51.7	37.1	37.1	53.0	34.0	28.0	50.2	28.0	28.2
Incr Delay (d2), s/veh	22.7	0.6	1.2	12.2	9.2	15.6	11.3	6.0	0.7	15.3	2.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	8.4	9.1	4.6	16.2	18.2	3.4	11.9	1.6	6.1	7.7	7.1
LnGrp Delay(d), s/veh	73.7	31.9	32.5	64.0	46.3	52.7	64.2	40.1	28.7	65.6	30.4	31.0
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	C	C
Approach Vol, veh/h		1130			1624			560			903	
Approach Delay, s/veh		37.7			49.7			43.0			43.5	
Approach LOS		D			D			D			D	

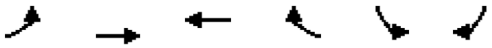
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	41.0	14.3	43.0	12.0	46.2	15.7	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	37.0	16.0	37.0	13.0	38.0	14.0	39.0
Max Q Clear Time (g_c+I1), s	13.1	23.6	10.3	20.0	8.3	17.4	11.8	34.0
Green Ext Time (p_c), s	0.1	2.4	0.1	5.7	0.1	3.8	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Future Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	85	798	394	170	1532	96	574	362	457	223	340	543
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	59	727	328	161	1330	83	512	1458	640	250	935	414
Arrive On Green	0.03	0.22	0.22	0.09	0.28	0.28	0.29	0.42	0.42	0.14	0.27	0.27
Sat Flow, veh/h	1757	3357	1516	1757	4835	303	1757	3505	1539	1757	3505	1554
Grp Volume(v), veh/h	85	798	394	170	1064	564	574	362	457	223	340	543
Grp Sat Flow(s),veh/h/ln	1757	1679	1516	1757	1679	1781	1757	1752	1539	1757	1752	1554
Q Serve(g_s), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Cycle Q Clear(g_c), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	727	328	161	923	490	512	1458	640	250	935	414
V/C Ratio(X)	1.45	1.10	1.20	1.06	1.15	1.15	1.12	0.25	0.71	0.89	0.36	1.31
Avail Cap(c_a), veh/h	59	727	328	161	923	490	512	1458	640	278	935	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	47.0	47.0	54.5	43.5	43.5	42.5	22.8	29.1	50.6	35.7	44.0
Incr Delay (d2), s/veh	275.9	63.0	115.5	86.4	80.9	89.9	77.1	0.4	6.7	26.5	1.1	156.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	18.4	21.4	9.2	25.6	28.4	27.9	4.0	13.8	9.1	4.7	31.7
LnGrp Delay(d), s/veh	333.9	110.0	162.5	141.0	124.4	133.4	119.6	23.2	35.8	77.0	36.8	200.1
LnGrp LOS	F	F	F	F	F	F	F	C	D	E	D	F
Approach Vol, veh/h		1277			1798			1393			1106	
Approach Delay, s/veh		141.1			128.8			67.0			125.1	
Approach LOS		F			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	53.9	15.0	30.0	39.0	36.0	8.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	48.0	11.0	26.0	35.0	32.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	17.0	31.6	13.0	28.0	37.0	34.0	6.0	35.0
Green Ext Time (p_c), s	0.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	115.5
HCM 2010 LOS	F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	320	1050	40	30	180
Future Volume (veh/h)	30	320	1050	40	30	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	33	356	1167	44	33	200
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	165	1528	1528	668	724	646
Arrive On Green	0.46	0.46	0.46	0.46	0.44	0.44
Sat Flow, veh/h	430	3399	3399	1448	1660	1482
Grp Volume(v), veh/h	33	356	1167	44	33	200
Grp Sat Flow(s),veh/h/ln	430	1656	1656	1448	1660	1482
Q Serve(g_s), s	5.4	5.1	22.9	1.3	0.9	6.9
Cycle Q Clear(g_c), s	28.2	5.1	22.9	1.3	0.9	6.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	165	1528	1528	668	724	646
V/C Ratio(X)	0.20	0.23	0.76	0.07	0.05	0.31
Avail Cap(c_a), veh/h	396	3313	3313	1449	724	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	12.7	17.5	11.7	12.7	14.3
Incr Delay (d2), s/veh	0.6	0.1	0.8	0.0	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.3	10.5	0.5	0.4	3.0
LnGrp Delay(d), s/veh	29.8	12.8	18.3	11.7	12.8	15.6
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h		389	1211		233	
Approach Delay, s/veh		14.2	18.0		15.2	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				40.0		38.0		40.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				78.0		34.0		78.0
Max Q Clear Time (g_c+I1), s				30.2		8.9		24.9
Green Ext Time (p_c), s				3.0		0.8		11.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Future Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	97	258	54	204	785	269	97	1065	0	75	677	237
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	120	1132	499	264	851	292	121	1338	599	95	1286	551
Arrive On Green	0.07	0.33	0.33	0.08	0.34	0.34	0.07	0.39	0.00	0.06	0.38	0.38
Sat Flow, veh/h	1707	3406	1503	3312	2491	853	1707	3406	1524	1707	3406	1460
Grp Volume(v), veh/h	97	258	54	204	537	517	97	1065	0	75	677	237
Grp Sat Flow(s),veh/h/ln	1707	1703	1503	1656	1703	1641	1707	1703	1524	1707	1703	1460
Q Serve(g_s), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Cycle Q Clear(g_c), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1132	499	264	582	561	121	1338	599	95	1286	551
V/C Ratio(X)	0.81	0.23	0.11	0.77	0.92	0.92	0.80	0.80	0.00	0.79	0.53	0.43
Avail Cap(c_a), veh/h	149	1132	499	376	610	587	194	1338	599	119	1286	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	27.6	26.5	51.7	36.2	36.2	52.4	30.7	0.0	53.5	27.7	26.5
Incr Delay (d2), s/veh	22.6	0.1	0.1	6.2	19.2	19.8	11.7	5.0	0.0	24.3	1.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.0	1.2	3.4	19.4	18.8	3.4	15.7	0.0	3.0	8.6	5.9
LnGrp Delay(d), s/veh	75.1	27.7	26.6	57.8	55.4	56.1	64.1	35.7	0.0	77.7	29.2	28.9
LnGrp LOS	E	C	C	E	E	E	E	D		E	C	C
Approach Vol, veh/h		409			1258			1162			989	
Approach Delay, s/veh		38.8			56.1			38.1			32.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	49.0	13.1	42.1	12.1	47.2	12.1	43.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	13.0	38.0	13.0	40.0	10.0	41.0
Max Q Clear Time (g_c+I1), s	7.0	33.6	8.9	8.3	8.4	19.7	8.4	36.7
Green Ext Time (p_c), s	0.0	5.4	0.2	1.8	0.1	5.2	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.7
HCM 2010 LOS	D

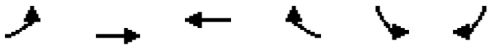
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	430	1280	50	20	20
Future Vol, veh/h	30	430	1280	50	20	20
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	31	448	1333	52	21	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1386	0	-	0	1620	668
Stage 1	-	-	-	-	1334	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	4.28	-	-	-	6.98	7.08
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.29	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	455	-	-	-	87	385
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	717	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	455	-	-	-	81	385
Mov Cap-2 Maneuver	-	-	-	-	81	-
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	716	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	39.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	455	-	-	-	81	385
HCM Lane V/C Ratio	0.069	-	-	-	0.257	0.054
HCM Control Delay (s/veh)	13.5	-	-	-	64.2	14.9
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.9	0.2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	410	1340	80	50	70
Future Volume (veh/h)	130	410	1340	80	50	70
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712
Adj Flow Rate, veh/h	135	427	1396	83	52	73
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	168	2244	1754	768	350	312
Arrive On Green	0.10	0.69	0.54	0.54	0.21	0.21
Sat Flow, veh/h	1630	3338	3338	1424	1630	1455
Grp Volume(v), veh/h	135	427	1396	83	52	73
Grp Sat Flow(s),veh/h/ln	1630	1626	1626	1424	1630	1455
Q Serve(g_s), s	6.8	3.9	29.1	2.4	2.2	3.5
Cycle Q Clear(g_c), s	6.8	3.9	29.1	2.4	2.2	3.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	168	2244	1754	768	350	312
V/C Ratio(X)	0.80	0.19	0.80	0.11	0.15	0.23
Avail Cap(c_a), veh/h	389	3646	2715	1189	350	312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	4.6	15.6	9.5	26.7	27.2
Incr Delay (d2), s/veh	8.7	0.0	0.9	0.1	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.7	13.2	1.0	1.1	0.2
LnGrp Delay(d), s/veh	45.4	4.7	16.5	9.5	27.6	29.0
LnGrp LOS	D	A	B	A	C	C
Approach Vol, veh/h		562	1479		125	
Approach Delay, s/veh		14.5	16.1		28.4	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				61.8		22.0	12.6	49.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				94.0		18.0	20.0	70.0
Max Q Clear Time (g_c+I1), s				5.9		5.5	8.8	31.1
Green Ext Time (p_c), s				3.0		0.3	0.2	14.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Future Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	0	480	10	0	1429	173	0	0	51	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	248	-	-	715
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.36	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.03	-	-	3.43
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	616	0	0	349
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	614	-	-	349
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	11.4	16
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	614	-	-	-	-	349
HCM Lane V/C Ratio	0.083	-	-	-	-	0.058
HCM Control Delay (s/veh)	11.4	-	-	-	-	16
HCM Lane LOS	B	-	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.2



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	280	180	640	160	210	410	230	150	180	990	100	940
Future Volume (vph)	280	180	640	160	210	410	230	150	180	990	100	940
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.96	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.99	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1424		4504	1422	1656	1743	1462	1583	1304	1482	1656	3213
Flt Permitted	0.95		0.71	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1424		3246	1422	1656	1743	1462	1583	1304	1482	1656	3213
Peak-hour factor, PHF	0.91	0.92	0.91	0.91	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.91
Adj. Flow (vph)	308	196	703	176	231	451	253	163	198	1088	110	1033
RTOR Reduction (vph)	0	0	0	89	0	0	0	129	107	317	0	0
Lane Group Flow (vph)	277	0	930	88	231	451	253	34	537	325	110	1033
Confl. Peds. (#/hr)				12	12							
Confl. Bikes (#/hr)				2			1					
Heavy Vehicles (%)	9%	2%	9%	9%	9%	9%	9%	2%	9%	9%	9%	9%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	Perm	Prot	Prot
Protected Phases	7	7	4		3	8					5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	16.0		45.0	30.0	11.0	25.0	25.0	25.0	37.0	37.0	26.0	26.0
Effective Green, g (s)	16.0		45.0	30.0	11.0	25.0	25.0	25.0	37.0	37.0	26.0	26.0
Actuated g/C Ratio	0.13		0.38	0.25	0.09	0.21	0.21	0.21	0.31	0.31	0.22	0.22
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	189		1384	355	151	363	304	329	402	456	358	696
v/s Ratio Prot	c0.19		0.09		0.14	c0.26					0.07	c0.32
v/s Ratio Perm			0.16	0.06			0.17	0.02	c0.41	0.22		
v/c Ratio	1.47		1.02dl	0.25	1.53	1.24	0.83	0.10	1.34	0.71	0.31	1.48
Uniform Delay, d1	52.0		31.3	36.0	54.5	47.5	45.5	38.4	41.5	36.8	39.4	47.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	236.1		1.3	0.4	268.9	130.4	17.4	0.1	167.0	9.1	0.5	225.5
Delay (s)	288.1		32.6	36.3	323.4	177.9	62.9	38.6	208.5	45.9	39.9	272.5
Level of Service	F		C	D	F	F	E	D	F	D	D	F
Approach Delay (s/veh)			84.3			161.3						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	113.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	118.5%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	750	330	90	910
Future Volume (vph)	750	330	90	910
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.95		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4714		1770	5085
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4714		1770	5085
Peak-hour factor, PHF	0.92	0.91	0.92	0.92
Adj. Flow (vph)	815	363	98	989
RTOR Reduction (vph)	65	0	0	0
Lane Group Flow (vph)	1113	0	98	989
Confl. Peds. (#/hr)		5		
Confl. Bikes (#/hr)		3		
Heavy Vehicles (%)	2%	9%	2%	2%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	51.9		11.1	37.0
Effective Green, g (s)	51.9		11.1	37.0
Actuated g/C Ratio	0.43		0.09	0.31
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	2038		163	1567
v/s Ratio Prot	0.24		0.06	0.19
v/s Ratio Perm				
v/c Ratio	0.55		0.60	0.63
Uniform Delay, d1	25.3		52.3	35.6
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	1.1		6.1	1.9
Delay (s)	26.4		58.4	37.6
Level of Service	C		E	D
Approach Delay (s/veh)	136.6			39.5
Approach LOS	F			D

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Future Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1759	1759	1759	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	461	843	124	90	787	0	79	382	393	101	730	112
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	541	1452	214	113	1334	597	100	1019	555	125	1093	431
Arrive On Green	0.17	0.50	0.50	0.07	0.40	0.00	0.06	0.21	0.21	0.07	0.23	0.23
Sat Flow, veh/h	3250	2916	429	1675	3343	1495	1675	4803	1445	1675	4803	1450
Grp Volume(v), veh/h	461	483	484	90	787	0	79	382	393	101	730	112
Grp Sat Flow(s),veh/h/ln	1625	1671	1673	1675	1671	1495	1675	1601	1445	1675	1601	1450
Q Serve(g_s), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.4
Cycle Q Clear(g_c), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.4
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	541	832	833	113	1334	597	100	1019	555	125	1093	431
V/C Ratio(X)	0.85	0.58	0.58	0.80	0.59	0.00	0.79	0.37	0.71	0.81	0.67	0.26
Avail Cap(c_a), veh/h	750	832	833	201	1334	597	185	1019	555	216	1108	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	19.2	19.2	49.8	25.6	0.0	50.3	36.6	28.8	49.4	38.1	29.2
Incr Delay (d2), s/veh	6.9	2.9	2.9	12.1	1.9	0.0	13.1	0.2	4.1	11.3	1.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	10.9	10.9	3.0	9.5	0.0	2.7	3.3	10.6	3.4	6.8	2.6
LnGrp Delay(d), s/veh	50.8	22.2	22.2	61.9	27.5	0.0	63.5	36.8	32.9	60.7	39.7	29.5
LnGrp LOS	D	C	C	E	C		E	D	C	E	D	C
Approach Vol, veh/h		1428			877			854			943	
Approach Delay, s/veh		31.4			31.1			37.5			40.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	58.0	12.1	27.0	22.0	47.3	10.4	28.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	14.0	23.0	25.0	42.0	12.0	25.0
Max Q Clear Time (g_c+I1), s	7.7	24.1	8.4	25.0	16.9	22.1	7.0	17.0
Green Ext Time (p_c), s	0.1	6.7	0.1	0.0	1.1	5.1	0.1	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Future Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
Arrive On Green	0.09	0.08	0.08	0.10	0.09	0.00	0.07	0.51	0.51	0.15	0.58	0.58
Sat Flow, veh/h	1707	3406	1482	1707	3406	1524	1707	3406	1474	1707	3406	1493
Grp Volume(v), veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Grp Sat Flow(s),veh/h/ln	1707	1703	1482	1707	1703	1524	1707	1703	1474	1707	1703	1493
Q Serve(g_s), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Cycle Q Clear(g_c), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
V/C Ratio(X)	0.82	0.62	0.40	0.82	0.61	0.00	0.80	0.62	0.11	0.86	0.58	0.67
Avail Cap(c_a), veh/h	253	539	235	270	573	256	220	1731	749	389	1988	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	44.7	43.8	44.6	44.2	0.0	46.1	17.9	12.9	42.0	13.2	14.3
Incr Delay (d2), s/veh	10.5	2.2	2.0	10.5	2.0	0.0	10.8	1.7	0.3	12.1	1.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.5	1.4	4.3	2.6	0.0	3.1	11.2	1.2	6.8	10.4	11.9
LnGrp Delay(d), s/veh	55.5	46.9	45.9	55.2	46.2	0.0	56.9	19.6	13.2	54.1	14.4	18.3
LnGrp LOS	E	D	D	E	D		E	B	B	D	B	B
Approach Vol, veh/h		360			330			1260			1950	
Approach Delay, s/veh		49.9			50.0			22.2			20.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	55.4	14.1	12.5	11.4	63.0	13.4	13.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	49.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.7	25.1	10.1	7.2	7.8	28.7	9.6	7.4
Green Ext Time (p_c), s	0.4	8.3	0.2	0.7	0.1	12.9	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	55

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	450	100	260	0	120	400
Future Vol, veh/h	450	100	260	0	120	400
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	506	112	292	0	135	449

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	1416	-
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	1124	-
Critical Hdwy	4.19	-	-	-	6.49	-
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.281	-	-	-	3.581	-
Pot Cap-1 Maneuver	1231	-	-	-	146	0
Stage 1	-	-	-	-	742	0
Stage 2	-	-	-	-	301	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1231	-	-	-	~ 86	-
Mov Cap-2 Maneuver	-	-	-	-	~ 86	-
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	301	-

Approach	EB	WB	SW
HCM Control Delay, s/v	8.1	0	$ 388.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1231	-	-	-	86	-
HCM Lane V/C Ratio	0.411	-	-	-	1.568	-
HCM Control Delay (s/veh)	9.9	-	-	-	$ 388.8	0
HCM Lane LOS	A	-	-	-	F	A
HCM 95th %tile Q(veh)	2	-	-	-	10.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Future Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	42	104	52	31	281	125	240	1146	0	115	990	94
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	145	303	151	335	312	139	347	1729	773	276	1594	689
Arrive On Green	0.03	0.27	0.27	0.02	0.27	0.27	0.09	0.51	0.00	0.05	0.47	0.47
Sat Flow, veh/h	1707	1119	559	1707	1173	522	1707	3406	1524	1707	3406	1472
Grp Volume(v), veh/h	42	0	156	31	0	406	240	1146	0	115	990	94
Grp Sat Flow(s),veh/h/ln	1707	0	1678	1707	0	1695	1707	1703	1524	1707	1703	1472
Q Serve(g_s), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Cycle Q Clear(g_c), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Prop In Lane	1.00		0.33	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	454	335	0	451	347	1729	773	276	1594	689
V/C Ratio(X)	0.29	0.00	0.34	0.09	0.00	0.90	0.69	0.66	0.00	0.42	0.62	0.14
Avail Cap(c_a), veh/h	163	0	573	359	0	579	475	1729	773	314	1594	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	31.8	28.2	0.0	38.3	17.1	19.8	0.0	16.6	21.6	16.4
Incr Delay (d2), s/veh	1.1	0.0	0.4	0.1	0.0	14.4	2.6	2.0	0.0	1.0	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	3.8	0.7	0.0	13.5	3.7	13.1	0.0	1.8	11.4	1.7
LnGrp Delay(d), s/veh	31.9	0.0	32.2	28.3	0.0	52.7	19.6	21.8	0.0	17.6	23.5	16.8
LnGrp LOS	C		C	C		D	B	C		B	C	B
Approach Vol, veh/h		198			437			1386			1199	
Approach Delay, s/veh		32.2			51.0			21.4			22.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	59.0	6.4	33.3	13.9	54.7	6.9	32.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	55.0	4.0	37.0	18.0	45.0	4.0	37.0
Max Q Clear Time (g_c+I1), s	5.8	29.1	3.4	10.1	9.5	25.6	3.9	27.0
Green Ext Time (p_c), s	0.1	9.3	0.0	0.9	0.4	7.2	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	160	50	150	480	30	30
Future Vol, veh/h	160	50	150	480	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	14	14	14	14	14	14
Mvmt Flow	176	55	165	527	33	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	231	0	1033	176
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	857	-
Critical Hdwy	-	-	4.24	-	6.54	6.34
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.326	-	3.626	3.426
Pot Cap-1 Maneuver	-	-	1269	-	245	837
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1269	-	200	837
Mov Cap-2 Maneuver	-	-	-	-	200	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	323	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	200	837	-	-	1269	-
HCM Lane V/C Ratio	0.165	0.039	-	-	0.13	-
HCM Control Delay (s/veh)	26.5	9.5	-	-	8.3	0
HCM Lane LOS	D	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.4	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	190	10	20	740	40	50
Future Vol, veh/h	190	10	20	740	40	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	198	10	21	771	42	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	208	0	1011	198
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	813	-
Critical Hdwy	-	-	4.26	-	6.56	6.36
Critical Hdwy Stg 1	-	-	-	-	5.56	-
Critical Hdwy Stg 2	-	-	-	-	5.56	-
Follow-up Hdwy	-	-	2.344	-	3.644	3.444
Pot Cap-1 Maneuver	-	-	1284	-	250	809
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	413	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1284	-	246	809
Mov Cap-2 Maneuver	-	-	-	-	246	-
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	406	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.2	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	246	809	-	-	1284	-
HCM Lane V/C Ratio	0.169	0.064	-	-	0.016	-
HCM Control Delay (s/veh)	22.6	9.8	-	-	7.9	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	140	50	20	680	60	40
Future Volume (veh/h)	140	50	20	680	60	40
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1624	1624	1624	1624	1624	1624
Adj Flow Rate, veh/h	149	53	21	723	64	43
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	17	17	17	17	17	17
Cap, veh/h	850	722	609	850	527	470
Arrive On Green	0.52	0.52	0.52	0.52	0.34	0.34
Sat Flow, veh/h	1624	1380	1025	1624	1547	1380
Grp Volume(v), veh/h	149	53	21	723	64	43
Grp Sat Flow(s),veh/h/ln	1624	1380	1025	1624	1547	1380
Q Serve(g_s), s	2.8	1.1	0.6	22.5	1.7	1.2
Cycle Q Clear(g_c), s	2.8	1.1	3.5	22.5	1.7	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	850	722	609	850	527	470
V/C Ratio(X)	0.18	0.07	0.03	0.85	0.12	0.09
Avail Cap(c_a), veh/h	2544	2162	1679	2544	527	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	6.9	8.3	12.0	13.3	13.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.5	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	0.2	10.4	0.8	0.5
LnGrp Delay(d), s/veh	7.4	7.0	8.3	14.5	13.8	13.6
LnGrp LOS	A	A	A	B	B	B
Approach Vol, veh/h	202			744	107	
Approach Delay, s/veh	7.3			14.4	13.7	
Approach LOS	A			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		24.0		34.7				34.7
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		20.0		92.0				92.0
Max Q Clear Time (g_c+I1), s		3.7		4.8				24.5
Green Ext Time (p_c), s		0.2		1.1				6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	160	10	10	550	160	20
Future Vol, veh/h	160	10	10	550	160	20
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	168	11	11	579	168	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	180	0	770	169
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	601	-
Critical Hdwy	-	-	4.28	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	-	-	2.362	-	3.662	3.462
Pot Cap-1 Maneuver	-	-	1305	-	347	835
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	344	834
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	514	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	23.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	344	834	-	-	1304	-
HCM Lane V/C Ratio	0.49	0.025	-	-	0.008	-
HCM Control Delay (s/veh)	25.1	9.4	-	-	7.8	-
HCM Lane LOS	D	A	-	-	A	-
HCM 95th %tile Q(veh)	2.6	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Future Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1900	1792	1792	1900
Adj Flow Rate, veh/h	281	375	104	198	844	219	52	1115	73	52	885	135
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	318	1065	282	414	939	242	66	1416	93	66	1289	197
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.04	0.44	0.44	0.04	0.44	0.44
Sat Flow, veh/h	1707	3834	1017	1707	3874	999	1707	3241	212	1707	2952	450
Grp Volume(v), veh/h	281	317	162	198	710	353	52	585	603	52	510	510
Grp Sat Flow(s),veh/h/ln	1707	1631	1588	1707	1631	1610	1707	1703	1751	1707	1703	1700
Q Serve(g_s), s	13.3	8.7	9.2	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.1	27.1
Cycle Q Clear(g_c), s	13.3	8.7	9.2	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.1	27.1
Prop In Lane	1.00		0.64	1.00		0.62	1.00		0.12	1.00		0.26
Lane Grp Cap(c), veh/h	318	906	441	414	791	390	66	744	765	66	744	742
V/C Ratio(X)	0.88	0.35	0.37	0.48	0.90	0.90	0.79	0.79	0.79	0.79	0.69	0.69
Avail Cap(c_a), veh/h	399	1018	495	448	814	402	91	744	765	91	744	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	32.4	32.6	27.2	41.2	41.2	53.5	27.1	27.1	53.5	25.4	25.4
Incr Delay (d2), s/veh	17.4	0.2	0.5	0.9	12.6	23.0	26.2	8.2	8.1	26.2	5.1	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	3.9	4.1	4.6	12.0	13.1	2.1	17.2	17.6	2.1	13.7	13.7
LnGrp Delay(d), s/veh	45.3	32.6	33.1	28.1	53.7	64.3	79.7	35.4	35.2	79.7	30.5	30.5
LnGrp LOS	D	C	C	C	D	E	E	D	D	E	C	C
Approach Vol, veh/h		760			1261			1240			1072	
Approach Delay, s/veh		37.4			52.7			37.2			32.9	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	53.0	15.7	35.2	8.3	53.0	19.7	31.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	49.0	14.0	35.0	6.0	49.0	21.0	28.0
Max Q Clear Time (g_c+I1), s	5.4	35.2	11.6	11.2	5.4	29.1	15.3	25.9
Green Ext Time (p_c), s	0.0	6.6	0.1	2.9	0.0	6.6	0.4	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.7
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	170	10	600	230	0	730
Future Volume (veh/h)	170	10	600	230	0	730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	0	1810
Adj Flow Rate, veh/h	191	11	674	0	0	820
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	5	0	5
Cap, veh/h	276	127	2871	1411	0	2871
Arrive On Green	0.08	0.08	0.84	0.00	0.00	0.84
Sat Flow, veh/h	3343	1538	3529	1538	0	3619
Grp Volume(v), veh/h	191	11	674	0	0	820
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	1538	0	1719
Q Serve(g_s), s	5.4	0.6	3.9	0.0	0.0	5.0
Cycle Q Clear(g_c), s	5.4	0.6	3.9	0.0	0.0	5.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	276	127	2871	1411	0	2871
V/C Ratio(X)	0.69	0.09	0.23	0.00	0.00	0.29
Avail Cap(c_a), veh/h	1068	492	2871	1411	0	2871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	43.3	41.1	1.6	0.0	0.0	1.7
Incr Delay (d2), s/veh	3.1	0.3	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.3	1.9	0.0	0.0	2.4
LnGrp Delay(d), s/veh	46.4	41.4	1.8	0.0	0.0	2.0
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	202		674			820
Approach Delay, s/veh	46.1		1.8			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		85.0				85.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		81.0				81.0		31.0
Max Q Clear Time (g_c+I1), s		5.9				7.0		7.4
Green Ext Time (p_c), s		5.0				6.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	240	30	430	600	20	190	10	310	20	20	20
Future Volume (veh/h)	10	240	30	430	600	20	190	10	310	20	20	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	11	261	33	467	652	22	207	11	337	22	22	22
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	18	1455	450	509	2840	95	380	20	355	75	36	36
Arrive On Green	0.01	0.29	0.29	0.29	0.57	0.57	0.23	0.23	0.23	0.04	0.04	0.04
Sat Flow, veh/h	1757	5036	1557	1757	4999	168	1672	89	1564	1757	841	841
Grp Volume(v), veh/h	11	261	33	467	437	237	218	0	337	22	0	44
Grp Sat Flow(s),veh/h/ln	1757	1679	1557	1757	1679	1810	1761	0	1564	1757	0	1682
Q Serve(g_s), s	0.7	4.1	1.6	27.2	6.8	6.9	11.5	0.0	22.4	1.3	0.0	2.7
Cycle Q Clear(g_c), s	0.7	4.1	1.6	27.2	6.8	6.9	11.5	0.0	22.4	1.3	0.0	2.7
Prop In Lane	1.00		1.00	1.00		0.09	0.95		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	18	1455	450	509	1907	1028	400	0	355	75	0	72
V/C Ratio(X)	0.60	0.18	0.07	0.92	0.23	0.23	0.54	0.00	0.95	0.29	0.00	0.61
Avail Cap(c_a), veh/h	67	1455	450	782	1907	1028	400	0	355	266	0	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.0	28.2	27.3	36.3	11.3	11.3	36.0	0.0	40.2	49.0	0.0	49.7
Incr Delay (d2), s/veh	27.5	0.3	0.3	11.2	0.3	0.5	1.5	0.0	34.4	2.1	0.0	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.9	0.7	14.7	3.2	3.6	5.8	0.0	13.1	0.7	0.0	1.4
LnGrp Delay(d), s/veh	79.5	28.4	27.6	47.5	11.6	11.9	37.5	0.0	74.6	51.1	0.0	57.9
LnGrp LOS	E	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		305			1141			555			66	
Approach Delay, s/veh		30.2			26.3			60.1			55.6	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	64.0		28.0	34.6	34.5		8.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	60.0		24.0	47.0	17.0		16.0
Max Q Clear Time (g_c+I1), s	2.7	8.9		24.4	29.2	6.1		4.7
Green Ext Time (p_c), s	0.0	5.1		0.0	1.4	1.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	190	120	530	670	340	10	1120	290	120	1320	70
Future Volume (veh/h)	30	190	120	530	670	340	10	1120	290	120	1320	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	32	202	128	564	713	362	11	1191	309	128	1404	74
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	40	595	257	631	1165	651	38	1368	620	155	1852	813
Arrive On Green	0.02	0.17	0.17	0.19	0.34	0.34	0.41	0.41	0.41	0.09	0.53	0.53
Sat Flow, veh/h	1740	3471	1501	3375	3471	1528	11	3348	1517	1740	3471	1524
Grp Volume(v), veh/h	32	202	128	564	713	362	639	563	309	128	1404	74
Grp Sat Flow(s),veh/h/ln	1740	1736	1501	1688	1736	1528	1780	1579	1517	1740	1736	1524
Q Serve(g_s), s	2.0	5.7	8.6	18.1	19.1	19.8	8.0	36.3	16.8	8.0	35.2	2.6
Cycle Q Clear(g_c), s	2.0	5.7	8.6	18.1	19.1	19.8	36.2	36.3	16.8	8.0	35.2	2.6
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	595	257	631	1165	651	760	645	620	155	1852	813
V/C Ratio(X)	0.81	0.34	0.50	0.89	0.61	0.56	0.84	0.87	0.50	0.83	0.76	0.09
Avail Cap(c_a), veh/h	78	595	257	700	1165	651	847	726	697	173	2065	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	40.4	41.6	44.0	30.8	24.1	29.9	30.1	24.4	49.7	20.3	12.7
Incr Delay (d2), s/veh	30.3	1.6	6.7	13.0	2.4	3.4	7.0	10.4	0.6	25.2	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	4.0	9.6	9.5	8.9	19.4	17.6	7.1	5.0	17.2	1.1
LnGrp Delay(d), s/veh	84.3	42.0	48.4	57.0	33.2	27.5	36.9	40.5	25.0	74.9	21.8	12.7
LnGrp LOS	F	D	D	E	C	C	D	D	C	E	C	B
Approach Vol, veh/h		362			1639			1511			1606	
Approach Delay, s/veh		48.0			40.2			35.8			25.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	41.2	13.9	49.3	24.8	23.0		63.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0	11.0	51.0	23.0	19.0		66.0
Max Q Clear Time (g_c+I1), s	4.0	21.8	10.0	38.3	20.1	10.6		37.2
Green Ext Time (p_c), s	0.0	5.2	0.0	7.0	0.7	1.0		12.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.9
HCM 2010 LOS	C

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	390	220	400	830	670	20
Future Volume (vph)	390	220	400	830	670	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3471	1553	1736	3471	3366	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3471	1553	1736	3471	3366	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	398	224	408	847	684	20
RTOR Reduction (vph)	0	87	0	0	2	0
Lane Group Flow (vph)	398	137	408	847	702	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	39.6	68.6	31.6	75.2	29.0	
Effective Green, g (s)	39.6	68.6	31.6	75.2	29.0	
Actuated g/C Ratio	0.35	0.61	0.28	0.67	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1225	1004	488	2326	870	
v/s Ratio Prot	0.11	0.04	c0.24	c0.24	c0.21	
v/s Ratio Perm		0.05				
v/c Ratio	0.32	0.14	0.84	0.36	0.81	
Uniform Delay, d1	26.5	9.2	37.9	8.1	39.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.1	11.8	0.4	5.5	
Delay (s)	27.2	9.3	49.7	8.5	44.5	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	20.8			21.9	44.5	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	112.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	430	290	80	430	1080	280
Future Volume (veh/h)	430	290	80	430	1080	280
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	439	0	82	439	1102	286
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	790	363	279	2363	2363	1055
Arrive On Green	0.23	0.00	0.68	0.68	0.68	0.68
Sat Flow, veh/h	3375	1553	381	3563	3563	1549
Grp Volume(v), veh/h	439	0	82	439	1102	286
Grp Sat Flow(s),veh/h/ln	1688	1553	381	1736	1736	1549
Q Serve(g_s), s	10.8	0.0	12.1	4.3	14.0	6.8
Cycle Q Clear(g_c), s	10.8	0.0	26.0	4.3	14.0	6.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	790	363	279	2363	2363	1055
V/C Ratio(X)	0.56	0.00	0.29	0.19	0.47	0.27
Avail Cap(c_a), veh/h	790	363	279	2363	2363	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	13.1	5.5	7.0	5.9
Incr Delay (d2), s/veh	2.8	0.0	0.6	0.0	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	1.3	2.1	6.8	3.0
LnGrp Delay(d), s/veh	34.5	0.0	13.7	5.5	7.7	6.5
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	439			521	1388	
Approach Delay, s/veh	34.5			6.8	7.4	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		68.0				68.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		64.0				64.0
Max Q Clear Time (g_c+I1), s		12.8		28.0				16.0
Green Ext Time (p_c), s		1.1		4.6				11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	48.4

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	160	0	10	880	0	0	1200	10	10	10
Future Vol, veh/h	160	0	10	880	0	0	1200	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	165	0	10	907	0	0	1237	10	10	10

Major/Minor	Minor1			Major1			Major2			Minor2	
Conflicting Flow All	1546	454	1247	0	-	-	-	0	1716	624	
Stage 1	927	-	-	-	-	-	-	-	1242	-	
Stage 2	619	-	-	-	-	-	-	-	474	-	
Critical Hdwy	7.6	7	4.2	-	-	-	-	-	7.6	7	
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-	-	6.6	-	
Critical Hdwy Stg 2	6.6	-	-	-	-	-	-	-	6.6	-	
Follow-up Hdwy	3.55	3.35	2.25	-	-	-	-	-	3.55	3.35	
Pot Cap-1 Maneuver	~ 76	545	538	-	0	0	-	-	56	421	
Stage 1	283	-	-	-	0	0	-	-	180	-	
Stage 2	436	-	-	-	0	0	-	-	532	-	
Platoon blocked, %				-			-	-			
Mov Cap-1 Maneuver	~ 72	545	538	-	-	-	-	-	17	421	
Mov Cap-2 Maneuver	~ 72	-	-	-	-	-	-	-	17	-	
Stage 1	273	-	-	-	-	-	-	-	173	-	
Stage 2	425	-	-	-	-	-	-	-	163	-	

Approach	NB	SE	NW	SW
HCM Control Delay, s/v	236.7	0.3	0	224.1
HCM LOS	F			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	72	545	-	-	538	-	33
HCM Lane V/C Ratio	2.291	0.681	-	-	0.019	-	0.625
HCM Control Delay (s/veh)	$ 714.1	24.5	-	-	11.8	0.2	224.1
HCM Lane LOS	F	C	-	-	B	A	F
HCM 95th %tile Q(veh)	15.6	5.2	-	-	0.1	-	2.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	20	20	20	1110	1160	60
Future Vol, veh/h	20	20	20	1110	1160	60
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	20	20	20	1133	1184	61

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1843	644	1266	0	-	0
Stage 1	1236	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.9	7	4.2	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-
Pot Cap-1 Maneuver	64	408	529	-	-	-
Stage 1	231	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	60	401	520	-	-	-
Mov Cap-2 Maneuver	60	-	-	-	-	-
Stage 1	219	-	-	-	-	-
Stage 2	490	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	53.9	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	520	-	60	401
HCM Lane V/C Ratio	-	-	0.039	-	0.34	0.051
HCM Control Delay (s/veh)	-	-	12.2	-	93.2	14.5
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1.2	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	210	1020	280	20	1080	490	80	550	460	340	560	20
Future Volume (veh/h)	210	1020	280	20	1080	490	80	550	460	340	560	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1690	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	226	1097	301	22	1161	527	86	591	0	366	602	22
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	241	1523	834	30	1186	607	109	897	401	394	1066	39
Arrive On Green	0.15	0.47	0.47	0.02	0.34	0.34	0.06	0.26	0.00	0.12	0.31	0.31
Sat Flow, veh/h	1609	3211	1405	1740	3471	1493	1740	3471	1553	3375	3411	125
Grp Volume(v), veh/h	226	1097	301	22	1161	527	86	591	0	366	306	318
Grp Sat Flow(s),veh/h/ln	1609	1605	1405	1740	1736	1493	1740	1736	1553	1688	1736	1800
Q Serve(g_s), s	16.7	32.7	13.4	1.5	39.7	39.0	5.9	18.3	0.0	12.9	17.7	17.7
Cycle Q Clear(g_c), s	16.7	32.7	13.4	1.5	39.7	39.0	5.9	18.3	0.0	12.9	17.7	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	241	1523	834	30	1186	607	109	897	401	394	543	563
V/C Ratio(X)	0.94	0.72	0.36	0.73	0.98	0.87	0.79	0.66	0.00	0.93	0.56	0.57
Avail Cap(c_a), veh/h	241	1523	834	72	1186	607	217	897	401	394	543	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	25.2	12.8	58.7	39.1	32.9	55.5	39.8	0.0	52.5	34.4	34.4
Incr Delay (d2), s/veh	40.7	1.7	0.3	28.3	21.1	12.7	12.1	3.8	0.0	28.3	4.2	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	14.8	5.3	1.0	22.5	18.2	3.2	9.3	0.0	7.5	9.0	9.4
LnGrp Delay(d), s/veh	91.1	26.9	13.0	87.0	60.2	45.7	67.6	43.6	0.0	80.8	38.6	38.5
LnGrp LOS	F	C	B	F	E	D	E	D		F	D	D
Approach Vol, veh/h		1624			1710			677			990	
Approach Delay, s/veh		33.2			56.1			46.6			54.2	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	41.5	6.1	60.9	18.0	35.0	22.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	30.0	5.0	54.0	14.0	31.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	7.9	19.7	3.5	34.7	14.9	20.3	18.7	41.7
Green Ext Time (p_c), s	0.1	2.8	0.0	8.6	0.0	3.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	10	460	30	60	780
Future Vol, veh/h	20	10	460	30	60	780
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	21	10	479	31	63	813

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1014	242	0	0	512	0
Stage 1	481	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.94	7.04	-	-	4.24	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-
Follow-up Hdwy	3.57	3.37	-	-	2.27	-
Pot Cap-1 Maneuver	226	744	-	-	1015	-
Stage 1	573	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	212	743	-	-	1013	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	19.2	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	212	743	1013	-
HCM Lane V/C Ratio	-	-	0.098	0.014	0.062	-
HCM Control Delay (s/veh)	-	-	23.8	9.9	8.8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0.2	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	90	430	40	80	710
Future Volume (veh/h)	60	90	430	40	80	710
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	62	94	448	42	83	740
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	144	129	2831	1266	776	2831
Arrive On Green	0.08	0.08	0.83	0.83	0.83	0.83
Sat Flow, veh/h	1707	1524	3495	1524	869	3495
Grp Volume(v), veh/h	62	94	448	42	83	740
Grp Sat Flow(s),veh/h/ln	1707	1524	1703	1524	869	1703
Q Serve(g_s), s	3.3	5.7	2.4	0.5	2.0	4.5
Cycle Q Clear(g_c), s	3.3	5.7	2.4	0.5	4.4	4.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	144	129	2831	1266	776	2831
V/C Ratio(X)	0.43	0.73	0.16	0.03	0.11	0.26
Avail Cap(c_a), veh/h	593	529	2831	1266	776	2831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	42.4	1.6	1.4	2.0	1.7
Incr Delay (d2), s/veh	2.0	7.6	0.1	0.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.7	1.2	0.2	0.5	2.1
LnGrp Delay(d), s/veh	43.3	50.1	1.7	1.4	2.3	2.0
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	156		490			823
Approach Delay, s/veh	47.4		1.7			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		4.4				6.5		7.7
Green Ext Time (p_c), s		3.2				6.4		0.5

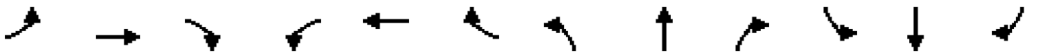
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.7
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	80	170	70	50	30
Future Vol, veh/h	30	80	170	70	50	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	19	19	19	19	19	19
Mvmt Flow	33	87	185	76	54	33
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	8.6	11.3	8.2
HCM LOS	A	B	A

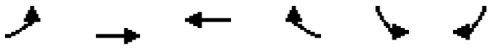
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	71%	100%	0%	0%	0%
Vol Thru, %	29%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	30	80	50	30
LT Vol	170	30	0	0	0
Through Vol	70	0	0	50	0
RT Vol	0	0	80	0	30
Lane Flow Rate	261	33	87	54	33
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.376	0.056	0.121	0.081	0.042
Departure Headway (Hd)	5.188	6.231	5.024	5.386	4.682
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	694	576	714	666	765
Service Time	3.209	3.96	2.753	3.113	2.408
HCM Lane V/C Ratio	0.376	0.057	0.122	0.081	0.043
HCM Control Delay, s/veh	11.3	9.3	8.4	8.6	7.6
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	1.8	0.2	0.4	0.3	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Future Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.96			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1703	4869		1703	4676			3391	1524	1550	3135	1492
Flt Permitted	0.95	1.00		0.95	1.00			0.92	1.00	0.95	0.58	1.00
Satd. Flow (perm)	1703	4869		1703	4676			3131	1524	1550	1878	1492
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	189	663	21	453	1316	442	21	263	589	368	42	32
RTOR Reduction (vph)	0	2	0	0	51	0	0	0	401	0	0	19
Lane Group Flow (vph)	189	682	0	453	1707	0	0	284	188	184	226	13
Confl. Peds. (#/hr)	6					6	4					4
Confl. Bikes (#/hr)			2			4						
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Effective Green, g (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Actuated g/C Ratio	0.12	0.21		0.29	0.38			0.24	0.24	0.13	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	210	1007		497	1756			737	358	204	918	597
v/s Ratio Prot	0.11	0.14		c0.27	c0.37					c0.12	0.03	
v/s Ratio Perm								0.09	c0.12		0.07	0.01
v/c Ratio	0.90	0.68		0.91	0.97			0.39	0.53	0.90	0.87dl	0.02
Uniform Delay, d1	51.8	43.8		40.9	36.8			38.5	40.0	51.2	23.9	21.7
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.0	1.8		20.9	15.4			1.5	5.4	37.1	0.1	0.1
Delay (s)	87.8	45.6		61.8	52.1			40.0	45.4	88.3	24.0	21.8
Level of Service	F	D		E	D			D	D	F	C	C
Approach Delay (s/veh)		54.7			54.1			43.7			50.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	51.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	1000	1580	80	60	30
Future Volume (veh/h)	80	1000	1580	80	60	30
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1658	1658	1792	1792	1792	1792
Adj Flow Rate, veh/h	92	1149	1816	92	69	34
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	176	2442	2640	1156	256	228
Arrive On Green	0.78	0.78	0.78	0.78	0.15	0.15
Sat Flow, veh/h	209	3233	3495	1491	1707	1524
Grp Volume(v), veh/h	92	1149	1816	92	69	34
Grp Sat Flow(s),veh/h/ln	209	1575	1703	1491	1707	1524
Q Serve(g_s), s	40.5	13.8	27.4	1.6	3.8	2.1
Cycle Q Clear(g_c), s	67.9	13.8	27.4	1.6	3.8	2.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	176	2442	2640	1156	256	228
V/C Ratio(X)	0.52	0.47	0.69	0.08	0.27	0.15
Avail Cap(c_a), veh/h	202	2833	3063	1341	256	228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	4.2	5.8	2.9	40.2	39.5
Incr Delay (d2), s/veh	2.4	0.1	0.5	0.0	2.6	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.0	12.8	0.6	2.0	1.0
LnGrp Delay(d), s/veh	24.5	4.4	6.3	2.9	42.8	40.8
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		1241	1908		103	
Approach Delay, s/veh		5.9	6.2		42.1	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				86.7		20.0		86.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				96.0		16.0		96.0
Max Q Clear Time (g_c+I1), s				69.9		5.8		29.4
Green Ext Time (p_c), s				12.8		0.2		26.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Future Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	234	660	85	213	1479	128	96	574	117	74	713	223
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	262	1623	207	244	1648	143	119	1055	466	94	1004	437
Arrive On Green	0.15	0.36	0.36	0.14	0.35	0.35	0.07	0.30	0.30	0.05	0.29	0.29
Sat Flow, veh/h	1740	4470	569	1740	4674	404	1740	3471	1533	1740	3471	1511
Grp Volume(v), veh/h	234	489	256	213	1052	555	96	574	117	74	713	223
Grp Sat Flow(s),veh/h/ln	1740	1663	1714	1740	1663	1754	1740	1736	1533	1740	1736	1511
Q Serve(g_s), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Cycle Q Clear(g_c), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Prop In Lane	1.00		0.33	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	1207	622	244	1172	618	119	1055	466	94	1004	437
V/C Ratio(X)	0.89	0.41	0.41	0.87	0.90	0.90	0.81	0.54	0.25	0.79	0.71	0.51
Avail Cap(c_a), veh/h	302	1207	622	363	1212	639	136	1055	466	106	1004	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	27.4	27.5	48.5	35.3	35.3	52.9	33.4	30.2	53.8	36.6	34.1
Incr Delay (d2), s/veh	24.4	0.2	0.4	14.3	8.9	15.2	25.9	2.0	1.3	29.2	4.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	5.8	6.2	7.6	17.2	19.3	3.9	7.9	3.0	3.1	10.7	6.4
LnGrp Delay(d), s/veh	72.4	27.6	27.9	62.8	44.2	50.5	78.8	35.5	31.5	83.1	40.9	38.3
LnGrp LOS	E	C	C	E	D	D	E	D	C	F	D	D
Approach Vol, veh/h		979			1820			787			1010	
Approach Delay, s/veh		38.4			48.3			40.2			43.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	39.0	20.2	45.8	11.9	37.3	21.4	44.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	24.0	38.0	9.0	33.0	20.0	42.0
Max Q Clear Time (g_c+I1), s	6.8	17.9	15.8	14.9	8.3	23.2	17.2	36.5
Green Ext Time (p_c), s	0.0	3.6	0.4	4.7	0.0	3.7	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Future Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	160	670	117	298	1553	149	117	1106	170	85	989	117
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	176	1104	190	326	1591	153	142	1140	175	88	1206	687
Arrive On Green	0.10	0.26	0.26	0.19	0.34	0.34	0.08	0.38	0.38	0.05	0.34	0.34
Sat Flow, veh/h	1757	4305	741	1757	4658	446	1757	3039	466	1757	3505	1539
Grp Volume(v), veh/h	160	520	267	298	1119	583	117	636	640	85	989	117
Grp Sat Flow(s),veh/h/ln	1757	1679	1689	1757	1679	1747	1757	1752	1752	1757	1752	1539
Q Serve(g_s), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Cycle Q Clear(g_c), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Prop In Lane	1.00		0.44	1.00		0.26	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	176	861	433	326	1147	597	142	657	657	88	1206	687
V/C Ratio(X)	0.91	0.60	0.62	0.92	0.98	0.98	0.82	0.97	0.97	0.97	0.82	0.17
Avail Cap(c_a), veh/h	176	861	433	366	1147	597	161	657	657	88	1206	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.3	39.4	48.0	39.0	39.0	54.3	36.8	36.9	56.9	35.9	20.1
Incr Delay (d2), s/veh	43.3	1.2	2.6	25.4	20.8	30.9	25.6	28.2	29.1	85.0	6.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.7	8.1	12.0	21.5	24.2	4.8	25.8	26.1	4.9	16.0	2.4
LnGrp Delay(d), s/veh	96.7	40.5	42.0	73.4	59.8	70.0	80.0	65.0	66.1	141.9	42.2	20.6
LnGrp LOS	F	D	D	E	E	E	E	E	E	F	D	C
Approach Vol, veh/h		947			2000			1393			1191	
Approach Delay, s/veh		50.4			64.8			66.7			47.2	
Approach LOS		D			E			E			D	

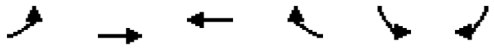
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	26.2	34.8	13.7	45.3	16.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	25.0	28.0	11.0	40.0	12.0	41.0
Max Q Clear Time (g_c+I1), s	7.8	45.1	22.0	18.7	9.9	32.9	12.8	41.6
Green Ext Time (p_c), s	0.0	0.0	0.3	3.3	0.0	3.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Future Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	73	823	115	219	1615	73	594	365	500	188	375	167
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	88	1084	150	246	1645	74	614	1373	601	331	413	181
Arrive On Green	0.05	0.24	0.24	0.14	0.33	0.33	0.31	0.39	0.39	0.09	0.18	0.18
Sat Flow, veh/h	1757	4457	619	1757	4934	223	1757	3505	1534	1757	2350	1028
Grp Volume(v), veh/h	73	619	319	219	1099	589	594	365	500	188	278	264
Grp Sat Flow(s),veh/h/ln	1757	1679	1718	1757	1679	1800	1757	1752	1534	1757	1752	1626
Q Serve(g_s), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Cycle Q Clear(g_c), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Prop In Lane	1.00		0.36	1.00		0.12	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	88	816	418	246	1119	600	614	1373	601	331	308	286
V/C Ratio(X)	0.83	0.76	0.76	0.89	0.98	0.98	0.97	0.27	0.83	0.57	0.90	0.92
Avail Cap(c_a), veh/h	88	816	418	278	1119	600	615	1373	601	331	308	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	42.1	42.2	50.7	39.6	39.7	31.2	24.8	32.9	36.0	48.4	48.6
Incr Delay (d2), s/veh	46.1	4.1	8.2	25.8	22.5	32.2	28.2	0.5	12.7	2.3	31.3	36.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	10.0	10.8	8.9	21.5	24.7	24.1	4.2	17.0	5.3	11.7	11.5
LnGrp Delay(d), s/veh	102.6	46.3	50.4	76.5	62.1	71.8	59.4	25.3	45.7	38.3	79.7	85.3
LnGrp LOS	F	D	D	E	E	E	E	C	D	D	E	F
Approach Vol, veh/h		1011			1907			1459			730	
Approach Delay, s/veh		51.6			66.8			46.2			71.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	51.0	20.8	33.2	40.9	25.1	10.0	44.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	47.0	19.0	27.0	37.0	21.0	6.0	40.0
Max Q Clear Time (g_c+I1), s	12.5	37.3	16.7	22.7	36.8	21.2	6.9	41.0
Green Ext Time (p_c), s	0.0	3.3	0.1	2.2	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.5
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	820	1720	0	470	520
Future Volume (veh/h)	0	820	1720	0	470	520
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	0	1706	1706
Adj Flow Rate, veh/h	0	845	1773	0	485	536
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	1858	1858	0	654	584
Arrive On Green	0.00	0.53	0.53	0.00	0.40	0.40
Sat Flow, veh/h	0	3689	3689	0	1625	1450
Grp Volume(v), veh/h	0	845	1773	0	485	536
Grp Sat Flow(s),veh/h/ln	0	1752	1752	0	1625	1450
Q Serve(g_s), s	0.0	17.8	57.3	0.0	30.3	41.7
Cycle Q Clear(g_c), s	0.0	17.8	57.3	0.0	30.3	41.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1858	1858	0	654	584
V/C Ratio(X)	0.00	0.45	0.95	0.00	0.74	0.92
Avail Cap(c_a), veh/h	0	1882	1882	0	654	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.3	26.6	0.0	30.3	33.7
Incr Delay (d2), s/veh	0.0	0.2	11.7	0.0	7.4	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.6	30.6	0.0	15.0	20.2
LnGrp Delay(d), s/veh	0.0	17.5	38.3	0.0	37.7	55.4
LnGrp LOS		B	D		D	E
Approach Vol, veh/h		845	1773		1021	
Approach Delay, s/veh		17.5	38.3		47.0	
Approach LOS		B	D		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				67.2		52.0		67.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				64.0		48.0		64.0
Max Q Clear Time (g_c+I1), s				19.8		43.7		59.3
Green Ext Time (p_c), s				6.3		1.7		3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Future Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	863	358	147	1463	568	211	379	147	368	537	326
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	217	1464	605	175	1388	617	238	492	213	348	712	310
Arrive On Green	0.13	0.42	0.42	0.10	0.40	0.40	0.14	0.14	0.14	0.20	0.21	0.21
Sat Flow, veh/h	1740	3447	1424	1740	3471	1543	1740	3471	1504	1740	3471	1513
Grp Volume(v), veh/h	232	832	389	147	1463	568	211	379	147	368	537	326
Grp Sat Flow(s),veh/h/ln	1740	1663	1547	1740	1736	1543	1740	1736	1504	1740	1736	1513
Q Serve(g_s), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Cycle Q Clear(g_c), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Prop In Lane	1.00		0.92	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	1412	657	175	1388	617	238	492	213	348	712	310
V/C Ratio(X)	1.07	0.59	0.59	0.84	1.05	0.92	0.89	0.77	0.69	1.06	0.75	1.05
Avail Cap(c_a), veh/h	217	1412	657	261	1388	617	261	492	213	348	712	310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	26.5	26.5	53.0	36.0	34.2	50.9	49.6	49.0	48.0	44.9	47.7
Incr Delay (d2), s/veh	79.8	0.6	1.4	14.4	39.7	19.2	27.3	11.1	16.8	64.2	7.3	64.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	10.6	10.1	5.5	30.6	21.1	8.7	6.8	5.6	17.7	9.1	15.9
LnGrp Delay(d), s/veh	132.3	27.1	27.9	67.5	75.7	53.4	78.2	60.7	65.8	112.2	52.1	112.6
LnGrp LOS	F	C	C	E	F	D	E	E	E	F	D	F
Approach Vol, veh/h		1453			2178			737			1231	
Approach Delay, s/veh		44.1			69.3			66.7			86.1	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	21.0	16.0	55.0	20.4	28.6	19.0	52.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	18.0	23.0	15.0	48.0
Max Q Clear Time (g_c+I1), s	26.0	14.6	12.0	25.2	16.3	26.6	17.0	50.0
Green Ext Time (p_c), s	0.0	0.7	0.2	7.9	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Future Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	154	901	143	110	1473	275	143	549	99	286	956	143
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	1732	274	136	1578	294	223	900	374	387	1103	464
Arrive On Green	0.10	0.40	0.40	0.08	0.37	0.37	0.08	0.26	0.26	0.13	0.31	0.31
Sat Flow, veh/h	1757	4373	691	1757	4261	794	1757	3505	1456	1757	3505	1473
Grp Volume(v), veh/h	154	691	353	110	1160	588	143	549	99	286	956	143
Grp Sat Flow(s),veh/h/ln	1757	1679	1706	1757	1679	1697	1757	1752	1456	1757	1752	1473
Q Serve(g_s), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Cycle Q Clear(g_c), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Prop In Lane	1.00		0.40	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	1330	676	136	1244	629	223	900	374	387	1103	464
V/C Ratio(X)	0.85	0.52	0.52	0.81	0.93	0.94	0.64	0.61	0.26	0.74	0.87	0.31
Avail Cap(c_a), veh/h	209	1330	676	224	1257	635	225	900	374	407	1103	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	27.0	27.0	53.4	35.6	35.6	31.7	38.5	34.8	26.9	37.9	30.5
Incr Delay (d2), s/veh	24.3	0.4	0.7	10.8	12.5	21.2	5.9	3.1	1.7	6.6	9.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	8.6	8.9	3.9	20.2	22.0	3.7	8.2	2.7	7.2	16.0	3.7
LnGrp Delay(d), s/veh	76.1	27.3	27.7	64.2	48.0	56.8	37.6	41.5	36.5	33.5	47.1	32.3
LnGrp LOS	E	C	C	E	D	E	D	D	D	C	D	C
Approach Vol, veh/h		1198			1858			791			1385	
Approach Delay, s/veh		33.7			51.8			40.2			42.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	34.2	13.1	50.6	12.9	41.0	16.1	47.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	15.0	43.0	9.0	37.0	14.0	44.0
Max Q Clear Time (g_c+I1), s	15.5	18.2	9.2	20.5	9.0	32.2	12.1	41.2
Green Ext Time (p_c), s	0.1	2.8	0.1	7.0	0.0	2.7	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Future Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	232	895	147	32	1516	274	74	179	11	326	358	211
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	2249	368	40	1674	302	306	1226	75	449	1282	565
Arrive On Green	0.15	0.51	0.51	0.02	0.39	0.39	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1774	4395	719	1774	4324	779	839	3385	206	1187	3539	1560
Grp Volume(v), veh/h	232	689	353	32	1188	602	74	93	97	326	358	211
Grp Sat Flow(s),veh/h/ln	1774	1695	1724	1774	1695	1712	839	1770	1822	1187	1770	1560
Q Serve(g_s), s	14.9	14.5	14.6	2.1	38.3	38.6	8.0	4.1	4.2	29.6	8.3	11.6
Cycle Q Clear(g_c), s	14.9	14.5	14.6	2.1	38.3	38.6	16.3	4.1	4.2	33.8	8.3	11.6
Prop In Lane	1.00		0.42	1.00		0.45	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	261	1735	882	40	1313	663	306	641	660	449	1282	565
V/C Ratio(X)	0.89	0.40	0.40	0.80	0.90	0.91	0.24	0.15	0.15	0.73	0.28	0.37
Avail Cap(c_a), veh/h	306	1754	892	92	1345	679	306	641	660	449	1282	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	17.4	17.4	56.4	33.5	33.6	32.0	24.9	24.9	36.3	26.2	27.3
Incr Delay (d2), s/veh	23.3	0.1	0.3	28.7	8.8	16.0	1.9	0.5	0.5	9.8	0.5	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	7.0	1.3	19.4	21.2	2.0	2.1	2.2	10.9	4.2	5.3
LnGrp Delay(d), s/veh	71.9	17.5	17.7	85.1	42.3	49.6	33.9	25.4	25.4	46.1	26.8	29.2
LnGrp LOS	E	B	B	F	D	D	C	C	C	D	C	C
Approach Vol, veh/h		1274			1822			264			895	
Approach Delay, s/veh		27.5			45.5			27.8			34.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		46.0	6.6	63.3		46.0	21.1	48.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		42.0	6.0	60.0		42.0	20.0	46.0
Max Q Clear Time (g_c+I1), s		18.3	4.1	16.6		35.8	16.9	40.6
Green Ext Time (p_c), s		1.4	0.0	8.1		2.3	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Future Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5027		1787	5054		1785	3574	1568	1781	3574	1573
Flt Permitted	0.95	1.00		0.95	1.00		0.30	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)	1787	5027		1787	5054		568	3574	1568	948	3574	1573
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	968	138	128	1394	138	106	340	43	106	649	287
RTOR Reduction (vph)	0	15	0	0	9	0	0	0	25	0	0	169
Lane Group Flow (vph)	106	1091	0	128	1523	0	106	340	18	106	649	118
Confl. Peds. (#/hr)	6		3	3		6	2		3	3		2
Confl. Bikes (#/hr)			3			2			2			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7			7				2			2	
Permitted Phases		8			8		2		2	2		2
Actuated Green, G (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Effective Green, g (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Actuated g/C Ratio	0.11	0.38		0.11	0.38		0.41	0.41	0.41	0.41	0.41	0.41
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	199	1888		199	1899		232	1465	642	388	1465	644
v/s Ratio Prot	0.06			c0.07				0.10			0.18	
v/s Ratio Perm		0.22			c0.30		c0.19		0.01	0.11		0.07
v/c Ratio	0.53	0.58		0.64	0.80		0.46	0.23	0.03	0.27	0.44	0.18
Uniform Delay, d1	49.1	29.1		49.8	32.7		25.1	22.5	20.6	23.0	24.9	22.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	0.4		6.9	2.5		6.4	0.4	0.1	1.7	1.0	0.6
Delay (s)	51.8	29.6		56.7	35.2		31.4	22.9	20.7	24.7	25.9	22.7
Level of Service	D	C		E	D		C	C	C	C	C	C
Approach Delay (s/veh)		31.5			36.8			24.6			24.9	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	40.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	210	590	0	940	610	0
Future Vol, veh/h	210	590	0	940	610	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	236	663	0	1056	685	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1213	343	-	0	-	0
Stage 1	685	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	-	-
Pot Cap-1 Maneuver	~ 170	~ 644	0	-	-	0
Stage 1	454	-	0	-	-	0
Stage 2	548	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 170	~ 644	-	-	-	-
Mov Cap-2 Maneuver	~ 170	-	-	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	118.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	170	644	-
HCM Lane V/C Ratio	-	1.388	1.029	-
HCM Control Delay (s/veh)	-	257.9	68.5	-
HCM Lane LOS	-	F	F	-
HCM 95th %tile Q(veh)	-	14.4	17	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Future Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	12	12	25	358	12	284	12	580	160	284	1012	12
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	127	217	462	530	449	334	2238	985	468	2238	996
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	282	442	755	1344	1845	1561	543	3505	1542	709	3505	1559
Grp Volume(v), veh/h	49	0	0	358	12	284	12	580	160	284	1012	12
Grp Sat Flow(s),veh/h/ln	1479	0	0	1344	1845	1561	543	1752	1542	709	1752	1559
Q Serve(g_s), s	0.0	0.0	0.0	24.7	0.5	17.1	1.2	7.7	4.5	31.3	15.9	0.3
Cycle Q Clear(g_c), s	2.3	0.0	0.0	27.0	0.5	17.1	17.1	7.7	4.5	39.1	15.9	0.3
Prop In Lane	0.24		0.51	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	467	0	0	462	530	449	334	2238	985	468	2238	996
V/C Ratio(X)	0.11	0.00	0.00	0.78	0.02	0.63	0.04	0.26	0.16	0.61	0.45	0.01
Avail Cap(c_a), veh/h	625	0	0	610	734	621	334	2238	985	468	2238	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	36.8	27.6	33.5	14.3	8.5	7.9	16.9	9.9	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	4.5	0.0	1.5	0.2	0.3	0.4	5.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	10.8	0.3	7.5	0.2	3.8	2.0	6.8	7.8	0.1
LnGrp Delay(d), s/veh	28.4	0.0	0.0	41.3	27.6	35.0	14.5	8.7	8.2	22.7	10.6	7.1
LnGrp LOS	C			D	C	D	B	A	A	C	B	A
Approach Vol, veh/h		49			654			752			1308	
Approach Delay, s/veh		28.4			38.3			8.7			13.2	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		35.1		73.0		35.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		43.0		69.0		43.0
Max Q Clear Time (g_c+I1), s		19.1		4.3		41.1		29.0
Green Ext Time (p_c), s		5.1		0.3		11.3		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.8

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	370	30	250	820	60	150
Future Vol, veh/h	370	30	250	820	60	150
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	425	34	287	943	69	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	459	0	1488	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	1046	-
Critical Hdwy	-	-	4.12	-	6.82	-
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	-
Pot Cap-1 Maneuver	-	-	1105	-	116	0
Stage 1	-	-	-	-	618	0
Stage 2	-	-	-	-	302	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1105	-	86	-
Mov Cap-2 Maneuver	-	-	-	-	86	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	223	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	2.2	133
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	86	-	1105	-
HCM Lane V/C Ratio	-	-	0.802	-	0.26	-
HCM Control Delay (s/veh)	-	-	133	0	9.4	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4.1	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Future Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	1359	196	141	1489	163	163	228	130	217	272	33
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	111	1734	250	174	1966	215	198	692	304	255	806	359
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.11	0.20	0.20	0.15	0.23	0.23
Sat Flow, veh/h	1757	4437	640	1757	4608	504	1757	3505	1539	1757	3505	1562
Grp Volume(v), veh/h	87	1028	527	141	1085	567	163	228	130	217	272	33
Grp Sat Flow(s),veh/h/ln	1757	1679	1720	1757	1679	1755	1757	1752	1539	1757	1752	1562
Q Serve(g_s), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Cycle Q Clear(g_c), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Prop In Lane	1.00		0.37	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	1312	672	174	1432	749	198	692	304	255	806	359
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.76	0.76	0.82	0.33	0.43	0.85	0.34	0.09
Avail Cap(c_a), veh/h	220	1579	809	331	1790	936	349	692	304	441	806	359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	25.6	25.6	42.2	23.2	23.2	41.5	33.0	33.7	39.9	30.7	29.0
Incr Delay (d2), s/veh	11.1	2.2	4.2	8.6	1.5	2.8	8.3	1.3	4.4	7.8	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	12.3	12.9	4.1	12.3	13.2	4.7	2.7	3.4	6.2	3.1	0.7
LnGrp Delay(d), s/veh	55.3	27.8	29.8	50.7	24.7	26.1	49.8	34.2	38.0	47.6	31.9	29.5
LnGrp LOS	E	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1642			1793			521			522	
Approach Delay, s/veh		29.9			27.2			40.0			38.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	22.9	13.5	41.4	14.8	26.0	10.1	44.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	19.0	22.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	13.5	9.1	9.5	27.7	10.7	8.2	6.7	28.2
Green Ext Time (p_c), s	0.4	1.1	0.2	9.6	0.2	1.4	0.1	12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Future Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	61	235	163	61	337	204	61	378	61	235	827	92
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	78	418	277	78	441	262	394	1647	718	622	2423	268
Arrive On Green	0.05	0.21	0.21	0.05	0.21	0.21	0.03	0.47	0.47	0.09	0.53	0.53
Sat Flow, veh/h	1740	1986	1318	1740	2097	1244	1740	3471	1514	1740	4551	504
Grp Volume(v), veh/h	61	204	194	61	278	263	61	378	61	235	603	316
Grp Sat Flow(s),veh/h/ln	1740	1736	1568	1740	1736	1605	1740	1736	1514	1740	1663	1729
Q Serve(g_s), s	3.1	9.5	10.0	3.1	13.6	14.0	1.6	5.8	2.0	5.8	9.3	9.4
Cycle Q Clear(g_c), s	3.1	9.5	10.0	3.1	13.6	14.0	1.6	5.8	2.0	5.8	9.3	9.4
Prop In Lane	1.00		0.84	1.00		0.78	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	78	365	330	78	365	338	394	1647	718	622	1770	921
V/C Ratio(X)	0.78	0.56	0.59	0.78	0.76	0.78	0.15	0.23	0.08	0.38	0.34	0.34
Avail Cap(c_a), veh/h	251	674	609	251	674	623	488	1647	718	943	1770	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	31.9	32.1	42.6	33.5	33.6	11.4	14.0	13.0	9.2	12.0	12.1
Incr Delay (d2), s/veh	15.2	1.3	1.7	15.2	3.3	3.9	0.2	0.3	0.2	0.4	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.7	4.5	1.8	6.8	6.5	0.8	2.9	0.9	2.8	4.4	4.7
LnGrp Delay(d), s/veh	57.8	33.2	33.7	57.8	36.8	37.5	11.5	14.3	13.2	9.6	12.6	13.1
LnGrp LOS	E	C	C	E	D	D	B	B	B	A	B	B
Approach Vol, veh/h		459			602			500			1154	
Approach Delay, s/veh		36.7			39.2			13.8			12.1	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	46.8	8.1	23.0	7.1	52.0	8.1	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	25.0	31.0	13.0	35.0	8.0	48.0	13.0	35.0
Max Q Clear Time (g_c+I1), s	7.8	7.8	5.1	12.0	3.6	11.4	5.1	16.0
Green Ext Time (p_c), s	0.6	2.7	0.1	2.2	0.0	7.4	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Future Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	715	1845	1543	928	1845	1528	561	3505	1528	778	3505	1530
Grp Volume(v), veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Grp Sat Flow(s),veh/h/ln	715	1845	1543	928	1845	1528	561	1752	1528	778	1752	1530
Q Serve(g_s), s	5.1	16.7	5.0	23.0	30.7	9.6	13.3	10.2	2.4	29.1	17.2	4.6
Cycle Q Clear(g_c), s	35.8	16.7	5.0	39.7	30.7	9.6	30.4	10.2	2.4	39.4	17.2	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
V/C Ratio(X)	0.23	0.49	0.17	0.68	0.78	0.31	0.31	0.30	0.08	0.59	0.45	0.15
Avail Cap(c_a), veh/h	168	761	636	311	761	630	288	1927	840	421	1927	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	27.4	23.8	42.6	31.8	25.2	24.8	14.1	12.3	24.7	15.7	12.8
Incr Delay (d2), s/veh	0.8	0.5	0.1	5.1	5.0	0.3	2.8	0.4	0.2	5.9	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.6	2.2	6.3	16.6	4.1	2.3	5.0	1.0	6.9	8.5	2.0
LnGrp Delay(d), s/veh	48.3	28.0	24.0	47.7	36.7	25.5	27.6	14.5	12.5	30.6	16.4	13.2
LnGrp LOS	D	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		483			922			730			1236	
Approach Delay, s/veh		28.6			36.8			15.9			18.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		68.0		48.4		68.0		48.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		64.0		48.0		64.0		48.0
Max Q Clear Time (g_c+I1), s		32.4		37.8		41.4		41.7
Green Ext Time (p_c), s		5.2		1.8		8.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	10	350	270	430	770	40
Future Vol, veh/h	10	350	270	430	770	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	393	303	483	865	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1713	433	910	0	-	0
Stage 1	865	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	81	571	744	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	48	571	744	-	-	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	221	-	-	-	-	-
Stage 2	380	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	26.3	5.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	744	-	48	571	-	-
HCM Lane V/C Ratio	0.408	-	0.234	0.689	-	-
HCM Control Delay (s/veh)	13.1	-	101.6	24.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2	-	0.8	5.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Future Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	41	557	227	247	1031	52	258	660	186	72	979	72
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	52	623	246	276	1491	75	288	1657	728	92	1267	555
Arrive On Green	0.03	0.18	0.18	0.16	0.30	0.30	0.16	0.47	0.47	0.05	0.36	0.36
Sat Flow, veh/h	1757	3535	1398	1757	4905	247	1757	3505	1540	1757	3505	1536
Grp Volume(v), veh/h	41	528	256	247	705	378	258	660	186	72	979	72
Grp Sat Flow(s),veh/h/ln	1757	1679	1575	1757	1679	1795	1757	1752	1540	1757	1752	1536
Q Serve(g_s), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Cycle Q Clear(g_c), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Prop In Lane	1.00		0.89	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	592	278	276	1021	546	288	1657	728	92	1267	555
V/C Ratio(X)	0.79	0.89	0.92	0.89	0.69	0.69	0.90	0.40	0.26	0.78	0.77	0.13
Avail Cap(c_a), veh/h	108	592	278	325	1021	546	341	1657	728	155	1267	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	45.7	45.9	46.9	34.8	34.8	46.5	19.4	17.9	53.1	32.1	24.3
Incr Delay (d2), s/veh	22.3	15.8	33.9	23.0	2.0	3.7	22.6	0.7	0.8	13.4	4.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.4	10.5	9.4	10.0	11.0	9.8	6.9	3.7	2.6	14.4	1.6
LnGrp Delay(d), s/veh	77.0	61.4	79.8	69.8	36.8	38.5	69.1	20.1	18.8	66.5	36.7	24.7
LnGrp LOS	E	E	E	E	D	D	E	C	B	E	D	C
Approach Vol, veh/h		825			1330			1104			1123	
Approach Delay, s/veh		67.9			43.4			31.3			37.9	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	57.6	21.9	24.0	22.6	45.0	7.4	38.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	53.0	21.0	20.0	22.0	41.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	6.6	15.9	17.6	20.1	18.3	30.1	4.6	23.0
Green Ext Time (p_c), s	0.0	5.5	0.2	0.0	0.3	4.8	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Future Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	98	87	196	98	141	87	163	1022	43	43	1337	109
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	28	443	44	38	443	191	2043	891	55	1771	769
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.58	0.58	0.03	0.51	0.51
Sat Flow, veh/h	0	99	1565	0	133	1565	1757	3505	1528	1757	3505	1521
Grp Volume(v), veh/h	185	0	196	239	0	87	163	1022	43	43	1337	109
Grp Sat Flow(s),veh/h/ln	99	0	1565	133	0	1565	1757	1752	1528	1757	1752	1521
Q Serve(g_s), s	0.0	0.0	12.0	0.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Cycle Q Clear(g_c), s	33.0	0.0	12.0	33.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Prop In Lane	0.53		1.00	0.41		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	443	81	0	443	191	2043	891	55	1771	769
V/C Ratio(X)	2.46	0.00	0.44	2.94	0.00	0.20	0.85	0.50	0.05	0.78	0.76	0.14
Avail Cap(c_a), veh/h	75	0	443	81	0	443	256	2043	891	105	1771	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	34.3	43.6	0.0	31.8	51.0	14.3	10.4	56.1	23.1	15.4
Incr Delay (d2), s/veh	693.8	0.0	0.7	907.6	0.0	0.2	18.2	0.9	0.1	21.1	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	0.0	5.2	23.1	0.0	2.1	6.1	9.9	0.6	1.7	17.8	2.0
LnGrp Delay(d), s/veh	740.1	0.0	35.0	951.2	0.0	32.0	69.2	15.2	10.5	77.2	26.1	15.8
LnGrp LOS	F		C	F		C	E	B	B	E	C	B
Approach Vol, veh/h		381			326			1228			1489	
Approach Delay, s/veh		377.4			705.9			22.2			26.9	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	72.0		37.0	16.7	62.9		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	68.0		33.0	17.0	58.0		33.0
Max Q Clear Time (g_c+I1), s	4.8	22.0		35.0	12.6	37.6		35.0
Green Ext Time (p_c), s	0.0	8.5		0.0	0.1	9.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		128.8
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Future Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
Arrive On Green	0.07	0.22	0.22	0.15	0.31	0.31	0.10	0.42	0.42	0.07	0.39	0.39
Sat Flow, veh/h	1757	3505	1526	1757	3505	1531	1757	3505	1534	1757	3505	1528
Grp Volume(v), veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Grp Sat Flow(s),veh/h/ln	1757	1752	1526	1757	1752	1531	1757	1752	1534	1757	1752	1528
Q Serve(g_s), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Cycle Q Clear(g_c), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
V/C Ratio(X)	0.90	1.00	0.24	1.04	0.89	0.40	1.02	0.62	0.10	0.81	1.00	0.16
Avail Cap(c_a), veh/h	117	789	343	264	1081	472	176	1464	641	205	1373	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	46.5	38.1	51.0	39.5	32.7	54.0	27.4	21.2	54.7	36.4	23.7
Incr Delay (d2), s/veh	52.5	32.2	0.4	66.2	9.1	0.5	72.9	2.0	0.3	12.1	23.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	16.6	2.3	13.6	16.4	5.0	9.4	12.1	1.3	3.9	27.1	2.1
LnGrp Delay(d), s/veh	108.0	78.7	38.5	117.2	48.6	33.3	127.1	29.4	21.5	66.8	59.9	24.2
LnGrp LOS	F	F	D	F	D	C	F	C	C	E	E	C
Approach Vol, veh/h		978			1421			1147			1568	
Approach Delay, s/veh		78.4			59.8			44.2			58.2	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	54.1	22.0	31.0	16.0	51.0	12.0	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	45.0	18.0	27.0	12.0	47.0	8.0	37.0
Max Q Clear Time (g_c+I1), s	9.1	26.3	20.0	29.0	14.0	48.7	9.1	33.2
Green Ext Time (p_c), s	0.1	5.9	0.0	0.0	0.0	0.0	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Future Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	71	101	141	131	162	91	899	0	101	1485	20
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	156	139	175	313	280	117	1962	878	129	2901	39
Arrive On Green	0.01	0.09	0.09	0.10	0.18	0.18	0.07	0.57	0.00	0.07	0.57	0.57
Sat Flow, veh/h	1740	1736	1553	1740	1736	1553	1740	3471	1553	1740	5070	68
Grp Volume(v), veh/h	10	71	101	141	131	162	91	899	0	101	974	531
Grp Sat Flow(s),veh/h/ln	1740	1736	1553	1740	1736	1553	1740	1736	1553	1740	1663	1814
Q Serve(g_s), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Cycle Q Clear(g_c), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	17	156	139	175	313	280	117	1962	878	129	1903	1038
V/C Ratio(X)	0.59	0.46	0.73	0.81	0.42	0.58	0.78	0.46	0.00	0.79	0.51	0.51
Avail Cap(c_a), veh/h	74	296	265	371	592	530	278	1962	878	278	1903	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	40.5	41.6	41.3	34.1	35.2	43.1	12.0	0.0	42.7	12.1	12.1
Incr Delay (d2), s/veh	28.2	2.1	7.0	8.4	0.9	1.9	10.7	0.8	0.0	10.0	1.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.8	2.8	4.0	3.1	4.0	2.7	7.0	0.0	2.9	7.8	8.8
LnGrp Delay(d), s/veh	74.5	42.6	48.5	49.7	35.0	37.0	53.8	12.7	0.0	52.7	13.1	13.9
LnGrp LOS	E	D	D	D	C	D	D	B		D	B	B
Approach Vol, veh/h		182			434			990			1606	
Approach Delay, s/veh		47.6			40.5			16.5			15.9	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	57.0	13.4	12.4	10.3	57.6	4.9	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	53.0	20.0	16.0	15.0	53.0	4.0	32.0
Max Q Clear Time (g_c+I1), s	7.4	16.2	9.4	7.9	6.8	18.6	2.5	11.0
Green Ext Time (p_c), s	0.1	6.7	0.2	0.5	0.1	12.2	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Future Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	11	11	87	22	11	11	109	1011	33	22	1652	54
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	62	44	173	74	26	173	136	2599	1137	31	3413	112
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.08	0.76	0.76	0.02	0.70	0.70
Sat Flow, veh/h	96	394	1534	157	230	1534	1723	3438	1504	1723	4909	160
Grp Volume(v), veh/h	22	0	87	33	0	11	109	1011	33	22	1108	598
Grp Sat Flow(s),veh/h/ln	490	0	1534	387	0	1534	1723	1719	1504	1723	1647	1777
Q Serve(g_s), s	0.1	0.0	5.6	1.2	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Cycle Q Clear(g_c), s	10.6	0.0	5.6	11.1	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Prop In Lane	0.50		1.00	0.67		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	106	0	173	100	0	173	136	2599	1137	31	2289	1235
V/C Ratio(X)	0.21	0.00	0.50	0.33	0.00	0.06	0.80	0.39	0.03	0.71	0.48	0.48
Avail Cap(c_a), veh/h	224	0	290	207	0	290	326	2599	1137	130	2289	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	44.2	46.3	0.0	41.9	48.0	4.5	3.2	51.7	7.4	7.4
Incr Delay (d2), s/veh	1.0	0.0	2.2	1.9	0.0	0.2	10.5	0.4	0.0	26.2	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.5	1.0	0.0	0.3	3.5	5.2	0.3	0.9	7.6	8.4
LnGrp Delay(d), s/veh	43.5	0.0	46.4	48.2	0.0	42.1	58.5	4.9	3.3	77.9	8.1	8.8
LnGrp LOS	D		D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		109			44			1153			1728	
Approach Delay, s/veh		45.8			46.7			9.9			9.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	84.0		16.5	12.4	77.5		16.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	80.0		20.0	20.0	68.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	12.8		12.6	8.6	18.4		13.1
Green Ext Time (p_c), s	0.0	8.5		0.1	0.2	16.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	730	110	150	1100	120	90
Future Volume (veh/h)	730	110	150	1100	120	90
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1900	1827	1827	1827	1827
Adj Flow Rate, veh/h	785	118	161	1183	129	97
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1211	181	207	2263	750	670
Arrive On Green	0.28	0.28	0.12	0.45	0.43	0.43
Sat Flow, veh/h	4530	651	1740	5152	1740	1553
Grp Volume(v), veh/h	596	307	161	1183	129	97
Grp Sat Flow(s),veh/h/ln	1663	1691	1740	1663	1740	1553
Q Serve(g_s), s	11.0	11.1	6.3	11.8	3.2	2.6
Cycle Q Clear(g_c), s	11.0	11.1	6.3	11.8	3.2	2.6
Prop In Lane		0.38	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	923	469	207	2263	750	670
V/C Ratio(X)	0.65	0.65	0.78	0.52	0.17	0.14
Avail Cap(c_a), veh/h	2199	1118	800	5879	750	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.2	29.8	13.6	12.2	12.0
Incr Delay (d2), s/veh	0.8	1.5	6.2	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	5.4	3.4	5.4	1.6	1.2
LnGrp Delay(d), s/veh	22.9	23.7	36.0	13.8	12.6	12.5
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	903			1344	226	
Approach Delay, s/veh	23.2			16.5	12.6	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		34.0	12.3	23.3				35.6
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		30.0	32.0	46.0				82.0
Max Q Clear Time (g_c+I1), s		5.2	8.3	13.1				13.8
Green Ext Time (p_c), s		0.6	0.4	6.2				10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	23.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Future Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	24	200	35	59	188	165	35	129	94	106	153	35
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	18.7	37.8	13.6	14.6
HCM LOS	C	E	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	14%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	85%	46%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	15%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	110	80	20	200	350	90	130	30
LT Vol	30	0	0	20	0	50	90	0	0
Through Vol	0	110	0	0	170	160	0	130	0
RT Vol	0	0	80	0	30	140	0	0	30
Lane Flow Rate	35	129	94	24	235	412	106	153	35
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.088	0.304	0.202	0.057	0.527	0.837	0.26	0.354	0.074
Departure Headway (Hd)	8.973	8.452	7.723	8.686	8.068	7.431	8.832	8.324	7.596
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	401	427	466	414	449	490	408	434	474
Service Time	6.701	6.18	5.451	6.395	5.778	5.131	6.559	6.039	5.311
HCM Lane V/C Ratio	0.087	0.302	0.202	0.058	0.523	0.841	0.26	0.353	0.074
HCM Control Delay, s/veh	12.6	14.8	12.4	11.9	19.4	37.8	14.6	15.5	10.9
HCM Lane LOS	B	B	B	B	C	E	B	C	B
HCM 95th-tile Q	0.3	1.3	0.7	0.2	3	8.3	1	1.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Future Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	96	904	117	43	1160	85	43	32	21	74	43	74
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	125	1681	736	55	1542	676	75	36	517	78	28	510
Arrive On Green	0.07	0.48	0.48	0.03	0.44	0.44	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1757	3505	1534	1757	3505	1535	0	110	1565	0	86	1545
Grp Volume(v), veh/h	96	904	117	43	1160	85	75	0	21	117	0	74
Grp Sat Flow(s),veh/h/ln	1757	1752	1534	1757	1752	1535	110	0	1565	86	0	1545
Q Serve(g_s), s	4.1	13.7	3.3	1.8	21.0	2.5	0.0	0.0	0.7	0.0	0.0	2.5
Cycle Q Clear(g_c), s	4.1	13.7	3.3	1.8	21.0	2.5	25.0	0.0	0.7	25.0	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	0.57		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	125	1681	736	55	1542	676	111	0	517	106	0	510
V/C Ratio(X)	0.77	0.54	0.16	0.78	0.75	0.13	0.67	0.00	0.04	1.10	0.00	0.14
Avail Cap(c_a), veh/h	395	3427	1500	209	3056	1339	111	0	517	106	0	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.5	13.8	11.1	36.4	17.7	12.6	26.1	0.0	17.2	31.3	0.0	17.8
Incr Delay (d2), s/veh	9.5	0.3	0.1	20.5	0.8	0.1	28.2	0.0	0.1	118.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.6	1.4	1.2	10.2	1.1	2.4	0.0	0.3	5.7	0.0	1.2
LnGrp Delay(d), s/veh	44.1	14.1	11.2	56.9	18.5	12.6	54.3	0.0	17.3	149.5	0.0	18.4
LnGrp LOS	D	B	B	E	B	B	D		B	F		B
Approach Vol, veh/h		1117			1288			96			191	
Approach Delay, s/veh		16.3			19.4			46.2			98.7	
Approach LOS		B			B			D			F	

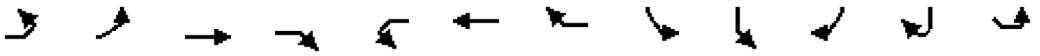
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	6.4	40.3		29.0	9.4	37.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	9.0	74.0		25.0	17.0	66.0
Max Q Clear Time (g_c+I1), s		27.0	3.8	15.7		27.0	6.1	23.0
Green Ext Time (p_c), s		0.0	0.0	7.6		0.0	0.1	10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	190	0	140	20	1030	130	100	1150	10
Future Volume (veh/h)	10	10	10	190	0	140	20	1030	130	100	1150	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	11	11	11	211	0	156	22	1144	144	111	1278	11
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	105	102	81	313	0	325	31	2079	909	139	2293	1003
Arrive On Green	0.21	0.21	0.21	0.21	0.00	0.21	0.02	0.60	0.60	0.08	0.66	0.66
Sat Flow, veh/h	286	488	387	1356	0	1551	1740	3471	1518	1740	3471	1518
Grp Volume(v), veh/h	33	0	0	211	0	156	22	1144	144	111	1278	11
Grp Sat Flow(s),veh/h/ln	1161	0	0	1356	0	1551	1740	1736	1518	1740	1736	1518
Q Serve(g_s), s	0.1	0.0	0.0	9.7	0.0	9.5	1.4	21.2	4.5	6.7	21.3	0.3
Cycle Q Clear(g_c), s	9.6	0.0	0.0	19.3	0.0	9.5	1.4	21.2	4.5	6.7	21.3	0.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	0	0	313	0	325	31	2079	909	139	2293	1003
V/C Ratio(X)	0.11	0.00	0.00	0.67	0.00	0.48	0.71	0.55	0.16	0.80	0.56	0.01
Avail Cap(c_a), veh/h	418	0	0	432	0	462	81	2079	909	275	2293	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	0.0	42.1	0.0	37.3	52.5	12.9	9.6	48.6	9.8	6.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	2.5	0.0	1.1	25.1	1.1	0.4	10.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	6.3	0.0	4.2	0.9	10.3	2.0	3.6	10.4	0.1
LnGrp Delay(d), s/veh	34.5	0.0	0.0	44.6	0.0	38.4	77.6	14.0	9.9	58.8	10.8	6.3
LnGrp LOS	C			D		D	E	B	A	E	B	A
Approach Vol, veh/h		33			367			1310			1400	
Approach Delay, s/veh		34.5			42.0			14.6			14.6	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.6	68.4		26.6	5.9	75.0		26.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	59.0		32.0	5.0	71.0		32.0
Max Q Clear Time (g_c+I1), s	8.7	23.2		11.6	3.4	23.3		21.3
Green Ext Time (p_c), s	0.1	10.1		0.1	0.0	11.8		1.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		18.0
HCM 2010 LOS		B



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL2
Lane Configurations												
Traffic Volume (vph)	60	90	490	90	10	1220	80	10	10	10	10	20
Future Volume (vph)	60	90	490	90	10	1220	80	10	10	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%			15%			
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00	1.00		
Frpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	0.98		
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Frt		1.00	0.98		1.00	0.99			1.00	0.85		
Flt Protected		0.95	1.00		0.95	1.00			0.95	1.00		
Satd. Flow (prot)		1787	5006		1787	5088			1653	1453		
Flt Permitted		0.95	1.00		0.40	1.00			0.95	1.00		
Satd. Flow (perm)		1787	5006		760	5088			1653	1453		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	97	527	97	11	1312	86	11	11	11	11	22
RTOR Reduction (vph)	0	0	19	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	162	605	0	11	1398	0	0	22	22	0	0
Confl. Peds. (#/hr)									2	3		
Confl. Bikes (#/hr)				1								
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Prot	Perm		Perm
Protected Phases	7	7	4		3	8		9	9			
Permitted Phases					8					10		6
Actuated Green, G (s)		12.9	49.3		37.8	37.1			1.4	3.0		
Effective Green, g (s)		12.9	49.3		37.8	37.1			1.4	3.0		
Actuated g/C Ratio		0.12	0.47		0.36	0.36			0.01	0.03		
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0	3.0		
Lane Grp Cap (vph)		221	2370		282	1813			22	41		
v/s Ratio Prot		c0.09	0.12		0.00	c0.27			c0.01			
v/s Ratio Perm					0.01					c0.02		
v/c Ratio		0.73	0.26		0.04	0.77			1.00	0.54		
Uniform Delay, d1		43.9	16.4		21.2	29.7			51.4	49.9		
Progression Factor		1.00	1.00		1.00	1.00			1.00	1.00		
Incremental Delay, d2		11.8	0.1		0.1	2.1			191.9	12.8		
Delay (s)		55.8	16.5		21.3	31.8			243.2	62.7		
Level of Service		E	B		C	C			F	E		
Approach Delay (s/veh)			24.6			31.7			153.0			
Approach LOS			C			C			F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	104.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NWR2
Lane Configurations							
Traffic Volume (vph)	40	120	150	180	210	40	10
Future Volume (vph)	40	120	150	180	210	40	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1787	1881	1599	1787	1881	1599	
Flt Permitted	0.48	1.00	1.00	0.63	1.00	1.00	
Satd. Flow (perm)	900	1881	1599	1194	1881	1599	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	43	129	161	194	226	43	11
RTOR Reduction (vph)	0	0	115	0	0	39	0
Lane Group Flow (vph)	65	129	46	194	226	15	0
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		6			2		
Permitted Phases	6		6	2		2	
Actuated Green, G (s)	29.7	29.7	29.7	29.7	29.7	29.7	
Effective Green, g (s)	29.7	29.7	29.7	29.7	29.7	29.7	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	256	536	456	340	536	456	
v/s Ratio Prot		0.07			0.12		
v/s Ratio Perm	0.07		0.03	c0.16		0.01	
v/c Ratio	0.25	0.24	0.10	0.57	0.42	0.03	
Uniform Delay, d1	28.7	28.5	27.4	31.8	30.2	26.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.2	0.1	6.8	2.4	0.1	
Delay (s)	29.2	28.8	27.5	38.6	32.6	27.0	
Level of Service	C	C	C	D	C	C	
Approach Delay (s/veh)		28.3			34.4		
Approach LOS		C			C		

Intersection Summary

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	520	10	10	730	10	10	10	100	10	10	30
Future Volume (Veh/h)	10	520	10	10	730	10	10	10	100	10	10	30
Sign Control		Free			Free			Stop			Yield	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	11	584	11	11	820	11	11	11	112	11	11	34
Pedestrians		1						3			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		4.0						4.0			4.0	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					499							
pX, platoon unblocked												
vC, conflicting volume	833			598			1087	1470	301	1281	1470	419
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	833			598			1087	1470	301	1281	1470	419
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			93	91	84	88	91	94
cM capacity (veh/h)	801			979			147	124	697	94	124	585

Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	NE 2	SW 1
Volume Total	303	303	421	421	59	75	56
Volume Left	11	0	11	0	11	0	11
Volume Right	0	11	0	11	37	75	34
cSH	801	1700	979	1700	273	697	213
Volume to Capacity	0.01	0.18	0.01	0.25	0.22	0.11	0.26
Queue Length 95th (ft)	1	0	1	0	20	9	26
Control Delay (s/veh)	0.5	0.0	0.4	0.0	21.8	10.8	27.9
Lane LOS	A		A		C	B	D
Approach Delay (s/veh)	0.2		0.2		15.7		27.9
Approach LOS					C		D

Intersection Summary				
Average Delay	2.4			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	320	1570	50	10	2490	350	180	20	360	220	50	20
Future Volume (vph)	320	1570	50	10	2490	350	180	20	360	220	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.87	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5055		1766	5085	1583	1766	1514	1485	1770	1863	1558
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.72	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	3433	5055		1766	5085	1583	1342	1514	1485	839	1863	1558
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	348	1707	54	11	2707	380	196	22	391	239	54	22
RTOR Reduction (vph)	0	3	0	0	0	123	0	90	90	0	0	16
Lane Group Flow (vph)	348	1758	0	11	2707	257	196	120	113	239	54	6
Confl. Peds. (#/hr)			6	6			1					1
Confl. Bikes (#/hr)			1						1			2
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	12.0	78.4		0.8	67.2	67.2	32.0	32.0	32.0	32.0	32.0	32.0
Effective Green, g (s)	12.0	78.4		0.8	67.2	67.2	32.0	32.0	32.0	32.0	32.0	32.0
Actuated g/C Ratio	0.10	0.64		0.01	0.55	0.55	0.26	0.26	0.26	0.26	0.26	0.26
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	334	3216		11	2773	863	348	393	385	217	483	404
v/s Ratio Prot	c0.10	0.35		0.01	c0.53			0.08			0.03	
v/s Ratio Perm						0.16	0.15		0.08	c0.28		0.00
v/c Ratio	1.04	0.55		1.00	0.98	0.30	0.56	0.30	0.29	1.10	0.11	0.01
Uniform Delay, d1	55.6	12.5		61.2	27.2	15.2	39.5	36.7	36.5	45.6	34.8	33.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	60.6	0.7		271.4	12.4	0.9	2.1	0.4	0.4	90.9	0.1	0.0
Delay (s)	116.2	13.2		332.6	39.6	16.1	41.6	37.1	37.0	136.5	34.9	33.9
Level of Service	F	B		F	D	B	D	D	D	F	C	C
Approach Delay (s/veh)		30.2			37.7			38.5			111.9	
Approach LOS		C			D			D			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.0	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	91.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	60	220	80	190	20	640	630	10	10	1010	480
Future Volume (veh/h)	220	60	220	80	190	20	640	630	10	10	1010	480
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	229	62	229	83	198	21	667	656	0	10	1052	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	291	305	259	106	230	24	753	2237	1001	17	1497	670
Arrive On Green	0.08	0.16	0.16	0.06	0.14	0.14	0.22	0.63	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3476	1881	1596	1792	1672	177	3476	3574	1599	1792	3574	1599
Grp Volume(v), veh/h	229	62	229	83	0	219	667	656	0	10	1052	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1596	1792	0	1849	1738	1787	1599	1792	1787	1599
Q Serve(g_s), s	7.2	3.2	15.7	5.1	0.0	13.0	20.8	9.4	0.0	0.6	27.1	0.0
Cycle Q Clear(g_c), s	7.2	3.2	15.7	5.1	0.0	13.0	20.8	9.4	0.0	0.6	27.1	0.0
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	305	259	106	0	255	753	2237	1001	17	1497	670
V/C Ratio(X)	0.79	0.20	0.88	0.78	0.00	0.86	0.89	0.29	0.00	0.58	0.70	0.00
Avail Cap(c_a), veh/h	342	320	271	176	0	314	901	2237	1001	64	1497	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.3	40.6	45.8	51.9	0.0	47.2	42.5	9.6	0.0	55.2	26.8	0.0
Incr Delay (d2), s/veh	10.0	0.3	26.6	11.8	0.0	17.8	9.3	0.3	0.0	27.8	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.7	8.8	2.9	0.0	7.9	11.0	4.8	0.0	0.4	13.9	0.0
LnGrp Delay(d), s/veh	60.3	40.9	72.5	63.7	0.0	64.9	51.7	9.9	0.0	83.0	29.5	0.0
LnGrp LOS	E	D	E	E		E	D	A		F	C	
Approach Vol, veh/h		520			302			1323			1062	
Approach Delay, s/veh		63.3			64.6			31.0			30.0	
Approach LOS		E			E			C			C	

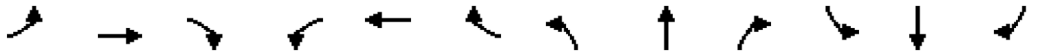
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	74.0	10.6	22.1	28.2	50.8	13.4	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	70.0	11.0	19.0	29.0	45.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	2.6	11.4	7.1	17.7	22.8	29.1	9.2	15.0
Green Ext Time (p_c), s	0.0	4.8	0.1	0.2	1.4	6.4	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.1
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	360	1310	290	180	1830	300	120	730	540	440	670	70
Future Volume (veh/h)	360	1310	290	180	1830	300	120	730	540	440	670	70
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	383	1394	309	191	1947	319	128	777	574	468	713	74
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	444	2112	644	220	2088	721	186	726	522	442	1306	135
Arrive On Green	0.13	0.41	0.41	0.12	0.41	0.41	0.05	0.20	0.20	0.13	0.28	0.28
Sat Flow, veh/h	3476	5136	1568	1792	5136	1564	3476	3574	1565	3476	4722	486
Grp Volume(v), veh/h	383	1394	309	191	1947	319	128	777	574	468	515	272
Grp Sat Flow(s),veh/h/ln	1738	1712	1568	1792	1712	1564	1738	1787	1565	1738	1712	1784
Q Serve(g_s), s	12.8	25.9	17.1	12.4	42.8	16.3	4.3	24.0	24.0	15.0	15.1	15.3
Cycle Q Clear(g_c), s	12.8	25.9	17.1	12.4	42.8	16.3	4.3	24.0	24.0	15.0	15.1	15.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	444	2112	644	220	2088	721	186	726	522	442	947	494
V/C Ratio(X)	0.86	0.66	0.48	0.87	0.93	0.44	0.69	1.07	1.10	1.06	0.54	0.55
Avail Cap(c_a), veh/h	500	2112	644	288	2088	721	353	726	522	442	947	494
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.5	28.1	25.5	50.8	33.5	21.6	54.9	47.0	39.6	51.5	36.4	36.4
Incr Delay (d2), s/veh	13.3	1.6	2.5	19.0	9.2	2.0	4.4	53.6	69.2	59.6	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.9	12.6	7.8	7.3	22.0	7.5	2.2	17.2	27.0	10.8	7.2	7.7
LnGrp Delay(d), s/veh	63.8	29.7	28.0	69.8	42.7	23.6	59.3	100.6	108.8	111.1	37.0	37.7
LnGrp LOS	E	C	C	E	D	C	E	F	F	F	D	D
Approach Vol, veh/h		2086			2457			1479			1255	
Approach Delay, s/veh		35.7			42.3			100.2			64.8	
Approach LOS		D			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	52.5	19.0	28.0	19.1	52.0	10.3	36.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	15.0	24.0	17.0	48.0	12.0	27.0
Max Q Clear Time (g_c+I1), s	14.4	27.9	17.0	26.0	14.8	44.8	6.3	17.3
Green Ext Time (p_c), s	0.2	9.7	0.0	0.0	0.3	2.9	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.1
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	10	10	70	20	1730	10	40	2590	210
Future Volume (veh/h)	110	20	20	10	10	70	20	1730	10	40	2590	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	115	21	21	10	10	73	21	1802	10	42	2698	219
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	4	291	46	32	295	30	3543	20	54	3322	262
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.68	0.68	0.03	0.69	0.69
Sat Flow, veh/h	0	23	1548	0	169	1568	1774	5218	29	1774	4798	378
Grp Volume(v), veh/h	136	0	21	20	0	73	21	1171	641	42	1883	1034
Grp Sat Flow(s),veh/h/ln	23	0	1548	169	0	1568	1774	1695	1857	1774	1695	1786
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	4.6	1.4	19.8	19.8	2.8	44.9	49.5
Cycle Q Clear(g_c), s	22.0	0.0	1.3	22.0	0.0	4.6	1.4	19.8	19.8	2.8	44.9	49.5
Prop In Lane	0.85		1.00	0.50		1.00	1.00		0.02	1.00		0.21
Lane Grp Cap(c), veh/h	61	0	291	78	0	295	30	2302	1261	54	2347	1237
V/C Ratio(X)	2.22	0.00	0.07	0.26	0.00	0.25	0.70	0.51	0.51	0.78	0.80	0.84
Avail Cap(c_a), veh/h	61	0	291	78	0	295	76	2302	1261	106	2347	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	39.1	40.7	0.0	40.4	57.2	9.2	9.2	56.3	12.4	13.1
Incr Delay (d2), s/veh	599.8	0.0	0.1	1.7	0.0	0.4	25.4	0.8	1.5	21.3	3.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	0.0	0.6	0.6	0.0	2.0	0.9	9.4	10.5	1.7	21.6	26.5
LnGrp Delay(d), s/veh	656.7	0.0	39.2	42.4	0.0	40.9	82.6	10.0	10.7	77.6	15.4	20.0
LnGrp LOS	F		D	D		D	F	B	B	E	B	B
Approach Vol, veh/h		157			93			1833			2959	
Approach Delay, s/veh		574.1			41.2			11.1			17.9	
Approach LOS		F			D			B			B	

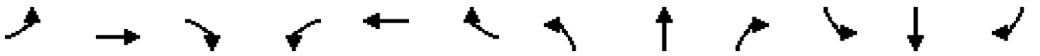
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	83.4		26.0	6.0	85.0		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	79.0		22.0	5.0	81.0		22.0
Max Q Clear Time (g_c+I1), s	4.8	21.8		24.0	3.4	51.5		24.0
Green Ext Time (p_c), s	0.0	20.1		0.0	0.0	26.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	520	70	60	570	120	90	1340	60	100	1970	420
Future Volume (veh/h)	370	520	70	60	570	120	90	1340	60	100	1970	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	378	531	71	61	582	122	92	1367	61	102	2010	429
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	976	433	103	640	279	115	2574	115	154	2220	458
Arrive On Green	0.12	0.28	0.28	0.03	0.18	0.18	0.03	0.52	0.52	0.04	0.53	0.53
Sat Flow, veh/h	3442	3539	1570	3442	3539	1542	3442	4990	223	3442	4211	869
Grp Volume(v), veh/h	378	531	71	61	582	122	92	929	499	102	1604	835
Grp Sat Flow(s),veh/h/ln	1721	1770	1570	1721	1770	1542	1721	1695	1822	1721	1695	1690
Q Serve(g_s), s	12.9	15.3	4.1	2.1	19.3	8.4	3.2	21.8	21.8	3.5	50.8	55.2
Cycle Q Clear(g_c), s	12.9	15.3	4.1	2.1	19.3	8.4	3.2	21.8	21.8	3.5	50.8	55.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.51
Lane Grp Cap(c), veh/h	430	976	433	103	640	279	115	1749	940	154	1787	891
V/C Ratio(X)	0.88	0.54	0.16	0.60	0.91	0.44	0.80	0.53	0.53	0.66	0.90	0.94
Avail Cap(c_a), veh/h	432	976	433	144	651	284	115	1749	940	202	1787	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	36.9	32.8	57.3	48.0	43.6	57.4	19.3	19.3	56.2	25.4	26.4
Incr Delay (d2), s/veh	18.4	0.6	0.2	5.4	16.8	1.1	31.5	1.2	2.1	5.1	7.6	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	7.5	1.8	1.1	10.9	3.7	2.0	10.5	11.5	1.8	25.5	30.0
LnGrp Delay(d), s/veh	69.8	37.5	33.0	62.7	64.8	44.6	88.8	20.4	21.4	61.3	33.0	44.7
LnGrp LOS	E	D	C	E	E	D	F	C	C	E	C	D
Approach Vol, veh/h		980			765			1520			2541	
Approach Delay, s/veh		49.6			61.4			24.9			38.0	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	65.7	7.6	37.0	8.0	67.0	18.9	25.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	60.0	5.0	32.0	4.0	63.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	5.5	23.8	4.1	17.3	5.2	57.2	14.9	21.3
Green Ext Time (p_c), s	0.0	12.0	0.0	3.1	0.0	5.4	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.6
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	750	380	760	710	10	180	190	370	10	160	10
Future Volume (vph)	10	750	380	760	710	10	180	190	370	10	160	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1787	3574	1571	3467	3566		1698	1779	1579		1860	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.54	0.97	1.00		0.98	
Satd. Flow (perm)	1787	3574	1571	3467	3566		971	1730	1579		1829	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	789	400	800	747	11	189	200	389	11	168	11
RTOR Reduction (vph)	0	0	204	0	1	0	0	0	265	0	2	0
Lane Group Flow (vph)	11	789	196	800	757	0	170	219	124	0	188	0
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			2						1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	0.7	34.7	34.7	30.6	64.6		36.3	36.3	36.3		36.3	
Effective Green, g (s)	0.7	34.7	34.7	30.6	64.6		36.3	36.3	36.3		36.3	
Actuated g/C Ratio	0.01	0.31	0.31	0.27	0.57		0.32	0.32	0.32		0.32	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	11	1091	479	933	2027		310	552	504		584	
v/s Ratio Prot	0.01	c0.22		c0.23	0.21							
v/s Ratio Perm			0.13				c0.18	0.13	0.08		0.10	
v/c Ratio	1.00	0.72	0.41	0.86	0.37		0.55	0.40	0.25		0.32	
Uniform Delay, d1	56.5	35.2	31.3	39.4	13.4		31.9	30.1	28.5		29.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	271.4	2.4	0.6	7.9	0.1		6.8	2.1	1.2		1.5	
Delay (s)	327.8	37.6	31.9	47.3	13.5		38.7	32.2	29.7		30.8	
Level of Service	F	D	C	D	B		D	C	C		C	
Approach Delay (s/veh)		38.3			30.9			32.4			30.8	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	113.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	150	10	30	10	650	80	100	1160	10
Future Volume (veh/h)	10	10	10	150	10	30	10	650	80	100	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	11	11	163	11	33	11	707	87	109	1261	11
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	185	169	285	255	13	39	19	2202	963	138	2441	1067
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.01	0.62	0.62	0.08	0.69	0.69
Sat Flow, veh/h	726	928	1568	1055	71	214	1774	3539	1548	1774	3539	1548
Grp Volume(v), veh/h	22	0	11	207	0	0	11	707	87	109	1261	11
Grp Sat Flow(s),veh/h/ln	1655	0	1568	1340	0	0	1774	1770	1548	1774	1770	1548
Q Serve(g_s), s	0.0	0.0	0.6	14.4	0.0	0.0	0.6	9.6	2.3	6.1	17.4	0.2
Cycle Q Clear(g_c), s	1.0	0.0	0.6	15.4	0.0	0.0	0.6	9.6	2.3	6.1	17.4	0.2
Prop In Lane	0.50		1.00	0.79		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	354	0	285	307	0	0	19	2202	963	138	2441	1067
V/C Ratio(X)	0.06	0.00	0.04	0.67	0.00	0.00	0.59	0.32	0.09	0.79	0.52	0.01
Avail Cap(c_a), veh/h	594	0	525	524	0	0	70	2202	963	332	2441	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	34.2	40.8	0.0	0.0	50.0	9.1	7.7	46.0	7.6	4.9
Incr Delay (d2), s/veh	0.1	0.0	0.1	2.6	0.0	0.0	26.3	0.4	0.2	9.5	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	5.9	0.0	0.0	0.4	4.7	1.0	3.4	8.7	0.1
LnGrp Delay(d), s/veh	34.5	0.0	34.3	43.3	0.0	0.0	76.3	9.4	7.9	55.5	8.4	4.9
LnGrp LOS	C		C	D			E	A	A	E	A	A
Approach Vol, veh/h		33			207			805			1381	
Approach Delay, s/veh		34.4			43.3			10.2			12.1	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.9	67.2		22.4	5.1	74.0		22.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	19.0	55.0		34.0	4.0	70.0		34.0
Max Q Clear Time (g_c+I1), s	8.1	11.6		3.0	2.6	19.4		17.4
Green Ext Time (p_c), s	0.2	5.6		0.1	0.0	12.2		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	360	150	30	230	10	70	280	80	30	540	490
Future Volume (veh/h)	360	360	150	30	230	10	70	280	80	30	540	490
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	396	396	165	33	253	11	77	308	88	33	593	538
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	504	733	301	207	362	16	307	1975	862	582	1975	870
Arrive On Green	0.22	0.30	0.30	0.02	0.10	0.10	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1792	2460	1011	1792	3490	151	501	3574	1560	993	3574	1575
Grp Volume(v), veh/h	396	286	275	33	129	135	77	308	88	33	593	538
Grp Sat Flow(s),veh/h/ln	1792	1787	1683	1792	1787	1853	501	1787	1560	993	1787	1575
Q Serve(g_s), s	17.9	12.8	13.1	1.6	6.7	6.7	9.4	4.0	2.6	1.6	8.5	22.3
Cycle Q Clear(g_c), s	17.9	12.8	13.1	1.6	6.7	6.7	17.9	4.0	2.6	5.7	8.5	22.3
Prop In Lane	1.00		0.60	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	532	502	207	185	192	307	1975	862	582	1975	870
V/C Ratio(X)	0.79	0.54	0.55	0.16	0.70	0.70	0.25	0.16	0.10	0.06	0.30	0.62
Avail Cap(c_a), veh/h	804	950	895	238	335	348	307	1975	862	582	1975	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	28.1	28.2	37.1	41.5	41.5	16.3	10.5	10.2	11.9	11.5	14.6
Incr Delay (d2), s/veh	2.7	0.8	0.9	0.4	4.6	4.6	2.0	0.2	0.2	0.2	0.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	6.5	6.2	0.8	3.5	3.7	1.4	2.0	1.2	0.5	4.3	10.3
LnGrp Delay(d), s/veh	29.9	29.0	29.2	37.5	46.2	46.1	18.3	10.7	10.4	12.1	11.9	17.9
LnGrp LOS	C	C	C	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		957			297			473			1164	
Approach Delay, s/veh		29.4			45.2			11.9			14.7	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	6.3	32.6		57.0	25.0	14.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	4.0	51.0		53.0	37.0	18.0
Max Q Clear Time (g_c+I1), s		19.9	3.6	15.1		24.3	19.9	8.7
Green Ext Time (p_c), s		3.4	0.0	3.5		6.7	1.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	550	110	340	600	10	170	30	190	30	60	20
Future Volume (veh/h)	10	550	110	340	600	10	170	30	190	30	60	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	11	618	124	382	674	11	191	34	213	34	67	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	302	780	156	455	1558	25	590	651	543	441	734	229
Arrive On Green	0.01	0.26	0.26	0.18	0.43	0.43	0.10	0.35	0.35	0.03	0.28	0.28
Sat Flow, veh/h	1792	2959	592	1792	3597	59	1792	1881	1569	1792	2667	832
Grp Volume(v), veh/h	11	373	369	382	335	350	191	34	213	34	44	45
Grp Sat Flow(s),veh/h/ln	1792	1787	1764	1792	1787	1869	1792	1881	1569	1792	1787	1712
Q Serve(g_s), s	0.4	16.8	16.9	12.5	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Cycle Q Clear(g_c), s	0.4	16.8	16.9	12.5	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Prop In Lane	1.00		0.34	1.00		0.03	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	302	471	465	455	774	809	590	651	543	441	492	471
V/C Ratio(X)	0.04	0.79	0.79	0.84	0.43	0.43	0.32	0.05	0.39	0.08	0.09	0.10
Avail Cap(c_a), veh/h	366	721	712	856	1360	1422	686	651	543	477	492	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	29.7	29.7	18.8	17.1	17.2	17.9	18.9	21.5	21.6	23.4	23.4
Incr Delay (d2), s/veh	0.0	3.4	3.5	4.2	0.4	0.4	0.3	0.2	2.1	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	8.7	8.7	6.7	5.7	5.9	3.1	0.6	4.1	0.6	0.8	0.9
LnGrp Delay(d), s/veh	23.0	33.1	33.2	23.0	17.5	17.5	18.2	19.0	23.6	21.7	23.7	23.8
LnGrp LOS	C	C	C	C	B	B	B	B	C	C	C	C
Approach Vol, veh/h		753			1067			438			123	
Approach Delay, s/veh		33.0			19.5			20.9			23.2	
Approach LOS		C			B			C			C	

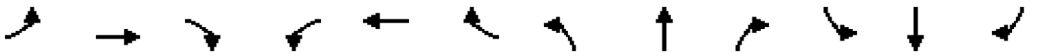
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	34.0	19.6	26.9	12.4	27.9	4.9	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	30.0	35.0	35.0	13.0	21.0	4.0	66.0
Max Q Clear Time (g_c+I1), s	3.2	10.9	14.5	18.9	8.3	3.7	2.4	13.3
Green Ext Time (p_c), s	0.0	0.8	1.1	4.0	0.2	0.3	0.0	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	340	80	40	410	140	100	160	30	220	320	160
Future Volume (veh/h)	120	340	80	40	410	140	100	160	30	220	320	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	136	386	91	45	466	159	114	182	34	250	364	182
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	1051	459	57	599	203	146	952	174	296	924	454
Arrive On Green	0.10	0.30	0.30	0.03	0.23	0.23	0.08	0.32	0.32	0.17	0.40	0.40
Sat Flow, veh/h	1774	3539	1547	1774	2580	873	1774	2979	545	1774	2286	1123
Grp Volume(v), veh/h	136	386	91	45	318	307	114	107	109	250	280	266
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1770	1683	1774	1770	1755	1774	1770	1640
Q Serve(g_s), s	6.5	7.5	3.8	2.2	14.6	14.8	5.5	3.8	3.9	11.8	9.7	10.0
Cycle Q Clear(g_c), s	6.5	7.5	3.8	2.2	14.6	14.8	5.5	3.8	3.9	11.8	9.7	10.0
Prop In Lane	1.00		1.00	1.00		0.52	1.00		0.31	1.00		0.68
Lane Grp Cap(c), veh/h	172	1051	459	57	411	391	146	566	561	296	715	662
V/C Ratio(X)	0.79	0.37	0.20	0.79	0.77	0.78	0.78	0.19	0.20	0.85	0.39	0.40
Avail Cap(c_a), veh/h	389	1797	786	164	674	641	348	566	561	635	715	662
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.3	24.0	22.7	41.6	31.1	31.2	39.0	21.3	21.4	35.0	18.3	18.4
Incr Delay (d2), s/veh	7.9	0.2	0.2	21.1	3.2	3.5	8.7	0.7	0.8	6.6	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.7	1.6	1.4	7.4	7.3	3.0	2.0	2.0	6.3	5.1	4.8
LnGrp Delay(d), s/veh	46.2	24.2	23.0	62.8	34.3	34.7	47.7	22.1	22.2	41.6	19.9	20.2
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	B	C
Approach Vol, veh/h		613			670			330			796	
Approach Delay, s/veh		28.9			36.4			31.0			26.8	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	31.7	6.8	29.7	11.1	39.0	12.4	24.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	21.0	8.0	44.0	17.0	35.0	19.0	33.0
Max Q Clear Time (g_c+I1), s	13.8	5.9	4.2	9.5	7.5	12.0	8.5	16.8
Green Ext Time (p_c), s	0.6	0.9	0.0	2.8	0.2	3.2	0.2	3.3

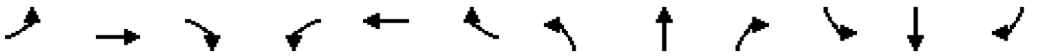
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Future Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		0.99		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1610	3319		1770	3539	1572		3426		1681	1747	2739
Flt Permitted	0.95	0.64		0.95	1.00	1.00		0.89		0.95	0.47	1.00
Satd. Flow (perm)	1610	2163		1770	3539	1572		3057		1681	823	2739
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	478	33	65	283	228	43	467	87	478	293	761
RTOR Reduction (vph)	0	3	0	0	0	49	0	11	0	0	0	39
Lane Group Flow (vph)	328	669	0	65	283	179	0	586	0	378	393	722
Confl. Peds. (#/hr)	2		2	2		2	1		12	12		1
Confl. Bikes (#/hr)			3			2			9			2
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Effective Green, g (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Actuated g/C Ratio	0.23	0.43		0.03	0.16	0.40		0.24		0.24	0.51	0.74
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	368	1184		59	575	679		728		397	637	2111
v/s Ratio Prot	c0.20	0.13		0.04	0.08	0.06				c0.22	0.15	0.08
v/s Ratio Perm		c0.11				0.05		c0.19			0.17	0.19
v/c Ratio	0.89	0.57		1.10	0.49	0.26		0.80		0.95	0.62	0.34
Uniform Delay, d1	44.8	26.1		58.0	45.7	24.2		43.1		45.1	21.1	5.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	22.6	0.6		148.0	0.7	0.2		9.2		32.9	1.8	0.1
Delay (s)	67.4	26.7		206.0	46.4	24.4		52.3		78.0	22.9	5.6
Level of Service	E	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		40.1			55.7			52.3			27.9	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Future Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1753	3539	1567	1770	3520		1681	1689	1552	1740	1723	
Flt Permitted	0.52	1.00	1.00	0.17	1.00		0.95	0.61	1.00	0.95	1.00	
Satd. Flow (perm)	967	3539	1567	317	3520		1681	1086	1552	1740	1723	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	10	542	604	552	375	10	385	10	510	10	10	10
RTOR Reduction (vph)	0	0	270	0	2	0	0	0	46	0	8	0
Lane Group Flow (vph)	10	542	334	552	383	0	196	199	464	10	12	0
Confl. Peds. (#/hr)	9		2	2		9			11	11		
Confl. Bikes (#/hr)			3			4			4			
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Effective Green, g (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Actuated g/C Ratio	0.21	0.21	0.36	0.54	0.49		0.16	0.39	0.65	0.01	0.20	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	209	727	625	599	1741		266	522	1059	10	343	
v/s Ratio Prot	0.00	0.15	c0.08	c0.27	0.11		c0.12	0.06	c0.13	0.01	0.01	
v/s Ratio Perm	0.01		0.13	c0.22				0.09	0.17			
v/c Ratio	0.05	0.75	0.53	0.92	0.22		0.74	0.38	0.44	1.00	0.03	
Uniform Delay, d1	35.4	42.3	28.5	28.4	16.2		45.4	24.6	9.8	56.4	36.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	4.2	0.9	19.7	0.1		10.2	0.5	0.3	284.6	0.2	
Delay (s)	35.5	46.4	29.3	48.1	16.3		55.6	25.0	10.1	341.0	36.8	
Level of Service	D	D	C	D	B		E	C	B	F	D	
Approach Delay (s/veh)		37.4			35.1			23.3			138.2	
Approach LOS		D			D			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Future Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	140	333	140	871	613	570	75	602	183	183	882	54
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	321	132	814	840	724	131	623	189	200	930	57
Arrive On Green	0.08	0.13	0.13	0.43	0.47	0.47	0.03	0.23	0.23	0.08	0.28	0.28
Sat Flow, veh/h	1774	2410	989	1774	1770	1525	1774	2671	810	1774	3383	207
Grp Volume(v), veh/h	140	242	231	871	613	570	75	398	387	183	461	475
Grp Sat Flow(s),veh/h/ln	1774	1770	1629	1774	1770	1525	1774	1770	1711	1774	1770	1821
Q Serve(g_s), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Cycle Q Clear(g_c), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Prop In Lane	1.00		0.61	1.00		1.00	1.00		0.47	1.00		0.11
Lane Grp Cap(c), veh/h	270	236	217	814	840	724	131	413	399	200	487	501
V/C Ratio(X)	0.52	1.03	1.06	1.07	0.73	0.79	0.57	0.97	0.97	0.92	0.95	0.95
Avail Cap(c_a), veh/h	300	236	217	814	840	724	131	413	399	200	487	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	52.0	52.0	28.9	25.3	26.4	36.8	45.5	45.6	34.9	42.7	42.7
Incr Delay (d2), s/veh	1.5	65.7	78.4	52.0	3.2	5.8	6.0	36.4	37.7	41.1	29.7	29.2
Initial Q Delay(d3),s/veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	12.1	11.9	38.7	17.1	17.0	2.1	17.2	16.9	3.9	19.0	19.5
LnGrp Delay(d), s/veh	41.5	117.8	130.4	80.9	28.6	32.2	42.8	81.9	83.3	76.0	72.4	71.8
LnGrp LOS	D	F	F	F	C	C	D	F	F	E	E	E
Approach Vol, veh/h		613			2054			860			1119	
Approach Delay, s/veh		105.1			51.8			79.1			72.7	
Approach LOS		F			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	32.0	55.0	20.0	8.0	37.0	14.0	61.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	28.0	51.0	16.0	4.0	33.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	11.0	28.8	53.0	18.0	5.9	32.7	10.1	39.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.2	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1080	160	190	460	130	100	950	190	220	1140	140
Future Volume (veh/h)	230	1080	160	190	460	130	100	950	190	220	1140	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	247	1161	172	204	495	140	108	1022	204	237	1226	151
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	309	1269	188	260	1068	292	133	1283	673	266	1548	816
Arrive On Green	0.09	0.28	0.28	0.07	0.27	0.27	0.07	0.36	0.36	0.15	0.43	0.43
Sat Flow, veh/h	3476	4498	666	3476	3988	1091	1792	3574	1542	1792	3574	1555
Grp Volume(v), veh/h	247	884	449	204	423	212	108	1022	204	237	1226	151
Grp Sat Flow(s),veh/h/ln	1738	1712	1740	1738	1712	1655	1792	1787	1542	1792	1787	1555
Q Serve(g_s), s	8.2	29.4	29.4	6.8	12.1	12.7	7.0	30.2	10.2	15.3	34.9	6.1
Cycle Q Clear(g_c), s	8.2	29.4	29.4	6.8	12.1	12.7	7.0	30.2	10.2	15.3	34.9	6.1
Prop In Lane	1.00		0.38	1.00		0.66	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	966	491	260	917	443	133	1283	673	266	1548	816
V/C Ratio(X)	0.80	0.91	0.92	0.79	0.46	0.48	0.81	0.80	0.30	0.89	0.79	0.19
Avail Cap(c_a), veh/h	413	988	502	266	917	443	152	1283	673	304	1548	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	40.9	40.9	53.6	36.0	36.2	53.7	33.9	21.8	49.2	28.8	14.9
Incr Delay (d2), s/veh	7.8	12.5	21.2	14.1	0.4	0.8	24.6	5.2	1.2	24.4	4.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	15.5	17.0	3.8	5.8	5.9	4.4	15.8	4.6	9.4	18.1	2.7
LnGrp Delay(d), s/veh	60.5	53.4	62.1	67.7	36.4	37.0	78.3	39.1	22.9	73.6	33.1	15.4
LnGrp LOS	E	D	E	E	D	D	E	D	C	E	C	B
Approach Vol, veh/h		1580			839			1334			1614	
Approach Delay, s/veh		57.0			44.2			39.8			37.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	46.3	12.8	37.2	12.8	55.0	14.5	35.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	41.0	9.0	34.0	10.0	51.0	14.0	29.0
Max Q Clear Time (g_c+I1), s	17.3	32.2	8.8	31.4	9.0	36.9	10.2	14.7
Green Ext Time (p_c), s	0.2	4.8	0.0	1.8	0.0	7.7	0.3	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Future Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1129	280	634	871	75	97	806	495	118	914	269
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	731	2497	619	463	3124	970	75	1162	511	115	681	200
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.04	0.32	0.32	0.25	0.25	0.25
Sat Flow, veh/h	1156	4104	1018	745	5136	1594	1792	3574	1572	426	2724	800
Grp Volume(v), veh/h	258	942	467	634	871	75	97	806	495	118	599	584
Grp Sat Flow(s),veh/h/ln	578	1712	1698	373	1712	1594	1792	1787	1572	426	1787	1737
Q Serve(g_s), s	16.3	17.8	17.8	55.2	9.6	2.3	5.0	23.6	37.2	15.4	30.0	30.0
Cycle Q Clear(g_c), s	25.9	17.8	17.8	73.0	9.6	2.3	5.0	23.6	37.2	30.0	30.0	30.0
Prop In Lane	1.00		0.60	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
V/C Ratio(X)	0.35	0.45	0.45	1.37	0.28	0.08	1.30	0.69	0.97	1.03	1.34	1.35
Avail Cap(c_a), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	12.7	12.7	39.6	11.1	9.7	57.5	35.3	39.9	56.3	45.0	45.0
Incr Delay (d2), s/veh	0.3	0.2	0.3	180.2	0.0	0.0	203.9	3.4	32.8	91.9	167.7	170.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.4	8.4	19.2	4.5	1.0	6.7	12.2	20.7	6.7	35.6	34.9
LnGrp Delay(d), s/veh	17.5	12.9	13.0	219.7	11.1	9.7	261.4	38.7	72.7	148.7	212.7	215.1
LnGrp LOS	B	B	B	F	B	A	F	D	E	F	F	F
Approach Vol, veh/h		1667			1580			1398			1301	
Approach Delay, s/veh		13.6			94.8			66.2			208.0	
Approach LOS		B			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		43.0		77.0	9.0	34.0		77.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		39.0		73.0	5.0	30.0		73.0
Max Q Clear Time (g_c+I1), s		39.2		27.9	7.0	32.0		75.0
Green Ext Time (p_c), s		0.0		17.2	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		90.1
HCM 2010 LOS		F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	280	70	60	1020	1480	220
Future Volume (veh/h)	280	70	60	1020	1480	220
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	73	62	1062	1542	229
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	293	80	2630	2047	298
Arrive On Green	0.19	0.19	0.04	0.74	0.66	0.66
Sat Flow, veh/h	1774	1583	1774	3632	3184	450
Grp Volume(v), veh/h	292	73	62	1062	870	901
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1772
Q Serve(g_s), s	17.9	4.4	3.9	12.3	36.5	39.0
Cycle Q Clear(g_c), s	17.9	4.4	3.9	12.3	36.5	39.0
Prop In Lane	1.00	1.00	1.00			0.25
Lane Grp Cap(c), veh/h	329	293	80	2630	1172	1174
V/C Ratio(X)	0.89	0.25	0.78	0.40	0.74	0.77
Avail Cap(c_a), veh/h	461	411	111	2630	1172	1174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	38.9	52.8	5.3	12.5	12.9
Incr Delay (d2), s/veh	14.4	0.4	20.2	0.5	4.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.1	2.3	6.1	19.0	20.3
LnGrp Delay(d), s/veh	58.8	39.3	73.0	5.7	16.8	17.8
LnGrp LOS	E	D	E	A	B	B
Approach Vol, veh/h	365			1124	1771	
Approach Delay, s/veh	54.9			9.4	17.3	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		87.0		24.7	9.0	78.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		83.0		29.0	7.0	72.0		
Max Q Clear Time (g_c+I1), s		14.3		19.9	5.9	41.0		
Green Ext Time (p_c), s		9.4		0.8	0.0	16.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Future Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	250	783	0	0	674	0	11	152	22	630	0	424
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	450	1721	0	0	997	446	40	554	80	0	0	0
Arrive On Green	0.13	0.49	0.00	0.00	0.28	0.00	0.37	0.37	0.37	0.00	0.00	0.00
Sat Flow, veh/h	1774	3632	0	0	3632	1583	108	1488	215		0	
Grp Volume(v), veh/h	250	783	0	0	674	0	185	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1811	0	0			
Q Serve(g_s), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Cycle Q Clear(g_c), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.06		0.12			
Lane Grp Cap(c), veh/h	450	1721	0	0	997	446	674	0	0			
V/C Ratio(X)	0.56	0.46	0.00	0.00	0.68	0.00	0.27	0.00	0.00			
Avail Cap(c_a), veh/h	905	3574	0	0	1944	870	674	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.7	9.6	0.0	0.0	18.0	0.0	12.4	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.2	0.0	0.0	0.8	0.0	1.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	4.0	0.0	0.0	4.7	0.0	2.2	0.0	0.0			
LnGrp Delay(d), s/veh	12.7	9.8	0.0	0.0	18.8	0.0	13.4	0.0	0.0			
LnGrp LOS	B	A			B		B					
Approach Vol, veh/h		1033			674			185				
Approach Delay, s/veh		10.5			18.8			13.4				
Approach LOS		B			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		25.0		31.4			11.5	19.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		57.0			22.0	31.0
Max Q Clear Time (g_c+I1), s		6.0		10.2			7.1	11.5
Green Ext Time (p_c), s		0.8		6.3			0.6	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Future Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	155	742	196	124	1423	52	443	505	93	93	670	361
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	174	1229	321	150	1481	54	478	1474	657	142	704	379
Arrive On Green	0.10	0.31	0.31	0.09	0.30	0.30	0.14	0.42	0.42	0.04	0.32	0.32
Sat Flow, veh/h	1740	3920	1023	1740	4938	180	3375	3471	1546	3375	2165	1166
Grp Volume(v), veh/h	155	628	310	124	958	517	443	505	93	93	537	494
Grp Sat Flow(s),veh/h/ln	1740	1663	1618	1740	1663	1793	1688	1736	1546	1688	1736	1596
Q Serve(g_s), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Cycle Q Clear(g_c), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Prop In Lane	1.00		0.63	1.00		0.10	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	174	1043	507	150	998	538	478	1474	657	142	564	519
V/C Ratio(X)	0.89	0.60	0.61	0.82	0.96	0.96	0.93	0.34	0.14	0.65	0.95	0.95
Avail Cap(c_a), veh/h	174	1043	507	232	998	538	478	1474	657	197	564	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	34.8	35.0	53.9	41.3	41.3	50.9	23.2	21.1	56.6	39.6	39.6
Incr Delay (d2), s/veh	39.0	1.0	2.1	13.1	19.6	29.0	24.2	0.6	0.5	5.0	27.7	29.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	8.9	9.0	4.6	18.3	21.1	8.9	5.7	2.0	1.6	21.6	20.1
LnGrp Delay(d), s/veh	92.4	35.8	37.1	67.0	60.9	70.3	75.1	23.9	21.6	61.6	67.3	68.9
LnGrp LOS	F	D	D	E	E	E	E	C	C	E	E	E
Approach Vol, veh/h		1093			1599			1041			1124	
Approach Delay, s/veh		44.2			64.4			45.5			67.6	
Approach LOS		D			E			D			E	

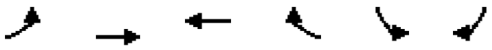
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	54.9	14.4	41.6	21.0	43.0	16.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	49.0	16.0	32.0	17.0	39.0	12.0	36.0
Max Q Clear Time (g_c+I1), s	5.3	13.8	10.4	21.5	17.6	38.3	12.6	36.0
Green Ext Time (p_c), s	0.0	3.6	0.1	4.3	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Future Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	74	695	179	242	1421	116	253	800	284	253	884	137
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	1176	596	272	1586	129	282	1095	719	282	1095	566
Arrive On Green	0.05	0.23	0.23	0.16	0.34	0.34	0.16	0.31	0.31	0.16	0.31	0.31
Sat Flow, veh/h	1757	5036	1477	1757	4734	386	1757	3505	1522	1757	3505	1544
Grp Volume(v), veh/h	74	695	179	242	1008	529	253	800	284	253	884	137
Grp Sat Flow(s),veh/h/ln	1757	1679	1477	1757	1679	1763	1757	1752	1522	1757	1752	1544
Q Serve(g_s), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Cycle Q Clear(g_c), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	1176	596	272	1125	591	282	1095	719	282	1095	566
V/C Ratio(X)	0.79	0.59	0.30	0.89	0.90	0.90	0.90	0.73	0.40	0.90	0.81	0.24
Avail Cap(c_a), veh/h	107	1176	596	351	1165	612	320	1095	719	320	1095	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	39.3	24.1	47.7	36.4	36.4	47.5	35.3	20.1	47.5	36.4	25.4
Incr Delay (d2), s/veh	28.5	0.8	0.3	19.5	9.1	15.5	24.7	4.3	1.6	24.7	6.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.6	4.0	9.0	16.7	18.6	9.8	12.0	6.2	9.8	13.9	3.2
LnGrp Delay(d), s/veh	82.3	40.1	24.4	67.2	45.5	51.9	72.1	39.6	21.7	72.1	42.9	26.4
LnGrp LOS	F	D	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		948			1779			1337			1274	
Approach Delay, s/veh		40.4			50.4			42.0			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	40.0	21.9	30.9	22.5	40.0	10.2	42.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	36.0	23.0	24.0	21.0	36.0	7.0	40.0
Max Q Clear Time (g_c+I1), s	18.3	25.4	17.6	16.1	18.3	28.7	6.8	34.9
Green Ext Time (p_c), s	0.2	4.6	0.3	3.1	0.2	3.5	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.7
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	320	850	730	500	100	100
Future Volume (vph)	320	850	730	500	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.95	1.00	1.00
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	0.96	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.96	1.00
Satd. Flow (prot)	1584	3195	3195	1362	3020	1301
Flt Permitted	0.33	1.00	1.00	1.00	0.96	1.00
Satd. Flow (perm)	556	3195	3195	1362	3020	1301
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	340	904	777	532	106	106
RTOR Reduction (vph)	0	0	0	172	30	52
Lane Group Flow (vph)	340	904	777	360	115	15
Confl. Peds. (#/hr)	11			11	1	
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	53.6	53.6	53.6	53.6	17.7	17.7
Effective Green, g (s)	53.6	53.6	53.6	53.6	17.7	17.7
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.22	0.22
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	375	2159	2159	920	674	290
v/s Ratio Prot		0.28	0.24		c0.04	
v/s Ratio Perm	c0.61			0.26		0.01
v/c Ratio	0.91	0.42	0.36	0.39	0.17	0.05
Uniform Delay, d1	10.8	5.8	5.5	5.7	24.9	24.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	24.7	0.1	0.1	0.3	0.6	0.3
Delay (s)	35.4	5.9	5.6	5.9	25.4	24.5
Level of Service	D	A	A	A	C	C
Approach Delay (s/veh)		14.0	5.7		25.1	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	79.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2.2

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	10	20	40	1400	1920	30
Future Vol, veh/h	10	20	40	1400	1920	30
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	100	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	10	21	41	1443	1979	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2787	994	2014	0	-	0
Stage 1	1983	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Critical Hdwy	6.88	6.98	4.18	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.34	2.24	-	-	-
Pot Cap-1 Maneuver	14	240	272	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	12	239	271	-	-	-
Mov Cap-2 Maneuver	12	-	-	-	-	-
Stage 1	77	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	219.4	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	271	-	12	239	-	-
HCM Lane V/C Ratio	0.152	-	0.859	0.086	-	-
HCM Control Delay (s/veh)	20.7	-	$ 615.3	21.5	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.5	-	1.9	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Future Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	21	830	64	74	1787	96	117	96	85	64	32	21
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	152	2629	202	363	2698	145	541	657	549	462	657	549
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	238	4760	365	614	4886	262	1329	1845	1543	1184	1845	1543
Grp Volume(v), veh/h	21	584	310	74	1227	656	117	96	85	64	32	21
Grp Sat Flow(s),veh/h/ln	238	1679	1769	614	1679	1791	1329	1845	1543	1184	1845	1543
Q Serve(g_s), s	6.0	8.2	8.3	6.5	22.5	22.6	5.5	3.1	3.3	3.4	1.0	0.8
Cycle Q Clear(g_c), s	28.5	8.2	8.3	14.8	22.5	22.6	6.5	3.1	3.3	6.5	1.0	0.8
Prop In Lane	1.00		0.21	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1854	977	363	1854	989	541	657	549	462	657	549
V/C Ratio(X)	0.14	0.32	0.32	0.20	0.66	0.66	0.22	0.15	0.15	0.14	0.05	0.04
Avail Cap(c_a), veh/h	242	3123	1645	595	3123	1665	541	657	549	462	657	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	10.6	10.6	14.6	13.8	13.8	20.5	19.1	19.1	21.2	18.4	18.3
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.3	0.4	0.8	0.9	0.5	0.6	0.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.8	4.1	1.1	10.5	11.3	2.2	1.7	1.5	1.2	0.5	0.3
LnGrp Delay(d), s/veh	24.3	10.7	10.8	14.9	14.2	14.6	21.4	19.5	19.7	21.9	18.5	18.4
LnGrp LOS	C	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		915			1957			298			117	
Approach Delay, s/veh		11.0			14.3			20.3			20.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		52.1		35.0		52.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		81.0		31.0		81.0
Max Q Clear Time (g_c+I1), s		8.5		30.5		8.5		24.6
Green Ext Time (p_c), s		1.2		7.5		0.4		23.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	110	10	10	10	10	500	10	60	870	60
Future Volume (veh/h)	110	10	110	10	10	10	10	500	10	60	870	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1854	1845	1863	1845	1845	1845	1845	1863
Adj Flow Rate, veh/h	128	12	128	12	12	12	12	581	12	70	1012	70
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	2
Cap, veh/h	60	3	453	47	32	449	20	1957	857	90	2098	948
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.01	0.56	0.56	0.05	0.60	0.60
Sat Flow, veh/h	0	11	1583	0	112	1568	1774	3505	1535	1757	3505	1583
Grp Volume(v), veh/h	140	0	128	24	0	12	12	581	12	70	1012	70
Grp Sat Flow(s),veh/h/ln	11	0	1583	112	0	1568	1774	1752	1535	1757	1752	1583
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	0.6	0.8	10.1	0.4	4.5	18.8	2.1
Cycle Q Clear(g_c), s	33.0	0.0	7.2	33.0	0.0	0.6	0.8	10.1	0.4	4.5	18.8	2.1
Prop In Lane	0.91		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	63	0	453	79	0	449	20	1957	857	90	2098	948
V/C Ratio(X)	2.23	0.00	0.28	0.30	0.00	0.03	0.61	0.30	0.01	0.78	0.48	0.07
Avail Cap(c_a), veh/h	63	0	453	79	0	449	92	1957	857	244	2098	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	31.9	33.9	0.0	29.6	56.8	13.5	11.3	54.0	13.1	9.7
Incr Delay (d2), s/veh	600.8	0.0	0.3	2.1	0.0	0.0	27.0	0.4	0.0	13.2	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	0.0	3.2	0.6	0.0	0.3	0.5	4.9	0.2	2.5	9.2	1.0
LnGrp Delay(d), s/veh	656.9	0.0	32.3	36.0	0.0	29.6	83.7	13.9	11.4	67.3	13.9	9.9
LnGrp LOS	F		C	D		C	F	B	B	E	B	A
Approach Vol, veh/h		268			36			605			1152	
Approach Delay, s/veh		358.6			33.9			15.2			16.9	
Approach LOS		F			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	68.4		37.0	5.3	73.0		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	59.0		33.0	6.0	69.0		33.0
Max Q Clear Time (g_c+I1), s	6.5	12.1		35.0	2.8	20.8		35.0
Green Ext Time (p_c), s	0.1	4.4		0.0	0.0	9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	61.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Future Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	11	11	114	57	11	11	45	375	45	11	545	11
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	31	326	55	6	315	137	1123	1112	40	1332	1116
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	0	149	1563	0	29	1510	143	1548	1534	13	1837	1539
Grp Volume(v), veh/h	22	0	114	68	0	11	420	0	45	556	0	11
Grp Sat Flow(s),veh/h/ln	149	0	1563	29	0	1510	1692	0	1534	1850	0	1539
Q Serve(g_s), s	0.0	0.0	7.5	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	25.0	0.0	7.5	25.0	0.0	0.7	9.6	0.0	1.0	14.0	0.0	0.2
Prop In Lane	0.50		1.00	0.84		1.00	0.11		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
V/C Ratio(X)	0.29	0.00	0.35	1.11	0.00	0.03	0.33	0.00	0.04	0.41	0.00	0.01
Avail Cap(c_a), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.3	0.0	40.6	57.6	0.0	37.9	5.9	0.0	4.7	6.5	0.0	4.6
Incr Delay (d2), s/veh	2.1	0.0	0.6	149.2	0.0	0.0	0.7	0.0	0.1	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.3	4.6	0.0	0.3	5.1	0.0	0.4	7.4	0.0	0.1
LnGrp Delay(d), s/veh	42.3	0.0	41.2	207.8	0.0	37.9	6.6	0.0	4.7	7.4	0.0	4.6
LnGrp LOS	D		D	F		D	A		A	A		A
Approach Vol, veh/h		136			79			465			567	
Approach Delay, s/veh		41.4			184.2			6.4			7.3	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0		29.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		87.0		25.0		87.0		25.0
Max Q Clear Time (g_c+I1), s		11.6		27.0		16.0		27.0
Green Ext Time (p_c), s		3.6		0.0		4.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Future Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	44	44	66	121	209	66	297	1275	44	33	1077	110
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	56	236	367	150	242	77	373	2101	72	42	1831	807
Arrive On Green	0.03	0.13	0.13	0.09	0.18	0.18	0.11	0.61	0.61	0.02	0.52	0.52
Sat Flow, veh/h	1757	1845	1528	1757	1333	421	3408	3454	119	1757	3505	1545
Grp Volume(v), veh/h	44	44	66	121	0	275	297	646	673	33	1077	110
Grp Sat Flow(s),veh/h/ln	1757	1845	1528	1757	0	1755	1704	1752	1820	1757	1752	1545
Q Serve(g_s), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Cycle Q Clear(g_c), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	56	236	367	150	0	319	373	1066	1107	42	1831	807
V/C Ratio(X)	0.79	0.19	0.18	0.80	0.00	0.86	0.80	0.61	0.61	0.79	0.59	0.14
Avail Cap(c_a), veh/h	119	338	452	271	0	474	559	1066	1107	102	1831	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.3	31.5	46.5	0.0	41.1	45.0	12.6	12.6	50.3	17.0	12.7
Incr Delay (d2), s/veh	21.1	0.4	0.2	9.6	0.0	10.3	4.8	2.6	2.5	27.7	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.1	1.5	3.8	0.0	8.6	4.4	12.1	12.5	1.3	11.0	1.7
LnGrp Delay(d), s/veh	70.9	40.7	31.7	56.1	0.0	51.4	49.7	15.2	15.1	78.0	18.4	13.1
LnGrp LOS	E	D	C	E		D	D	B	B	E	B	B
Approach Vol, veh/h		154			396			1616			1220	
Approach Delay, s/veh		45.5			52.9			21.5			19.6	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	67.0	12.9	17.3	15.3	58.1	7.3	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	63.0	16.0	19.0	17.0	52.0	7.0	28.0
Max Q Clear Time (g_c+I1), s	3.9	25.8	9.0	5.6	10.8	23.9	4.6	17.8
Green Ext Time (p_c), s	0.0	11.0	0.1	0.3	0.5	8.9	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	24.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Future Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	34	57	102	136	136	11	102	273	45	11	352	68
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	12.9	22.3	29.2	25.5
HCM LOS	B	C	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	38%	0%	50%	0%	3%	0%
Vol Thru, %	73%	0%	63%	0%	50%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	330	40	80	90	240	10	320	60
LT Vol	90	0	30	0	120	0	10	0
Through Vol	240	0	50	0	120	0	310	0
RT Vol	0	40	0	90	0	10	0	60
Lane Flow Rate	375	45	91	102	273	11	364	68
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.774	0.083	0.212	0.213	0.611	0.022	0.739	0.125
Departure Headway (Hd)	7.431	6.572	8.402	7.483	8.061	7.082	7.321	6.586
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	542	425	477	447	503	491	541
Service Time	5.212	4.353	6.201	5.281	5.846	4.865	5.103	4.368
HCM Lane V/C Ratio	0.775	0.083	0.214	0.214	0.611	0.022	0.741	0.126
HCM Control Delay, s/veh	31.5	10	13.5	12.3	22.8	10	28.3	10.3
HCM Lane LOS	D	A	B	B	C	A	D	B
HCM 95th-tile Q	6.8	0.3	0.8	0.8	4	0.1	6.1	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	640	130	70	870	220	160	530	70	180	730	290
Future Volume (veh/h)	210	640	130	70	870	220	160	530	70	180	730	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	228	696	141	76	946	239	174	576	76	196	793	315
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	234	1906	830	338	1906	850	177	1271	167	269	1430	640
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	476	3574	1557	660	3574	1594	512	3176	418	785	3574	1599
Grp Volume(v), veh/h	228	696	141	76	946	239	174	323	329	196	793	315
Grp Sat Flow(s),veh/h/ln	476	1787	1557	660	1787	1594	512	1787	1807	785	1787	1599
Q Serve(g_s), s	43.8	13.5	5.6	9.0	20.2	9.9	27.5	15.9	16.0	29.3	20.5	17.7
Cycle Q Clear(g_c), s	64.0	13.5	5.6	22.6	20.2	9.9	48.0	15.9	16.0	45.3	20.5	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	234	1906	830	338	1906	850	177	715	723	269	1430	640
V/C Ratio(X)	0.98	0.37	0.17	0.23	0.50	0.28	0.98	0.45	0.45	0.73	0.55	0.49
Avail Cap(c_a), veh/h	234	1906	830	338	1906	850	177	715	723	269	1430	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	16.2	14.4	22.8	17.8	15.4	50.8	26.4	26.4	43.0	27.8	26.9
Incr Delay (d2), s/veh	51.7	0.1	0.1	0.3	0.2	0.2	63.2	2.1	2.1	15.8	1.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	6.7	2.4	1.7	9.9	4.4	8.9	8.2	8.4	7.5	10.4	8.3
LnGrp Delay(d), s/veh	95.0	16.3	14.5	23.1	18.0	15.6	113.9	28.4	28.5	58.8	29.3	29.6
LnGrp LOS	F	B	B	C	B	B	F	C	C	E	C	C
Approach Vol, veh/h		1065			1261			826			1304	
Approach Delay, s/veh		32.9			17.8			46.5			33.8	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		52.0		68.0		52.0		68.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		48.0		64.0		48.0		64.0
Max Q Clear Time (g_c+I1), s		50.0		66.0		47.3		24.6
Green Ext Time (p_c), s		0.0		0.0		0.5		9.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	640	100	270	1090	100	180	850	210	100	1090	370
Future Volume (veh/h)	200	640	100	270	1090	100	180	850	210	100	1090	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1810
Adj Flow Rate, veh/h	211	674	105	284	1147	105	189	895	221	105	1147	389
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	215	876	135	311	1187	109	223	1112	274	129	1433	629
Arrive On Green	0.13	0.20	0.20	0.18	0.26	0.26	0.07	0.41	0.41	0.07	0.42	0.42
Sat Flow, veh/h	1723	4312	664	1723	4596	420	3343	2723	672	1723	3438	1509
Grp Volume(v), veh/h	211	513	266	284	822	430	189	565	551	105	1147	389
Grp Sat Flow(s),veh/h/ln	1723	1647	1683	1723	1647	1723	1672	1719	1676	1723	1719	1509
Q Serve(g_s), s	14.6	17.6	18.0	19.4	29.6	29.6	6.7	34.7	34.8	7.2	35.0	24.3
Cycle Q Clear(g_c), s	14.6	17.6	18.0	19.4	29.6	29.6	6.7	34.7	34.8	7.2	35.0	24.3
Prop In Lane	1.00		0.39	1.00		0.24	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	215	669	342	311	851	445	223	702	685	129	1433	629
V/C Ratio(X)	0.98	0.77	0.78	0.91	0.97	0.97	0.85	0.80	0.81	0.81	0.80	0.62
Avail Cap(c_a), veh/h	215	669	342	345	851	445	223	702	685	172	1433	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	45.1	45.3	48.3	44.0	44.0	55.4	31.3	31.3	54.7	30.6	27.5
Incr Delay (d2), s/veh	55.3	5.3	10.9	26.5	22.8	34.0	25.1	9.5	9.8	19.3	4.8	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	8.5	9.4	11.5	16.2	18.3	3.9	18.3	17.9	4.1	17.5	10.8
LnGrp Delay(d), s/veh	107.6	50.5	56.2	74.8	66.8	78.0	80.5	40.8	41.1	74.0	35.4	32.0
LnGrp LOS	F	D	E	E	E	E	F	D	D	E	D	C
Approach Vol, veh/h		990			1536			1305			1641	
Approach Delay, s/veh		64.2			71.4			46.6			37.1	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	53.0	25.6	28.4	12.0	54.0	19.0	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	46.0	24.0	22.0	8.0	50.0	15.0	31.0
Max Q Clear Time (g_c+I1), s	9.2	36.8	21.4	20.0	8.7	37.0	16.6	31.6
Green Ext Time (p_c), s	0.1	4.5	0.2	0.9	0.0	7.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Future Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	266	43	330	319	170	32	1351	298	64	1989	85
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	393	206	405	391	203	41	2398	528	83	2994	128
Arrive On Green	0.05	0.11	0.11	0.12	0.18	0.18	0.02	0.57	0.57	0.05	0.60	0.60
Sat Flow, veh/h	1774	3539	1526	3442	2230	1158	1774	4170	919	1774	5002	213
Grp Volume(v), veh/h	74	266	43	330	251	238	32	1098	551	64	1347	727
Grp Sat Flow(s),veh/h/ln	1774	1770	1526	1721	1770	1618	1774	1695	1698	1774	1695	1825
Q Serve(g_s), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Cycle Q Clear(g_c), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.54	1.00		0.12
Lane Grp Cap(c), veh/h	95	393	206	405	310	284	41	1949	977	83	2029	1092
V/C Ratio(X)	0.78	0.68	0.21	0.81	0.81	0.84	0.79	0.56	0.56	0.78	0.66	0.67
Avail Cap(c_a), veh/h	166	530	265	579	397	363	100	1949	977	166	2029	1092
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	45.7	41.3	46.0	42.4	42.6	52.0	14.3	14.3	50.4	14.3	14.3
Incr Delay (d2), s/veh	12.8	2.1	0.5	5.9	9.5	12.8	27.3	1.2	2.4	14.2	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.9	1.2	5.1	7.9	7.8	1.3	10.4	10.7	2.2	13.6	15.1
LnGrp Delay(d), s/veh	62.7	47.8	41.8	51.9	51.9	55.4	79.3	15.5	16.7	64.7	16.0	17.5
LnGrp LOS	E	D	D	D	D	E	E	B	B	E	B	B
Approach Vol, veh/h		383			819			1681			2138	
Approach Delay, s/veh		50.0			52.9			17.1			18.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	65.5	16.6	15.9	6.5	68.0	9.7	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	60.0	18.0	16.0	6.0	64.0	10.0	24.0
Max Q Clear Time (g_c+I1), s	5.8	23.8	12.0	9.7	3.9	30.5	6.4	17.2
Green Ext Time (p_c), s	0.0	15.9	0.6	0.8	0.0	20.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	160	200	10	30	30
Future Vol, veh/h	20	160	200	10	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	174	217	11	33	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	228	0	-	0	435	217
Stage 1	-	-	-	-	217	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1340	-	-	-	578	823
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1340	-	-	-	568	823
Mov Cap-2 Maneuver	-	-	-	-	568	-
Stage 1	-	-	-	-	804	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1340	-	-	-	568	823
HCM Lane V/C Ratio	0.016	-	-	-	0.057	0.04
HCM Control Delay (s/veh)	7.7	0	-	-	11.7	9.6
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	30	0	50	20	10	10	20	350	20	80	490	10
Future Vol, veh/h	30	0	50	20	10	10	20	350	20	80	490	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	0	54	22	11	11	22	380	22	87	533	11

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	881	1153	201	947	1159	272	544	0	0	402	0	0
Stage 1	435	435	-	713	713	-	-	-	-	-	-	-
Stage 2	446	718	-	234	446	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	241	196	806	216	194	726	1021	-	-	1153	-	-
Stage 1	570	579	-	389	434	-	-	-	-	-	-	-
Stage 2	561	431	-	748	572	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	210	177	806	187	176	726	1021	-	-	1153	-	-
Mov Cap-2 Maneuver	210	177	-	187	176	-	-	-	-	-	-	-
Stage 1	557	566	-	380	401	-	-	-	-	-	-	-
Stage 2	497	399	-	683	559	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	15.1	24.8	0.4	1.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	210	390	806	1153	-	-	1021	-	-	225
HCM Lane V/C Ratio	0.104	0.074	0.045	0.075	-	-	0.021	-	-	0.193
HCM Control Delay (s/veh)	24.1	15	9.7	8.4	-	-	8.6	-	-	24.8
HCM Lane LOS	C	C	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0.2	0.1	0.2	-	-	0.1	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	140	10	10	380	50	50	0	10	60	0	20
Future Volume (veh/h)	120	140	10	10	380	50	50	0	10	60	0	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	130	152	11	11	413	54	54	0	11	65	0	22
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	264	467	34	57	914	117	943	0	962	721	12	221
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.60	0.00	0.60	0.60	0.00	0.60
Sat Flow, veh/h	581	1578	114	28	3084	395	1415	0	1599	1064	19	367
Grp Volume(v), veh/h	130	0	163	254	0	224	54	0	11	87	0	0
Grp Sat Flow(s),veh/h/ln	581	0	1692	1866	0	1642	1415	0	1599	1451	0	0
Q Serve(g_s), s	10.3	0.0	5.9	0.0	0.0	8.7	0.0	0.0	0.2	1.2	0.0	0.0
Cycle Q Clear(g_c), s	19.0	0.0	5.9	8.6	0.0	8.7	1.0	0.0	0.2	2.1	0.0	0.0
Prop In Lane	1.00		0.07	0.04		0.24	1.00		1.00	0.75		0.25
Lane Grp Cap(c), veh/h	264	0	501	601	0	486	943	0	962	953	0	0
V/C Ratio(X)	0.49	0.00	0.33	0.42	0.00	0.46	0.06	0.00	0.01	0.09	0.00	0.00
Avail Cap(c_a), veh/h	763	0	1407	1586	0	1366	943	0	962	953	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	30.2	0.0	21.4	22.4	0.0	22.4	6.4	0.0	6.3	6.6	0.0	0.0
Incr Delay (d2), s/veh	1.4	0.0	0.4	0.5	0.0	0.7	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	2.8	4.5	0.0	4.0	0.5	0.0	0.1	0.8	0.0	0.0
LnGrp Delay(d), s/veh	31.6	0.0	21.8	22.8	0.0	23.1	6.5	0.0	6.3	6.8	0.0	0.0
LnGrp LOS	C		C	C		C	A		A	A		
Approach Vol, veh/h		293			478			65			87	
Approach Delay, s/veh		26.1			23.0			6.5			6.8	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		27.1		51.0		27.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		47.0		65.0		47.0		65.0
Max Q Clear Time (g_c+I1), s		3.0		21.0		4.1		10.7
Green Ext Time (p_c), s		0.3		2.1		0.5		2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	120	10	10	470	30	10	0	10	20	0	10
Future Volume (veh/h)	10	120	10	10	470	30	10	0	10	20	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	130	11	11	511	33	11	0	11	22	0	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	99	753	62	77	804	51	528	33	458	688	22	298
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.61	0.00	0.61	0.61	0.00	0.61
Sat Flow, veh/h	89	3100	255	26	3307	211	703	54	757	949	37	493
Grp Volume(v), veh/h	80	0	72	293	0	262	22	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	1777	0	1667	1868	0	1675	1514	0	0	1479	0	0
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	1.8	7.4	0.0	7.4	0.3	0.0	0.0	0.4	0.0	0.0
Prop In Lane	0.14		0.15	0.04		0.13	0.50		0.50	0.67		0.33
Lane Grp Cap(c), veh/h	509	0	405	525	0	407	1019	0	0	1009	0	0
V/C Ratio(X)	0.16	0.00	0.18	0.56	0.00	0.64	0.02	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	2569	0	2523	2871	0	2535	1019	0	0	1009	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	15.8	17.9	0.0	17.9	4.2	0.0	0.0	4.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.9	0.0	1.7	0.0	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.8	4.0	0.0	3.6	0.1	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	16.0	0.0	16.0	18.9	0.0	19.6	4.2	0.0	0.0	4.2	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		152			555			22			33	
Approach Delay, s/veh		16.0			19.2			4.2			4.2	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		16.8		36.0		16.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		80.0		32.0		80.0
Max Q Clear Time (g_c+I1), s		2.3		3.8		2.4		9.4
Green Ext Time (p_c), s		0.1		0.9		0.1		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	120	10	10	470	20	130	10	10	10	0	10
Future Volume (veh/h)	10	120	10	10	470	20	130	10	10	10	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	130	11	11	511	22	141	11	11	11	0	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	68	598	50	53	711	30	942	74	67	565	22	518
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.69	0.69	0.69	0.69	0.00	0.69
Sat Flow, veh/h	76	2844	239	28	3382	144	1245	107	98	721	32	753
Grp Volume(v), veh/h	75	0	77	286	0	258	163	0	0	22	0	0
Grp Sat Flow(s),veh/h/ln	1490	0	1670	1867	0	1686	1450	0	0	1507	0	0
Q Serve(g_s), s	0.1	0.0	3.0	1.1	0.0	11.2	2.7	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.3	0.0	3.0	11.2	0.0	11.2	3.0	0.0	0.0	0.3	0.0	0.0
Prop In Lane	0.15		0.14	0.04		0.09	0.87		0.07	0.50		0.50
Lane Grp Cap(c), veh/h	366	0	351	440	0	354	1083	0	0	1105	0	0
V/C Ratio(X)	0.21	0.00	0.22	0.65	0.00	0.73	0.15	0.00	0.00	0.02	0.00	0.00
Avail Cap(c_a), veh/h	1218	0	1234	1416	0	1246	1083	0	0	1105	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	25.6	0.0	25.7	28.9	0.0	28.9	4.3	0.0	0.0	3.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.3	1.6	0.0	2.9	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	1.4	5.9	0.0	5.5	1.3	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	25.8	0.0	26.0	30.5	0.0	31.8	4.6	0.0	0.0	3.9	0.0	0.0
LnGrp LOS	C		C	C		C	A			A		
Approach Vol, veh/h		152			544			163			22	
Approach Delay, s/veh		25.9			31.1			4.6			3.9	
Approach LOS		C			C			A			A	

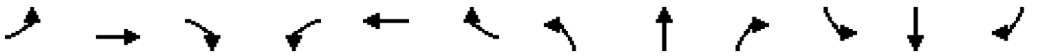
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		58.0		20.5		58.0		20.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		54.0		58.0		54.0		58.0
Max Q Clear Time (g_c+I1), s		5.0		13.3		2.3		13.2
Green Ext Time (p_c), s		1.1		0.9		0.1		3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	130	10	10	520	10	30	10	30	30	10	10
Future Volume (veh/h)	10	130	10	10	520	10	30	10	30	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	141	11	11	565	11	33	11	33	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	87	744	57	67	841	16	468	172	417	637	213	189
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	81	3078	235	24	3477	67	613	274	665	865	339	301
Grp Volume(v), veh/h	85	0	78	308	0	279	77	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1723	0	1670	1869	0	1700	1552	0	0	1505	0	0
Q Serve(g_s), s	0.0	0.0	2.3	0.0	0.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.1	0.0	2.3	9.0	0.0	9.0	1.0	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.13		0.14	0.04		0.04	0.43		0.43	0.60		0.20
Lane Grp Cap(c), veh/h	484	0	404	513	0	411	1057	0	0	1038	0	0
V/C Ratio(X)	0.18	0.00	0.19	0.60	0.00	0.68	0.07	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	2069	0	2037	2320	0	2074	1057	0	0	1038	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.3	0.0	18.3	20.9	0.0	20.9	4.4	0.0	0.0	4.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	1.1	0.0	2.0	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	1.1	4.8	0.0	4.4	0.5	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	18.4	0.0	18.5	22.0	0.0	22.8	4.6	0.0	0.0	4.5	0.0	0.0
LnGrp LOS	B		B	C		C	A			A		
Approach Vol, veh/h		163			587			77			55	
Approach Delay, s/veh		18.5			22.4			4.6			4.5	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		42.0		18.7		42.0		18.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		38.0		74.0		38.0		74.0
Max Q Clear Time (g_c+I1), s		3.0		11.1		2.7		11.0
Green Ext Time (p_c), s		0.4		0.9		0.3		3.6

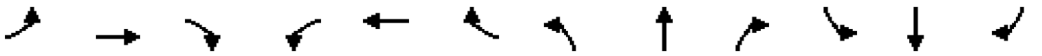
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	400	10	10	420	340	0	0	0	50	30	70
Future Volume (vph)	10	400	10	10	420	340	0	0	0	50	30	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					0.95	0.91	0.95
Frt		1.00		1.00	0.93					1.00	0.95	0.85
Flt Protected		1.00		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3557		1787	3334					1698	1611	1519
Flt Permitted		0.93		0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3309		1787	3334					1698	1607	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	435	11	11	457	370	0	0	0	54	33	76
RTOR Reduction (vph)	0	2	0	0	243	0	0	0	0	0	8	24
Lane Group Flow (vph)	0	455	0	11	584	0	0	0	0	49	52	30
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		15.4		1.1	20.5					3.0	35.9	35.9
Effective Green, g (s)		15.4		1.1	20.5					3.0	35.9	35.9
Actuated g/C Ratio		0.24		0.02	0.32					0.05	0.56	0.56
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		791		30	1061					79	896	846
v/s Ratio Prot				0.01	c0.18					c0.03	0.00	0.02
v/s Ratio Perm		0.14									c0.03	
v/c Ratio		0.57		0.37	0.55					0.62	0.06	0.04
Uniform Delay, d1		21.6		31.3	18.1					30.1	6.5	6.4
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.0		7.4	0.6					14.2	0.0	0.1
Delay (s)		22.6		38.8	18.8					44.3	6.5	6.5
Level of Service		C		D	B					D	A	A
Approach Delay (s/veh)		22.6			19.0			0.0			17.9	
Approach LOS		C			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	64.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	32.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	330	350	10	10	530	820	10	10	20	380	10	140
Future Volume (vph)	330	350	10	10	530	820	10	10	20	380	10	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1599	1787	3574	1599		1733		1698	1623	1519
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.92		0.78	0.75	1.00
Satd. Flow (perm)	1787	3574	1599	1787	3574	1599		1617		1397	1273	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	359	380	11	11	576	891	11	11	22	413	11	152
RTOR Reduction (vph)	0	0	4	0	0	379	0	16	0	0	2	100
Lane Group Flow (vph)	359	380	7	11	576	512	0	28	0	219	218	37
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	24.5	64.8	64.8	0.7	41.0	41.0		29.1		29.1	29.1	29.1
Effective Green, g (s)	24.5	64.8	64.8	0.7	41.0	41.0		29.1		29.1	29.1	29.1
Actuated g/C Ratio	0.23	0.61	0.61	0.01	0.38	0.38		0.27		0.27	0.27	0.27
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	410	2172	972	11	1374	615		441		381	347	414
v/s Ratio Prot	c0.20	0.11		0.01	0.16							
v/s Ratio Perm			0.00			c0.32		0.02		0.16	c0.17	0.02
v/c Ratio	0.88	0.17	0.01	1.00	0.42	0.83		0.06		0.57	0.63	0.09
Uniform Delay, d1	39.6	9.2	8.2	53.0	24.1	29.7		28.7		33.4	34.0	28.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	18.4	0.0	0.0	271.4	0.2	9.4		0.3		6.2	8.3	0.4
Delay (s)	58.0	9.2	8.2	324.3	24.3	39.1		28.9		39.6	42.3	29.3
Level of Service	E	A	A	F	C	D		C		D	D	C
Approach Delay (s/veh)		32.5			35.4			28.9			38.2	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	106.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	90	60	230	10	50	180	1060	130	20	970	10
Future Volume (veh/h)	10	90	60	230	10	50	180	1060	130	20	970	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	11	98	65	250	11	54	196	1152	141	22	1054	11
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	40	247	400	70	0	400	357	2395	1071	292	2428	25
Arrive On Green	0.25	0.25	0.25	0.25	0.25	0.25	0.67	0.67	0.67	0.67	0.67	0.67
Sat Flow, veh/h	0	986	1599	0	0	1599	533	3574	1599	429	3624	38
Grp Volume(v), veh/h	109	0	65	261	0	54	196	1152	141	22	520	545
Grp Sat Flow(s),veh/h/ln	986	0	1599	0	0	1599	533	1787	1599	429	1787	1875
Q Serve(g_s), s	0.0	0.0	3.2	0.0	0.0	2.6	27.1	15.7	3.2	2.6	13.5	13.5
Cycle Q Clear(g_c), s	25.0	0.0	3.2	25.0	0.0	2.6	40.6	15.7	3.2	18.3	13.5	13.5
Prop In Lane	0.10		1.00	0.96		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	286	0	400	70	0	400	357	2395	1071	292	1197	1256
V/C Ratio(X)	0.38	0.00	0.16	3.70	0.00	0.14	0.55	0.48	0.13	0.08	0.43	0.43
Avail Cap(c_a), veh/h	286	0	400	70	0	400	357	2395	1071	292	1197	1256
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	0.0	29.3	50.0	0.0	29.1	17.1	8.0	6.0	12.5	7.7	7.7
Incr Delay (d2), s/veh	0.8	0.0	0.2	1250.4	0.0	0.2	6.0	0.7	0.3	0.5	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.4	26.4	0.0	1.2	4.6	7.9	1.5	0.4	7.0	7.3
LnGrp Delay(d), s/veh	31.4	0.0	29.5	1300.4	0.0	29.3	23.1	8.7	6.2	13.0	8.8	8.8
LnGrp LOS	C		C	F		C	C	A	A	B	A	A
Approach Vol, veh/h		174			315			1489			1087	
Approach Delay, s/veh		30.7			1082.5			10.4			8.9	
Approach LOS		C			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		29.0		71.0		29.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		16.0		67.0		25.0
Max Q Clear Time (g_c+I1), s		42.6		27.0		20.3		27.0
Green Ext Time (p_c), s		12.0		0.0		9.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	121.2
HCM 2010 LOS	F

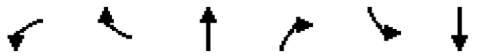
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	1023	1086	-	-	1628	-
Stage 1	1024	-	-	-	-	-
Stage 2	1024	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1022	1085	-	-	1627	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1024	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1627	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frpb, ped/bikes						
Flpb, ped/bikes						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Confl. Peds. (#/hr)	11			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot	pm+ov			pm+pt	
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)	0.0		0.0		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	63.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	16.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	5	5	0	0	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	11	17	16	11	17	6	11	0	0	6	0	0
Stage 1	11	11	-	6	6	-	-	-	-	-	-	-
Stage 2	0	6	-	5	11	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	929	877	897	929	877	910	1141	-	-	1147	-	-
Stage 1	927	886	-	934	890	-	-	-	-	-	-	-
Stage 2	-	890	-	936	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	922	866	886	921	866	905	1131	-	-	1141	-	-
Mov Cap-2 Maneuver	922	866	-	921	866	-	-	-	-	-	-	-
Stage 1	920	879	-	929	886	-	-	-	-	-	-	-
Stage 2	-	886	-	932	879	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1131	-	-	-	-	1141	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	--2147483648	2147483648	--2147483648	2147483648	--2147483648	2147483648	--2147483648	2147483648	--2147483648	2147483648	0	
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	1863	0	1774	1863	0	1774	5253	0	1774	5253	0
Grp Volume(v), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1774	1863	0	1774	1695	0	1774	1695	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	1056	1903	0	1056	1903	0	1056	1903	0	1056	1903	0
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	611	1211	0	611	1211	0	611	1082	0	611	1082	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS												
Approach Vol, veh/h		0			0			0			0	
Approach Delay, s/veh		0.0			0.0			0.0			0.0	
Approach LOS												

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	20.0	32.0	20.0	32.0	20.0	32.0
Max Q Clear Time (g_c+I1), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	30	490	510	20	30
Future Vol, veh/h	10	30	490	510	20	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	31	510	531	21	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	41	0	1577	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	1551	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1581	-	122	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	194	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1581	-	66	1056
Mov Cap-2 Maneuver	-	-	-	-	66	-
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	105	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	4.1	38.3
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	66	1056	-	-	1581	-
HCM Lane V/C Ratio	0.316	0.03	-	-	0.323	-
HCM Control Delay (s/veh)	82.9	8.5	-	-	8.4	0
HCM Lane LOS	F	A	-	-	A	A
HCM 95th %tile Q(veh)	1.2	0.1	-	-	1.4	-

Intersection	
Int Delay, s/veh	7.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	90	940	50	50	870
Future Vol, veh/h	60	90	940	50	50	870
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	63	94	979	52	52	906

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1564	518	0	0	1033	0
Stage 1	1007	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	103	505	-	-	674	-
Stage 1	316	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	87	504	-	-	673	-
Mov Cap-2 Maneuver	87	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	456	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	98.5	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	173	673	-
HCM Lane V/C Ratio	-	-	0.903	0.077	-
HCM Control Delay (s/veh)	-	-	98.5	10.8	0.8
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	6.7	0.3	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	20	60	40	320	1220	40
Future Volume (veh/h)	20	60	40	320	1220	40
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	21	64	43	340	1298	43
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	358	320	297	2621	2587	86
Arrive On Green	0.20	0.20	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1792	1599	410	3668	3622	117
Grp Volume(v), veh/h	21	64	43	340	657	684
Grp Sat Flow(s),veh/h/ln	1792	1599	410	1787	1787	1857
Q Serve(g_s), s	1.1	4.0	5.9	3.4	18.6	18.7
Cycle Q Clear(g_c), s	1.1	4.0	24.6	3.4	18.6	18.7
Prop In Lane	1.00	1.00	1.00			0.06
Lane Grp Cap(c), veh/h	358	320	297	2621	1311	1362
V/C Ratio(X)	0.06	0.20	0.14	0.13	0.50	0.50
Avail Cap(c_a), veh/h	358	320	297	2621	1311	1362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	40.0	11.9	4.7	6.7	6.8
Incr Delay (d2), s/veh	0.3	1.4	1.0	0.1	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.8	1.7	9.6	10.0
LnGrp Delay(d), s/veh	39.2	41.4	13.0	4.8	8.1	8.1
LnGrp LOS	D	D	B	A	A	A
Approach Vol, veh/h	85			383	1341	
Approach Delay, s/veh	40.9			5.7	8.1	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				92.0		28.0		92.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				88.0		24.0		88.0
Max Q Clear Time (g_c+I1), s				26.6		6.0		20.7
Green Ext Time (p_c), s				3.0		0.2		11.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.1
HCM 2010 LOS	A

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Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Future Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.94	1.00	1.00		1.00		0.96		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.98	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3337	1372	1787	3555		3467		1532		
Flt Permitted			0.90	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3014	1372	1787	3555		3467		1532		
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	22	725	516	187	1044	33	769	0	209	0	0
RTOR Reduction (vph)	0	0	8	281	0	2	0	0	0	117	0	0
Lane Group Flow (vph)	0	0	837	137	187	1075	0	769	0	92	0	0
Confl. Peds. (#/hr)		2		18	18		2			13	13	
Confl. Bikes (#/hr)				11						5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases		4		4						2		
Actuated Green, G (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Effective Green, g (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Actuated g/C Ratio			0.33	0.33	0.13	0.49		0.24		0.44		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			984	448	229	1740		845		676		
v/s Ratio Prot					c0.10	0.30		c0.22				
v/s Ratio Perm			c0.28	0.10						c0.06		
v/c Ratio			0.85	0.30	0.82	0.62		0.91		0.14		
Uniform Delay, d1			36.4	29.2	49.2	21.7		42.6		19.3		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			7.2	0.4	19.7	0.7		13.8		0.4		
Delay (s)			43.6	29.6	68.9	22.3		56.4		19.7		
Level of Service			D	C	E	C		E		B		
Approach Delay (s/veh)			38.9			29.2			48.5			40.7
Approach LOS			D			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1627
Flt Permitted	1.00
Satd. Flow (perm)	1627
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	18.9
Effective Green, g (s)	18.9
Actuated g/C Ratio	0.16
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	265
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	40.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	40.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	90	10	20	110	0	1000	50	0	600
Future Volume (vph)	0	0	60	90	10	20	110	0	1000	50	0	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00		0.95
Frpb, ped/bikes			0.94	1.00	0.96		1.00		1.00	0.94		1.00
Flpb, ped/bikes			1.00	0.96	1.00		1.00		1.00	1.00		1.00
Frt			0.87	1.00	0.90		1.00		1.00	0.85		1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00		1.00
Satd. Flow (prot)			1522	1713	1624		1787		3574	1510		3574
Flt Permitted			1.00	0.95	1.00		0.41		1.00	1.00		1.00
Satd. Flow (perm)			1522	1713	1624		767		3574	1510		3574
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	96	11	21	117	0	1064	53	0	638
RTOR Reduction (vph)	0	0	57	0	19	0	0	0	0	9	0	0
Lane Group Flow (vph)	0	0	7	96	13	0	117	0	1064	44	0	638
Confl. Peds. (#/hr)	25		20	20		25		8		10	10	
Confl. Bikes (#/hr)			6			1				5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			11.5	11.5	11.5		90.7		90.7	90.7		90.7
Effective Green, g (s)			11.5	11.5	11.5		90.7		90.7	90.7		90.7
Actuated g/C Ratio			0.10	0.10	0.10		0.82		0.82	0.82		0.82
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)			158	178	169		631		2941	1242		2941
v/s Ratio Prot					0.01				c0.30			0.18
v/s Ratio Perm			0.00	c0.06			0.15			0.03		
v/c Ratio			0.04	0.54	0.08		0.19		0.36	0.04		0.22
Uniform Delay, d1			44.4	46.8	44.6		2.0		2.5	1.8		2.1
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2			0.1	3.1	0.2		0.6		0.3	0.1		0.2
Delay (s)			44.5	50.0	44.8		2.7		2.8	1.8		2.3
Level of Service			D	D	D		A		A	A		A
Approach Delay (s/veh)		44.5			48.7				2.8			2.3
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	110.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	0.95
Flpb, ped/bikes	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1520
Flt Permitted	1.00
Satd. Flow (perm)	1520
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	21
RTOR Reduction (vph)	2
Lane Group Flow (vph)	19
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	6
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	90.7
Effective Green, g (s)	90.7
Actuated g/C Ratio	0.82
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1251
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.01
Uniform Delay, d1	1.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	1.8
Level of Service	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	930	130	310	1280	280	140	700	230	240	380	80
Future Volume (veh/h)	120	930	130	310	1280	280	140	700	230	240	380	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	979	137	326	1347	295	147	737	242	253	400	84
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1122	157	356	1514	331	418	1056	460	329	1216	666
Arrive On Green	0.09	0.25	0.25	0.20	0.36	0.36	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	4491	627	1774	4154	908	1774	3539	1541	1774	3539	1544
Grp Volume(v), veh/h	126	738	378	326	1099	543	147	737	242	253	400	84
Grp Sat Flow(s),veh/h/ln	1774	1695	1727	1774	1695	1672	1774	1770	1541	1774	1770	1544
Q Serve(g_s), s	8.1	24.3	24.4	21.0	35.5	35.6	6.7	21.5	15.2	11.1	9.7	3.8
Cycle Q Clear(g_c), s	8.1	24.3	24.4	21.0	35.5	35.6	6.7	21.5	15.2	11.1	9.7	3.8
Prop In Lane	1.00		0.36	1.00		0.54	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	847	432	356	1236	609	418	1056	460	329	1216	666
V/C Ratio(X)	0.83	0.87	0.87	0.92	0.89	0.89	0.35	0.70	0.53	0.77	0.33	0.13
Avail Cap(c_a), veh/h	183	847	432	411	1281	632	418	1056	460	371	1216	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	41.9	41.9	45.6	34.8	34.8	25.5	36.2	34.0	26.2	28.3	20.0
Incr Delay (d2), s/veh	22.3	9.8	17.8	23.2	7.9	14.5	0.5	3.8	4.3	8.5	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	12.5	13.8	12.5	18.0	18.9	3.3	11.1	7.0	6.2	4.9	1.7
LnGrp Delay(d), s/veh	74.7	51.7	59.7	68.8	42.7	49.3	26.0	40.1	38.3	34.7	29.0	20.4
LnGrp LOS	E	D	E	E	D	D	C	D	D	C	C	C
Approach Vol, veh/h		1242			1968			1126			737	
Approach Delay, s/veh		56.5			48.8			37.8			30.0	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	38.7	27.4	33.1	12.0	44.0	14.0	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	32.0	27.0	29.0	8.0	40.0	12.0	44.0
Max Q Clear Time (g_c+I1), s	13.1	23.5	23.0	26.4	8.7	11.7	10.1	37.6
Green Ext Time (p_c), s	0.2	3.7	0.4	1.6	0.0	2.9	0.0	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	190	30	220	200	130	80	950	260	110	700	70
Future Volume (veh/h)	50	190	30	220	200	130	80	950	260	110	700	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	53	200	32	232	211	137	84	1000	274	116	737	74
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	520	83	333	348	226	383	2105	910	253	1925	193
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1029	1561	250	1141	1044	678	670	3539	1530	433	3237	325
Grp Volume(v), veh/h	53	0	232	232	0	348	84	1000	274	116	403	408
Grp Sat Flow(s),veh/h/ln	1029	0	1811	1141	0	1722	670	1770	1530	433	1770	1792
Q Serve(g_s), s	5.0	0.0	10.9	21.7	0.0	18.7	8.3	17.7	9.8	22.9	13.2	13.3
Cycle Q Clear(g_c), s	23.8	0.0	10.9	32.5	0.0	18.7	21.6	17.7	9.8	40.6	13.2	13.3
Prop In Lane	1.00		0.14	1.00		0.39	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	234	0	603	333	0	574	383	2105	910	253	1053	1066
V/C Ratio(X)	0.23	0.00	0.38	0.70	0.00	0.61	0.22	0.47	0.30	0.46	0.38	0.38
Avail Cap(c_a), veh/h	318	0	751	426	0	714	383	2105	910	253	1053	1066
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	28.3	40.7	0.0	30.9	17.5	12.7	11.1	24.2	11.8	11.8
Incr Delay (d2), s/veh	0.5	0.0	0.4	3.5	0.0	1.0	1.3	0.8	0.8	5.9	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	5.5	7.2	0.0	9.1	1.7	8.8	4.3	3.2	6.7	6.8
LnGrp Delay(d), s/veh	41.4	0.0	28.7	44.2	0.0	32.0	18.8	13.5	11.9	30.0	12.8	12.8
LnGrp LOS	D		C	D		C	B	B	B	C	B	B
Approach Vol, veh/h		285			580			1358			927	
Approach Delay, s/veh		31.1			36.9			13.5			15.0	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		40.9		70.0		40.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		23.6		25.8		42.6		34.5
Green Ext Time (p_c), s		11.5		1.4		7.2		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	10	50	0	10	10	90	1210	60	10	850	180
Future Volume (veh/h)	130	10	50	0	10	10	90	1210	60	10	850	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.94	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	135	10	52	0	10	10	94	1260	62	10	885	188
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	35	184	69	118	118	427	2763	1199	342	2254	479
Arrive On Green	0.14	0.14	0.14	0.00	0.14	0.14	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1334	248	1292	1335	829	829	523	3539	1536	413	2888	613
Grp Volume(v), veh/h	135	0	62	0	0	20	94	1260	62	10	542	531
Grp Sat Flow(s),veh/h/ln	1334	0	1540	1335	0	1657	523	1770	1536	413	1770	1732
Q Serve(g_s), s	10.1	0.0	3.7	0.0	0.0	1.1	7.2	12.6	1.0	0.9	10.1	10.1
Cycle Q Clear(g_c), s	11.2	0.0	3.7	0.0	0.0	1.1	17.3	12.6	1.0	13.5	10.1	10.1
Prop In Lane	1.00		0.84	1.00		0.50	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	245	0	219	69	0	236	427	2763	1199	342	1381	1352
V/C Ratio(X)	0.55	0.00	0.28	0.00	0.00	0.08	0.22	0.46	0.05	0.03	0.39	0.39
Avail Cap(c_a), veh/h	454	0	460	278	0	495	427	2763	1199	342	1381	1352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	0.0	39.8	0.0	0.0	38.6	6.3	3.9	2.6	6.2	3.6	3.6
Incr Delay (d2), s/veh	1.9	0.0	0.7	0.0	0.0	0.2	1.2	0.5	0.1	0.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.6	0.0	0.0	0.5	1.2	6.2	0.4	0.1	5.1	5.0
LnGrp Delay(d), s/veh	45.4	0.0	40.5	0.0	0.0	38.8	7.5	4.4	2.7	6.3	4.4	4.5
LnGrp LOS	D		D			D	A	A	A	A	A	A
Approach Vol, veh/h		197			20			1416			1083	
Approach Delay, s/veh		43.9			38.8			4.6			4.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.0		18.8		85.0		18.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		81.0		31.0		81.0		31.0
Max Q Clear Time (g_c+I1), s		19.3		13.2		15.5		3.1
Green Ext Time (p_c), s		16.0		0.6		9.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Future Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	161	65	151	183	65	118	1301	183	54	871	32
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	334	135	248	499	404	402	2331	1000	229	2331	999
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1116	1245	502	1143	1863	1508	614	3539	1518	354	3539	1517
Grp Volume(v), veh/h	43	0	226	151	183	65	118	1301	183	54	871	32
Grp Sat Flow(s),veh/h/ln	1116	0	1747	1143	1863	1508	614	1770	1518	354	1770	1517
Q Serve(g_s), s	3.6	0.0	11.9	14.0	8.7	3.6	11.8	21.7	5.1	10.6	12.2	0.8
Cycle Q Clear(g_c), s	12.3	0.0	11.9	25.9	8.7	3.6	23.9	21.7	5.1	32.3	12.2	0.8
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	468	248	499	404	402	2331	1000	229	2331	999
V/C Ratio(X)	0.16	0.00	0.48	0.61	0.37	0.16	0.29	0.56	0.18	0.24	0.37	0.03
Avail Cap(c_a), veh/h	385	0	639	360	682	552	402	2331	1000	229	2331	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	33.6	44.5	32.5	30.6	13.9	10.1	7.2	18.8	8.4	6.5
Incr Delay (d2), s/veh	0.3	0.0	0.8	2.4	0.4	0.2	1.8	1.0	0.4	2.4	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	5.8	4.6	4.5	1.5	2.2	10.8	2.2	1.2	6.1	0.4
LnGrp Delay(d), s/veh	37.7	0.0	34.4	46.9	32.9	30.8	15.7	11.0	7.6	21.2	8.9	6.6
LnGrp LOS	D		C	D	C	C	B	B	A	C	A	A
Approach Vol, veh/h		269			399			1602			957	
Approach Delay, s/veh		34.9			37.9			11.0			9.5	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		33.3		76.0		33.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		25.9		14.3		34.3		27.9
Green Ext Time (p_c), s		16.8		1.5		8.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Future Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	196	660	155	227	959	134	165	773	227	165	711	309
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	222	1067	466	257	997	139	192	1133	494	193	763	331
Arrive On Green	0.12	0.30	0.30	0.14	0.32	0.32	0.11	0.32	0.32	0.11	0.32	0.32
Sat Flow, veh/h	1792	3574	1560	1792	3139	438	1792	3574	1558	1792	2401	1043
Grp Volume(v), veh/h	196	660	155	227	546	547	165	773	227	165	529	491
Grp Sat Flow(s),veh/h/ln	1792	1787	1560	1792	1787	1790	1792	1787	1558	1792	1787	1657
Q Serve(g_s), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Cycle Q Clear(g_c), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	222	1067	466	257	567	568	192	1133	494	193	568	526
V/C Ratio(X)	0.88	0.62	0.33	0.88	0.96	0.96	0.86	0.68	0.46	0.86	0.93	0.93
Avail Cap(c_a), veh/h	225	1067	466	329	568	569	195	1133	494	225	568	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	36.1	32.7	50.3	40.1	40.1	52.5	35.6	32.7	52.5	39.6	39.6
Incr Delay (d2), s/veh	30.5	1.1	0.4	19.9	28.4	28.5	30.0	3.3	3.1	23.8	24.3	25.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.5	4.1	8.8	22.2	22.3	7.0	11.6	6.4	6.6	20.7	19.4
LnGrp Delay(d), s/veh	82.0	37.2	33.1	70.2	68.5	68.6	82.5	38.9	35.7	76.3	63.8	65.2
LnGrp LOS	F	D	C	E	E	E	F	D	D	E	E	E
Approach Vol, veh/h		1011			1320			1165			1185	
Approach Delay, s/veh		45.3			68.8			44.5			66.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	41.9	21.1	39.7	16.8	42.0	18.9	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	36.0	22.0	31.0	13.0	38.0	15.0	38.0
Max Q Clear Time (g_c+I1), s	12.8	24.5	16.9	21.0	12.8	36.4	14.9	37.9
Green Ext Time (p_c), s	0.1	4.6	0.3	3.5	0.0	1.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	220	30	90	10	880	170	80	780	40
Future Volume (veh/h)	0	0	0	220	30	90	10	880	170	80	780	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.93		0.91	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	237	32	97	11	946	183	86	839	43
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	326	0	363	66	201	499	2233	432	392	2602	133
Arrive On Green	0.00	0.00	0.00	0.17	0.17	0.17	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1281	1900	0	1683	387	1174	639	2996	579	506	3490	179
Grp Volume(v), veh/h	0	0	0	237	0	129	11	570	559	86	434	448
Grp Sat Flow(s),veh/h/ln	1281	1900	0	1683	0	1561	639	1805	1769	506	1805	1863
Q Serve(g_s), s	0.0	0.0	0.0	13.1	0.0	7.2	0.6	11.3	11.4	7.4	7.8	7.8
Cycle Q Clear(g_c), s	0.0	0.0	0.0	13.1	0.0	7.2	8.3	11.3	11.4	18.7	7.8	7.8
Prop In Lane	1.00		0.00	1.00		0.75	1.00		0.33	1.00		0.10
Lane Grp Cap(c), veh/h	75	326	0	363	0	268	499	1346	1319	392	1346	1389
V/C Ratio(X)	0.00	0.00	0.00	0.65	0.00	0.48	0.02	0.42	0.42	0.22	0.32	0.32
Avail Cap(c_a), veh/h	385	787	0	772	0	646	499	1346	1319	392	1346	1389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	38.6	0.0	36.1	5.5	4.6	4.6	8.1	4.1	4.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.0	0.0	1.3	0.1	1.0	1.0	1.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	6.3	0.0	3.2	0.1	5.9	5.8	1.2	4.1	4.2
LnGrp Delay(d), s/veh	0.0	0.0	0.0	40.5	0.0	37.5	5.6	5.5	5.6	9.3	4.8	4.7
LnGrp LOS				D		D	A	A	A	A	A	A
Approach Vol, veh/h		0			366			1140			968	
Approach Delay, s/veh		0.0			39.5			5.6			5.2	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		20.6		76.0		20.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		13.4		0.0		20.7		15.1
Green Ext Time (p_c), s		10.0		0.0		8.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	990	210	150	1330	300	310	480	150	300	420	400
Future Volume (veh/h)	400	990	210	150	1330	300	310	480	150	300	420	400
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	440	1088	231	165	1462	330	341	527	165	330	462	440
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	403	1549	921	194	1315	295	370	485	151	314	596	609
Arrive On Green	0.22	0.43	0.43	0.11	0.32	0.32	0.16	0.18	0.18	0.14	0.17	0.17
Sat Flow, veh/h	1792	3574	1540	1792	4153	933	1792	2646	824	1792	3574	1495
Grp Volume(v), veh/h	440	1088	231	165	1204	588	341	355	337	330	462	440
Grp Sat Flow(s),veh/h/ln	1792	1787	1540	1792	1712	1662	1792	1787	1682	1792	1787	1495
Q Serve(g_s), s	27.0	29.7	8.6	10.9	38.0	38.0	19.0	22.0	22.0	17.0	14.8	20.0
Cycle Q Clear(g_c), s	27.0	29.7	8.6	10.9	38.0	38.0	19.0	22.0	22.0	17.0	14.8	20.0
Prop In Lane	1.00		1.00	1.00		0.56	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	403	1549	921	194	1084	526	370	328	308	314	596	609
V/C Ratio(X)	1.09	0.70	0.25	0.85	1.11	1.12	0.92	1.08	1.09	1.05	0.78	0.72
Avail Cap(c_a), veh/h	403	1549	921	269	1084	526	370	328	308	314	596	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	27.7	11.8	52.6	41.0	41.0	35.3	49.0	49.0	36.9	47.9	31.4
Incr Delay (d2), s/veh	71.7	1.4	0.1	16.8	62.9	75.5	27.8	73.8	78.4	65.0	9.5	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.4	15.0	3.7	6.3	27.4	28.4	12.1	17.5	16.9	14.2	8.1	13.7
LnGrp Delay(d), s/veh	118.2	29.1	11.9	69.4	103.9	116.5	63.1	122.8	127.4	101.9	57.4	38.6
LnGrp LOS	F	C	B	E	F	F	E	F	F	F	E	D
Approach Vol, veh/h		1759			1957			1033			1232	
Approach Delay, s/veh		49.2			104.8			104.6			62.6	
Approach LOS		D			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	26.0	17.0	56.0	23.0	24.0	31.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	22.0	18.0	47.0	19.0	20.0	27.0	38.0
Max Q Clear Time (g_c+I1), s	19.0	24.0	12.9	31.7	21.0	22.0	29.0	40.0
Green Ext Time (p_c), s	0.0	0.0	0.2	7.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	79.7
HCM 2010 LOS	E

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	150	250	40	270	120	290	640	50	90	250	220
Future Volume (veh/h)	150	150	250	40	270	120	290	640	50	90	250	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	155	155	258	41	278	124	299	660	52	93	258	227
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	245	231	385	220	453	202	507	1882	148	399	1028	871
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	989	627	1043	979	1230	548	914	3349	264	742	1830	1549
Grp Volume(v), veh/h	155	0	413	41	0	402	299	352	360	93	252	233
Grp Sat Flow(s),veh/h/ln	989	0	1669	979	0	1778	914	1787	1825	742	1787	1591
Q Serve(g_s), s	17.5	0.0	24.0	4.2	0.0	21.3	28.8	12.4	12.5	9.0	8.3	8.7
Cycle Q Clear(g_c), s	38.9	0.0	24.0	28.2	0.0	21.3	37.5	12.4	12.5	21.5	8.3	8.7
Prop In Lane	1.00		0.62	1.00		0.31	1.00		0.14	1.00		0.97
Lane Grp Cap(c), veh/h	245	0	616	220	0	656	507	1004	1026	399	1004	894
V/C Ratio(X)	0.63	0.00	0.67	0.19	0.00	0.61	0.59	0.35	0.35	0.23	0.25	0.26
Avail Cap(c_a), veh/h	282	0	678	257	0	723	507	1004	1026	399	1004	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	0.0	30.6	42.5	0.0	29.8	22.6	13.8	13.8	19.7	12.9	13.0
Incr Delay (d2), s/veh	3.7	0.0	2.3	0.4	0.0	1.3	5.0	1.0	0.9	1.4	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	11.4	1.2	0.0	10.7	7.9	6.3	6.5	2.0	4.2	4.0
LnGrp Delay(d), s/veh	49.3	0.0	32.9	42.9	0.0	31.1	27.6	14.8	14.8	21.0	13.5	13.7
LnGrp LOS	D		C	D		C	C	B	B	C	B	B
Approach Vol, veh/h		568			443			1011			578	
Approach Delay, s/veh		37.4			32.2			18.6			14.8	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		46.7		69.0		46.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		39.5		40.9		23.5		30.2
Green Ext Time (p_c), s		6.6		1.8		4.1		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	500	270	10	220	60	740	120	190	1160	10
Future Volume (veh/h)	20	0	500	270	10	220	60	740	120	190	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	21	0	532	287	11	234	64	787	128	202	1234	11
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	187	0	389	60	18	375	96	1285	1066	340	1285	1066
Arrive On Green	0.25	0.00	0.25	0.25	0.25	0.25	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	1141	0	1557	877	71	1500	449	1881	1560	614	1881	1560
Grp Volume(v), veh/h	21	0	532	287	0	245	64	787	128	202	1234	11
Grp Sat Flow(s),veh/h/ln	1141	0	1557	877	0	1570	449	1881	1560	614	1881	1560
Q Serve(g_s), s	2.0	0.0	30.0	0.0	0.0	16.6	9.5	27.3	3.4	32.0	72.5	0.3
Cycle Q Clear(g_c), s	18.6	0.0	30.0	30.0	0.0	16.6	82.0	27.3	3.4	59.4	72.5	0.3
Prop In Lane	1.00		1.00	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	187	0	389	60	0	393	96	1285	1066	340	1285	1066
V/C Ratio(X)	0.11	0.00	1.37	4.78	0.00	0.62	0.67	0.61	0.12	0.59	0.96	0.01
Avail Cap(c_a), veh/h	187	0	389	60	0	393	96	1285	1066	340	1285	1066
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	0.0	45.0	60.0	0.0	40.0	57.3	10.3	6.6	26.5	17.5	6.1
Incr Delay (d2), s/veh	0.3	0.0	180.8	1739.6	0.0	3.1	31.3	2.2	0.2	7.5	17.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	32.4	31.0	0.0	7.5	2.9	14.8	1.5	6.1	43.2	0.1
LnGrp Delay(d), s/veh	48.5	0.0	225.8	1799.6	0.0	43.1	88.7	12.5	6.8	34.0	34.7	6.1
LnGrp LOS	D		F	F		D	F	B	A	C	C	A
Approach Vol, veh/h		553			532			979			1447	
Approach Delay, s/veh		219.1			990.7			16.8			34.4	
Approach LOS		F			F			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.0		34.0		86.0		34.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		82.0		30.0		82.0		30.0
Max Q Clear Time (g_c+I1), s		84.0		32.0		74.5		32.0
Green Ext Time (p_c), s		0.0		0.0		5.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	203.5
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Future Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	84	274	116	32	168	42	137	737	116	53	337	53
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	187	391	324	138	300	75	749	1353	1124	416	2222	346
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1175	1881	1561	999	1442	361	999	1881	1563	651	3090	481
Grp Volume(v), veh/h	84	274	116	32	0	210	137	737	116	53	193	197
Grp Sat Flow(s),veh/h/ln	1175	1881	1561	999	0	1803	999	1881	1563	651	1787	1783
Q Serve(g_s), s	7.6	14.8	7.0	3.4	0.0	11.5	5.5	19.9	2.5	4.5	3.7	3.8
Cycle Q Clear(g_c), s	19.0	14.8	7.0	18.2	0.0	11.5	9.3	19.9	2.5	24.4	3.7	3.8
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	187	391	324	138	0	375	749	1353	1124	416	1285	1283
V/C Ratio(X)	0.45	0.70	0.36	0.23	0.00	0.56	0.18	0.54	0.10	0.13	0.15	0.15
Avail Cap(c_a), veh/h	296	565	469	231	0	542	749	1353	1124	416	1285	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	40.3	37.2	48.8	0.0	39.0	6.3	7.1	4.7	12.7	4.9	4.9
Incr Delay (d2), s/veh	1.7	2.3	0.7	0.8	0.0	1.3	0.5	1.6	0.2	0.6	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.9	3.1	1.0	0.0	5.9	1.6	10.8	1.1	0.9	1.9	1.9
LnGrp Delay(d), s/veh	49.2	42.6	37.9	49.6	0.0	40.3	6.9	8.7	4.9	13.4	5.1	5.1
LnGrp LOS	D	D	D	D		D	A	A	A	B	A	A
Approach Vol, veh/h		474			242			990			443	
Approach Delay, s/veh		42.6			41.5			8.0			6.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		26.8		83.0		26.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		21.9		21.0		26.4		20.2
Green Ext Time (p_c), s		7.2		1.8		3.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Future Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	467	130	98	435	98	261	967	76	130	707	217
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	306	741	318	243	517	219	418	2103	165	321	1355	416
Arrive On Green	0.12	0.21	0.21	0.06	0.14	0.14	0.09	0.63	0.63	0.51	0.51	0.51
Sat Flow, veh/h	1792	3574	1533	1792	3574	1515	1792	3352	263	543	2677	822
Grp Volume(v), veh/h	228	467	130	98	435	98	261	516	527	130	472	452
Grp Sat Flow(s),veh/h/ln	1792	1787	1533	1792	1787	1515	1792	1787	1828	543	1787	1711
Q Serve(g_s), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	18.9	20.3	20.3
Cycle Q Clear(g_c), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	22.3	20.3	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.48
Lane Grp Cap(c), veh/h	306	741	318	243	517	219	418	1121	1147	321	904	866
V/C Ratio(X)	0.74	0.63	0.41	0.40	0.84	0.45	0.62	0.46	0.46	0.40	0.52	0.52
Avail Cap(c_a), veh/h	351	903	387	244	592	251	481	1121	1147	321	904	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	41.5	39.4	38.5	47.8	44.9	14.0	11.2	11.2	20.7	19.0	19.0
Incr Delay (d2), s/veh	7.2	1.0	0.8	1.1	9.5	1.4	2.0	1.4	1.3	3.7	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.8	3.6	2.7	7.4	2.9	3.9	8.9	9.1	3.2	10.5	10.1
LnGrp Delay(d), s/veh	42.2	42.5	40.2	39.6	57.3	46.3	16.0	12.5	12.5	24.4	21.2	21.3
LnGrp LOS	D	D	D	D	E	D	B	B	B	C	C	C
Approach Vol, veh/h		825			631			1304			1054	
Approach Delay, s/veh		42.0			52.8			13.2			21.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		76.0	11.0	27.8	13.9	62.1	18.1	20.6
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		72.0	7.0	29.0	14.0	54.0	17.0	19.0
Max Q Clear Time (g_c+I1), s		19.3	7.3	15.7	9.6	24.3	14.0	15.6
Green Ext Time (p_c), s		8.4	0.0	2.9	0.3	8.7	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Future Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	253	126	168	105	463	221	116	663	53	95	484	242
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	338	600	498	424	567	268	330	1740	139	367	979	1017
Arrive On Green	0.12	0.32	0.32	0.05	0.24	0.24	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1810	1900	1577	1810	2355	1115	740	3376	270	746	1900	1582
Grp Volume(v), veh/h	253	126	168	105	354	330	116	354	362	95	484	242
Grp Sat Flow(s),veh/h/ln	1810	1900	1577	1810	1805	1665	740	1805	1841	746	1900	1582
Q Serve(g_s), s	10.1	4.9	8.2	4.4	18.7	18.9	12.2	11.9	12.0	8.9	16.7	6.6
Cycle Q Clear(g_c), s	10.1	4.9	8.2	4.4	18.7	18.9	28.9	11.9	12.0	20.8	16.7	6.6
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	338	600	498	424	435	401	330	930	949	367	979	1017
V/C Ratio(X)	0.75	0.21	0.34	0.25	0.81	0.82	0.35	0.38	0.38	0.26	0.49	0.24
Avail Cap(c_a), veh/h	525	961	797	424	590	545	330	930	949	367	979	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	25.3	26.4	27.0	36.2	36.3	25.3	14.7	14.7	21.0	15.9	7.7
Incr Delay (d2), s/veh	3.3	0.2	0.4	0.3	6.3	7.3	2.9	1.2	1.2	1.7	1.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	2.6	3.6	2.2	10.1	9.5	2.7	6.2	6.3	2.0	9.2	3.0
LnGrp Delay(d), s/veh	28.5	25.4	26.8	27.3	42.5	43.6	28.2	15.9	15.9	22.7	17.7	8.3
LnGrp LOS	C	C	C	C	D	D	C	B	B	C	B	A
Approach Vol, veh/h		547			789			832			821	
Approach Delay, s/veh		27.3			40.9			17.6			15.5	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	9.0	35.9		56.0	16.6	28.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	5.0	51.0		52.0	23.0	33.0
Max Q Clear Time (g_c+I1), s		30.9	6.4	10.2		22.8	12.1	20.9
Green Ext Time (p_c), s		5.3	0.0	1.3		4.9	0.5	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Future Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	274	653	505	611	832	105	463	1063	168	126	853	295
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	344	625	258	538	954	120	403	1152	182	169	834	347
Arrive On Green	0.14	0.17	0.17	0.27	0.30	0.30	0.19	0.38	0.38	0.05	0.23	0.23
Sat Flow, veh/h	1792	3574	1473	1792	3172	400	1792	3071	484	1792	3574	1487
Grp Volume(v), veh/h	274	653	505	611	469	468	463	618	613	126	853	295
Grp Sat Flow(s),veh/h/ln	1792	1787	1473	1792	1787	1785	1792	1787	1768	1792	1787	1487
Q Serve(g_s), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Cycle Q Clear(g_c), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	344	625	258	538	537	537	403	670	663	169	834	347
V/C Ratio(X)	0.80	1.04	1.96	1.14	0.87	0.87	1.15	0.92	0.93	0.75	1.02	0.85
Avail Cap(c_a), veh/h	360	625	258	538	537	537	403	670	663	169	834	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	49.5	49.5	35.0	39.8	39.8	36.8	35.8	35.9	37.6	46.0	44.0
Incr Delay (d2), s/veh	11.4	48.0	445.4	82.1	14.6	14.6	91.6	20.1	20.8	16.4	37.1	22.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	14.5	40.4	30.0	16.9	16.9	23.6	23.3	23.3	3.9	18.1	11.5
LnGrp Delay(d), s/veh	46.0	97.5	494.9	117.1	54.4	54.4	128.5	55.9	56.7	53.9	83.1	66.1
LnGrp LOS	D	F	F	F	D	D	F	E	E	D	F	E
Approach Vol, veh/h		1432			1548			1694			1274	
Approach Delay, s/veh		227.8			79.1			76.0			76.3	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	36.0	25.0	27.0	32.0	20.9	40.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	32.0	21.0	23.0	28.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	8.0	41.9	34.0	23.0	25.0	30.0	16.8	31.8
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	0.0	0.1	1.7

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		113.4	
HCM 2010 LOS		F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Future Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.89	1.00		0.93	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	333	1031	146	156	1469	198	365	1240	167	125	1000	271
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1334	189	183	1311	520	314	1322	178	144	984	276
Arrive On Green	0.17	0.43	0.43	0.10	0.37	0.37	0.14	0.29	0.29	0.04	0.19	0.19
Sat Flow, veh/h	1792	3096	438	1792	3574	1418	1792	4532	610	1792	5136	1441
Grp Volume(v), veh/h	333	594	583	156	1469	198	365	937	470	125	1000	271
Grp Sat Flow(s),veh/h/ln	1792	1787	1746	1792	1787	1418	1792	1712	1719	1792	1712	1441
Q Serve(g_s), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Cycle Q Clear(g_c), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	299	770	753	183	1311	520	314	999	501	144	984	276
V/C Ratio(X)	1.12	0.77	0.77	0.85	1.12	0.38	1.16	0.94	0.94	0.87	1.02	0.98
Avail Cap(c_a), veh/h	299	770	753	209	1311	520	314	999	501	144	984	276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	29.1	29.1	53.0	38.0	28.0	35.0	41.4	41.4	44.7	48.5	48.3
Incr Delay (d2), s/veh	86.7	4.8	5.0	24.8	65.1	0.5	102.7	17.0	27.4	38.9	32.7	49.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	17.7	17.4	6.3	33.5	4.9	19.3	17.4	19.0	4.9	13.8	12.8
LnGrp Delay(d), s/veh	136.7	33.9	34.2	77.7	103.1	28.4	137.6	58.4	68.9	83.6	81.2	97.9
LnGrp LOS	F	C	C	E	F	C	F	E	E	F	F	F
Approach Vol, veh/h		1510			1823			1772			1396	
Approach Delay, s/veh		56.7			92.8			77.5			84.7	
Approach LOS		E			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	39.0	16.3	55.7	21.0	27.0	24.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	35.0	14.0	50.0	17.0	23.0	20.0	44.0
Max Q Clear Time (g_c+I1), s	7.0	34.0	12.3	36.2	19.0	25.0	22.0	46.0
Green Ext Time (p_c), s	0.0	0.8	0.1	6.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	78.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Future Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.90	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	200	484	211	347	1021	389	358	1000	137	305	800	137
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	226	779	308	376	1077	436	385	1135	155	331	965	163
Arrive On Green	0.13	0.22	0.22	0.21	0.30	0.30	0.21	0.25	0.25	0.19	0.22	0.22
Sat Flow, veh/h	1792	3574	1411	1792	3574	1445	1792	4493	613	1792	4332	732
Grp Volume(v), veh/h	200	484	211	347	1021	389	358	761	376	305	630	307
Grp Sat Flow(s),veh/h/ln	1792	1787	1411	1792	1787	1445	1792	1712	1683	1792	1712	1640
Q Serve(g_s), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Cycle Q Clear(g_c), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.45
Lane Grp Cap(c), veh/h	226	779	308	376	1077	436	385	865	425	331	763	366
V/C Ratio(X)	0.88	0.62	0.69	0.92	0.95	0.89	0.93	0.88	0.88	0.92	0.83	0.84
Avail Cap(c_a), veh/h	226	779	308	422	1083	438	407	865	425	347	763	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	42.0	42.7	46.0	40.6	39.7	45.8	42.7	42.7	47.5	44.0	44.1
Incr Delay (d2), s/veh	31.1	1.5	6.2	24.3	16.3	20.1	27.2	12.4	22.6	28.3	9.9	20.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	7.4	6.9	13.7	18.7	14.6	14.4	13.4	14.6	12.4	10.9	11.7
LnGrp Delay(d), s/veh	82.1	43.5	48.9	70.3	56.9	59.7	72.9	55.1	65.3	75.9	53.9	64.3
LnGrp LOS	F	D	D	E	E	E	E	E	E	E	D	E
Approach Vol, veh/h		895			1757			1495			1242	
Approach Delay, s/veh		53.4			60.2			61.9			61.9	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	34.0	28.9	29.9	29.5	30.5	19.0	39.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	30.0	28.0	23.0	27.0	26.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	21.9	27.5	24.5	18.3	25.3	23.2	15.0	35.2
Green Ext Time (p_c), s	0.1	1.6	0.4	1.6	0.2	1.5	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Future Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	354	1081	152	374	1293	253	495	919	141	323	788	172
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	378	1639	230	440	1362	572	523	1372	399	379	941	203
Arrive On Green	0.11	0.36	0.36	0.13	0.38	0.38	0.15	0.27	0.27	0.11	0.23	0.23
Sat Flow, veh/h	3476	4514	634	3476	3574	1500	3476	5136	1492	3476	4167	898
Grp Volume(v), veh/h	354	820	413	374	1293	253	495	919	141	323	646	314
Grp Sat Flow(s),veh/h/ln	1738	1712	1724	1738	1787	1500	1738	1712	1492	1738	1712	1642
Q Serve(g_s), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Cycle Q Clear(g_c), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	378	1243	626	440	1362	572	523	1372	399	379	773	371
V/C Ratio(X)	0.94	0.66	0.66	0.85	0.95	0.44	0.95	0.67	0.35	0.85	0.84	0.85
Avail Cap(c_a), veh/h	378	1243	626	552	1375	577	523	1372	399	407	773	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	31.9	31.9	51.1	35.9	27.5	50.3	39.1	35.4	52.3	44.2	44.3
Incr Delay (d2), s/veh	30.6	1.3	2.6	9.9	13.9	0.5	26.4	2.6	2.4	15.0	10.3	20.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	11.5	11.8	6.6	23.3	6.3	10.0	9.4	4.1	6.0	11.2	12.1
LnGrp Delay(d), s/veh	83.5	33.2	34.5	61.0	49.8	28.1	76.7	41.7	37.9	67.3	54.5	65.1
LnGrp LOS	F	C	C	E	D	C	E	D	D	E	D	E
Approach Vol, veh/h		1587			1920			1555			1283	
Approach Delay, s/veh		44.7			49.1			52.5			60.3	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	36.0	19.1	47.4	22.0	31.0	17.0	49.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	19.0	40.0	18.0	27.0	13.0	46.0
Max Q Clear Time (g_c+I1), s	12.9	21.1	14.6	26.0	18.9	23.9	14.1	43.9
Green Ext Time (p_c), s	0.1	4.5	0.6	6.7	0.0	1.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Future Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	287	32	191	11	32	32	202	1415	21	32	777	202
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	59	0	632	39	94	643	234	2457	36	40	1468	377
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.47	0.47	0.02	0.36	0.36
Sat Flow, veh/h	0	0	1568	0	233	1595	1792	5211	77	1792	4038	1038
Grp Volume(v), veh/h	319	0	191	43	0	32	202	930	506	32	658	321
Grp Sat Flow(s),veh/h/ln	0	0	1568	233	0	1595	1792	1712	1865	1792	1712	1652
Q Serve(g_s), s	0.0	0.0	9.7	0.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Cycle Q Clear(g_c), s	47.0	0.0	9.7	47.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Prop In Lane	0.90		1.00	0.26		1.00	1.00		0.04	1.00		0.63
Lane Grp Cap(c), veh/h	59	0	632	133	0	643	234	1615	879	40	1245	600
V/C Ratio(X)	5.44	0.00	0.30	0.32	0.00	0.05	0.86	0.58	0.58	0.79	0.53	0.54
Avail Cap(c_a), veh/h	59	0	632	133	0	643	384	1615	879	92	1245	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	23.7	28.5	0.0	21.2	49.7	22.4	22.4	56.7	29.2	29.3
Incr Delay (d2), s/veh	2035.1	0.0	0.3	1.4	0.0	0.0	10.6	1.5	2.7	28.1	1.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.0	0.0	4.2	0.9	0.0	0.6	7.1	11.2	12.5	1.3	8.6	8.8
LnGrp Delay(d), s/veh	2093.4	0.0	23.9	29.9	0.0	21.2	60.3	23.9	25.1	84.8	30.8	32.7
LnGrp LOS	F		C	C		C	E	C	C	F	C	C
Approach Vol, veh/h		510			75			1638			1011	
Approach Delay, s/veh		1318.4			26.2			28.7			33.2	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	59.0		51.0	19.2	46.4		51.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	55.0		47.0	25.0	36.0		47.0
Max Q Clear Time (g_c+I1), s	4.1	25.0		49.0	14.9	19.9		49.0
Green Ext Time (p_c), s	0.0	11.4		0.0	0.4	5.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		233.4
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Future Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.95		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	42	73	125	125	125	73	156	1250	94	62	948	52
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	319	246	223	319	248	462	2447	1049	336	2296	126
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.68	0.68	0.03	0.67	0.67
Sat Flow, veh/h	1142	1881	1453	1135	1881	1462	1792	3574	1532	1792	3437	188
Grp Volume(v), veh/h	42	73	125	125	125	73	156	1250	94	62	493	507
Grp Sat Flow(s),veh/h/ln	1142	1881	1453	1135	1881	1462	1792	1787	1532	1792	1787	1838
Q Serve(g_s), s	3.6	3.5	8.2	11.3	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Cycle Q Clear(g_c), s	9.8	3.5	8.2	14.8	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	194	319	246	223	319	248	462	2447	1049	336	1194	1228
V/C Ratio(X)	0.22	0.23	0.51	0.56	0.39	0.29	0.34	0.51	0.09	0.18	0.41	0.41
Avail Cap(c_a), veh/h	305	501	387	332	501	389	648	2447	1049	415	1194	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	37.7	39.7	44.1	38.9	38.2	5.8	8.0	5.6	6.4	8.0	8.0
Incr Delay (d2), s/veh	0.5	0.4	1.6	2.2	0.8	0.7	0.4	0.8	0.2	0.3	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	3.4	3.7	3.3	1.9	1.4	8.9	1.0	0.6	6.8	7.0
LnGrp Delay(d), s/veh	43.8	38.1	41.3	46.3	39.6	38.8	6.2	8.8	5.7	6.6	9.1	9.0
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		240			323			1500			1062	
Approach Delay, s/veh		40.8			42.0			8.3			8.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	76.0		21.8	9.1	74.3		21.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	72.0		28.0	16.0	64.0		28.0
Max Q Clear Time (g_c+I1), s	3.1	19.8		11.8	4.8	15.3		16.8
Green Ext Time (p_c), s	0.0	13.2		0.9	0.3	8.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1340	420	40	530	60	120	1080	30	150	1080	150
Future Volume (veh/h)	260	1340	420	40	530	60	120	1080	30	150	1080	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	271	1396	438	42	552	62	125	1125	31	156	1125	156
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	354	1504	747	73	933	104	193	1397	38	236	1271	176
Arrive On Green	0.10	0.43	0.43	0.29	0.29	0.29	0.06	0.40	0.40	0.07	0.41	0.41
Sat Flow, veh/h	1757	3505	1529	250	3167	355	1757	3482	96	1757	3083	426
Grp Volume(v), veh/h	271	1396	438	42	305	309	125	566	590	156	638	643
Grp Sat Flow(s),veh/h/ln	1757	1752	1529	250	1752	1769	1757	1752	1825	1757	1752	1757
Q Serve(g_s), s	12.0	44.9	24.5	6.1	17.6	17.8	4.9	34.0	34.0	6.1	40.0	40.3
Cycle Q Clear(g_c), s	12.0	44.9	24.5	35.0	17.6	17.8	4.9	34.0	34.0	6.1	40.0	40.3
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.05	1.00		0.24
Lane Grp Cap(c), veh/h	354	1504	747	73	516	521	193	703	732	236	723	725
V/C Ratio(X)	0.77	0.93	0.59	0.57	0.59	0.59	0.65	0.81	0.81	0.66	0.88	0.89
Avail Cap(c_a), veh/h	354	1504	747	73	516	521	210	703	732	264	723	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	32.2	21.9	58.5	35.8	35.8	27.2	31.5	31.5	25.5	32.3	32.4
Incr Delay (d2), s/veh	9.7	10.4	1.2	10.3	1.8	1.8	6.0	9.5	9.2	5.1	14.7	15.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	23.9	10.6	1.6	8.8	8.9	2.7	18.2	18.9	3.3	22.3	22.5
LnGrp Delay(d), s/veh	37.5	42.6	23.1	68.8	37.6	37.7	33.3	41.0	40.7	30.6	47.0	47.4
LnGrp LOS	D	D	C	E	D	D	C	D	D	C	D	D
Approach Vol, veh/h		2105			656			1281			1437	
Approach Delay, s/veh		37.9			39.6			40.1			45.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	51.7		55.0	10.8	53.0	16.0	39.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	47.0		51.0	8.0	49.0	12.0	35.0
Max Q Clear Time (g_c+I1), s	8.1	36.0		46.9	6.9	42.3	14.0	37.0
Green Ext Time (p_c), s	0.1	5.5		3.3	0.0	4.2	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		40.6
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	870	500	40	410	50	210	900	30	130	1170	110
Future Volume (veh/h)	190	870	500	40	410	50	210	900	30	130	1170	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	906	521	42	427	52	219	938	0	135	1219	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	225	1009	444	53	666	293	246	1590	711	163	1424	637
Arrive On Green	0.13	0.29	0.29	0.03	0.19	0.19	0.14	0.45	0.00	0.09	0.41	0.00
Sat Flow, veh/h	1757	3505	1544	1757	3505	1542	1757	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	198	906	521	42	427	52	219	938	0	135	1219	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1544	1757	1752	1542	1757	1752	1568	1757	1752	1568
Q Serve(g_s), s	13.1	29.3	34.0	2.8	13.3	3.3	14.5	23.6	0.0	8.9	37.4	0.0
Cycle Q Clear(g_c), s	13.1	29.3	34.0	2.8	13.3	3.3	14.5	23.6	0.0	8.9	37.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1009	444	53	666	293	246	1590	711	163	1424	637
V/C Ratio(X)	0.88	0.90	1.17	0.79	0.64	0.18	0.89	0.59	0.00	0.83	0.86	0.00
Avail Cap(c_a), veh/h	253	1009	444	59	666	293	268	1590	711	253	1424	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	40.4	42.1	56.9	44.1	40.1	49.9	24.1	0.0	52.7	31.9	0.0
Incr Delay (d2), s/veh	25.9	10.7	99.3	45.3	2.1	0.3	27.3	1.6	0.0	12.5	6.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	15.7	26.7	2.0	6.6	1.4	8.9	11.7	0.0	4.9	19.5	0.0
LnGrp Delay(d), s/veh	76.5	51.1	141.4	102.2	46.2	40.4	77.2	25.7	0.0	65.2	38.7	0.0
LnGrp LOS	E	D	F	F	D	D	E	C		E	D	
Approach Vol, veh/h		1625			521			1157			1354	
Approach Delay, s/veh		83.2			50.2			35.4			41.4	
Approach LOS		F			D			D			D	

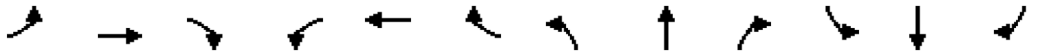
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	57.6	7.6	38.0	20.5	52.0	19.2	26.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	49.0	4.0	34.0	18.0	48.0	17.0	21.0
Max Q Clear Time (g_c+I1), s	10.9	25.6	4.8	36.0	16.5	39.4	15.1	15.3
Green Ext Time (p_c), s	0.1	6.6	0.0	0.0	0.1	5.0	0.1	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	170	1180	90	40	850	130	130	560	150	150	420	160
Future Volume (veh/h)	170	1180	90	40	850	130	130	560	150	150	420	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1759
Adj Flow Rate, veh/h	173	1204	0	41	867	133	133	571	153	153	429	163
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	206	1437	643	50	1126	490	163	1002	262	185	932	404
Arrive On Green	0.12	0.43	0.00	0.03	0.34	0.34	0.10	0.27	0.27	0.11	0.28	0.28
Sat Flow, veh/h	1675	3343	1495	1675	3343	1455	1675	3768	984	1675	3343	1450
Grp Volume(v), veh/h	173	1204	0	41	867	133	133	483	241	153	429	163
Grp Sat Flow(s),veh/h/ln	1675	1671	1495	1675	1671	1455	1675	1601	1549	1675	1671	1450
Q Serve(g_s), s	9.9	31.4	0.0	2.4	22.7	6.5	7.6	12.7	13.2	8.7	10.4	8.9
Cycle Q Clear(g_c), s	9.9	31.4	0.0	2.4	22.7	6.5	7.6	12.7	13.2	8.7	10.4	8.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	206	1437	643	50	1126	490	163	852	412	185	932	404
V/C Ratio(X)	0.84	0.84	0.00	0.81	0.77	0.27	0.82	0.57	0.58	0.83	0.46	0.40
Avail Cap(c_a), veh/h	343	1847	826	103	1368	596	291	852	412	309	932	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	24.8	0.0	47.1	29.0	23.6	43.2	31.0	31.2	42.6	29.1	28.6
Incr Delay (d2), s/veh	9.0	2.8	0.0	25.6	2.2	0.3	9.5	2.7	6.0	9.1	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	14.9	0.0	1.5	10.8	2.7	3.9	6.0	6.3	4.5	5.0	3.9
LnGrp Delay(d), s/veh	50.9	27.7	0.0	72.7	31.2	23.9	52.7	33.7	37.1	51.7	30.8	31.6
LnGrp LOS	D	C		E	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1377			1041			857			745	
Approach Delay, s/veh		30.6			31.9			37.6			35.2	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	30.0	6.9	46.0	13.5	31.3	16.0	36.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	26.0	6.0	54.0	17.0	27.0	20.0	40.0
Max Q Clear Time (g_c+I1), s	10.7	15.2	4.4	33.4	9.6	12.4	11.9	24.7
Green Ext Time (p_c), s	0.2	3.3	0.0	8.6	0.2	2.8	0.3	5.5

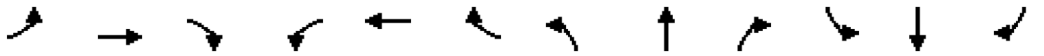
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.3
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	990	130	190	870	40	160	550	90	60	470	20
Future Volume (veh/h)	60	990	130	190	870	40	160	550	90	60	470	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	65	1076	141	207	946	43	174	598	98	65	511	22
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Cap, veh/h	82	1266	556	240	1581	704	206	1157	186	82	968	41
Arrive On Green	0.05	0.38	0.38	0.14	0.47	0.47	0.12	0.28	0.28	0.05	0.20	0.20
Sat Flow, veh/h	1691	3374	1482	1691	3374	1504	1691	4191	675	1691	4760	204
Grp Volume(v), veh/h	65	1076	141	207	946	43	174	459	237	65	346	187
Grp Sat Flow(s),veh/h/ln	1691	1687	1482	1691	1687	1504	1691	1616	1634	1691	1616	1732
Q Serve(g_s), s	3.9	29.7	6.7	12.1	21.0	1.6	10.2	12.1	12.5	3.9	9.7	9.8
Cycle Q Clear(g_c), s	3.9	29.7	6.7	12.1	21.0	1.6	10.2	12.1	12.5	3.9	9.7	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		0.12
Lane Grp Cap(c), veh/h	82	1266	556	240	1581	704	206	892	451	82	657	352
V/C Ratio(X)	0.79	0.85	0.25	0.86	0.60	0.06	0.85	0.51	0.53	0.79	0.53	0.53
Avail Cap(c_a), veh/h	167	1497	658	350	1863	830	300	892	451	167	657	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	29.1	21.9	42.5	19.9	14.7	43.6	31.0	31.1	47.7	36.0	36.1
Incr Delay (d2), s/veh	15.1	4.2	0.2	13.8	0.4	0.0	13.7	2.1	4.3	15.1	3.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	14.5	2.8	6.6	9.8	0.7	5.6	5.7	6.1	2.2	4.6	5.2
LnGrp Delay(d), s/veh	62.8	33.3	22.1	56.3	20.3	14.8	57.3	33.1	35.4	62.8	39.0	41.7
LnGrp LOS	E	C	C	E	C	B	E	C	D	E	D	D
Approach Vol, veh/h		1282			1196			870			598	
Approach Delay, s/veh		33.5			26.3			38.5			42.5	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	32.0	18.4	42.1	16.3	24.6	8.9	51.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	28.0	21.0	45.0	18.0	20.0	10.0	56.0
Max Q Clear Time (g_c+I1), s	5.9	14.5	14.1	31.7	12.2	11.8	5.9	23.0
Green Ext Time (p_c), s	0.0	3.6	0.3	6.4	0.2	2.0	0.0	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↑↑		↰	↑↑↑					↰↰		↱
Traffic Volume (vph)	0	1380	0	310	890	0	0	0	0	220	0	40
Future Volume (vph)	0	1380	0	310	890	0	0	0	0	220	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3438		1719	4940					3335		1538
Flt Permitted		1.00		0.16	1.00					0.95		1.00
Satd. Flow (perm)		3438		282	4940					3335		1538
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1453	0	326	937	0	0	0	0	232	0	42
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	36
Lane Group Flow (vph)	0	1453	0	326	937	0	0	0	0	232	0	6
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		96.0		96.0	96.0					16.0		16.0
Effective Green, g (s)		96.0		96.0	96.0					16.0		16.0
Actuated g/C Ratio		0.80		0.80	0.80					0.13		0.13
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2750		225	3952					444		205
v/s Ratio Prot		0.42			0.19							
v/s Ratio Perm				c1.16						c0.07		0.00
v/c Ratio		0.53		1.45	0.24					0.52		0.03
Uniform Delay, d1		4.2		12.0	3.0					48.4		45.2
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		225.2	0.0					4.3		0.2
Delay (s)		4.3		237.2	3.0					52.8		45.5
Level of Service		A		F	A					D		D
Approach Delay (s/veh)		4.3			63.4			0.0			51.7	
Approach LOS		A			E			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	1100	260	60	670	500	290	540	270	260	330	50
Future Volume (veh/h)	140	1100	260	60	670	500	290	540	270	260	330	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	146	1146	271	62	698	521	302	562	0	271	344	52
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	201	1195	280	72	1430	795	372	750	335	296	958	417
Arrive On Green	0.06	0.43	0.43	0.04	0.42	0.42	0.11	0.22	0.00	0.17	0.28	0.28
Sat Flow, veh/h	3343	2752	645	1723	3438	1501	3343	3438	1538	1723	3438	1499
Grp Volume(v), veh/h	146	712	705	62	698	521	302	562	0	271	344	52
Grp Sat Flow(s),veh/h/ln	1672	1719	1677	1723	1719	1501	1672	1719	1538	1723	1719	1499
Q Serve(g_s), s	5.1	47.7	49.0	4.3	17.7	30.0	10.5	18.2	0.0	18.4	9.6	3.1
Cycle Q Clear(g_c), s	5.1	47.7	49.0	4.3	17.7	30.0	10.5	18.2	0.0	18.4	9.6	3.1
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	746	728	72	1430	795	372	750	335	296	958	417
V/C Ratio(X)	0.73	0.95	0.97	0.86	0.49	0.66	0.81	0.75	0.00	0.92	0.36	0.12
Avail Cap(c_a), veh/h	280	750	731	72	1430	795	645	750	335	303	958	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	32.6	32.9	56.8	25.5	20.4	51.8	43.6	0.0	48.5	34.5	32.2
Incr Delay (d2), s/veh	5.7	22.2	25.6	60.3	0.3	1.9	4.3	6.8	0.0	30.5	1.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	27.1	27.7	3.2	8.5	12.8	5.1	9.4	0.0	11.3	4.7	1.4
LnGrp Delay(d), s/veh	60.7	54.7	58.5	117.0	25.8	22.4	56.1	50.4	0.0	79.0	35.5	32.8
LnGrp LOS	E	D	E	F	C	C	E	D		E	D	C
Approach Vol, veh/h		1563			1281			864			667	
Approach Delay, s/veh		57.0			28.8			52.4			53.0	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	37.2	9.0	55.8	24.5	30.0	11.2	53.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	24.0	5.0	52.0	21.0	26.0	10.0	47.0
Max Q Clear Time (g_c+I1), s	12.5	11.6	6.3	51.0	20.4	20.2	7.1	32.0
Green Ext Time (p_c), s	0.7	1.7	0.0	0.8	0.1	1.7	0.1	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1100	70	50	890	150	60	1040	70	280	1060	290
Future Volume (veh/h)	210	1100	70	50	890	150	60	1040	70	280	1060	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	221	1158	74	53	937	158	63	1095	74	295	1116	305
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	230	1473	94	67	920	155	80	1175	516	302	1616	916
Arrive On Green	0.13	0.31	0.31	0.04	0.22	0.22	0.05	0.34	0.34	0.17	0.47	0.47
Sat Flow, veh/h	1723	4737	303	1723	4248	714	1723	3438	1511	1723	3438	1513
Grp Volume(v), veh/h	221	805	427	53	726	369	63	1095	74	295	1116	305
Grp Sat Flow(s),veh/h/ln	1723	1647	1746	1723	1647	1668	1723	1719	1511	1723	1719	1513
Q Serve(g_s), s	15.3	26.7	26.8	3.7	26.0	26.0	4.3	36.9	4.1	20.4	30.6	12.0
Cycle Q Clear(g_c), s	15.3	26.7	26.8	3.7	26.0	26.0	4.3	36.9	4.1	20.4	30.6	12.0
Prop In Lane	1.00		0.17	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	1024	543	67	714	361	80	1175	516	302	1616	916
V/C Ratio(X)	0.96	0.79	0.79	0.79	1.02	1.02	0.79	0.93	0.14	0.98	0.69	0.33
Avail Cap(c_a), veh/h	230	1024	543	86	714	361	129	1175	516	302	1616	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	37.7	37.7	57.2	47.0	47.0	56.6	38.2	27.3	49.3	24.9	11.8
Incr Delay (d2), s/veh	48.5	4.1	7.6	29.8	38.0	53.0	15.3	14.3	0.6	45.7	2.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	12.8	14.1	2.3	15.6	17.3	2.4	19.8	1.8	13.6	15.0	5.2
LnGrp Delay(d), s/veh	100.2	41.8	45.3	86.9	85.0	100.1	71.9	52.5	27.9	95.0	27.4	12.8
LnGrp LOS	F	D	D	F	F	F	E	D	C	F	C	B
Approach Vol, veh/h		1453			1148			1232			1716	
Approach Delay, s/veh		51.7			89.9			52.0			36.4	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	45.0	8.7	41.3	9.6	60.4	20.0	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	41.0	6.0	36.0	9.0	53.0	16.0	26.0
Max Q Clear Time (g_c+I1), s	22.4	38.9	5.7	28.8	6.3	32.6	17.3	28.0
Green Ext Time (p_c), s	0.0	1.4	0.0	4.2	0.0	9.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1210	200	110	630	140	80	570	90	170	770	130
Future Volume (veh/h)	240	1210	200	110	630	140	80	570	90	170	770	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	247	1247	206	113	649	144	82	588	93	175	794	134
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	279	1446	239	139	1047	228	232	1657	719	338	1411	238
Arrive On Green	0.16	0.34	0.34	0.08	0.26	0.26	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1740	4294	709	1740	4084	891	589	3471	1506	741	2957	499
Grp Volume(v), veh/h	247	966	487	113	526	267	82	588	93	175	466	462
Grp Sat Flow(s),veh/h/ln	1740	1663	1678	1740	1663	1651	589	1736	1506	741	1736	1720
Q Serve(g_s), s	15.7	30.7	30.7	7.2	15.8	16.2	13.1	12.1	3.9	22.0	21.7	21.7
Cycle Q Clear(g_c), s	15.7	30.7	30.7	7.2	15.8	16.2	34.8	12.1	3.9	34.1	21.7	21.7
Prop In Lane	1.00		0.42	1.00		0.54	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	279	1120	565	139	852	423	232	1657	719	338	828	821
V/C Ratio(X)	0.89	0.86	0.86	0.81	0.62	0.63	0.35	0.35	0.13	0.52	0.56	0.56
Avail Cap(c_a), veh/h	400	1205	608	200	852	423	232	1657	719	338	828	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	35.1	35.1	51.2	37.2	37.3	33.6	18.6	16.5	29.3	21.1	21.1
Incr Delay (d2), s/veh	15.4	6.3	11.6	15.2	1.4	3.0	4.2	0.6	0.4	5.6	2.8	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	15.1	16.0	4.1	7.4	7.8	2.4	5.9	1.7	5.0	11.0	10.9
LnGrp Delay(d), s/veh	61.8	41.4	46.6	66.4	38.5	40.3	37.8	19.2	16.8	34.9	23.9	23.9
LnGrp LOS	E	D	D	E	D	D	D	B	B	C	C	C
Approach Vol, veh/h		1700			906			763			1103	
Approach Delay, s/veh		45.9			42.5			20.9			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	13.0	42.1		58.0	22.1	33.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	13.0	41.0		54.0	26.0	28.0
Max Q Clear Time (g_c+I1), s		36.8	9.2	32.7		36.1	17.7	18.2
Green Ext Time (p_c), s		5.0	0.1	5.4		7.2	0.4	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Future Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	1542	115	146	1031	167	104	271	104	312	281	83
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	1840	137	176	1814	293	131	484	393	381	798	230
Arrive On Green	0.07	0.38	0.38	0.10	0.41	0.41	0.07	0.26	0.26	0.11	0.30	0.30
Sat Flow, veh/h	1774	4827	360	1774	4387	709	1774	1863	1514	3442	2686	774
Grp Volume(v), veh/h	94	1083	574	146	796	402	104	271	104	312	183	181
Grp Sat Flow(s),veh/h/ln	1774	1695	1796	1774	1695	1706	1774	1863	1514	1721	1770	1691
Q Serve(g_s), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Cycle Q Clear(g_c), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Prop In Lane	1.00		0.20	1.00		0.42	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	119	1293	685	176	1402	706	131	484	393	381	526	502
V/C Ratio(X)	0.79	0.84	0.84	0.83	0.57	0.57	0.80	0.56	0.26	0.82	0.35	0.36
Avail Cap(c_a), veh/h	214	1416	750	264	1511	760	214	484	393	479	526	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	30.3	30.3	47.6	24.2	24.2	49.1	34.5	31.7	46.8	29.7	29.8
Incr Delay (d2), s/veh	10.9	4.3	7.8	12.7	0.4	0.9	10.4	4.6	1.6	8.7	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	15.4	16.9	4.9	9.2	9.3	3.4	7.6	2.6	5.0	4.5	4.5
LnGrp Delay(d), s/veh	60.4	34.6	38.1	60.2	24.6	25.1	59.5	39.1	33.3	55.5	31.5	31.8
LnGrp LOS	E	C	D	E	C	C	E	D	C	E	C	C
Approach Vol, veh/h		1751			1344			479			676	
Approach Delay, s/veh		37.1			28.6			42.3			42.7	
Approach LOS		D			C			D			D	

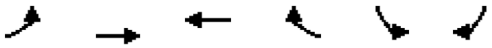
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	32.0	14.7	45.1	11.9	36.0	11.2	48.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	28.0	16.0	45.0	13.0	30.0	13.0	48.0
Max Q Clear Time (g_c+I1), s	11.5	15.6	10.7	33.3	8.2	11.1	7.6	21.5
Green Ext Time (p_c), s	0.4	1.6	0.2	7.8	0.1	2.2	0.1	8.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Future Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	253	1326	474	200	1063	147	305	653	316	242	316	337
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	1334	473	224	1487	205	332	834	365	268	706	313
Arrive On Green	0.16	0.36	0.36	0.13	0.33	0.33	0.19	0.23	0.23	0.15	0.20	0.20
Sat Flow, veh/h	1792	3720	1321	1792	4550	628	1792	3574	1565	1792	3574	1584
Grp Volume(v), veh/h	253	1220	580	200	799	411	305	653	316	242	316	337
Grp Sat Flow(s),veh/h/ln	1792	1712	1617	1792	1712	1755	1792	1787	1565	1792	1787	1584
Q Serve(g_s), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Cycle Q Clear(g_c), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Prop In Lane	1.00		0.82	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1228	580	224	1119	574	332	834	365	268	706	313
V/C Ratio(X)	0.90	0.99	1.00	0.89	0.71	0.72	0.92	0.78	0.86	0.90	0.45	1.08
Avail Cap(c_a), veh/h	314	1228	580	224	1119	574	359	834	365	269	706	313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	38.3	38.5	51.7	35.4	35.5	48.0	43.1	44.1	50.1	42.4	48.1
Incr Delay (d2), s/veh	25.7	24.0	37.6	33.0	2.2	4.2	26.9	7.2	22.9	31.0	2.0	72.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	24.3	25.2	8.6	12.0	12.7	12.4	11.0	12.4	10.2	4.8	16.7
LnGrp Delay(d), s/veh	75.4	62.4	76.1	84.6	37.6	39.7	74.9	50.3	67.1	81.1	44.4	120.9
LnGrp LOS	E	E	F	F	D	D	E	D	E	F	D	F
Approach Vol, veh/h		2053			1410			1274			895	
Approach Delay, s/veh		67.9			44.9			60.4			83.1	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	32.0	19.0	47.0	26.2	27.7	22.8	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	28.0	15.0	43.0	24.0	22.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	17.9	25.3	15.2	45.0	22.0	25.7	18.6	26.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.2	0.0	0.2	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.8
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	820	440	30	70	60
Future Volume (veh/h)	100	820	440	30	70	60
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	105	863	463	32	74	63
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	360	1277	1277	558	811	724
Arrive On Green	0.38	0.38	0.38	0.38	0.48	0.48
Sat Flow, veh/h	849	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	105	863	463	32	74	63
Grp Sat Flow(s),veh/h/ln	849	1671	1671	1461	1675	1495
Q Serve(g_s), s	6.1	12.9	5.9	0.8	1.4	1.4
Cycle Q Clear(g_c), s	12.0	12.9	5.9	0.8	1.4	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	360	1277	1277	558	811	724
V/C Ratio(X)	0.29	0.68	0.36	0.06	0.09	0.09
Avail Cap(c_a), veh/h	1212	4633	4633	2025	811	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	15.4	13.3	11.7	8.3	8.3
Incr Delay (d2), s/veh	0.4	0.6	0.2	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.0	2.7	0.3	0.7	0.6
LnGrp Delay(d), s/veh	18.0	16.0	13.4	11.7	8.6	8.6
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h		968	495		137	
Approach Delay, s/veh		16.3	13.3		8.6	
Approach LOS		B	B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				26.9		33.0		26.9
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s				14.9		3.4		7.9
Green Ext Time (p_c), s				8.0		0.4		3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	670	130	140	340	150	40	890	230	310	1200	90
Future Volume (veh/h)	140	670	130	140	340	150	40	890	230	310	1200	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	147	705	137	147	358	158	42	937	0	326	1263	95
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	175	805	354	202	448	194	53	1257	562	357	1863	778
Arrive On Green	0.10	0.23	0.23	0.06	0.19	0.19	0.03	0.36	0.00	0.21	0.54	0.54
Sat Flow, veh/h	1740	3471	1527	3375	2343	1015	1740	3471	1553	1740	3471	1448
Grp Volume(v), veh/h	147	705	137	147	263	253	42	937	0	326	1263	95
Grp Sat Flow(s),veh/h/ln	1740	1736	1527	1688	1736	1622	1740	1736	1553	1740	1736	1448
Q Serve(g_s), s	9.4	22.2	8.6	4.9	16.4	16.9	2.7	26.8	0.0	20.8	30.1	3.7
Cycle Q Clear(g_c), s	9.4	22.2	8.6	4.9	16.4	16.9	2.7	26.8	0.0	20.8	30.1	3.7
Prop In Lane	1.00		1.00	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	805	354	202	332	310	53	1257	562	357	1863	778
V/C Ratio(X)	0.84	0.88	0.39	0.73	0.79	0.81	0.79	0.75	0.00	0.91	0.68	0.12
Avail Cap(c_a), veh/h	214	886	390	208	336	314	107	1257	562	444	1863	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	42.1	36.8	52.5	43.8	44.0	54.7	31.7	0.0	44.1	19.2	13.0
Incr Delay (d2), s/veh	21.4	9.2	0.7	11.7	12.2	14.9	22.1	4.1	0.0	20.2	2.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	11.7	3.7	2.6	9.0	8.9	1.6	13.5	0.0	12.0	14.9	1.5
LnGrp Delay(d), s/veh	71.6	51.3	37.5	64.2	56.0	58.9	76.8	35.7	0.0	64.3	21.2	13.4
LnGrp LOS	E	D	D	E	E	E	E	D		E	C	B
Approach Vol, veh/h		989			663			979			1684	
Approach Delay, s/veh		52.4			58.9			37.5			29.1	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.3	45.1	10.8	30.3	7.5	65.0	15.4	25.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	39.0	7.0	29.0	7.0	61.0	14.0	22.0
Max Q Clear Time (g_c+I1), s	22.8	28.8	6.9	24.2	4.7	32.1	11.4	18.9
Green Ext Time (p_c), s	0.5	4.4	0.0	2.1	0.0	11.0	0.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.9
HCM 2010 LOS	D

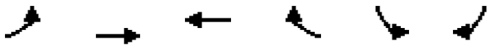
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	1440	650	10	30	40
Future Vol, veh/h	40	1440	650	10	30	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	42	1516	684	11	32	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	695	0	-	0	1526	342
Stage 1	-	-	-	-	684	-
Stage 2	-	-	-	-	842	-
Critical Hdwy	4.26	-	-	-	6.96	7.06
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	2.28	-	-	-	3.58	3.38
Pot Cap-1 Maneuver	858	-	-	-	102	637
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	368	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	858	-	-	-	97	637
Mov Cap-2 Maneuver	-	-	-	-	97	-
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	368	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.3	0	31.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	858	-	-	-	97	637
HCM Lane V/C Ratio	0.049	-	-	-	0.326	0.066
HCM Control Delay (s/veh)	9.4	-	-	-	59.1	11.1
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1.3	0.2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	1230	570	30	160	150
Future Volume (veh/h)	90	1230	570	30	160	150
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	96	1309	606	32	170	160
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	123	1698	1284	561	655	585
Arrive On Green	0.07	0.51	0.38	0.38	0.39	0.39
Sat Flow, veh/h	1675	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	96	1309	606	32	170	160
Grp Sat Flow(s),veh/h/ln	1675	1671	1671	1461	1675	1495
Q Serve(g_s), s	4.5	25.1	10.8	1.1	5.4	5.8
Cycle Q Clear(g_c), s	4.5	25.1	10.8	1.1	5.4	5.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	123	1698	1284	561	655	585
V/C Ratio(X)	0.78	0.77	0.47	0.06	0.26	0.27
Avail Cap(c_a), veh/h	402	3416	2446	1069	655	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	15.8	18.4	15.4	16.3	16.5
Incr Delay (d2), s/veh	10.2	0.8	0.3	0.0	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	11.6	5.0	0.4	2.7	5.8
LnGrp Delay(d), s/veh	46.3	16.5	18.6	15.4	17.3	17.6
LnGrp LOS	D	B	B	B	B	B
Approach Vol, veh/h		1405	638		330	
Approach Delay, s/veh		18.6	18.5		17.5	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				44.3		35.0	9.8	34.4
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				81.0		31.0	19.0	58.0
Max Q Clear Time (g_c+I1), s				27.1		7.8	6.5	12.8
Green Ext Time (p_c), s				13.2		1.0	0.2	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1360	10	0	590	40	0	0	40	0	0	20
Future Vol, veh/h	0	1360	10	0	590	40	0	0	40	0	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	1388	10	0	602	41	0	0	41	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	699	-	-	301
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.02	-	-	3.42
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	310	0	0	666
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	310	-	-	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	18.4	10.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	310	-	-	-	-	666
HCM Lane V/C Ratio	0.132	-	-	-	-	0.031
HCM Control Delay (s/veh)	18.4	-	-	-	-	10.6
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.1



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	590	290	590	690	360	290	400	220	0	0	70	900
Future Volume (vph)	590	290	590	690	360	290	400	220	0	0	70	900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0			4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00			1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00	0.99	1.00			1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85			1.00	1.00
Flt Protected	0.95		0.98	1.00	0.95	1.00	1.00	1.00			0.95	0.95
Satd. Flow (prot)	1451		4476	1467	1687	1776	1489	1509			1687	3273
Flt Permitted	0.95		0.68	1.00	0.95	1.00	1.00	1.00			0.95	0.95
Satd. Flow (perm)	1451		3133	1467	1687	1776	1489	1509			1687	3273
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	602	296	602	704	367	296	408	224	0	0	71	918
RTOR Reduction (vph)	0	0	0	144	0	0	0	168	0	0	0	0
Lane Group Flow (vph)	367	0	1133	560	367	296	408	56	0	0	71	918
Confl. Peds. (#/hr)				7	7							
Confl. Bikes (#/hr)				1			2					
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	Perm	Prot	Prot
Protected Phases	7	7	4		3	8					5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	26.0		60.0	36.0	20.0	30.0	30.0	30.0			26.0	26.0
Effective Green, g (s)	26.0		60.0	36.0	20.0	30.0	30.0	30.0			26.0	26.0
Actuated g/C Ratio	0.22		0.50	0.30	0.17	0.25	0.25	0.25			0.22	0.22
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	314		1857	440	281	444	372	377			365	709
v/s Ratio Prot	c0.25		0.13		c0.22	0.17					0.04	c0.28
v/s Ratio Perm			0.17	c0.38			0.27	0.04				
v/c Ratio	1.17		1.53dl	1.27	1.31	0.67	1.10	0.15			0.19	1.29
Uniform Delay, d1	47.0		21.6	42.0	50.0	40.5	45.0	35.1			38.4	47.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	104.7		0.6	139.3	161.1	3.8	75.3	0.2			0.3	143.0
Delay (s)	151.7		22.2	181.3	211.1	44.3	120.3	35.2			38.7	190.0
Level of Service	F		C	F	F	D	F	D			D	F
Approach Delay (s/veh)			94.6			113.9						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	102.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	550	190	90	870
Future Volume (vph)	550	190	90	870
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.96		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4636		1687	4848
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4636		1687	4848
Peak-hour factor, PHF	0.98	0.98	0.98	0.98
Adj. Flow (vph)	561	194	92	888
RTOR Reduction (vph)	50	0	0	0
Lane Group Flow (vph)	705	0	92	888
Confl. Peds. (#/hr)		4		
Confl. Bikes (#/hr)				
Heavy Vehicles (%)	7%	7%	7%	7%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	37.0		11.0	22.0
Effective Green, g (s)	37.0		11.0	22.0
Actuated g/C Ratio	0.31		0.09	0.18
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	1429		154	888
v/s Ratio Prot	0.15		0.05	c0.18
v/s Ratio Perm				
v/c Ratio	0.49		0.60	1.00
Uniform Delay, d1	33.8		52.4	49.0
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	1.2		6.1	30.2
Delay (s)	35.1		58.5	79.2
Level of Service	D		E	E
Approach Delay (s/veh)	116.8			77.3
Approach LOS	F			E

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	360	780	80	130	760	70	110	990	400	90	610	100
Future Volume (veh/h)	360	780	80	130	760	70	110	990	400	90	610	100
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	367	796	82	133	776	0	112	1010	408	92	622	102
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	444	1292	133	162	1281	573	139	1329	617	116	1263	531
Arrive On Green	0.13	0.42	0.42	0.09	0.38	0.00	0.08	0.27	0.27	0.07	0.26	0.26
Sat Flow, veh/h	3312	3110	320	1707	3406	1524	1707	4893	1519	1707	4893	1497
Grp Volume(v), veh/h	367	436	442	133	776	0	112	1010	408	92	622	102
Grp Sat Flow(s),veh/h/ln	1656	1703	1728	1707	1703	1524	1707	1631	1519	1707	1631	1497
Q Serve(g_s), s	11.5	21.4	21.4	8.1	19.6	0.0	6.9	20.1	23.2	5.6	11.5	5.0
Cycle Q Clear(g_c), s	11.5	21.4	21.4	8.1	19.6	0.0	6.9	20.1	23.2	5.6	11.5	5.0
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	707	718	162	1281	573	139	1329	617	116	1263	531
V/C Ratio(X)	0.83	0.62	0.62	0.82	0.61	0.00	0.81	0.76	0.66	0.80	0.49	0.19
Avail Cap(c_a), veh/h	654	707	718	273	1281	573	241	1426	647	193	1288	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	24.4	24.4	47.3	26.8	0.0	48.0	35.5	25.7	48.9	33.5	23.9
Incr Delay (d2), s/veh	5.6	4.0	3.9	9.8	2.1	0.0	10.5	2.3	2.4	11.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	10.8	11.0	4.3	9.5	0.0	3.6	9.4	10.1	3.0	5.2	2.1
LnGrp Delay(d), s/veh	50.5	28.4	28.4	57.1	29.0	0.0	58.5	37.8	28.0	60.5	33.8	24.1
LnGrp LOS	D	C	C	E	C		E	D	C	E	C	C
Approach Vol, veh/h		1245			909			1530			816	
Approach Delay, s/veh		34.9			33.1			36.7			35.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	48.2	11.2	32.9	18.3	44.0	12.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	44.0	12.0	31.0	21.0	40.0	15.0	28.0
Max Q Clear Time (g_c+I1), s	10.1	23.4	7.6	25.2	13.5	21.6	8.9	13.5
Green Ext Time (p_c), s	0.2	5.3	0.1	3.7	0.8	4.9	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	230	820	90	50	260	120	200	960	140	260	1140	220
Future Volume (veh/h)	230	820	90	50	260	120	200	960	140	260	1140	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	242	863	95	53	274	0	211	1011	147	274	1200	232
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	271	966	424	68	559	250	239	1277	553	303	1404	615
Arrive On Green	0.16	0.28	0.28	0.04	0.16	0.00	0.14	0.37	0.37	0.17	0.40	0.40
Sat Flow, veh/h	1740	3471	1525	1740	3471	1553	1740	3471	1504	1740	3471	1520
Grp Volume(v), veh/h	242	863	95	53	274	0	211	1011	147	274	1200	232
Grp Sat Flow(s),veh/h/ln	1740	1736	1525	1740	1736	1553	1740	1736	1504	1740	1736	1520
Q Serve(g_s), s	15.5	27.2	5.5	3.4	8.2	0.0	13.5	29.5	7.8	17.5	35.8	12.2
Cycle Q Clear(g_c), s	15.5	27.2	5.5	3.4	8.2	0.0	13.5	29.5	7.8	17.5	35.8	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	966	424	68	559	250	239	1277	553	303	1404	615
V/C Ratio(X)	0.89	0.89	0.22	0.78	0.49	0.00	0.88	0.79	0.27	0.90	0.85	0.38
Avail Cap(c_a), veh/h	321	1038	456	92	580	260	275	1277	553	352	1404	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	39.4	31.6	54.2	43.4	0.0	48.1	32.0	25.2	46.0	30.8	23.8
Incr Delay (d2), s/veh	22.9	9.6	0.3	25.8	0.7	0.0	24.3	5.1	1.2	23.6	6.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	14.2	2.3	2.1	4.0	0.0	8.1	15.1	3.4	10.4	18.3	5.4
LnGrp Delay(d), s/veh	69.9	49.0	31.9	79.9	44.1	0.0	72.4	37.1	26.3	69.6	37.6	25.5
LnGrp LOS	E	D	C	E	D		E	D	C	E	D	C
Approach Vol, veh/h		1200			327			1369			1706	
Approach Delay, s/veh		51.9			49.9			41.4			41.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.8	45.8	8.4	35.6	19.6	50.0	21.7	22.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	41.0	6.0	34.0	18.0	46.0	21.0	19.0
Max Q Clear Time (g_c+I1), s	19.5	31.5	5.4	29.2	15.5	37.8	17.5	10.2
Green Ext Time (p_c), s	0.3	4.8	0.0	2.5	0.1	5.2	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	108.9

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	850	380	340	0	40	90
Future Vol, veh/h	850	380	340	0	40	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	924	413	370	0	43	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	370	0	-	0	2631	-
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	2261	-
Critical Hdwy	4.15	-	-	-	6.45	-
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	-
Pot Cap-1 Maneuver	1172	-	-	-	~ 26	0
Stage 1	-	-	-	-	692	0
Stage 2	-	-	-	-	83	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1172	-	-	-	~ 6	-
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	83	-

Approach	EB	WB	SW
HCM Control Delay, s/v	12.7	0	$ 3993.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1172	-	-	-	6	-
HCM Lane V/C Ratio	0.788	-	-	-	7.246	-
HCM Control Delay (s/veh)	18.4	-	-	-	$ 3993.3	0
HCM Lane LOS	C	-	-	-	F	A
HCM 95th %tile Q(veh)	8.7	-	-	-	7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	180	40	150	170	60	980	50	270	1170	90
Future Volume (veh/h)	210	430	180	40	150	170	60	980	50	270	1170	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	443	186	41	155	175	62	1010	0	278	1206	93
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	356	450	189	111	229	258	176	1231	551	311	1517	659
Arrive On Green	0.10	0.37	0.37	0.02	0.29	0.29	0.03	0.35	0.00	0.12	0.44	0.44
Sat Flow, veh/h	1740	1215	510	1740	776	876	1740	3471	1553	1740	3471	1508
Grp Volume(v), veh/h	216	0	629	41	0	330	62	1010	0	278	1206	93
Grp Sat Flow(s),veh/h/ln	1740	0	1726	1740	0	1652	1740	1736	1553	1740	1736	1508
Q Serve(g_s), s	9.9	0.0	43.0	2.0	0.0	21.0	2.7	31.5	0.0	11.6	35.7	4.4
Cycle Q Clear(g_c), s	9.9	0.0	43.0	2.0	0.0	21.0	2.7	31.5	0.0	11.6	35.7	4.4
Prop In Lane	1.00		0.30	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	0	638	111	0	487	176	1231	551	311	1517	659
V/C Ratio(X)	0.61	0.00	0.99	0.37	0.00	0.68	0.35	0.82	0.00	0.89	0.79	0.14
Avail Cap(c_a), veh/h	358	0	638	126	0	500	176	1231	551	344	1517	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	37.2	33.3	0.0	37.0	26.4	34.9	0.0	25.9	28.9	20.1
Incr Delay (d2), s/veh	2.9	0.0	31.8	2.1	0.0	3.6	1.2	6.2	0.0	22.9	4.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	26.1	1.0	0.0	10.0	1.3	16.1	0.0	7.5	18.0	1.9
LnGrp Delay(d), s/veh	29.2	0.0	69.0	35.3	0.0	40.5	27.6	41.1	0.0	48.8	33.3	20.5
LnGrp LOS	C		E	D		D	C	D		D	C	C
Approach Vol, veh/h		845			371			1072			1577	
Approach Delay, s/veh		58.8			40.0			40.3			35.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	46.2	7.0	48.0	8.0	56.0	15.9	39.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	40.0	4.0	44.0	4.0	52.0	12.0	36.0
Max Q Clear Time (g_c+I1), s	13.6	33.5	4.0	45.0	4.7	37.7	11.9	23.0
Green Ext Time (p_c), s	0.2	3.5	0.0	0.0	0.0	7.5	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	740	50	50	210	60	120
Future Vol, veh/h	740	50	50	210	60	120
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	787	53	53	223	64	128

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	840	0	1116	788
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	329	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	770	-	224	382
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	770	-	206	382
Mov Cap-2 Maneuver	-	-	-	-	206	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.9	22.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	206	382	-	-	770	-
HCM Lane V/C Ratio	0.31	0.334	-	-	0.069	-
HCM Control Delay (s/veh)	30.1	19.1	-	-	10	0
HCM Lane LOS	D	C	-	-	B	A
HCM 95th %tile Q(veh)	1.3	1.4	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	880	40	10	260	60	20
Future Vol, veh/h	880	40	10	260	60	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	917	42	10	271	63	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	959	0	1208	917
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	291	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	686	-	195	319
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	686	-	192	319
Mov Cap-2 Maneuver	-	-	-	-	192	-
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	730	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.4	28.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	192	319	-	-	686	-
HCM Lane V/C Ratio	0.326	0.065	-	-	0.015	-
HCM Control Delay (s/veh)	32.5	17.1	-	-	10.3	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	1.3	0.2	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	830	120	90	270	50	70
Future Volume (veh/h)	830	120	90	270	50	70
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	874	126	95	284	53	74
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	1083	921	227	1083	442	395
Arrive On Green	0.62	0.62	0.62	0.62	0.27	0.27
Sat Flow, veh/h	1743	1482	525	1743	1660	1482
Grp Volume(v), veh/h	874	126	95	284	53	74
Grp Sat Flow(s),veh/h/ln	1743	1482	525	1743	1660	1482
Q Serve(g_s), s	27.2	2.5	12.0	5.3	1.7	2.7
Cycle Q Clear(g_c), s	27.2	2.5	39.1	5.3	1.7	2.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1083	921	227	1083	442	395
V/C Ratio(X)	0.81	0.14	0.42	0.26	0.12	0.19
Avail Cap(c_a), veh/h	2274	1933	586	2274	442	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	5.6	25.1	6.1	19.8	20.2
Incr Delay (d2), s/veh	1.5	0.1	1.2	0.1	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	1.0	1.8	2.6	0.8	1.2
LnGrp Delay(d), s/veh	11.7	5.7	26.3	6.2	20.4	21.2
LnGrp LOS	B	A	C	A	C	C
Approach Vol, veh/h	1000			379	127	
Approach Delay, s/veh	11.0			11.3	20.9	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		23.0		48.3				48.3
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		19.0		93.0				93.0
Max Q Clear Time (g_c+I1), s		4.7		29.2				41.1
Green Ext Time (p_c), s		0.3		9.0				3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	43.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	910	10	10	240	150	350
Future Vol, veh/h	910	10	10	240	150	350
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	968	11	11	255	160	372

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	979	0	1245	968
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	277	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	682	-	187	~ 300
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	756	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	682	-	184	~ 300
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.4	144.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	184	300	-	-	682	-
HCM Lane V/C Ratio	0.867	1.241	-	-	0.016	-
HCM Control Delay (s/veh)	87	169.5	-	-	10.4	-
HCM Lane LOS	F	F	-	-	B	-
HCM 95th %tile Q(veh)	6.4	17.2	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	600	90	110	340	50	40	910	120	190	1100	70
Future Volume (veh/h)	160	600	90	110	340	50	40	910	120	190	1100	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	167	625	94	115	354	52	42	948	125	198	1146	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	300	755	112	211	644	92	53	1460	192	229	1902	121
Arrive On Green	0.10	0.17	0.17	0.07	0.15	0.15	0.03	0.48	0.48	0.13	0.58	0.58
Sat Flow, veh/h	1723	4324	641	1723	4357	623	1723	3054	403	1723	3279	209
Grp Volume(v), veh/h	167	474	245	115	265	141	42	534	539	198	600	619
Grp Sat Flow(s),veh/h/ln	1723	1647	1671	1723	1647	1686	1723	1719	1737	1723	1719	1768
Q Serve(g_s), s	9.0	15.5	15.9	6.3	8.4	8.7	2.7	26.3	26.3	12.6	25.3	25.3
Cycle Q Clear(g_c), s	9.0	15.5	15.9	6.3	8.4	8.7	2.7	26.3	26.3	12.6	25.3	25.3
Prop In Lane	1.00		0.38	1.00		0.37	1.00		0.23	1.00		0.12
Lane Grp Cap(c), veh/h	300	575	292	211	487	249	53	822	831	229	997	1026
V/C Ratio(X)	0.56	0.82	0.84	0.54	0.54	0.56	0.79	0.65	0.65	0.87	0.60	0.60
Avail Cap(c_a), veh/h	361	647	328	241	500	256	108	822	831	323	997	1026
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	44.6	44.7	37.4	44.2	44.4	54.0	22.1	22.1	47.6	15.2	15.2
Incr Delay (d2), s/veh	1.6	7.8	16.1	2.2	1.2	2.7	22.6	4.0	3.9	15.9	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	7.7	8.7	3.1	3.9	4.3	1.6	13.4	13.5	7.0	12.6	12.9
LnGrp Delay(d), s/veh	36.5	52.4	60.8	39.6	45.4	47.1	76.5	26.1	26.0	63.5	17.9	17.8
LnGrp LOS	D	D	E	D	D	D	E	C	C	E	B	B
Approach Vol, veh/h		886			521			1115			1417	
Approach Delay, s/veh		51.7			44.6			28.0			24.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	57.6	12.1	23.6	7.4	69.0	15.0	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	51.0	10.0	22.0	7.0	65.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.6	28.3	8.3	17.9	4.7	27.3	11.0	10.7
Green Ext Time (p_c), s	0.3	7.4	0.0	1.6	0.0	10.3	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	210	10	720	260	0	730
Future Volume (veh/h)	210	10	720	260	0	730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	0	1827
Adj Flow Rate, veh/h	226	11	774	0	0	785
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	0	4
Cap, veh/h	317	146	2856	1423	0	2856
Arrive On Green	0.09	0.09	0.82	0.00	0.00	0.82
Sat Flow, veh/h	3375	1553	3563	1553	0	3654
Grp Volume(v), veh/h	226	11	774	0	0	785
Grp Sat Flow(s),veh/h/ln	1688	1553	1736	1553	0	1736
Q Serve(g_s), s	6.2	0.6	4.9	0.0	0.0	5.0
Cycle Q Clear(g_c), s	6.2	0.6	4.9	0.0	0.0	5.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	317	146	2856	1423	0	2856
V/C Ratio(X)	0.71	0.08	0.27	0.00	0.00	0.27
Avail Cap(c_a), veh/h	1160	534	2856	1423	0	2856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	42.2	39.7	1.9	0.0	0.0	1.9
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.3	2.4	0.0	0.0	2.4
LnGrp Delay(d), s/veh	45.2	39.9	2.2	0.0	0.0	2.2
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	237		774			785
Approach Delay, s/veh	45.0		2.2			2.2
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		13.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		6.9				7.0		8.2
Green Ext Time (p_c), s		6.0				6.1		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.8
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	890	70	600	470	60	90	20	200	40	80	10
Future Volume (veh/h)	30	890	70	600	470	60	90	20	200	40	80	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	927	73	625	490	62	94	21	208	42	83	10
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1309	405	662	2777	345	216	48	232	132	121	15
Arrive On Green	0.02	0.26	0.26	0.37	0.61	0.61	0.15	0.15	0.15	0.07	0.07	0.07
Sat Flow, veh/h	1774	5085	1574	1774	4567	567	1463	327	1570	1774	1628	196
Grp Volume(v), veh/h	31	927	73	625	361	191	115	0	208	42	0	93
Grp Sat Flow(s),veh/h/ln	1774	1695	1574	1774	1695	1744	1790	0	1570	1774	0	1824
Q Serve(g_s), s	1.9	18.0	3.9	37.0	5.1	5.2	6.4	0.0	14.1	2.4	0.0	5.4
Cycle Q Clear(g_c), s	1.9	18.0	3.9	37.0	5.1	5.2	6.4	0.0	14.1	2.4	0.0	5.4
Prop In Lane	1.00		1.00	1.00		0.33	0.82		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	40	1309	405	662	2062	1061	264	0	232	132	0	136
V/C Ratio(X)	0.78	0.71	0.18	0.94	0.18	0.18	0.44	0.00	0.90	0.32	0.00	0.68
Avail Cap(c_a), veh/h	98	1309	405	768	2062	1061	264	0	232	262	0	269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.8	36.6	31.4	32.9	9.3	9.4	42.1	0.0	45.5	47.6	0.0	49.0
Incr Delay (d2), s/veh	27.3	3.3	1.0	18.6	0.2	0.4	1.1	0.0	33.4	1.4	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.8	1.8	21.5	2.4	2.6	3.2	0.0	8.2	1.2	0.0	2.9
LnGrp Delay(d), s/veh	80.1	39.9	32.4	51.5	9.5	9.7	43.3	0.0	78.8	49.0	0.0	54.9
LnGrp LOS	F	D	C	D	A	A	D		E	D		D
Approach Vol, veh/h		1031			1177			323			135	
Approach Delay, s/veh		40.5			31.9			66.2			53.0	
Approach LOS		D			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	70.0		20.0	44.5	31.9		12.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	66.0		16.0	47.0	25.0		16.0
Max Q Clear Time (g_c+I1), s	3.9	7.2		16.1	39.0	20.0		7.4
Green Ext Time (p_c), s	0.0	4.1		0.0	1.5	2.6		0.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		40.5
HCM 2010 LOS		D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	640	300	320	440	380	10	900	360	120	970	60
Future Volume (veh/h)	40	640	300	320	440	380	10	900	360	120	970	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	42	667	312	333	458	396	10	938	375	125	1010	62
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	53	1055	466	400	1361	734	39	1135	514	153	1609	707
Arrive On Green	0.03	0.30	0.30	0.12	0.39	0.39	0.34	0.34	0.34	0.09	0.46	0.46
Sat Flow, veh/h	1740	3471	1535	3375	3471	1524	12	3362	1524	1740	3471	1525
Grp Volume(v), veh/h	42	667	312	333	458	396	505	443	375	125	1010	62
Grp Sat Flow(s),veh/h/ln	1740	1736	1535	1688	1736	1524	1795	1579	1524	1740	1736	1525
Q Serve(g_s), s	2.5	17.4	18.7	10.2	9.7	19.2	4.3	27.2	22.8	7.4	23.2	2.4
Cycle Q Clear(g_c), s	2.5	17.4	18.7	10.2	9.7	19.2	26.9	27.2	22.8	7.4	23.2	2.4
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	1055	466	400	1361	734	641	533	514	153	1609	707
V/C Ratio(X)	0.79	0.63	0.67	0.83	0.34	0.54	0.79	0.83	0.73	0.82	0.63	0.09
Avail Cap(c_a), veh/h	99	1055	466	481	1361	734	780	660	637	215	2011	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	31.6	32.0	45.4	22.4	19.2	32.0	32.1	30.6	47.2	21.4	15.8
Incr Delay (d2), s/veh	22.6	2.9	7.4	10.2	0.7	2.8	4.5	7.3	3.3	15.2	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	8.8	8.8	5.3	4.8	8.6	14.3	12.9	10.0	4.2	11.2	1.0
LnGrp Delay(d), s/veh	73.4	34.5	39.5	55.5	23.1	22.1	36.4	39.4	33.9	62.3	21.8	15.8
LnGrp LOS	E	C	D	E	C	C	D	D	C	E	C	B
Approach Vol, veh/h		1021			1187			1323			1197	
Approach Delay, s/veh		37.6			31.8			36.7			25.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	45.3	13.3	39.5	16.5	36.0		52.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	41.0	13.0	44.0	15.0	32.0		61.0
Max Q Clear Time (g_c+I1), s	4.5	21.2	9.4	29.2	12.2	20.7		25.2
Green Ext Time (p_c), s	0.0	4.1	0.1	6.4	0.3	4.0		8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.9
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	910	270	390	530	500	30
Future Volume (vph)	910	270	390	530	500	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3505	1568	1752	3505	3388	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3505	1568	1752	3505	3388	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	958	284	411	558	526	32
RTOR Reduction (vph)	0	78	0	0	4	0
Lane Group Flow (vph)	958	206	411	558	554	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	50.9	74.1	32.2	87.1	23.2	
Effective Green, g (s)	50.9	74.1	32.2	87.1	23.2	
Actuated g/C Ratio	0.43	0.63	0.27	0.74	0.20	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1508	1035	476	2580	664	
v/s Ratio Prot	c0.27	0.04	c0.23	0.16	c0.16	
v/s Ratio Perm		0.09				
v/c Ratio	0.64	0.20	0.86	0.22	0.83	
Uniform Delay, d1	26.4	9.4	41.0	4.9	45.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	0.1	14.9	0.2	8.9	
Delay (s)	28.5	9.5	55.9	5.1	54.6	
Level of Service	C	A	E	A	D	
Approach Delay (s/veh)	24.1			26.6	54.6	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	118.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	670	320	190	840	600	450
Future Volume (veh/h)	670	320	190	840	600	450
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	698	0	198	875	625	469
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1076	495	337	2103	2103	941
Arrive On Green	0.32	0.00	0.60	0.60	0.60	0.60
Sat Flow, veh/h	3408	1568	508	3597	3597	1568
Grp Volume(v), veh/h	698	0	198	875	625	469
Grp Sat Flow(s),veh/h/ln	1704	1568	508	1752	1752	1568
Q Serve(g_s), s	16.7	0.0	29.5	12.6	8.2	16.2
Cycle Q Clear(g_c), s	16.7	0.0	37.7	12.6	8.2	16.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1076	495	337	2103	2103	941
V/C Ratio(X)	0.65	0.00	0.59	0.42	0.30	0.50
Avail Cap(c_a), veh/h	1076	495	337	2103	2103	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	18.4	10.1	9.2	10.8
Incr Delay (d2), s/veh	3.0	0.0	2.7	0.1	0.4	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	4.4	6.1	4.1	7.4
LnGrp Delay(d), s/veh	31.0	0.0	21.1	10.3	9.6	12.7
LnGrp LOS	C		C	B	A	B
Approach Vol, veh/h	698			1073	1094	
Approach Delay, s/veh	31.0			12.3	10.9	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		34.0		61.0				61.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		30.0		57.0				57.0
Max Q Clear Time (g_c+I1), s		18.7		39.7				18.2
Green Ext Time (p_c), s		2.1		7.5				6.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	162.8

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	200	0	10	1440	0	0	810	10	0	10
Future Vol, veh/h	200	0	10	1440	0	0	810	10	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	204	0	10	1469	0	0	827	10	0	10

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	1903	735	837	0	-	-	-	0	1587	419
Stage 1	1489	-	-	-	-	-	-	-	832	-
Stage 2	414	-	-	-	-	-	-	-	755	-
Critical Hdwy	7.56	6.96	4.16	-	-	-	-	-	7.56	6.96
Critical Hdwy Stg 1	6.56	-	-	-	-	-	-	-	6.56	-
Critical Hdwy Stg 2	6.56	-	-	-	-	-	-	-	6.56	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	~ 41	360	786	-	0	0	-	-	72	580
Stage 1	~ 129	-	-	-	0	0	-	-	328	-
Stage 2	584	-	-	-	0	0	-	-	365	-
Platoon blocked, %				-			-	-		
Mov Cap-1 Maneuver	~ 38	360	786	-	-	-	-	-	18	580
Mov Cap-2 Maneuver	~ 38	-	-	-	-	-	-	-	18	-
Stage 1	~ 120	-	-	-	-	-	-	-	305	-
Stage 2	574	-	-	-	-	-	-	-	89	-

Approach	NB	SE	NW	SW
HCM Control Delay, s/v	$ 968.1	0.4	0	11.3
HCM LOS	F			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SETSWLn1
Capacity (veh/h)	38	360	-	-	786	- 580
HCM Lane V/C Ratio	5.371	0.737	-	-	0.013	- 0.018
HCM Control Delay (s/veh)	$ 2176.7	38.4	-	-	9.6	0.3 11.3
HCM Lane LOS	F	E	-	-	A	A B
HCM 95th %tile Q(veh)	24	5.7	-	-	0	- 0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	6.8

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	70	120	40	1690	740	40
Future Vol, veh/h	70	120	40	1690	740	40
Conflicting Peds, #/hr	0	0	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	73	125	42	1760	771	42

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1771	422	828	0	-	0
Stage 1	807	-	-	-	-	-
Stage 2	964	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	74	577	793	-	-	-
Stage 1	397	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 68	570	783	-	-	-
Mov Cap-2 Maneuver	~ 68	-	-	-	-	-
Stage 1	371	-	-	-	-	-
Stage 2	324	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	94.8	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	783	-	68	570
HCM Lane V/C Ratio	-	-	0.053	-	1.072	0.219
HCM Control Delay (s/veh)	-	-	9.9	-	234.9	13.1
HCM Lane LOS	-	-	A	-	F	B
HCM 95th %tile Q(veh)	-	-	0.2	-	5.5	0.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Future Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1706	1706	1706	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	147	1242	526	137	979	242	189	1032	0	316	453	32
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	1243	690	132	1238	742	218	1081	483	341	942	66
Arrive On Green	0.10	0.38	0.38	0.08	0.35	0.35	0.12	0.31	0.00	0.10	0.28	0.28
Sat Flow, veh/h	1625	3242	1422	1757	3505	1550	1757	3505	1568	3408	3316	233
Grp Volume(v), veh/h	147	1242	526	137	979	242	189	1032	0	316	239	246
Grp Sat Flow(s),veh/h/ln	1625	1621	1422	1757	1752	1550	1757	1752	1568	1704	1752	1797
Q Serve(g_s), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Cycle Q Clear(g_c), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	171	1243	690	132	1238	742	218	1081	483	341	498	511
V/C Ratio(X)	0.86	1.00	0.76	1.04	0.79	0.33	0.87	0.95	0.00	0.93	0.48	0.48
Avail Cap(c_a), veh/h	176	1243	690	132	1238	742	307	1081	483	341	498	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	37.0	25.4	55.5	34.8	19.4	51.6	40.7	0.0	53.6	35.6	35.6
Incr Delay (d2), s/veh	32.1	25.4	5.0	89.4	3.5	0.3	16.6	18.5	0.0	30.7	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	24.9	15.1	7.6	15.2	5.0	7.1	19.5	0.0	6.6	7.0	7.2
LnGrp Delay(d), s/veh	85.0	62.4	30.4	145.3	38.4	19.7	68.2	59.2	0.0	84.3	38.9	38.9
LnGrp LOS	F	E	C	F	D	B	E	E		F	D	D
Approach Vol, veh/h		1915			1358			1221			801	
Approach Delay, s/veh		55.3			45.8			60.6			56.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	38.1	13.0	50.0	16.0	41.0	16.6	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	28.0	9.0	46.0	12.0	37.0	13.0	42.0
Max Q Clear Time (g_c+I1), s	14.7	15.6	11.0	48.0	13.0	36.6	12.7	32.1
Green Ext Time (p_c), s	0.3	2.3	0.0	0.0	0.0	0.2	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	40	690	20	30	1270
Future Vol, veh/h	30	40	690	20	30	1270
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	41	711	21	31	1309

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1431	359	0	0	735	0
Stage 1	714	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	124	635	-	-	860	-
Stage 1	444	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	119	633	-	-	858	-
Mov Cap-2 Maneuver	119	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	426	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	25.9	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	119	633	858	-
HCM Lane V/C Ratio	-	-	0.26	0.065	0.036	-
HCM Control Delay (s/veh)	-	-	45.6	11.1	9.4	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.2	0.1	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	110	600	50	400	920
Future Volume (veh/h)	80	110	600	50	400	920
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	82	113	619	52	412	948
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	158	141	2912	1297	664	2912
Arrive On Green	0.09	0.09	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1740	1553	3563	1546	748	3563
Grp Volume(v), veh/h	82	113	619	52	412	948
Grp Sat Flow(s),veh/h/ln	1740	1553	1736	1546	748	1736
Q Serve(g_s), s	5.1	8.2	4.0	0.6	27.5	6.9
Cycle Q Clear(g_c), s	5.1	8.2	4.0	0.6	31.5	6.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	158	141	2912	1297	664	2912
V/C Ratio(X)	0.52	0.80	0.21	0.04	0.62	0.33
Avail Cap(c_a), veh/h	243	217	2912	1297	664	2912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	51.0	1.8	1.5	4.9	2.0
Incr Delay (d2), s/veh	2.6	11.2	0.2	0.1	4.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.0	2.0	0.3	6.3	3.4
LnGrp Delay(d), s/veh	52.2	62.2	2.0	1.6	9.2	2.3
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	195		671			1360
Approach Delay, s/veh	58.0		1.9			4.4
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		100.0				100.0		14.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		96.0				96.0		16.0
Max Q Clear Time (g_c+I1), s		6.0				33.5		10.2
Green Ext Time (p_c), s		4.7				14.2		0.3

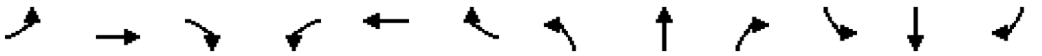
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.4
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	16.7
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	500	50	40	50	30
Future Vol, veh/h	40	500	50	40	50	30
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	47	588	59	47	59	35
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	18.8	10.7	9.5
HCM LOS	C	B	A

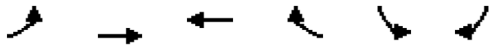
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	56%	100%	0%	0%	0%
Vol Thru, %	44%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	40	500	50	30
LT Vol	50	40	0	0	0
Through Vol	40	0	0	50	0
RT Vol	0	0	500	0	30
Lane Flow Rate	106	47	588	59	35
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.182	0.076	0.747	0.103	0.055
Departure Headway (Hd)	6.198	5.778	4.573	6.331	5.621
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	574	619	788	561	630
Service Time	4.291	3.523	2.318	4.131	3.42
HCM Lane V/C Ratio	0.185	0.076	0.746	0.105	0.056
HCM Control Delay, s/veh	10.7	9	19.6	9.9	8.8
HCM Lane LOS	B	A	C	A	A
HCM 95th-tile Q	0.7	0.2	6.9	0.3	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Future Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.93			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	1752	5029		1752	4609			3493	1568	1595	3242	1538
Flt Permitted	0.95	1.00		0.95	1.00			0.93	1.00	0.95	0.62	1.00
Satd. Flow (perm)	1752	5029		1752	4609			3271	1568	1595	2089	1538
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	367	1102	10	745	643	612	20	296	867	153	31	10
RTOR Reduction (vph)	0	1	0	0	140	0	0	0	501	0	0	7
Lane Group Flow (vph)	367	1111	0	745	1115	0	0	316	366	76	108	3
Confl. Peds. (#/hr)	6					6	3					3
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Effective Green, g (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Actuated g/C Ratio	0.23	0.19		0.39	0.35			0.23	0.23	0.05	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	407	963		686	1616			763	365	79	719	487
v/s Ratio Prot	0.21	c0.22		c0.43	0.24					c0.05	0.01	
v/s Ratio Perm								0.10	c0.23		0.04	0.00
v/c Ratio	0.90	1.15		1.09	0.90dr			0.41	1.00	0.96	0.93dl	0.01
Uniform Delay, d1	44.7	48.5		36.5	33.4			39.0	46.0	56.9	29.4	28.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	22.6	81.2		60.1	1.3			1.7	47.5	87.9	0.1	0.0
Delay (s)	67.3	129.7		96.6	34.7			40.7	93.5	144.8	29.5	28.1
Level of Service	E	F		F	C			D	F	F	C	C
Approach Delay (s/veh)		114.2			57.7			79.4			74.6	
Approach LOS		F			E			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	80.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	1360	1130	40	320	190
Future Volume (veh/h)	50	1360	1130	40	320	190
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1827	1827	1827	1827
Adj Flow Rate, veh/h	53	1447	1202	43	340	202
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	190	1734	1875	838	664	593
Arrive On Green	0.54	0.54	0.54	0.54	0.38	0.38
Sat Flow, veh/h	404	3295	3563	1551	1740	1553
Grp Volume(v), veh/h	53	1447	1202	43	340	202
Grp Sat Flow(s),veh/h/ln	404	1605	1736	1551	1740	1553
Q Serve(g_s), s	10.9	38.6	24.9	1.3	15.4	9.5
Cycle Q Clear(g_c), s	35.8	38.6	24.9	1.3	15.4	9.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	190	1734	1875	838	664	593
V/C Ratio(X)	0.28	0.83	0.64	0.05	0.51	0.34
Avail Cap(c_a), veh/h	260	2293	2479	1108	664	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	19.7	16.5	11.1	24.3	22.5
Incr Delay (d2), s/veh	0.8	2.1	0.4	0.0	2.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	17.4	11.9	0.6	7.9	4.3
LnGrp Delay(d), s/veh	29.9	21.8	16.9	11.1	27.1	24.0
LnGrp LOS	C	C	B	B	C	C
Approach Vol, veh/h		1500	1245		542	
Approach Delay, s/veh		22.1	16.7		26.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.2		43.0		59.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				73.0		39.0		73.0
Max Q Clear Time (g_c+I1), s				40.6		17.4		26.9
Green Ext Time (p_c), s				14.7		1.8		11.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Future Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	266	1394	170	170	787	117	43	1074	170	191	915	287
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	1413	172	177	1087	160	55	1209	535	207	1512	661
Arrive On Green	0.17	0.31	0.31	0.10	0.24	0.24	0.03	0.34	0.34	0.12	0.43	0.43
Sat Flow, veh/h	1774	4583	559	1774	4472	660	1774	3539	1565	1774	3539	1548
Grp Volume(v), veh/h	266	1031	533	170	595	309	43	1074	170	191	915	287
Grp Sat Flow(s),veh/h/ln	1774	1695	1752	1774	1695	1742	1774	1770	1565	1774	1770	1548
Q Serve(g_s), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Cycle Q Clear(g_c), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Prop In Lane	1.00		0.32	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	1045	540	177	824	423	55	1209	535	207	1512	661
V/C Ratio(X)	0.91	0.99	0.99	0.96	0.72	0.73	0.78	0.89	0.32	0.92	0.61	0.43
Avail Cap(c_a), veh/h	325	1045	540	177	824	423	103	1209	535	207	1512	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	41.2	41.3	53.8	41.7	41.8	57.7	37.3	29.2	52.5	26.5	24.2
Incr Delay (d2), s/veh	26.2	24.4	35.2	55.2	3.1	6.3	20.7	9.9	1.6	41.6	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	20.4	22.7	8.3	9.5	10.2	1.7	18.4	4.4	8.7	12.1	7.1
LnGrp Delay(d), s/veh	75.4	65.7	76.4	109.0	44.9	48.1	78.4	47.2	30.7	94.1	28.4	26.2
LnGrp LOS	E	E	E	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1830			1074			1287			1393	
Approach Delay, s/veh		70.2			55.9			46.1			36.9	
Approach LOS		E			E			D			D	

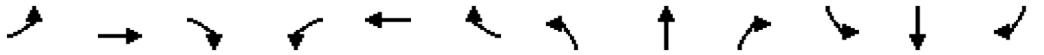
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	45.0	16.0	41.0	7.7	55.3	23.8	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	41.0	12.0	37.0	7.0	48.0	22.0	27.0
Max Q Clear Time (g_c+I1), s	14.8	36.4	13.4	38.3	4.9	26.0	19.7	21.6
Green Ext Time (p_c), s	0.0	2.8	0.0	0.0	0.0	7.2	0.2	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Future Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	216	1340	175	227	845	134	93	938	124	134	1072	103
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	1360	178	237	1298	204	103	1098	145	148	1327	795
Arrive On Green	0.14	0.30	0.30	0.13	0.30	0.30	0.06	0.35	0.35	0.08	0.38	0.38
Sat Flow, veh/h	1774	4535	592	1774	4397	692	1774	3137	415	1774	3539	1537
Grp Volume(v), veh/h	216	1002	513	227	650	329	93	529	533	134	1072	103
Grp Sat Flow(s),veh/h/ln	1774	1695	1736	1774	1695	1699	1774	1770	1782	1774	1770	1537
Q Serve(g_s), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Cycle Q Clear(g_c), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Prop In Lane	1.00		0.34	1.00		0.41	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	245	1017	521	237	1001	502	103	619	624	148	1327	795
V/C Ratio(X)	0.88	0.99	0.99	0.96	0.65	0.66	0.90	0.85	0.85	0.91	0.81	0.13
Avail Cap(c_a), veh/h	310	1017	521	237	1001	502	103	619	624	148	1327	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	41.7	41.7	51.7	36.9	37.0	56.1	36.2	36.2	54.5	33.6	15.2
Incr Delay (d2), s/veh	20.7	24.5	35.5	47.1	1.5	3.1	57.4	14.0	14.0	47.4	5.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	19.9	22.0	10.6	9.6	9.9	4.7	18.6	18.7	6.3	16.9	1.9
LnGrp Delay(d), s/veh	71.4	66.2	77.2	98.8	38.4	40.0	113.6	50.2	50.1	101.9	39.0	15.6
LnGrp LOS	E	E	E	F	D	D	F	D	D	F	D	B
Approach Vol, veh/h		1731			1206			1155			1309	
Approach Delay, s/veh		70.1			50.2			55.3			43.6	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	46.0	20.0	40.0	11.0	49.0	20.6	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	42.0	16.0	36.0	7.0	45.0	21.0	31.0
Max Q Clear Time (g_c+I1), s	11.0	35.3	17.3	37.2	8.3	34.6	16.3	22.3
Green Ext Time (p_c), s	0.0	3.5	0.0	0.0	0.0	5.3	0.2	3.9

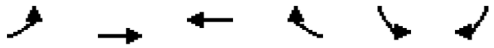
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.1
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Future Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	153	1367	500	806	918	184	235	224	163	133	510	153
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1034	374	591	2171	433	178	649	274	303	486	145
Arrive On Green	0.10	0.28	0.28	0.33	0.51	0.51	0.07	0.18	0.18	0.07	0.18	0.18
Sat Flow, veh/h	1774	3649	1320	1774	4221	842	1774	3539	1494	1774	2649	789
Grp Volume(v), veh/h	153	1269	598	806	736	366	235	224	163	133	339	324
Grp Sat Flow(s),veh/h/ln	1774	1695	1578	1774	1695	1672	1774	1770	1494	1774	1770	1669
Q Serve(g_s), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Cycle Q Clear(g_c), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Prop In Lane	1.00		0.84	1.00		0.50	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	181	961	447	591	1744	860	178	649	274	303	324	306
V/C Ratio(X)	0.84	1.32	1.34	1.36	0.42	0.42	1.32	0.35	0.60	0.44	1.05	1.06
Avail Cap(c_a), veh/h	266	961	447	591	1744	860	178	649	274	303	324	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	43.0	43.0	40.0	18.1	18.1	42.8	42.7	44.9	36.7	49.0	49.0
Incr Delay (d2), s/veh	14.8	151.9	166.3	174.1	0.2	0.3	177.0	1.5	9.2	1.0	62.6	67.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	36.1	35.4	48.1	7.6	7.6	8.8	3.4	5.6	3.6	16.4	15.8
LnGrp Delay(d), s/veh	67.7	194.9	209.3	214.1	18.2	18.4	219.8	44.2	54.1	37.7	111.6	116.4
LnGrp LOS	E	F	F	F	B	B	F	D	D	D	F	F
Approach Vol, veh/h		2020			1908			622			796	
Approach Delay, s/veh		189.5			101.0			113.1			101.2	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	26.0	44.0	38.0	12.0	26.0	16.3	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	22.0	40.0	34.0	8.0	22.0	18.0	56.0
Max Q Clear Time (g_c+I1), s	9.3	14.0	42.0	36.0	10.0	24.0	12.2	18.3
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.0	0.2	8.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		135.9
HCM 2010 LOS		F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	1490	1200	0	340	270
Future Volume (veh/h)	0	1490	1200	0	340	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1723	1723
Adj Flow Rate, veh/h	0	1568	1263	0	358	284
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1847	1847	0	661	590
Arrive On Green	0.00	0.52	0.52	0.00	0.40	0.40
Sat Flow, veh/h	0	3725	3725	0	1641	1465
Grp Volume(v), veh/h	0	1568	1263	0	358	284
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1641	1465
Q Serve(g_s), s	0.0	40.6	28.3	0.0	17.8	15.3
Cycle Q Clear(g_c), s	0.0	40.6	28.3	0.0	17.8	15.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1847	1847	0	661	590
V/C Ratio(X)	0.00	0.85	0.68	0.00	0.54	0.48
Avail Cap(c_a), veh/h	0	2289	2289	0	661	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	19.0	0.0	24.3	23.6
Incr Delay (d2), s/veh	0.0	2.7	0.6	0.0	3.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.3	13.8	0.0	8.6	6.6
LnGrp Delay(d), s/veh	0.0	24.6	19.6	0.0	27.5	26.4
LnGrp LOS		C	B		C	C
Approach Vol, veh/h		1568	1263		642	
Approach Delay, s/veh		24.6	19.6		27.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.7		47.0		59.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				69.0		43.0		69.0
Max Q Clear Time (g_c+I1), s				42.6		19.8		30.3
Green Ext Time (p_c), s				13.1		2.1		11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Future Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	235	1214	398	214	959	276	204	561	153	408	551	296
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1199	392	222	1062	458	232	678	294	414	1042	455
Arrive On Green	0.14	0.32	0.32	0.13	0.30	0.30	0.13	0.19	0.19	0.23	0.29	0.29
Sat Flow, veh/h	1774	3785	1239	1774	3539	1526	1774	3539	1535	1774	3539	1547
Grp Volume(v), veh/h	235	1087	525	214	959	276	204	561	153	408	551	296
Grp Sat Flow(s),veh/h/ln	1774	1695	1634	1774	1770	1526	1774	1770	1535	1774	1770	1547
Q Serve(g_s), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Cycle Q Clear(g_c), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	1074	518	222	1062	458	232	678	294	414	1042	455
V/C Ratio(X)	0.94	1.01	1.01	0.97	0.90	0.60	0.88	0.83	0.52	0.99	0.53	0.65
Avail Cap(c_a), veh/h	251	1074	518	222	1062	458	266	678	294	414	1042	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	41.0	41.0	52.2	40.3	35.9	51.2	46.6	43.5	45.8	35.4	36.9
Incr Delay (d2), s/veh	39.4	30.6	43.1	50.4	10.8	2.2	24.8	11.1	6.4	40.3	1.9	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.3	23.3	10.2	16.8	8.1	8.2	10.0	5.1	18.1	7.9	9.4
LnGrp Delay(d), s/veh	90.4	71.6	84.1	102.6	51.1	38.1	76.0	57.7	50.0	86.1	37.3	44.0
LnGrp LOS	F	F	F	F	D	D	E	E	D	F	D	D
Approach Vol, veh/h		1847			1449			918			1255	
Approach Delay, s/veh		77.6			56.2			60.5			54.7	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	27.0	19.0	42.0	19.7	39.3	21.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	23.0	15.0	38.0	18.0	33.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	29.5	20.3	16.4	40.0	15.6	22.0	17.7	33.2
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.1	3.5	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Future Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	177	1031	125	177	812	302	115	885	94	198	865	156
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	208	1214	147	208	963	356	284	1338	581	315	1443	626
Arrive On Green	0.12	0.27	0.27	0.12	0.27	0.27	0.06	0.38	0.38	0.09	0.41	0.41
Sat Flow, veh/h	1757	4543	550	1757	3604	1330	1757	3505	1520	1757	3505	1522
Grp Volume(v), veh/h	177	761	395	177	756	358	115	885	94	198	865	156
Grp Sat Flow(s),veh/h/ln	1757	1679	1736	1757	1679	1577	1757	1752	1520	1757	1752	1522
Q Serve(g_s), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Cycle Q Clear(g_c), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Prop In Lane	1.00		0.32	1.00		0.84	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	897	464	208	897	421	284	1338	581	315	1443	626
V/C Ratio(X)	0.85	0.85	0.85	0.85	0.84	0.85	0.40	0.66	0.16	0.63	0.60	0.25
Avail Cap(c_a), veh/h	289	983	508	289	983	462	330	1338	581	389	1443	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	38.0	38.0	47.2	37.9	38.0	20.3	27.9	22.3	20.8	25.1	21.1
Incr Delay (d2), s/veh	15.7	6.6	12.2	15.7	6.3	13.1	0.9	2.6	0.6	2.2	1.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.7	12.9	6.2	11.6	11.8	2.1	11.5	2.0	3.6	10.6	3.3
LnGrp Delay(d), s/veh	63.0	44.6	50.2	63.0	44.2	51.1	21.2	30.5	22.9	23.0	27.0	22.0
LnGrp LOS	E	D	D	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1333			1291			1094			1219	
Approach Delay, s/veh		48.7			48.7			28.9			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	45.7	16.9	33.2	10.2	49.0	16.9	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	40.0	18.0	32.0	9.0	45.0	18.0	32.0
Max Q Clear Time (g_c+I1), s	9.2	24.8	12.8	25.6	6.3	23.1	12.8	25.5
Green Ext Time (p_c), s	0.2	5.5	0.2	3.6	0.1	6.5	0.2	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Future Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	276	1163	71	41	816	265	133	367	31	327	255	214
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1853	113	52	896	289	475	1615	136	479	1731	774
Arrive On Green	0.17	0.38	0.38	0.03	0.24	0.24	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	4897	299	1774	3794	1223	920	3301	277	982	3539	1582
Grp Volume(v), veh/h	276	805	429	41	729	352	133	196	202	327	255	214
Grp Sat Flow(s),veh/h/ln	1774	1695	1805	1774	1695	1626	920	1770	1809	982	1770	1582
Q Serve(g_s), s	17.8	22.6	22.6	2.7	24.4	24.6	10.8	7.4	7.5	33.5	4.6	9.3
Cycle Q Clear(g_c), s	17.8	22.6	22.6	2.7	24.4	24.6	15.5	7.4	7.5	40.9	4.6	9.3
Prop In Lane	1.00		0.17	1.00		0.75	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	305	1283	683	52	800	384	475	865	885	479	1731	774
V/C Ratio(X)	0.91	0.63	0.63	0.78	0.91	0.92	0.28	0.23	0.23	0.68	0.15	0.28
Avail Cap(c_a), veh/h	350	1283	683	107	814	391	475	865	885	479	1731	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	29.5	29.5	56.2	43.3	43.4	20.7	17.1	17.1	28.9	16.4	17.6
Incr Delay (d2), s/veh	24.1	1.0	1.8	21.8	14.1	26.0	1.5	0.6	0.6	7.7	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	10.7	11.5	1.6	13.0	13.8	2.9	3.7	3.9	10.1	2.3	4.3
LnGrp Delay(d), s/veh	71.4	30.5	31.4	78.0	57.4	69.4	22.1	17.7	17.7	36.6	16.6	18.5
LnGrp LOS	E	C	C	E	E	E	C	B	B	D	B	B
Approach Vol, veh/h		1510			1122			531			796	
Approach Delay, s/veh		38.2			61.9			18.8			25.3	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		61.0	7.4	48.1		61.0	24.0	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		57.0	7.0	44.0		57.0	23.0	28.0
Max Q Clear Time (g_c+I1), s		17.5	4.7	24.6		42.9	19.8	26.6
Green Ext Time (p_c), s		3.1	0.0	7.9		3.4	0.3	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Future Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5078		1787	5051		1784	3574	1576	1786	3574	1574
Flt Permitted	0.95	1.00		0.95	1.00		0.44	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1787	5078		1787	5051		823	3574	1576	725	3574	1574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	177	1302	94	73	844	104	125	583	177	135	490	135
RTOR Reduction (vph)	0	8	0	0	13	0	0	0	21	0	0	63
Lane Group Flow (vph)	177	1388	0	73	935	0	125	583	156	135	490	72
Confl. Peds. (#/hr)			1	1			2		1	1		2
Confl. Bikes (#/hr)			4						1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4!			7!	8!			2			6	
Permitted Phases		4!					2		2	6		6
Actuated Green, G (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Effective Green, g (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Actuated g/C Ratio	0.39	0.39		0.08	0.27		0.54	0.54	0.54	0.54	0.54	0.54
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	694	1974		140	1373		440	1912	843	387	1912	842
v/s Ratio Prot	0.10			0.04	0.19			0.16			0.14	
v/s Ratio Perm		c0.27					0.15		0.10	c0.19		0.05
v/c Ratio	0.26	0.70		0.52	0.68		0.28	0.30	0.19	0.35	0.26	0.09
Uniform Delay, d1	21.8	27.0		46.5	34.2		13.4	13.6	12.6	14.0	13.2	11.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.2		3.5	1.4		1.6	0.4	0.5	2.5	0.3	0.2
Delay (s)	22.0	28.2		50.0	35.6		15.0	14.0	13.1	16.4	13.5	12.1
Level of Service	C	C		D	D		B	B	B	B	B	B
Approach Delay (s/veh)		27.5			36.7			14.0			13.8	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Intersection	
Int Delay, s/veh	160.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	370	750	0	1060	680	0
Future Vol, veh/h	370	750	0	1060	680	0
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	407	824	0	1165	747	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1330	374	-	0	-	0
Stage 1	747	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	-	-
Pot Cap-1 Maneuver	~ 145	~ 621	0	-	-	0
Stage 1	426	-	0	-	-	0
Stage 2	518	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 145	~ 621	-	-	-	-
Mov Cap-2 Maneuver	~ 145	-	-	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 409.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	145	621	-
HCM Lane V/C Ratio	-	2.804	1.327	-
HCM Control Delay (s/veh)	-	$ 878.6	178.7	-
HCM Lane LOS	-	F	F	-
HCM 95th %tile Q(veh)	-	36.8	34.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Future Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	11	11	359	0	250	11	707	87	250	1011	11
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	162	141	460	532	447	339	2269	1001	441	2269	1014
Arrive On Green	0.29	0.29	0.29	0.29	0.00	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	420	569	494	1361	1863	1565	550	3539	1562	681	3539	1581
Grp Volume(v), veh/h	33	0	0	359	0	250	11	707	87	250	1011	11
Grp Sat Flow(s),veh/h/ln	1483	0	0	1361	1863	1565	550	1770	1562	681	1770	1581
Q Serve(g_s), s	0.0	0.0	0.0	25.9	0.0	14.8	1.1	9.8	2.3	28.4	15.7	0.3
Cycle Q Clear(g_c), s	1.5	0.0	0.0	27.4	0.0	14.8	16.8	9.8	2.3	38.2	15.7	0.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	468	0	0	460	532	447	339	2269	1001	441	2269	1014
V/C Ratio(X)	0.07	0.00	0.00	0.78	0.00	0.56	0.03	0.31	0.09	0.57	0.45	0.01
Avail Cap(c_a), veh/h	611	0	0	595	717	602	339	2269	1001	441	2269	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	0.0	37.5	0.0	33.2	14.1	8.8	7.4	17.4	9.8	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	5.0	0.0	1.1	0.2	0.4	0.2	5.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	11.0	0.0	6.5	0.2	4.8	1.0	5.9	7.8	0.1
LnGrp Delay(d), s/veh	28.5	0.0	0.0	42.5	0.0	34.3	14.2	9.1	7.6	22.5	10.5	7.1
LnGrp LOS	C			D		C	B	A	A	C	B	A
Approach Vol, veh/h		33			609			805			1272	
Approach Delay, s/veh		28.5			39.1			9.0			12.8	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		35.2		74.0		35.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		18.8		3.5		40.2		29.4
Green Ext Time (p_c), s		6.1		0.2		11.3		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Future Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	57	1307	193	148	1523	125	193	159	114	148	239	114
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	1680	248	182	2094	172	231	888	396	182	792	348
Arrive On Green	0.04	0.38	0.38	0.10	0.44	0.44	0.13	0.25	0.25	0.10	0.22	0.22
Sat Flow, veh/h	1774	4464	659	1774	4784	392	1774	3539	1578	1774	3539	1553
Grp Volume(v), veh/h	57	993	507	148	1079	569	193	159	114	148	239	114
Grp Sat Flow(s),veh/h/ln	1774	1695	1733	1774	1695	1786	1774	1770	1578	1774	1770	1553
Q Serve(g_s), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Cycle Q Clear(g_c), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Prop In Lane	1.00		0.38	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	1276	652	182	1484	782	231	888	396	182	792	348
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.73	0.73	0.84	0.18	0.29	0.81	0.30	0.33
Avail Cap(c_a), veh/h	167	1560	797	334	1879	990	408	888	396	334	792	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	26.3	26.3	42.0	22.2	22.2	40.6	28.1	28.9	42.0	30.9	31.1
Incr Delay (d2), s/veh	15.9	2.1	4.0	8.4	1.1	2.0	7.8	0.4	1.8	8.4	1.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.9	12.6	4.2	11.9	12.8	5.5	1.7	2.6	4.2	2.7	2.8
LnGrp Delay(d), s/veh	61.3	28.4	30.3	50.4	23.2	24.2	48.5	28.5	30.8	50.4	31.9	33.6
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1557			1796			466			501	
Approach Delay, s/veh		30.2			25.8			37.3			37.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	28.0	13.8	40.0	16.4	25.4	8.0	45.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	24.0	18.0	44.0	22.0	20.0	9.0	53.0
Max Q Clear Time (g_c+I1), s	9.8	7.6	9.8	26.7	12.2	7.9	5.0	27.1
Green Ext Time (p_c), s	0.2	1.1	0.2	9.3	0.3	1.4	0.0	13.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Future Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	43	174	87	141	424	293	130	891	130	207	772	130
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	55	425	202	172	498	341	411	1714	764	377	2225	371
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.05	0.49	0.49	0.08	0.51	0.51
Sat Flow, veh/h	1757	2292	1091	1757	1978	1354	1757	3505	1562	1757	4337	724
Grp Volume(v), veh/h	43	131	130	141	375	342	130	891	130	207	596	306
Grp Sat Flow(s),veh/h/ln	1757	1752	1631	1757	1752	1580	1757	1752	1562	1757	1679	1704
Q Serve(g_s), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	11.3	11.4
Cycle Q Clear(g_c), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	11.3	11.4
Prop In Lane	1.00		0.67	1.00		0.86	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	55	325	302	172	442	398	411	1714	764	377	1722	874
V/C Ratio(X)	0.79	0.40	0.43	0.82	0.85	0.86	0.32	0.52	0.17	0.55	0.35	0.35
Avail Cap(c_a), veh/h	115	360	335	295	539	486	462	1714	764	501	1722	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	38.4	38.7	47.5	38.2	38.3	12.5	18.8	15.3	13.9	15.5	15.5
Incr Delay (d2), s/veh	21.5	0.8	1.0	9.4	10.5	12.3	0.4	1.1	0.5	1.2	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.5	3.5	4.6	11.8	11.0	1.9	9.3	2.2	3.0	5.3	5.6
LnGrp Delay(d), s/veh	73.1	39.3	39.6	56.8	48.6	50.6	13.0	19.9	15.8	15.1	16.0	16.6
LnGrp LOS	E	D	D	E	D	D	B	B	B	B	B	B
Approach Vol, veh/h		304			858			1151			1109	
Approach Delay, s/veh		44.2			50.8			18.6			16.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	56.4	14.5	23.9	9.9	59.0	7.3	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	48.0	18.0	22.0	9.0	55.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	8.1	20.7	10.4	9.6	5.9	13.4	4.6	24.1
Green Ext Time (p_c), s	0.3	7.7	0.2	1.1	0.1	7.4	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Future Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	746	1845	1546	898	1845	1533	691	3505	1567	601	3505	1567
Grp Volume(v), veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Grp Sat Flow(s),veh/h/ln	746	1845	1546	898	1845	1533	691	1752	1567	601	1752	1567
Q Serve(g_s), s	16.6	22.4	3.9	9.0	25.4	13.9	11.1	15.8	2.5	38.2	11.7	3.6
Cycle Q Clear(g_c), s	42.0	22.4	3.9	31.4	25.4	13.9	22.7	15.8	2.5	54.1	11.7	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
V/C Ratio(X)	0.64	0.64	0.14	0.36	0.70	0.43	0.27	0.41	0.08	0.67	0.32	0.11
Avail Cap(c_a), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	32.6	26.6	45.7	33.6	29.9	18.7	13.7	10.9	28.5	12.8	11.2
Incr Delay (d2), s/veh	8.3	2.1	0.1	1.0	3.4	0.6	1.6	0.6	0.2	10.2	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	11.8	1.7	2.3	13.6	5.9	2.3	7.8	1.1	7.3	5.7	1.6
LnGrp Delay(d), s/veh	60.1	34.7	26.7	46.8	37.0	30.4	20.3	14.3	11.1	38.7	13.3	11.4
LnGrp LOS	E	C	C	D	D	C	C	B	B	D	B	B
Approach Vol, veh/h		590			759			1021			989	
Approach Delay, s/veh		38.2			35.9			14.7			18.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		46.0		74.0		46.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		24.7		44.0		56.1		33.4
Green Ext Time (p_c), s		7.9		0.0		5.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	12.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	40	340	360	820	600	20
Future Vol, veh/h	40	340	360	820	600	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	374	396	901	659	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1902	330	681	0	-	0
Stage 1	659	-	-	-	-	-
Stage 2	1243	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	61	666	907	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	235	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 34	666	907	-	-	-
Mov Cap-2 Maneuver	~ 34	-	-	-	-	-
Stage 1	268	-	-	-	-	-
Stage 2	235	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	60.9	3.7	0
HCM LOS	F		

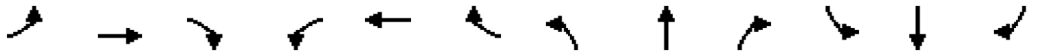
Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	907	-	34	666	-	-
HCM Lane V/C Ratio	0.436	-	1.293	0.561	-	-
HCM Control Delay (s/veh)	12	-	$ 433.6	17.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.2	-	4.7	3.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Future Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	111	949	273	253	556	71	263	980	192	81	747	61
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1031	296	282	1576	198	292	1348	590	103	970	420
Arrive On Green	0.08	0.26	0.26	0.16	0.35	0.35	0.16	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	1774	3908	1121	1774	4565	574	1774	3539	1549	1774	3539	1533
Grp Volume(v), veh/h	111	823	399	253	411	216	263	980	192	81	747	61
Grp Sat Flow(s),veh/h/ln	1774	1695	1638	1774	1695	1749	1774	1770	1549	1774	1770	1533
Q Serve(g_s), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Cycle Q Clear(g_c), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Prop In Lane	1.00		0.68	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	895	432	282	1171	604	292	1348	590	103	970	420
V/C Ratio(X)	0.81	0.92	0.92	0.90	0.35	0.36	0.90	0.73	0.33	0.79	0.77	0.15
Avail Cap(c_a), veh/h	230	910	440	322	1171	604	338	1348	590	123	970	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	41.3	41.4	47.7	28.2	28.3	47.3	30.6	25.3	53.7	38.6	31.7
Incr Delay (d2), s/veh	10.5	14.1	24.8	24.3	0.2	0.4	23.7	3.5	1.5	24.4	5.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.6	15.4	9.8	4.9	5.2	10.2	14.0	4.5	3.3	11.8	1.6
LnGrp Delay(d), s/veh	63.0	55.4	66.2	71.9	28.4	28.6	71.0	34.1	26.7	78.1	44.5	32.4
LnGrp LOS	E	E	E	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		1333			880			1435			889	
Approach Delay, s/veh		59.3			40.9			39.9			46.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	48.0	22.4	34.5	23.0	35.7	13.0	43.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	21.0	31.0	22.0	30.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.2	29.4	18.2	29.4	18.8	24.4	9.1	12.7
Green Ext Time (p_c), s	0.0	6.3	0.2	1.1	0.2	2.3	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Future Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	83	188	52	94	62	125	1365	52	42	1167	83
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	0	570	42	58	562	153	1792	781	54	1595	695
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.09	0.51	0.51	0.03	0.45	0.45
Sat Flow, veh/h	0	0	1582	0	160	1559	1774	3539	1543	1774	3539	1542
Grp Volume(v), veh/h	281	0	188	146	0	62	125	1365	52	42	1167	83
Grp Sat Flow(s),veh/h/ln	0	0	1582	160	0	1559	1774	1770	1543	1774	1770	1542
Q Serve(g_s), s	0.0	0.0	10.1	0.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Cycle Q Clear(g_c), s	42.0	0.0	10.1	42.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Prop In Lane	0.70		1.00	0.36		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	0	570	100	0	562	153	1792	781	54	1595	695
V/C Ratio(X)	5.34	0.00	0.33	1.46	0.00	0.11	0.82	0.76	0.07	0.78	0.73	0.12
Avail Cap(c_a), veh/h	53	0	570	100	0	562	244	1792	781	107	1595	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	27.0	35.0	0.0	24.8	52.4	23.1	14.7	56.1	26.2	18.6
Incr Delay (d2), s/veh	1992.4	0.0	0.3	255.6	0.0	0.1	11.1	3.1	0.2	21.3	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.8	0.0	4.4	10.3	0.0	1.3	4.4	18.4	0.9	1.7	16.1	1.6
LnGrp Delay(d), s/veh	2050.6	0.0	27.4	290.6	0.0	24.9	63.5	26.2	14.9	77.4	29.2	18.9
LnGrp LOS	F		C	F		C	E	C	B	E	C	B
Approach Vol, veh/h		469			208			1542			1292	
Approach Delay, s/veh		1239.6			211.4			28.9			30.1	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	63.0		46.0	14.0	56.5		46.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	59.0		42.0	16.0	50.0		42.0
Max Q Clear Time (g_c+I1), s	4.7	38.1		44.0	10.1	33.5		44.0
Green Ext Time (p_c), s	0.0	9.9		0.0	0.1	7.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		201.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Future Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
Arrive On Green	0.10	0.27	0.27	0.12	0.29	0.29	0.07	0.35	0.35	0.12	0.40	0.40
Sat Flow, veh/h	1774	3539	1548	1774	3539	1554	1774	3539	1551	1774	3539	1555
Grp Volume(v), veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Grp Sat Flow(s),veh/h/ln	1774	1770	1548	1774	1770	1554	1774	1770	1551	1774	1770	1555
Q Serve(g_s), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Cycle Q Clear(g_c), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
V/C Ratio(X)	0.85	0.95	0.22	0.89	0.74	0.43	0.81	0.93	0.11	0.88	0.74	0.08
Avail Cap(c_a), veh/h	208	976	427	208	1025	450	148	1243	545	222	1430	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	42.6	33.5	52.0	38.4	34.5	54.8	37.4	26.2	51.5	30.3	22.0
Incr Delay (d2), s/veh	24.5	17.3	0.3	33.5	2.8	0.7	24.1	13.2	0.4	30.7	3.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	17.1	2.4	7.9	11.6	5.3	4.2	20.5	1.4	8.2	15.6	1.1
LnGrp Delay(d), s/veh	77.3	59.9	33.8	85.6	41.2	35.1	78.8	50.6	26.6	82.3	33.8	22.2
LnGrp LOS	E	E	C	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1163			1133			1316			1306	
Approach Delay, s/veh		60.1			47.4			51.7			40.6	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	46.0	18.0	36.8	12.5	52.3	16.1	38.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	42.0	14.0	33.0	10.0	47.0	14.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	39.5	14.2	32.4	8.8	32.5	12.1	25.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.4	0.0	6.1	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Future Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	146	167	83	125	115	94	1219	0	115	1219	21
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	230	201	106	327	276	119	1996	893	143	2973	51
Arrive On Green	0.01	0.13	0.13	0.06	0.18	0.18	0.07	0.58	0.00	0.08	0.59	0.59
Sat Flow, veh/h	1740	1736	1514	1740	1782	1501	1740	3471	1553	1740	5049	87
Grp Volume(v), veh/h	10	146	167	83	121	119	94	1219	0	115	803	437
Grp Sat Flow(s),veh/h/ln	1740	1736	1514	1740	1736	1548	1740	1736	1553	1740	1663	1811
Q Serve(g_s), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Cycle Q Clear(g_c), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Prop In Lane	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	17	230	201	106	319	284	119	1996	893	143	1958	1067
V/C Ratio(X)	0.60	0.63	0.83	0.79	0.38	0.42	0.79	0.61	0.00	0.81	0.41	0.41
Avail Cap(c_a), veh/h	65	260	227	195	389	347	211	1996	893	244	1958	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	43.9	45.2	49.6	38.3	38.6	49.1	14.9	0.0	48.3	11.9	11.9
Incr Delay (d2), s/veh	29.7	4.1	20.4	12.0	0.7	1.0	11.2	1.4	0.0	10.2	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.4	6.0	2.8	3.2	3.2	3.1	12.1	0.0	3.8	6.5	7.3
LnGrp Delay(d), s/veh	82.5	48.1	65.6	61.6	39.1	39.6	60.3	16.3	0.0	58.4	12.6	13.1
LnGrp LOS	F	D	E	E	D	D	E	B		E	B	B
Approach Vol, veh/h		323			323			1313			1355	
Approach Delay, s/veh		58.2			45.0			19.4			16.6	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	65.5	10.5	18.2	11.3	67.0	5.0	23.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	61.0	12.0	16.0	13.0	63.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	9.0	26.6	7.0	13.5	7.7	16.0	2.6	9.2
Green Ext Time (p_c), s	0.1	10.2	0.1	0.4	0.1	9.8	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Future Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	42	0	94	42	0	21	52	1365	21	10	1417	31
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	63	0	264	63	0	268	67	2473	1079	17	3433	75
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.04	0.71	0.71	0.01	0.68	0.68
Sat Flow, veh/h	0	0	1519	0	0	1539	1740	3471	1514	1740	5022	110
Grp Volume(v), veh/h	42	0	94	42	0	21	52	1365	21	10	938	510
Grp Sat Flow(s),veh/h/ln	0	0	1519	0	0	1539	1740	1736	1514	1740	1663	1807
Q Serve(g_s), s	0.0	0.0	6.3	0.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Cycle Q Clear(g_c), s	20.0	0.0	6.3	20.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	63	0	264	63	0	268	67	2473	1079	17	2273	1235
V/C Ratio(X)	0.67	0.00	0.36	0.67	0.00	0.08	0.78	0.55	0.02	0.60	0.41	0.41
Avail Cap(c_a), veh/h	63	0	264	63	0	268	197	2473	1079	91	2273	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	41.9	57.5	0.0	39.8	54.9	7.8	4.8	56.8	8.0	8.0
Incr Delay (d2), s/veh	24.5	0.0	0.8	24.5	0.0	0.1	17.4	0.9	0.0	30.6	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.7	1.8	0.0	0.6	2.0	10.4	0.2	0.5	6.7	7.4
LnGrp Delay(d), s/veh	82.0	0.0	42.7	82.0	0.0	40.0	72.3	8.7	4.9	87.4	8.6	9.0
LnGrp LOS	F		D	F		D	E	A	A	F	A	A
Approach Vol, veh/h		136			63			1438			1458	
Approach Delay, s/veh		54.8			68.0			11.0			9.3	
Approach LOS		D			E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	86.0		24.0	8.4	82.7		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	82.0		20.0	13.0	75.0		20.0
Max Q Clear Time (g_c+I1), s	2.7	23.4		22.0	5.4	16.3		22.0
Green Ext Time (p_c), s	0.0	13.7		0.0	0.0	12.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	970	140	70	830	170	190
Future Volume (veh/h)	970	140	70	830	170	190
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1900	1845	1845	1845	1845
Adj Flow Rate, veh/h	1102	159	80	943	193	216
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1589	229	104	2353	762	680
Arrive On Green	0.36	0.36	0.06	0.47	0.43	0.43
Sat Flow, veh/h	4598	639	1757	5202	1757	1568
Grp Volume(v), veh/h	835	426	80	943	193	216
Grp Sat Flow(s),veh/h/ln	1679	1713	1757	1679	1757	1568
Q Serve(g_s), s	17.1	17.2	3.6	9.9	5.6	7.3
Cycle Q Clear(g_c), s	17.1	17.2	3.6	9.9	5.6	7.3
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1204	614	104	2353	762	680
V/C Ratio(X)	0.69	0.69	0.77	0.40	0.25	0.32
Avail Cap(c_a), veh/h	2287	1167	392	4804	762	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.1	37.4	14.1	14.5	15.0
Incr Delay (d2), s/veh	0.7	1.4	11.2	0.1	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	8.3	2.1	4.6	2.9	3.4
LnGrp Delay(d), s/veh	22.8	23.5	48.6	14.2	15.3	16.2
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	1261			1023	409	
Approach Delay, s/veh	23.1			16.9	15.8	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		39.0	8.8	32.9				41.7
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		35.0	18.0	55.0				77.0
Max Q Clear Time (g_c+I1), s		9.3	5.6	19.2				11.9
Green Ext Time (p_c), s		1.2	0.1	9.8				7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Future Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	260	21	63	156	115	31	135	52	156	167	31
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	21.5	26.2	13.8	15.3
HCM LOS	C	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	19%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	93%	47%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	7%	34%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	130	50	20	270	320	150	160	30
LT Vol	30	0	0	20	0	60	150	0	0
Through Vol	0	130	0	0	250	150	0	160	0
RT Vol	0	0	50	0	20	110	0	0	30
Lane Flow Rate	31	135	52	21	281	333	156	167	31
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.077	0.316	0.111	0.048	0.61	0.699	0.368	0.369	0.063
Departure Headway (Hd)	8.908	8.388	7.66	8.375	7.814	7.55	8.486	7.968	7.243
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	400	427	465	426	458	477	422	448	491
Service Time	6.708	6.187	5.458	6.166	5.604	5.333	6.279	5.76	5.034
HCM Lane V/C Ratio	0.078	0.316	0.112	0.049	0.614	0.698	0.37	0.373	0.063
HCM Control Delay, s/veh	12.5	15.1	11.4	11.6	22.2	26.2	16.2	15.4	10.5
HCM Lane LOS	B	C	B	B	C	D	C	C	B
HCM 95th-tile Q	0.2	1.3	0.4	0.2	4	5.4	1.7	1.7	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Future Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	83	1073	52	10	958	83	62	42	31	94	21	73
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	108	1469	641	18	1289	563	76	33	645	87	11	637
Arrive On Green	0.06	0.42	0.42	0.01	0.37	0.37	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1757	3505	1530	1757	3505	1531	0	81	1567	0	27	1547
Grp Volume(v), veh/h	83	1073	52	10	958	83	104	0	31	115	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1530	1757	1752	1531	81	0	1567	27	0	1547
Q Serve(g_s), s	3.5	19.3	1.5	0.4	17.9	2.7	0.0	0.0	0.9	0.0	0.0	2.2
Cycle Q Clear(g_c), s	3.5	19.3	1.5	0.4	17.9	2.7	31.0	0.0	0.9	31.0	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	0.60		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	108	1469	641	18	1289	563	109	0	645	98	0	637
V/C Ratio(X)	0.77	0.73	0.08	0.57	0.74	0.15	0.95	0.00	0.05	1.18	0.00	0.11
Avail Cap(c_a), veh/h	396	3303	1442	140	2791	1219	109	0	645	98	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.8	18.3	13.2	37.1	20.7	15.9	28.0	0.0	13.3	34.2	0.0	13.7
Incr Delay (d2), s/veh	10.8	0.7	0.1	25.6	0.9	0.1	73.4	0.0	0.1	146.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.4	0.7	0.3	8.8	1.2	4.4	0.0	0.4	6.0	0.0	1.0
LnGrp Delay(d), s/veh	45.7	19.0	13.2	62.8	21.6	16.0	101.4	0.0	13.5	180.2	0.0	14.1
LnGrp LOS	D	B	B	E	C	B	F		B	F		B
Approach Vol, veh/h		1208			1051			135			188	
Approach Delay, s/veh		20.6			21.5			81.2			115.7	
Approach LOS		C			C			F			F	

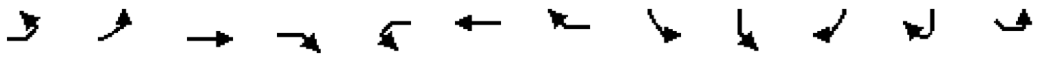
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	4.8	35.6		35.0	8.6	31.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	6.0	71.0		31.0	17.0	60.0
Max Q Clear Time (g_c+I1), s		33.0	2.4	21.3		33.0	5.5	19.9
Green Ext Time (p_c), s		0.0	0.0	9.2		0.0	0.1	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	20	120	0	90	10	1370	220	160	1140	10
Future Volume (veh/h)	10	10	20	120	0	90	10	1370	220	160	1140	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	11	11	22	132	0	99	11	1505	242	176	1253	11
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	66	65	92	223	0	200	18	2270	990	207	2647	1156
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.01	0.65	0.65	0.12	0.76	0.76
Sat Flow, veh/h	205	511	717	1355	0	1564	1757	3505	1529	1757	3505	1530
Grp Volume(v), veh/h	44	0	0	132	0	99	11	1505	242	176	1253	11
Grp Sat Flow(s),veh/h/ln	1434	0	0	1355	0	1564	1757	1752	1529	1757	1752	1530
Q Serve(g_s), s	0.0	0.0	0.0	5.2	0.0	6.6	0.7	29.8	7.5	11.1	15.3	0.2
Cycle Q Clear(g_c), s	6.7	0.0	0.0	11.9	0.0	6.6	0.7	29.8	7.5	11.1	15.3	0.2
Prop In Lane	0.25		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	0	0	223	0	200	18	2270	990	207	2647	1156
V/C Ratio(X)	0.20	0.00	0.00	0.59	0.00	0.50	0.61	0.66	0.24	0.85	0.47	0.01
Avail Cap(c_a), veh/h	286	0	0	278	0	264	62	2270	990	328	2647	1156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	0.0	0.0	48.3	0.0	45.7	55.5	12.2	8.3	48.7	5.2	3.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	2.5	0.0	1.9	28.3	1.5	0.6	11.5	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	4.2	0.0	3.0	0.5	14.7	3.3	6.0	7.5	0.1
LnGrp Delay(d), s/veh	44.4	0.0	0.0	50.8	0.0	47.6	83.8	13.8	8.9	60.2	5.9	3.4
LnGrp LOS	D			D		D	F	B	A	E	A	A
Approach Vol, veh/h		44			231			1758			1440	
Approach Delay, s/veh		44.4			49.4			13.5			12.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.3	76.9		18.4	5.2	89.0		18.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	21.0	68.0		19.0	4.0	85.0		19.0
Max Q Clear Time (g_c+I1), s	13.1	31.8		8.7	2.7	17.3		13.9
Green Ext Time (p_c), s	0.3	15.7		0.1	0.0	11.8		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL2
Lane Configurations												
Traffic Volume (vph)	280	170	1400	280	10	520	10	10	10	10	10	10
Future Volume (vph)	280	170	1400	280	10	520	10	10	10	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%			15%			
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00	1.00		
Frpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Frt		1.00	0.98		1.00	1.00			1.00	0.85		
Flt Protected		0.95	1.00		0.95	1.00			0.95	1.00		
Satd. Flow (prot)		1805	5045		1805	5172			1670	1494		
Flt Permitted		0.95	1.00		0.22	1.00			0.95	1.00		
Satd. Flow (perm)		1805	5045		415	5172			1670	1494		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	301	183	1505	301	11	559	11	11	11	11	11	11
RTOR Reduction (vph)	0	0	21	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	484	1785	0	11	570	0	0	22	22	0	0
Confl. Peds. (#/hr)				1	1				5			
Confl. Bikes (#/hr)				2								
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Prot	Perm		Perm
Protected Phases	7	7	4		3	8		9	9			
Permitted Phases					8					10		6
Actuated Green, G (s)		31.4	49.0		19.0	18.3			1.4	3.1		
Effective Green, g (s)		31.4	49.0		19.0	18.3			1.4	3.1		
Actuated g/C Ratio		0.29	0.46		0.18	0.17			0.01	0.03		
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0	3.0		
Lane Grp Cap (vph)		526	2297		82	879			21	43		
v/s Ratio Prot		c0.27	c0.35		0.00	0.11			c0.01			
v/s Ratio Perm					0.02					c0.01		
v/c Ratio		0.92	0.78		0.13	0.65			1.05	0.51		
Uniform Delay, d1		36.9	24.7		36.7	41.6			53.1	51.5		
Progression Factor		1.00	1.00		1.00	1.00			1.00	1.00		
Incremental Delay, d2		21.5	1.7		0.7	1.7			212.0	9.9		
Delay (s)		58.4	26.4		37.4	43.3			265.1	61.4		
Level of Service		E	C		D	D			F	E		
Approach Delay (s/veh)			33.2			43.2			163.3			
Approach LOS			C			D			F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	107.6	Sum of lost time (s)	20.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NWR2
Lane Configurations							
Traffic Volume (vph)	60	260	70	180	260	20	20
Future Volume (vph)	60	260	70	180	260	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	
Flt Permitted	0.42	1.00	1.00	0.42	1.00	1.00	
Satd. Flow (perm)	793	1900	1615	793	1900	1615	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	280	75	194	280	22	22
RTOR Reduction (vph)	0	0	52	0	0	30	0
Lane Group Flow (vph)	76	280	23	194	280	14	0
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		6			2		
Permitted Phases	6		6	2		2	
Actuated Green, G (s)	33.4	33.4	33.4	33.4	33.4	33.4	
Effective Green, g (s)	33.4	33.4	33.4	33.4	33.4	33.4	
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.31	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	246	589	501	246	589	501	
v/s Ratio Prot		0.15			0.15		
v/s Ratio Perm	0.10		0.01	c0.24		0.01	
v/c Ratio	0.31	0.48	0.05	0.79	0.48	0.03	
Uniform Delay, d1	28.3	30.0	26.0	33.9	30.0	25.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.6	0.0	22.1	2.7	0.1	
Delay (s)	29.0	30.6	26.0	56.0	32.8	25.9	
Level of Service	C	C	C	E	C	C	
Approach Delay (s/veh)		29.5			40.9		
Approach LOS		C			D		

Intersection Summary

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	830	10	10	570	50	10	10	180	10	10	40
Future Volume (Veh/h)	10	830	10	10	570	50	10	10	180	10	10	40
Sign Control		Free			Free			Stop			Yield	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	865	10	10	594	52	10	10	188	10	10	42
Pedestrians		2									2	
Lane Width (ft)		12.0									12.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		0									0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					499							
pX, platoon unblocked												
vC, conflicting volume	648			875			1256	1558	438	1288	1537	327
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	648			875			1256	1558	438	1288	1537	327
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			99			91	91	67	87	91	94
cM capacity (veh/h)	939			773			110	110	570	75	113	669

Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	NE 2	SW 1
Volume Total	443	443	307	349	83	125	62
Volume Left	10	0	10	0	10	0	10
Volume Right	0	10	0	52	63	125	42
cSH	939	1700	773	1700	283	570	217
Volume to Capacity	0.01	0.26	0.01	0.21	0.29	0.22	0.29
Queue Length 95th (ft)	1	0	1	0	29	21	28
Control Delay (s/veh)	0.3	0.0	0.5	0.0	22.8	13.1	28.0
Lane LOS	A		A		C	B	D
Approach Delay (s/veh)	0.2		0.2		17.0		28.0
Approach LOS					C		D

Intersection Summary				
Average Delay	3.1			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	340	2510	50	20	2060	200	400	20	530	190	30	10
Future Volume (vph)	340	2510	50	20	2060	200	400	20	530	190	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	0.98	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.86	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5116		1787	5136	1566	1768	1511	1490	1782	1881	1552
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.74	1.00	1.00	0.36	1.00	1.00
Satd. Flow (perm)	3467	5116		1787	5136	1566	1370	1511	1490	674	1881	1552
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	1.00	0.93	1.00
Adj. Flow (vph)	366	2699	54	22	2215	215	430	22	570	190	32	10
RTOR Reduction (vph)	0	2	0	0	0	87	0	114	114	0	0	7
Lane Group Flow (vph)	366	2751	0	22	2215	128	430	182	182	190	32	3
Confl. Peds. (#/hr)			7	7			5		3	3		5
Confl. Bikes (#/hr)			2			1			1			9
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	14.0	70.2		2.4	58.6	58.6	37.0	37.0	37.0	37.0	37.0	37.0
Effective Green, g (s)	14.0	70.2		2.4	58.6	58.6	37.0	37.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.12	0.58		0.02	0.48	0.48	0.30	0.30	0.30	0.30	0.30	0.30
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	399	2953		35	2475	754	416	459	453	205	572	472
v/s Ratio Prot	c0.11	c0.54		0.01	0.43			0.12			0.02	
v/s Ratio Perm						0.08	c0.31		0.12	0.28		0.00
v/c Ratio	0.92	0.93		0.63	0.89	0.17	1.03	0.40	0.40	0.93	0.06	0.01
Uniform Delay, d1	53.2	23.5		59.2	28.7	17.8	42.3	33.5	33.5	41.0	29.9	29.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	25.4	6.8		30.3	5.5	0.5	53.1	0.6	0.6	42.4	0.0	0.0
Delay (s)	78.7	30.3		89.5	34.2	18.3	95.4	34.0	34.1	83.4	30.0	29.5
Level of Service	E	C		F	C	B	F	C	C	F	C	C
Approach Delay (s/veh)		36.0			33.3			59.9			73.7	
Approach LOS		D			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	121.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	93.3%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	200	380	40	50	10	280	1070	0	10	830	170
Future Volume (veh/h)	730	200	380	40	50	10	280	1070	0	10	830	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	760	208	396	42	52	10	292	1115	0	10	865	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	887	539	457	54	94	18	373	1852	828	18	1504	673
Arrive On Green	0.25	0.28	0.28	0.03	0.06	0.06	0.11	0.51	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3510	1900	1612	1810	1547	297	3510	3610	1615	1810	3610	1615
Grp Volume(v), veh/h	760	208	396	42	0	62	292	1115	0	10	865	0
Grp Sat Flow(s),veh/h/ln	1755	1900	1612	1810	0	1844	1755	1805	1615	1810	1805	1615
Q Serve(g_s), s	20.1	8.6	22.8	2.2	0.0	3.2	7.9	21.2	0.0	0.5	17.9	0.0
Cycle Q Clear(g_c), s	20.1	8.6	22.8	2.2	0.0	3.2	7.9	21.2	0.0	0.5	17.9	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	887	539	457	54	0	112	373	1852	828	18	1504	673
V/C Ratio(X)	0.86	0.39	0.87	0.78	0.00	0.55	0.78	0.60	0.00	0.57	0.58	0.00
Avail Cap(c_a), veh/h	1224	838	711	130	0	303	540	1852	828	74	1504	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.8	28.1	33.2	47.0	0.0	44.5	42.5	16.7	0.0	48.1	21.8	0.0
Incr Delay (d2), s/veh	4.6	0.5	7.0	21.3	0.0	4.2	4.7	1.5	0.0	25.6	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	4.6	11.0	1.4	0.0	1.8	4.1	10.9	0.0	0.4	9.2	0.0
LnGrp Delay(d), s/veh	39.4	28.5	40.2	68.3	0.0	48.7	47.1	18.2	0.0	73.7	23.4	0.0
LnGrp LOS	D	C	D	E		D	D	B		E	C	
Approach Vol, veh/h		1364			104			1407			875	
Approach Delay, s/veh		37.9			56.6			24.2			24.0	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	54.0	6.9	31.6	14.3	44.6	28.6	9.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	50.0	7.0	43.0	15.0	39.0	34.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	23.2	4.2	24.8	9.9	19.9	22.1	5.2
Green Ext Time (p_c), s	0.0	8.6	0.0	2.6	0.4	5.6	2.5	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	690	1960	390	180	1430	100	290	570	330	310	670	140
Future Volume (veh/h)	690	1960	390	180	1430	100	290	570	330	310	670	140
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	719	2042	406	188	1490	104	302	594	344	323	698	146
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	779	2326	711	215	1791	711	358	660	643	376	806	166
Arrive On Green	0.22	0.45	0.45	0.12	0.35	0.35	0.10	0.18	0.18	0.11	0.19	0.19
Sat Flow, veh/h	3476	5136	1570	1792	5136	1566	3476	3574	1544	3476	4247	876
Grp Volume(v), veh/h	719	2042	406	188	1490	104	302	594	344	323	561	283
Grp Sat Flow(s),veh/h/ln	1738	1712	1570	1792	1712	1566	1738	1787	1544	1738	1712	1700
Q Serve(g_s), s	24.1	43.0	22.8	12.3	31.7	4.7	10.2	19.4	20.2	10.9	18.9	19.3
Cycle Q Clear(g_c), s	24.1	43.0	22.8	12.3	31.7	4.7	10.2	19.4	20.2	10.9	18.9	19.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	779	2326	711	215	1791	711	358	660	643	376	650	323
V/C Ratio(X)	0.92	0.88	0.57	0.87	0.83	0.15	0.84	0.90	0.53	0.86	0.86	0.88
Avail Cap(c_a), veh/h	816	2326	711	225	1791	711	379	660	643	379	650	323
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	29.6	24.1	51.6	35.6	19.2	52.5	47.5	26.8	52.3	46.8	46.9
Incr Delay (d2), s/veh	15.5	5.1	3.3	28.6	4.7	0.4	15.3	15.5	0.9	17.5	11.5	22.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	21.3	10.5	7.8	15.8	2.1	5.7	11.0	8.7	6.2	10.0	11.1
LnGrp Delay(d), s/veh	60.8	34.7	27.4	80.2	40.3	19.6	67.8	63.0	27.7	69.7	58.3	69.8
LnGrp LOS	E	C	C	F	D	B	E	E	C	E	E	E
Approach Vol, veh/h		3167			1782			1240			1167	
Approach Delay, s/veh		39.7			43.3			54.4			64.2	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.3	58.0	16.9	26.0	30.7	45.6	16.3	26.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	54.0	13.0	22.0	28.0	41.0	13.0	22.0
Max Q Clear Time (g_c+I1), s	14.3	45.0	12.9	22.2	26.1	33.7	12.2	21.3
Green Ext Time (p_c), s	0.0	7.6	0.0	0.0	0.6	5.2	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	20	30	20	20	110	20	2580	10	80	2200	140
Future Volume (veh/h)	140	20	30	20	20	110	20	2580	10	80	2200	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	141	20	30	20	20	111	20	2606	10	81	2222	141
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	58	0	320	46	32	320	29	3350	13	103	3331	209
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.63	0.63	0.06	0.68	0.68
Sat Flow, veh/h	0	0	1560	0	157	1558	1792	5281	20	1792	4930	310
Grp Volume(v), veh/h	161	0	30	40	0	111	20	1689	927	81	1537	826
Grp Sat Flow(s),veh/h/ln	0	0	1560	157	0	1558	1792	1712	1877	1792	1712	1816
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	7.1	1.3	41.6	41.7	5.2	30.9	31.6
Cycle Q Clear(g_c), s	24.0	0.0	1.8	24.0	0.0	7.1	1.3	41.6	41.7	5.2	30.9	31.6
Prop In Lane	0.88		1.00	0.50		1.00	1.00		0.01	1.00		0.17
Lane Grp Cap(c), veh/h	58	0	320	78	0	320	29	2172	1191	103	2314	1227
V/C Ratio(X)	2.79	0.00	0.09	0.51	0.00	0.35	0.68	0.78	0.78	0.78	0.66	0.67
Avail Cap(c_a), veh/h	58	0	320	78	0	320	77	2172	1191	184	2314	1227
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	0.0	37.6	40.0	0.0	39.8	57.2	15.4	15.4	54.4	11.2	11.3
Incr Delay (d2), s/veh	850.3	0.0	0.1	5.4	0.0	0.6	24.4	2.8	5.1	12.1	1.5	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	0.0	0.8	1.2	0.0	3.1	0.8	20.3	23.1	2.9	15.0	16.6
LnGrp Delay(d), s/veh	908.7	0.0	37.8	45.4	0.0	40.4	81.6	18.2	20.5	66.4	12.7	14.2
LnGrp LOS	F		D	D		D	F	B	C	E	B	B
Approach Vol, veh/h		191			151			2636			2444	
Approach Delay, s/veh		771.9			41.7			19.5			15.0	
Approach LOS		F			D			B			B	

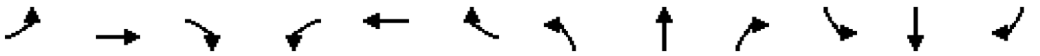
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	78.2		28.0	5.9	83.0		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	72.0		24.0	5.0	79.0		24.0
Max Q Clear Time (g_c+I1), s	7.2	43.7		26.0	3.3	33.6		26.0
Green Ext Time (p_c), s	0.1	22.7		0.0	0.0	29.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	770	80	110	470	230	110	1760	50	160	1810	320
Future Volume (veh/h)	580	770	80	110	470	230	110	1760	50	160	1810	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	617	819	85	117	500	245	117	1872	53	170	1926	340
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	665	1046	455	170	536	230	145	2362	67	225	2122	367
Arrive On Green	0.19	0.29	0.29	0.05	0.15	0.15	0.04	0.46	0.46	0.06	0.48	0.48
Sat Flow, veh/h	3476	3574	1554	3476	3574	1531	3476	5130	145	3476	4389	760
Grp Volume(v), veh/h	617	819	85	117	500	245	117	1249	676	170	1494	772
Grp Sat Flow(s),veh/h/ln	1738	1787	1554	1738	1787	1531	1738	1712	1851	1738	1712	1725
Q Serve(g_s), s	20.9	25.2	4.9	4.0	16.6	18.0	4.0	37.2	37.2	5.8	48.0	50.2
Cycle Q Clear(g_c), s	20.9	25.2	4.9	4.0	16.6	18.0	4.0	37.2	37.2	5.8	48.0	50.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.44
Lane Grp Cap(c), veh/h	665	1046	455	170	536	230	145	1577	853	225	1655	834
V/C Ratio(X)	0.93	0.78	0.19	0.69	0.93	1.07	0.81	0.79	0.79	0.76	0.90	0.93
Avail Cap(c_a), veh/h	666	1046	455	174	536	230	145	1577	853	232	1655	834
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	38.9	31.7	56.2	50.4	51.0	57.0	27.5	27.5	55.2	28.4	29.0
Incr Delay (d2), s/veh	19.3	3.9	0.2	10.7	23.4	78.0	27.6	4.2	7.5	13.0	8.4	17.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.8	13.0	2.1	2.2	9.9	12.6	2.5	18.4	20.7	3.2	24.6	27.9
LnGrp Delay(d), s/veh	66.9	42.9	31.9	66.8	73.7	128.9	84.6	31.6	35.0	68.1	36.8	46.6
LnGrp LOS	E	D	C	E	E	F	F	C	C	E	D	D
Approach Vol, veh/h		1521			862			2042			2436	
Approach Delay, s/veh		52.0			88.5			35.8			42.1	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	59.2	9.9	39.1	9.0	62.0	27.0	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	55.0	6.0	35.0	5.0	58.0	23.0	18.0
Max Q Clear Time (g_c+I1), s	7.8	39.2	6.0	27.2	6.0	52.2	22.9	20.0
Green Ext Time (p_c), s	0.0	11.0	0.0	3.4	0.0	5.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	870	240	360	870	30	380	110	510	30	50	40
Future Volume (vph)	40	870	240	360	870	30	380	110	510	30	50	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	0.99		1.00	1.00	0.85		0.96	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00		0.99	
Satd. Flow (prot)	1805	3610	1587	3502	3589		1715	1756	1588		1792	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.67	0.76	1.00		0.88	
Satd. Flow (perm)	1805	3610	1587	3502	3589		1202	1378	1588		1604	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	42	916	253	379	916	32	400	116	537	32	53	42
RTOR Reduction (vph)	0	0	169	0	2	0	0	0	191	0	14	0
Lane Group Flow (vph)	42	916	84	379	946	0	252	264	346	0	113	0
Confl. Peds. (#/hr)			2	2					2	2		
Confl. Bikes (#/hr)			2			2			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	4.0	37.6	37.6	16.9	50.5		47.3	47.3	47.3		47.3	
Effective Green, g (s)	4.0	37.6	37.6	16.9	50.5		47.3	47.3	47.3		47.3	
Actuated g/C Ratio	0.04	0.33	0.33	0.15	0.44		0.42	0.42	0.42		0.42	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	63	1192	524	520	1592		499	572	660		666	
v/s Ratio Prot	0.02	c0.25		c0.11	0.26							
v/s Ratio Perm			0.05				0.21	0.19	c0.22		0.07	
v/c Ratio	0.67	0.77	0.16	0.73	0.59		0.51	0.46	0.52		0.17	
Uniform Delay, d1	54.2	34.2	26.9	46.3	23.9		24.6	24.0	24.8		20.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	23.5	3.0	0.1	5.1	0.6		3.6	2.7	3.0		0.6	
Delay (s)	77.8	37.2	27.1	51.3	24.5		28.2	26.7	27.8		21.5	
Level of Service	E	D	C	D	C		C	C	C		C	
Approach Delay (s/veh)		36.5			32.2			27.6			21.5	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	113.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	10	30	10	30	10	970	70	20	580	10
Future Volume (veh/h)	10	0	10	30	10	30	10	970	70	20	580	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.97		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	11	0	11	33	11	33	11	1066	77	22	637	11
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	192	0	129	94	31	56	19	2786	1220	33	2814	1231
Arrive On Green	0.08	0.00	0.08	0.08	0.08	0.08	0.01	0.78	0.78	0.02	0.79	0.79
Sat Flow, veh/h	1436	0	1531	510	371	661	1792	3574	1565	1792	3574	1564
Grp Volume(v), veh/h	11	0	11	77	0	0	11	1066	77	22	637	11
Grp Sat Flow(s),veh/h/ln	1436	0	1531	1542	0	0	1792	1787	1565	1792	1787	1564
Q Serve(g_s), s	0.0	0.0	0.7	3.0	0.0	0.0	0.6	9.5	1.2	1.2	4.7	0.2
Cycle Q Clear(g_c), s	0.7	0.0	0.7	4.8	0.0	0.0	0.6	9.5	1.2	1.2	4.7	0.2
Prop In Lane	1.00		1.00	0.43		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	0	129	180	0	0	19	2786	1220	33	2814	1231
V/C Ratio(X)	0.06	0.00	0.09	0.43	0.00	0.00	0.58	0.38	0.06	0.67	0.23	0.01
Avail Cap(c_a), veh/h	356	0	316	364	0	0	123	2786	1220	159	2814	1231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	42.9	44.7	0.0	0.0	50.1	3.5	2.6	49.6	2.8	2.3
Incr Delay (d2), s/veh	0.1	0.0	0.3	1.6	0.0	0.0	25.6	0.4	0.1	21.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	2.2	0.0	0.0	0.4	4.7	0.5	0.8	2.4	0.1
LnGrp Delay(d), s/veh	43.1	0.0	43.2	46.3	0.0	0.0	75.6	3.9	2.7	71.1	3.0	2.3
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		22			77			1154			670	
Approach Delay, s/veh		43.1			46.3			4.5			5.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	83.2		12.6	5.1	84.0		12.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	78.0		21.0	7.0	80.0		21.0
Max Q Clear Time (g_c+I1), s	3.2	11.5		2.7	2.6	6.7		6.8
Green Ext Time (p_c), s	0.0	9.9		0.0	0.0	4.7		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	350	110	50	230	40	100	580	40	20	300	310
Future Volume (veh/h)	450	350	110	50	230	40	100	580	40	20	300	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	479	372	117	53	245	43	106	617	43	21	319	330
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	595	917	284	257	358	62	422	1710	744	374	1710	751
Arrive On Green	0.26	0.34	0.34	0.04	0.12	0.12	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1792	2677	830	1792	3038	525	786	3574	1555	778	3574	1570
Grp Volume(v), veh/h	479	247	242	53	142	146	106	617	43	21	319	330
Grp Sat Flow(s),veh/h/ln	1792	1787	1720	1792	1787	1776	786	1787	1555	778	1787	1570
Q Serve(g_s), s	18.2	8.8	9.0	2.2	6.4	6.6	7.5	9.1	1.2	1.5	4.3	11.6
Cycle Q Clear(g_c), s	18.2	8.8	9.0	2.2	6.4	6.6	11.7	9.1	1.2	10.6	4.3	11.6
Prop In Lane	1.00		0.48	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	595	612	589	257	210	209	422	1710	744	374	1710	751
V/C Ratio(X)	0.81	0.40	0.41	0.21	0.68	0.70	0.25	0.36	0.06	0.06	0.19	0.44
Avail Cap(c_a), veh/h	1158	1304	1255	343	428	425	422	1710	744	374	1710	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	21.0	21.0	30.9	35.3	35.4	15.8	13.7	11.7	17.1	12.5	14.4
Incr Delay (d2), s/veh	2.6	0.4	0.5	0.4	3.8	4.1	1.4	0.6	0.1	0.3	0.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	4.4	4.3	1.1	3.4	3.5	1.8	4.6	0.6	0.3	2.1	5.4
LnGrp Delay(d), s/veh	23.7	21.4	21.5	31.3	39.1	39.6	17.3	14.3	11.8	17.3	12.7	16.3
LnGrp LOS	C	C	C	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		968			341			766			670	
Approach Delay, s/veh		22.6			38.1			14.6			14.6	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	7.0	32.6		44.0	25.7	13.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	7.0	61.0		40.0	48.0	20.0
Max Q Clear Time (g_c+I1), s		13.7	4.2	11.0		13.6	20.2	8.6
Green Ext Time (p_c), s		5.1	0.0	3.0		3.3	1.5	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	750	170	130	470	10	300	100	230	30	50	10
Future Volume (veh/h)	20	750	170	130	470	10	300	100	230	30	50	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	798	181	138	500	11	319	106	245	32	53	11
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	362	972	221	246	1383	30	710	780	653	420	867	174
Arrive On Green	0.02	0.33	0.33	0.07	0.38	0.38	0.14	0.41	0.41	0.02	0.29	0.29
Sat Flow, veh/h	1810	2922	663	1810	3609	79	1810	1900	1589	1810	2987	600
Grp Volume(v), veh/h	21	493	486	138	250	261	319	106	245	32	31	33
Grp Sat Flow(s),veh/h/ln	1810	1805	1780	1810	1805	1883	1810	1900	1589	1810	1805	1782
Q Serve(g_s), s	0.7	24.4	24.4	4.6	9.6	9.7	11.4	3.4	10.5	1.2	1.2	1.3
Cycle Q Clear(g_c), s	0.7	24.4	24.4	4.6	9.6	9.7	11.4	3.4	10.5	1.2	1.2	1.3
Prop In Lane	1.00		0.37	1.00		0.04	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	362	601	592	246	692	722	710	780	653	420	524	517
V/C Ratio(X)	0.06	0.82	0.82	0.56	0.36	0.36	0.45	0.14	0.38	0.08	0.06	0.06
Avail Cap(c_a), veh/h	404	853	841	382	1038	1083	895	780	653	451	524	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	29.8	29.8	22.3	21.5	21.5	17.6	17.9	20.0	23.3	25.0	25.0
Incr Delay (d2), s/veh	0.1	4.4	4.5	2.0	0.3	0.3	0.4	0.4	1.6	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	12.9	12.8	2.4	4.8	5.1	5.7	1.8	4.9	0.6	0.6	0.7
LnGrp Delay(d), s/veh	21.0	34.2	34.3	24.3	21.8	21.8	18.1	18.3	21.6	23.4	25.2	25.2
LnGrp LOS	C	C	C	C	C	C	B	B	C	C	C	C
Approach Vol, veh/h		1000			649			670			96	
Approach Delay, s/veh		34.0			22.3			19.4			24.6	
Approach LOS		C			C			B			C	

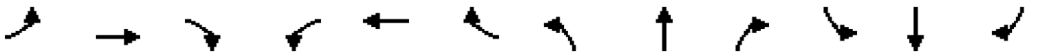
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	44.0	10.7	36.4	18.0	32.3	5.7	41.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	40.0	14.0	46.0	24.0	20.0	4.0	56.0
Max Q Clear Time (g_c+I1), s	3.2	12.5	6.6	26.4	13.4	3.3	2.7	11.7
Green Ext Time (p_c), s	0.0	1.4	0.2	6.0	0.7	0.2	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	380	140	70	470	250	80	370	50	140	270	80
Future Volume (veh/h)	130	380	140	70	470	250	80	370	50	140	270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	133	388	143	71	480	255	82	378	51	143	276	82
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	169	1129	496	92	614	324	107	1090	146	180	1050	305
Arrive On Green	0.09	0.32	0.32	0.05	0.27	0.27	0.06	0.34	0.34	0.10	0.39	0.39
Sat Flow, veh/h	1792	3574	1571	1792	2248	1187	1792	3162	423	1792	2721	791
Grp Volume(v), veh/h	133	388	143	71	381	354	82	212	217	143	179	179
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1647	1792	1787	1798	1792	1787	1725
Q Serve(g_s), s	6.2	7.1	5.9	3.3	16.8	17.0	3.9	7.6	7.7	6.7	5.9	6.1
Cycle Q Clear(g_c), s	6.2	7.1	5.9	3.3	16.8	17.0	3.9	7.6	7.7	6.7	5.9	6.1
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.24	1.00		0.46
Lane Grp Cap(c), veh/h	169	1129	496	92	488	450	107	616	620	180	690	665
V/C Ratio(X)	0.79	0.34	0.29	0.77	0.78	0.79	0.77	0.34	0.35	0.79	0.26	0.27
Avail Cap(c_a), veh/h	377	1881	826	251	815	751	293	616	620	398	690	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	22.4	22.0	40.1	28.7	28.8	39.6	20.8	20.9	37.6	17.9	18.0
Incr Delay (d2), s/veh	7.9	0.2	0.3	12.5	2.8	3.1	10.9	1.5	1.6	7.6	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.5	2.6	2.0	8.6	8.1	2.2	4.0	4.1	3.7	3.1	3.1
LnGrp Delay(d), s/veh	45.8	22.6	22.3	52.6	31.5	31.8	50.5	22.4	22.4	45.2	18.8	19.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		664			806			511			501	
Approach Delay, s/veh		27.2			33.5			26.9			26.4	
Approach LOS		C			C			C			C	

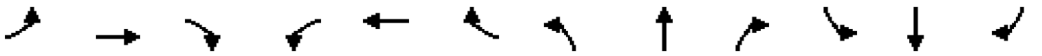
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	33.5	8.4	31.0	9.1	37.0	12.1	27.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	28.0	12.0	45.0	14.0	33.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	8.7	9.7	5.3	9.1	5.9	8.1	8.2	19.0
Green Ext Time (p_c), s	0.2	2.2	0.1	3.0	0.1	2.0	0.2	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Future Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.98		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1626	3330		1787	3574	1584		3457		1698	1775	2745
Flt Permitted	0.95	0.55		0.95	1.00	1.00		0.88		0.95	0.91	1.00
Satd. Flow (perm)	1626	1856		1787	3574	1584		3067		1698	1629	2745
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	573	375	31	94	458	375	42	354	73	375	302	656
RTOR Reduction (vph)	0	3	0	0	0	49	0	13	0	0	0	19
Lane Group Flow (vph)	321	655	0	94	458	326	0	456	0	330	347	637
Confl. Peds. (#/hr)	3		2	2		3	5		7	7		5
Confl. Bikes (#/hr)			2			2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Effective Green, g (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Actuated g/C Ratio	0.24	0.47		0.06	0.20	0.41		0.21		0.21	0.46	0.70
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	392	1232		110	701	697		655		355	776	2015
v/s Ratio Prot	c0.20	0.13		0.05	c0.13	0.10				c0.19	0.09	0.08
v/s Ratio Perm		0.12				0.11		c0.15			0.11	0.16
v/c Ratio	0.82	0.53		0.85	0.65	0.47		0.70		0.93	0.45	0.32
Uniform Delay, d1	41.1	21.3		53.3	42.5	25.0		41.7		44.5	21.2	6.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	12.5	0.4		43.8	2.2	0.5		6.0		30.0	0.4	0.1
Delay (s)	53.7	21.8		97.1	44.7	25.5		47.7		74.5	21.6	6.8
Level of Service	D	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		32.2			42.3			47.7			27.4	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



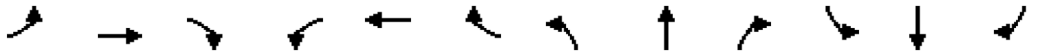
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Future Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1765	3574	1575	1785	3558		1698	1705	1562	1756	1740	
Flt Permitted	0.47	1.00	1.00	0.25	1.00		0.95	0.62	1.00	0.95	1.00	
Satd. Flow (perm)	867	3574	1575	460	3558		1698	1101	1562	1756	1740	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	433	433	485	495	10	464	10	423	10	10	10
RTOR Reduction (vph)	0	0	272	0	1	0	0	0	51	0	8	0
Lane Group Flow (vph)	10	433	161	485	504	0	237	237	372	10	12	0
Confl. Peds. (#/hr)	17		8	8		17			13	13		
Confl. Bikes (#/hr)			2			3			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Effective Green, g (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Actuated g/C Ratio	0.20	0.19	0.37	0.48	0.44		0.18	0.44	0.65	0.01	0.22	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	178	685	644	559	1563		304	593	1074	11	388	
v/s Ratio Prot	0.00	0.12	0.04	c0.22	0.14		c0.14	0.07	0.09	0.01	0.01	
v/s Ratio Perm	0.01		0.06	c0.20				c0.10	0.15			
v/c Ratio	0.06	0.63	0.25	0.87	0.32		0.78	0.40	0.35	0.91	0.03	
Uniform Delay, d1	34.2	39.3	23.0	21.7	19.4		41.4	20.1	8.3	52.5	32.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	1.9	0.2	13.4	0.1		11.9	0.4	0.2	217.6	0.2	
Delay (s)	34.3	41.2	23.2	35.1	19.5		53.3	20.5	8.5	270.1	32.3	
Level of Service	C	D	C	D	B		D	C	A	F	C	
Approach Delay (s/veh)		32.3			27.1			23.5			111.6	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Future Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	73	594	104	156	229	115	94	740	292	188	802	52
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	332	692	121	244	616	296	373	1189	469	337	1727	112
Arrive On Green	0.04	0.23	0.23	0.08	0.27	0.27	0.04	0.47	0.47	0.07	0.50	0.50
Sat Flow, veh/h	1810	3055	533	1810	2326	1115	1810	2514	992	1810	3437	223
Grp Volume(v), veh/h	73	350	348	156	175	169	94	531	501	188	421	433
Grp Sat Flow(s),veh/h/ln	1810	1805	1783	1810	1805	1636	1810	1805	1701	1810	1805	1855
Q Serve(g_s), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Cycle Q Clear(g_c), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Prop In Lane	1.00		0.30	1.00		0.68	1.00		0.58	1.00		0.12
Lane Grp Cap(c), veh/h	332	409	404	244	478	434	373	854	805	337	907	932
V/C Ratio(X)	0.22	0.86	0.86	0.64	0.37	0.39	0.25	0.62	0.62	0.56	0.46	0.46
Avail Cap(c_a), veh/h	336	478	473	310	610	553	412	854	805	454	907	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	40.6	40.7	30.0	32.7	33.0	14.5	21.5	21.5	16.4	17.7	17.7
Incr Delay (d2), s/veh	0.3	12.8	13.4	2.8	0.5	0.6	0.4	3.4	3.6	1.4	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	11.6	11.5	3.7	4.4	4.2	1.5	12.8	12.1	2.9	8.6	8.8
LnGrp Delay(d), s/veh	30.8	53.4	54.0	32.8	33.2	33.5	14.8	24.9	25.1	17.9	19.4	19.3
LnGrp LOS	C	D	D	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		771			500			1126			1042	
Approach Delay, s/veh		51.6			33.2			24.2			19.1	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	55.8	13.0	28.8	8.7	59.0	8.8	33.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	47.0	13.0	29.0	7.0	55.0	5.0	37.0
Max Q Clear Time (g_c+I1), s	7.6	26.1	8.9	22.5	4.9	18.6	5.4	11.2
Green Ext Time (p_c), s	0.3	7.0	0.1	2.3	0.0	6.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	730	110	220	980	200	250	1240	250	150	840	230
Future Volume (veh/h)	170	730	110	220	980	200	250	1240	250	150	840	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	172	737	111	222	990	202	253	1253	253	152	848	232
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	228	1065	159	281	1073	218	282	1588	817	180	1385	703
Arrive On Green	0.07	0.24	0.24	0.08	0.25	0.25	0.16	0.44	0.44	0.10	0.39	0.39
Sat Flow, veh/h	3476	4482	668	3476	4245	864	1792	3574	1549	1792	3574	1544
Grp Volume(v), veh/h	172	561	287	222	798	394	253	1253	253	152	848	232
Grp Sat Flow(s),veh/h/ln	1738	1712	1726	1738	1712	1685	1792	1787	1549	1792	1787	1544
Q Serve(g_s), s	5.7	17.5	17.8	7.3	26.6	26.7	16.2	35.1	10.8	9.8	22.3	11.3
Cycle Q Clear(g_c), s	5.7	17.5	17.8	7.3	26.6	26.7	16.2	35.1	10.8	9.8	22.3	11.3
Prop In Lane	1.00		0.39	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	814	410	281	866	426	282	1588	817	180	1385	703
V/C Ratio(X)	0.75	0.69	0.70	0.79	0.92	0.92	0.90	0.79	0.31	0.84	0.61	0.33
Avail Cap(c_a), veh/h	238	814	410	327	878	432	322	1588	817	214	1385	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	40.7	40.8	52.8	42.6	42.6	48.4	27.8	15.8	51.7	28.8	20.6
Incr Delay (d2), s/veh	12.3	2.5	5.2	10.8	14.8	25.6	24.4	4.1	1.0	22.4	2.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	8.5	9.0	3.9	14.3	15.4	9.9	18.1	4.8	5.9	11.3	5.1
LnGrp Delay(d), s/veh	66.1	43.1	46.0	63.6	57.4	68.2	72.7	31.9	16.8	74.2	30.8	21.9
LnGrp LOS	E	D	D	E	E	E	E	C	B	E	C	C
Approach Vol, veh/h		1020			1414			1759			1232	
Approach Delay, s/veh		47.8			61.4			35.6			34.5	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	56.0	13.4	31.8	22.4	49.3	11.7	33.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	52.0	11.0	27.0	21.0	45.0	8.0	30.0
Max Q Clear Time (g_c+I1), s	11.8	37.1	9.3	19.8	18.2	24.3	7.7	28.7
Green Ext Time (p_c), s	0.1	8.5	0.1	2.9	0.2	6.8	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Future Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	412	979	113	577	979	144	206	990	536	93	526	216
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	580	2669	307	581	2939	899	151	1324	582	104	624	255
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.08	0.37	0.37	0.25	0.25	0.25
Sat Flow, veh/h	988	4709	542	1018	5187	1587	1810	3610	1587	347	2496	1021
Grp Volume(v), veh/h	412	718	374	577	979	144	206	990	536	93	380	362
Grp Sat Flow(s),veh/h/ln	494	1729	1793	509	1729	1587	1810	1805	1587	347	1805	1711
Q Serve(g_s), s	45.8	13.6	13.7	54.3	12.1	5.2	10.0	28.7	38.8	15.3	24.0	24.2
Cycle Q Clear(g_c), s	57.9	13.6	13.7	68.0	12.1	5.2	10.0	28.7	38.8	30.0	24.0	24.2
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
V/C Ratio(X)	0.71	0.37	0.37	0.99	0.33	0.16	1.37	0.75	0.92	0.89	0.84	0.85
Avail Cap(c_a), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	14.2	14.2	38.3	13.9	12.4	55.0	33.2	36.3	56.4	42.7	42.8
Incr Delay (d2), s/veh	4.0	0.1	0.2	35.7	0.1	0.1	201.2	3.9	22.2	62.7	17.1	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.5	6.8	12.4	5.7	2.3	13.4	15.0	20.6	4.9	14.1	13.5
LnGrp Delay(d), s/veh	33.4	14.3	14.5	74.0	14.0	12.5	256.2	37.1	58.6	119.0	59.9	61.1
LnGrp LOS	C	B	B	E	B	B	F	D	E	F	E	E
Approach Vol, veh/h		1504			1700			1732			835	
Approach Delay, s/veh		19.6			34.2			69.8			67.0	
Approach LOS		B			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		48.0		72.0	14.0	34.0		72.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		44.0		68.0	10.0	30.0		68.0
Max Q Clear Time (g_c+I1), s		40.8		59.9	12.0	32.0		70.0
Green Ext Time (p_c), s		2.3		6.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.8
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	260	80	70	1230	1270	210
Future Volume (veh/h)	260	80	70	1230	1270	210
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	260	80	70	1230	1270	210
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	300	268	90	2711	2054	337
Arrive On Green	0.17	0.17	0.05	0.76	0.67	0.67
Sat Flow, veh/h	1792	1599	1792	3668	3155	502
Grp Volume(v), veh/h	260	80	70	1230	737	743
Grp Sat Flow(s),veh/h/ln	1792	1599	1792	1787	1787	1776
Q Serve(g_s), s	15.3	4.7	4.2	13.7	24.9	25.6
Cycle Q Clear(g_c), s	15.3	4.7	4.2	13.7	24.9	25.6
Prop In Lane	1.00	1.00	1.00			0.28
Lane Grp Cap(c), veh/h	300	268	90	2711	1199	1192
V/C Ratio(X)	0.87	0.30	0.77	0.45	0.61	0.62
Avail Cap(c_a), veh/h	497	444	166	2711	1199	1192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	39.4	50.7	4.8	9.9	10.1
Incr Delay (d2), s/veh	8.6	0.6	13.1	0.5	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	4.4	2.4	6.9	12.9	13.2
LnGrp Delay(d), s/veh	52.4	40.1	63.8	5.4	12.3	12.5
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	340			1300	1480	
Approach Delay, s/veh	49.5			8.5	12.4	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		86.0		22.1	9.5	76.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		82.0		30.0	10.0	68.0		
Max Q Clear Time (g_c+I1), s		15.7		17.3	6.2	27.6		
Green Ext Time (p_c), s		11.9		0.8	0.0	13.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Future Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1900	1881	1900	1881	0	1881
Adj Flow Rate, veh/h	758	611	0	0	874	0	11	189	21	853	0	547
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1	1	0	1
Cap, veh/h	794	2512	0	0	977	437	19	323	36	0	0	0
Arrive On Green	0.38	0.70	0.00	0.00	0.27	0.00	0.21	0.21	0.21	0.00	0.00	0.00
Sat Flow, veh/h	1792	3668	0	0	3668	1599	91	1572	175		0	
Grp Volume(v), veh/h	758	611	0	0	874	0	221	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1792	1787	0	0	1787	1599	1838	0	0			
Q Serve(g_s), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Cycle Q Clear(g_c), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.05		0.10			
Lane Grp Cap(c), veh/h	794	2512	0	0	977	437	378	0	0			
V/C Ratio(X)	0.95	0.24	0.00	0.00	0.89	0.00	0.58	0.00	0.00			
Avail Cap(c_a), veh/h	844	2655	0	0	1021	457	378	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	19.9	4.7	0.0	0.0	30.6	0.0	31.4	0.0	0.0			
Incr Delay (d2), s/veh	20.1	0.0	0.0	0.0	10.0	0.0	6.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	21.9	2.6	0.0	0.0	11.4	0.0	5.5	0.0	0.0			
LnGrp Delay(d), s/veh	40.0	4.7	0.0	0.0	40.6	0.0	37.9	0.0	0.0			
LnGrp LOS	D	A			D		D					
Approach Vol, veh/h		1369			874			221				
Approach Delay, s/veh		24.2			40.6			37.9				
Approach LOS		C			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.0		65.5			37.6	27.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		18.0		65.0			36.0	25.0
Max Q Clear Time (g_c+I1), s		11.5		7.4			32.5	22.6
Green Ext Time (p_c), s		0.6		4.6			1.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Future Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	163	1245	255	173	755	122	306	959	163	173	827	122
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1343	275	201	1424	228	362	1295	565	228	1010	149
Arrive On Green	0.11	0.32	0.32	0.11	0.32	0.32	0.11	0.37	0.37	0.07	0.33	0.33
Sat Flow, veh/h	1774	4213	863	1774	4403	705	3442	3539	1544	3442	3089	456
Grp Volume(v), veh/h	163	1002	498	173	580	297	306	959	163	173	474	475
Grp Sat Flow(s),veh/h/ln	1774	1695	1686	1774	1695	1718	1721	1770	1544	1721	1770	1775
Q Serve(g_s), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Cycle Q Clear(g_c), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Prop In Lane	1.00		0.51	1.00		0.41	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	192	1080	537	201	1096	555	362	1295	565	228	579	581
V/C Ratio(X)	0.85	0.93	0.93	0.86	0.53	0.54	0.85	0.74	0.29	0.76	0.82	0.82
Avail Cap(c_a), veh/h	287	1096	545	226	1096	555	381	1295	565	234	579	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	38.7	38.7	51.2	32.5	32.5	51.7	32.4	26.4	53.9	36.3	36.3
Incr Delay (d2), s/veh	14.0	13.1	22.1	25.2	0.5	1.0	15.5	3.8	1.3	13.0	12.2	12.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	17.7	18.9	6.9	7.7	8.1	5.7	14.1	3.9	3.2	16.0	16.1
LnGrp Delay(d), s/veh	65.4	51.8	60.8	76.4	32.9	33.6	67.2	36.3	27.7	67.0	48.6	48.5
LnGrp LOS	E	D	E	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1663			1050			1428			1122	
Approach Delay, s/veh		55.9			40.3			41.9			51.4	
Approach LOS		E			D			D			D	

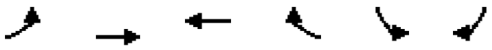
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	47.0	17.3	41.5	16.4	42.4	16.7	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	15.0	38.0	13.0	38.0	19.0	34.0
Max Q Clear Time (g_c+I1), s	7.8	29.7	13.3	35.6	12.3	30.9	12.6	18.7
Green Ext Time (p_c), s	0.0	5.6	0.1	1.9	0.1	3.1	0.2	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Future Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	226	1204	237	183	796	204	183	925	258	269	957	161
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	1332	577	211	950	241	211	1110	674	298	1282	797
Arrive On Green	0.14	0.26	0.26	0.12	0.24	0.24	0.12	0.31	0.31	0.17	0.36	0.36
Sat Flow, veh/h	1774	5085	1484	1774	4006	1016	1774	3539	1550	1774	3539	1572
Grp Volume(v), veh/h	226	1204	237	183	672	328	183	925	258	269	957	161
Grp Sat Flow(s),veh/h/ln	1774	1695	1484	1774	1695	1631	1774	1770	1550	1774	1770	1572
Q Serve(g_s), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Cycle Q Clear(g_c), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	1332	577	211	804	387	211	1110	674	298	1282	797
V/C Ratio(X)	0.89	0.90	0.41	0.87	0.84	0.85	0.87	0.83	0.38	0.90	0.75	0.20
Avail Cap(c_a), veh/h	291	1360	585	230	804	387	245	1110	674	337	1282	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	41.4	26.4	50.2	42.1	42.2	50.2	37.0	22.4	47.3	32.3	15.8
Incr Delay (d2), s/veh	24.5	8.7	0.5	26.5	7.7	15.9	23.8	7.4	1.6	24.7	4.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	13.4	5.7	7.3	11.1	11.7	7.1	14.9	5.9	10.5	14.1	3.0
LnGrp Delay(d), s/veh	73.2	50.1	26.9	76.7	49.8	58.1	74.0	44.4	24.1	72.0	36.3	16.3
LnGrp LOS	E	D	C	E	D	E	E	D	C	E	D	B
Approach Vol, veh/h		1667			1183			1366			1387	
Approach Delay, s/veh		49.9			56.3			44.5			40.9	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.5	40.4	17.8	34.4	17.8	46.0	20.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	36.0	15.0	31.0	16.0	42.0	19.0	27.0
Max Q Clear Time (g_c+I1), s	19.2	30.2	13.8	28.5	13.7	29.4	16.5	24.2
Green Ext Time (p_c), s	0.2	3.3	0.1	1.8	0.1	5.5	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.7
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	1020	1260	230	680	200
Future Volume (vph)	30	1020	1260	230	680	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1687	3374	3374	1459	3271	1374
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	169	3374	3374	1459	3271	1374
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	31	1041	1286	235	694	204
RTOR Reduction (vph)	0	0	0	90	2	32
Lane Group Flow (vph)	31	1041	1286	145	712	152
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				2		
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	47.4	47.4	47.4	47.4	42.5	42.5
Effective Green, g (s)	47.4	47.4	47.4	47.4	42.5	42.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	1633	1633	706	1419	596
v/s Ratio Prot		0.31	c0.38		c0.22	
v/s Ratio Perm	0.18			0.10		0.11
v/c Ratio	0.38	0.64	0.79	0.20	0.50	0.26
Uniform Delay, d1	16.0	18.8	21.1	14.5	20.0	17.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.8	2.6	0.1	1.3	1.0
Delay (s)	19.0	19.7	23.6	14.6	21.3	18.7
Level of Service	B	B	C	B	C	B
Approach Delay (s/veh)		19.6	22.2		20.8	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	5.9

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	30	20	30	1230	1550	30
Future Vol, veh/h	30	20	30	1230	1550	30
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	100	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	32	22	32	1323	1667	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2395	836	1701	0	-	0
Stage 1	1669	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Critical Hdwy	6.88	6.98	4.18	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.34	2.24	-	-	-
Pot Cap-1 Maneuver	~ 27	306	361	-	-	-
Stage 1	136	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 24	305	360	-	-	-
Mov Cap-2 Maneuver	~ 24	-	-	-	-	-
Stage 1	124	-	-	-	-	-
Stage 2	434	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 333.1	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	360	-	24	305	-	-
HCM Lane V/C Ratio	0.09	-	1.344	0.071	-	-
HCM Control Delay (s/veh)	16	-	$ 543.4	17.7	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	4	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Future Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	1444	91	71	1061	51	111	51	91	81	71	30
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	2646	167	212	2692	129	514	658	555	507	658	548
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	504	4880	307	337	4963	238	1281	1863	1571	1234	1863	1551
Grp Volume(v), veh/h	30	1003	532	71	724	388	111	51	91	81	71	30
Grp Sat Flow(s),veh/h/ln	504	1695	1797	337	1695	1811	1281	1863	1571	1234	1863	1551
Q Serve(g_s), s	2.8	14.7	14.7	13.3	9.5	9.5	4.9	1.4	3.0	3.6	2.0	1.0
Cycle Q Clear(g_c), s	12.3	14.7	14.7	28.0	9.5	9.5	6.8	1.4	3.0	5.0	2.0	1.0
Prop In Lane	1.00		0.17	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1838	974	212	1838	982	514	658	555	507	658	548
V/C Ratio(X)	0.10	0.55	0.55	0.33	0.39	0.39	0.22	0.08	0.16	0.16	0.11	0.05
Avail Cap(c_a), veh/h	592	3769	1997	404	3769	2014	514	658	555	507	658	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	11.4	11.4	20.5	10.2	10.2	18.9	16.4	17.0	18.1	16.6	16.3
Incr Delay (d2), s/veh	0.1	0.3	0.5	0.9	0.1	0.3	1.0	0.2	0.6	0.7	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.9	7.4	1.3	4.5	4.8	1.9	0.8	1.4	1.3	1.1	0.4
LnGrp Delay(d), s/veh	13.9	11.6	11.9	21.4	10.3	10.4	19.9	16.7	17.6	18.8	17.0	16.5
LnGrp LOS	B	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1565			1183			253			182	
Approach Delay, s/veh		11.8			11.0			18.4			17.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		45.5		31.0		45.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		27.0		85.0		27.0		85.0
Max Q Clear Time (g_c+I1), s		8.8		16.7		7.0		30.0
Green Ext Time (p_c), s		0.9		16.3		0.7		11.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	60	10	10	10	60	770	10	60	1000	80
Future Volume (veh/h)	50	10	60	10	10	10	60	770	10	60	1000	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	54	11	65	11	11	11	65	828	11	65	1075	86
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	121	103	95	71	102	84	2671	1163	84	2671	1191
Arrive On Green	0.00	0.06	0.06	0.06	0.06	0.06	0.05	0.75	0.75	0.05	0.75	0.75
Sat Flow, veh/h	0	1863	1583	542	1096	1576	1774	3539	1542	1774	3539	1578
Grp Volume(v), veh/h	0	11	65	22	0	11	65	828	11	65	1075	86
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1639	0	1576	1774	1770	1542	1774	1770	1578
Q Serve(g_s), s	0.0	0.5	3.6	0.0	0.0	0.6	3.3	6.8	0.2	3.3	9.6	1.3
Cycle Q Clear(g_c), s	0.0	0.5	3.6	1.0	0.0	0.6	3.3	6.8	0.2	3.3	9.6	1.3
Prop In Lane	0.00		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	121	103	166	0	102	84	2671	1163	84	2671	1191
V/C Ratio(X)	0.00	0.09	0.63	0.13	0.00	0.11	0.77	0.31	0.01	0.77	0.40	0.07
Avail Cap(c_a), veh/h	0	537	457	374	0	315	276	2671	1163	276	2671	1191
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	39.6	41.1	39.9	0.0	39.7	42.4	3.5	2.7	42.4	3.9	2.9
Incr Delay (d2), s/veh	0.0	0.3	6.3	0.4	0.0	0.5	13.7	0.3	0.0	13.7	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	1.8	0.5	0.0	0.3	1.9	3.3	0.1	1.9	4.8	0.6
LnGrp Delay(d), s/veh	0.0	40.0	47.4	40.2	0.0	40.2	56.1	3.8	2.7	56.1	4.4	3.0
LnGrp LOS		D	D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		76			33			904			1226	
Approach Delay, s/veh		46.3			40.2			7.6			7.0	
Approach LOS		D			D			A			A	

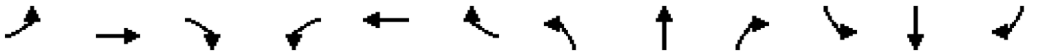
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	72.0		9.8	8.3	72.0	0.0	9.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	68.0		26.0	14.0	68.0	4.0	18.0
Max Q Clear Time (g_c+I1), s	5.3	8.8		5.6	5.3	11.6	0.0	3.0
Green Ext Time (p_c), s	0.1	6.9		0.2	0.1	10.5	0.0	0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.1
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Future Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	0	61	41	10	10	71	398	71	10	439	10
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	301	54	8	289	195	1076	1150	42	1372	1152
Arrive On Green	0.19	0.00	0.19	0.19	0.19	0.19	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	0	0	1571	0	40	1507	217	1451	1550	15	1850	1553
Grp Volume(v), veh/h	10	0	61	51	0	10	469	0	71	449	0	10
Grp Sat Flow(s),veh/h/ln	0	0	1571	40	0	1507	1667	0	1550	1865	0	1553
Q Serve(g_s), s	0.0	0.0	3.9	0.0	0.0	0.6	0.0	0.0	1.5	0.0	0.0	0.2
Cycle Q Clear(g_c), s	23.0	0.0	3.9	23.0	0.0	0.6	10.3	0.0	1.5	9.7	0.0	0.2
Prop In Lane	1.00		1.00	0.80		1.00	0.15		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
V/C Ratio(X)	0.17	0.00	0.20	0.83	0.00	0.03	0.37	0.00	0.06	0.32	0.00	0.01
Avail Cap(c_a), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	40.8	56.6	0.0	39.5	5.3	0.0	4.2	5.3	0.0	4.0
Incr Delay (d2), s/veh	1.3	0.0	0.3	57.7	0.0	0.0	0.8	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.7	2.7	0.0	0.3	5.5	0.0	0.7	5.2	0.0	0.1
LnGrp Delay(d), s/veh	61.3	0.0	41.1	114.3	0.0	39.5	6.2	0.0	4.3	5.9	0.0	4.0
LnGrp LOS	E		D	F		D	A		A	A		A
Approach Vol, veh/h		71			61			540			459	
Approach Delay, s/veh		44.0			102.0			5.9			5.8	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		93.0		27.0		93.0		27.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		89.0		23.0		89.0		23.0
Max Q Clear Time (g_c+I1), s		12.3		25.0		11.7		25.0
Green Ext Time (p_c), s		4.2		0.0		3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Future Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	137	105	105	63	53	74	53	1200	84	84	1189	53
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	300	296	81	77	108	103	1953	137	107	2169	956
Arrive On Green	0.09	0.16	0.16	0.05	0.11	0.11	0.03	0.58	0.58	0.06	0.61	0.61
Sat Flow, veh/h	1774	1863	1548	1774	691	964	3442	3356	235	1774	3539	1560
Grp Volume(v), veh/h	137	105	105	63	0	127	53	632	652	84	1189	53
Grp Sat Flow(s),veh/h/ln	1774	1863	1548	1774	0	1655	1721	1770	1821	1774	1770	1560
Q Serve(g_s), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Cycle Q Clear(g_c), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Prop In Lane	1.00		1.00	1.00		0.58	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	168	300	296	81	0	185	103	1030	1060	107	2169	956
V/C Ratio(X)	0.82	0.35	0.35	0.78	0.00	0.68	0.52	0.61	0.62	0.78	0.55	0.06
Avail Cap(c_a), veh/h	284	421	397	151	0	250	195	1030	1060	201	2169	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	39.6	37.3	50.1	0.0	45.3	50.7	14.4	14.4	49.1	12.0	8.2
Incr Delay (d2), s/veh	9.3	0.7	0.7	14.5	0.0	4.7	4.0	2.7	2.7	11.6	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	2.8	2.7	2.1	0.0	3.8	0.8	12.7	13.1	2.8	10.4	0.6
LnGrp Delay(d), s/veh	56.4	40.3	38.0	64.6	0.0	50.0	54.7	17.2	17.1	60.7	13.0	8.3
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	A
Approach Vol, veh/h		347			190			1337			1326	
Approach Delay, s/veh		46.0			54.8			18.6			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	65.7	8.9	21.1	7.2	69.0	14.0	15.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	59.0	9.0	24.0	6.0	65.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	7.0	26.7	5.7	8.2	3.6	22.8	10.0	9.8
Green Ext Time (p_c), s	0.1	10.2	0.0	0.7	0.0	11.0	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Future Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	33	43	98	54	33	11	76	293	54	11	370	43
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	10.9	11.7	17.5	17.9
HCM LOS	B	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	21%	0%	43%	0%	63%	0%	3%	0%
Vol Thru, %	79%	0%	57%	0%	38%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	340	50	70	90	80	10	350	40
LT Vol	70	0	30	0	50	0	10	0
Through Vol	270	0	40	0	30	0	340	0
RT Vol	0	50	0	90	0	10	0	40
Lane Flow Rate	370	54	76	98	87	11	380	43
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.63	0.08	0.154	0.172	0.182	0.02	0.639	0.064
Departure Headway (Hd)	6.133	5.319	7.279	6.344	7.54	6.503	6.047	5.323
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	588	670	490	562	473	546	593	670
Service Time	3.892	3.078	5.061	4.126	5.329	4.291	3.807	3.083
HCM Lane V/C Ratio	0.629	0.081	0.155	0.174	0.184	0.02	0.641	0.064
HCM Control Delay, s/veh	18.8	8.5	11.4	10.5	12	9.4	19	8.5
HCM Lane LOS	C	A	B	B	B	A	C	A
HCM 95th-tile Q	4.4	0.3	0.5	0.6	0.7	0.1	4.5	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Future Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	211	937	179	53	726	221	168	905	63	284	663	221
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	188	1340	577	138	1340	586	349	1891	132	292	1996	878
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	596	3574	1540	508	3574	1563	632	3386	236	584	3574	1573
Grp Volume(v), veh/h	211	937	179	53	726	221	168	478	490	284	663	221
Grp Sat Flow(s),veh/h/ln	596	1787	1540	508	1787	1563	632	1787	1835	584	1787	1573
Q Serve(g_s), s	25.9	26.6	9.9	11.8	19.1	12.4	23.6	19.3	19.3	47.7	12.1	8.7
Cycle Q Clear(g_c), s	45.0	26.6	9.9	38.5	19.1	12.4	35.6	19.3	19.3	67.0	12.1	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
V/C Ratio(X)	1.12	0.70	0.31	0.39	0.54	0.38	0.48	0.48	0.48	0.97	0.33	0.25
Avail Cap(c_a), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	31.8	26.5	48.1	29.4	27.3	24.0	16.0	16.0	40.5	14.4	13.6
Incr Delay (d2), s/veh	101.3	1.6	0.3	1.8	0.4	0.4	4.7	1.6	1.6	46.2	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	13.4	4.2	1.7	9.5	5.4	4.6	9.9	10.1	13.1	6.0	3.9
LnGrp Delay(d), s/veh	152.5	33.4	26.8	49.8	29.9	27.7	28.7	17.6	17.6	86.7	14.8	14.3
LnGrp LOS	F	C	C	D	C	C	C	B	B	F	B	B
Approach Vol, veh/h		1327			1000			1136			1168	
Approach Delay, s/veh		51.4			30.4			19.2			32.2	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		49.0		71.0		49.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		45.0		67.0		45.0
Max Q Clear Time (g_c+I1), s		37.6		47.0		69.0		40.5
Green Ext Time (p_c), s		8.7		0.0		0.0		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	900	130	140	820	240	110	930	220	100	1070	330
Future Volume (veh/h)	230	900	130	140	820	240	110	930	220	100	1070	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	240	938	135	146	854	250	115	969	229	104	1115	344
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	266	1245	179	172	875	254	167	1159	273	128	1534	673
Arrive On Green	0.15	0.28	0.28	0.10	0.23	0.23	0.05	0.41	0.41	0.07	0.44	0.44
Sat Flow, veh/h	1757	4437	636	1757	3850	1120	3408	2803	661	1757	3505	1539
Grp Volume(v), veh/h	240	709	364	146	744	360	115	605	593	104	1115	344
Grp Sat Flow(s),veh/h/ln	1757	1679	1715	1757	1679	1613	1704	1752	1712	1757	1752	1539
Q Serve(g_s), s	16.0	22.9	23.0	9.7	26.1	26.4	3.9	36.7	37.0	6.9	31.2	19.2
Cycle Q Clear(g_c), s	16.0	22.9	23.0	9.7	26.1	26.4	3.9	36.7	37.0	6.9	31.2	19.2
Prop In Lane	1.00		0.37	1.00		0.69	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	266	942	482	172	763	366	167	725	708	128	1534	673
V/C Ratio(X)	0.90	0.75	0.76	0.85	0.98	0.98	0.69	0.83	0.84	0.81	0.73	0.51
Avail Cap(c_a), veh/h	281	942	482	192	763	366	172	725	708	163	1534	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	39.0	39.0	52.7	45.6	45.7	55.6	31.2	31.3	54.3	27.6	24.2
Incr Delay (d2), s/veh	28.8	3.4	6.7	26.1	26.5	42.2	10.7	10.9	11.4	20.9	3.0	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	11.1	11.8	6.0	14.9	16.0	2.1	20.0	19.7	4.1	15.7	8.6
LnGrp Delay(d), s/veh	78.3	42.4	45.8	78.8	72.1	87.9	66.3	42.2	42.7	75.2	30.6	27.0
LnGrp LOS	E	D	D	E	E	F	E	D	D	E	C	C
Approach Vol, veh/h		1313			1250			1313			1563	
Approach Delay, s/veh		49.9			77.4			44.5			32.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.7	53.1	15.7	37.4	9.8	56.0	22.0	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	47.0	13.0	33.0	6.0	52.0	19.0	27.0
Max Q Clear Time (g_c+I1), s	8.9	39.0	11.7	25.0	5.9	33.2	18.0	28.4
Green Ext Time (p_c), s	0.0	4.4	0.0	3.9	0.0	9.4	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Future Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	110	396	77	308	275	132	33	1769	231	154	1835	77
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	137	495	246	375	397	184	42	2325	302	184	2961	124
Arrive On Green	0.08	0.14	0.14	0.11	0.17	0.17	0.02	0.51	0.51	0.10	0.59	0.59
Sat Flow, veh/h	1792	3574	1506	3476	2337	1084	1792	4589	595	1792	5051	212
Grp Volume(v), veh/h	110	396	77	308	208	199	33	1317	683	154	1243	669
Grp Sat Flow(s),veh/h/ln	1792	1787	1506	1738	1787	1634	1792	1712	1761	1792	1712	1839
Q Serve(g_s), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Cycle Q Clear(g_c), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Prop In Lane	1.00		1.00	1.00		0.66	1.00		0.34	1.00		0.12
Lane Grp Cap(c), veh/h	137	495	246	375	303	277	42	1734	892	184	2007	1078
V/C Ratio(X)	0.80	0.80	0.31	0.82	0.69	0.72	0.79	0.76	0.77	0.84	0.62	0.62
Avail Cap(c_a), veh/h	210	580	282	470	322	295	97	1734	892	259	2007	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	46.3	41.1	48.4	43.2	43.5	53.9	21.9	22.1	48.8	14.9	14.9
Incr Delay (d2), s/veh	11.9	6.8	0.7	9.1	5.5	7.6	27.6	3.2	6.2	15.1	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	6.4	2.1	5.1	6.5	6.3	1.3	16.9	18.2	5.4	12.7	14.0
LnGrp Delay(d), s/veh	62.3	53.1	41.8	57.5	48.8	51.1	81.4	25.1	28.3	63.9	16.4	17.6
LnGrp LOS	E	D	D	E	D	D	F	C	C	E	B	B
Approach Vol, veh/h		583			715			2033			2066	
Approach Delay, s/veh		53.3			53.2			27.1			20.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	60.2	16.0	19.3	6.6	69.0	12.5	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	55.0	15.0	18.0	6.0	65.0	13.0	20.0
Max Q Clear Time (g_c+I1), s	11.4	36.7	11.6	13.9	4.0	28.2	8.7	14.8
Green Ext Time (p_c), s	0.1	13.2	0.3	1.0	0.0	19.5	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	30	10	80	120	30
Future Vol, veh/h	20	30	10	80	120	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	33	11	87	130	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	-	0	88	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	77	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1495	-	-	-	913	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	946	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1495	-	-	-	899	1070
Mov Cap-2 Maneuver	-	-	-	-	899	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	946	-

Approach	EB	WB	SB
HCM Control Delay, s/v	3	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1495	-	-	-	899	1070
HCM Lane V/C Ratio	0.015	-	-	-	0.145	0.03
HCM Control Delay (s/veh)	7.4	0	-	-	9.7	8.5
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0.1

Intersection	
Int Delay, s/veh	3.7

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	40	0	90	30	10	10	30	520	20	70	400	10
Future Vol, veh/h	40	0	90	30	10	10	30	520	20	70	400	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	98	33	11	11	33	565	22	76	435	11

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	1017	1240	294	942	1246	223	446	0	0	587	0	0
Stage 1	642	642	-	593	593	-	-	-	-	-	-	-
Stage 2	375	598	-	349	653	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	192	174	702	218	172	780	1111	-	-	984	-	-
Stage 1	429	467	-	459	492	-	-	-	-	-	-	-
Stage 2	618	489	-	640	462	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	165	156	702	173	154	780	1111	-	-	984	-	-
Mov Cap-2 Maneuver	165	156	-	173	154	-	-	-	-	-	-	-
Stage 1	416	453	-	445	454	-	-	-	-	-	-	-
Stage 2	549	451	-	534	448	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	17	29.8	0.4	1.3
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	165	351	702	984	-	-	1111	-	-	199
HCM Lane V/C Ratio	0.176	0.134	0.093	0.077	-	-	0.029	-	-	0.273
HCM Control Delay (s/veh)	31.4	16.8	10.7	9	-	-	8.3	-	-	29.8
HCM Lane LOS	D	C	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.6	0.5	0.3	0.3	-	-	0.1	-	-	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	850	10	10	210	70	10	10	10	60	10	60
Future Volume (veh/h)	80	850	10	10	210	70	10	10	10	60	10	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	87	924	11	11	228	76	11	11	11	65	11	65
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	1263	15	73	1005	322	429	404	756	385	84	334
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	219	3133	37	40	2494	798	729	845	1583	641	176	700
Grp Volume(v), veh/h	517	0	505	167	0	148	22	0	11	141	0	0
Grp Sat Flow(s),veh/h/ln	1701	0	1689	1778	0	1554	1574	0	1583	1517	0	0
Q Serve(g_s), s	11.3	0.0	17.1	0.0	0.0	4.2	0.0	0.0	0.2	0.9	0.0	0.0
Cycle Q Clear(g_c), s	17.1	0.0	17.1	17.1	0.0	4.2	0.4	0.0	0.2	3.2	0.0	0.0
Prop In Lane	0.17		0.02	0.07		0.51	0.50		1.00	0.46		0.46
Lane Grp Cap(c), veh/h	748	0	681	774	0	627	832	0	756	803	0	0
V/C Ratio(X)	0.69	0.00	0.74	0.22	0.00	0.24	0.03	0.00	0.01	0.18	0.00	0.00
Avail Cap(c_a), veh/h	2058	0	2016	2066	0	1855	832	0	756	803	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.8	0.0	17.0	13.1	0.0	13.2	9.3	0.0	9.2	10.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	1.6	0.1	0.0	0.2	0.1	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	8.2	2.0	0.0	1.8	0.2	0.0	0.1	1.6	0.0	0.0
LnGrp Delay(d), s/veh	18.0	0.0	18.7	13.3	0.0	13.4	9.3	0.0	9.2	10.4	0.0	0.0
LnGrp LOS	B		B	B		B	A		A	B		
Approach Vol, veh/h		1022			315			33			141	
Approach Delay, s/veh		18.3			13.3			9.3			10.4	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		31.0		36.0		31.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		80.0		32.0		80.0
Max Q Clear Time (g_c+I1), s		2.4		19.1		5.2		19.1
Green Ext Time (p_c), s		0.1		7.9		0.8		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	560	10	10	300	10	10	10	10	20	10	10
Future Volume (veh/h)	10	560	10	10	300	10	10	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	609	11	11	326	11	11	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	940	17	83	911	30	355	353	308	513	256	222
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	21	3447	62	37	3342	111	458	615	536	714	446	387
Grp Volume(v), veh/h	331	0	300	182	0	166	33	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1846	0	1684	1814	0	1675	1609	0	0	1547	0	0
Q Serve(g_s), s	0.0	0.0	8.2	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.2	0.0	8.2	4.1	0.0	4.2	0.4	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.03		0.04	0.06		0.07	0.33		0.33	0.50		0.25
Lane Grp Cap(c), veh/h	575	0	459	568	0	457	1016	0	0	992	0	0
V/C Ratio(X)	0.58	0.00	0.65	0.32	0.00	0.36	0.03	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	2928	0	2643	2804	0	2630	1016	0	0	992	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.8	0.0	16.8	15.3	0.0	15.3	4.8	0.0	0.0	4.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.6	0.3	0.0	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	4.0	2.2	0.0	2.0	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	17.7	0.0	18.4	15.6	0.0	15.8	4.9	0.0	0.0	4.9	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		631			348			33			44	
Approach Delay, s/veh		18.0			15.7			4.9			4.9	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		34.0		18.2		34.0		18.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		82.0		30.0		82.0
Max Q Clear Time (g_c+I1), s		2.4		10.2		2.6		6.2
Green Ext Time (p_c), s		0.1		4.0		0.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	580	10	10	330	20	10	10	10	20	10	10
Future Volume (veh/h)	10	580	10	10	330	20	10	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	630	11	11	359	22	11	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	973	17	83	917	55	350	347	302	506	252	218
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	20	3450	60	32	3251	196	456	617	537	712	449	387
Grp Volume(v), veh/h	342	0	310	206	0	186	33	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1845	0	1685	1819	0	1660	1610	0	0	1548	0	0
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.3	0.0	8.4	4.6	0.0	4.7	0.4	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.03		0.04	0.05		0.12	0.33		0.33	0.50		0.25
Lane Grp Cap(c), veh/h	592	0	475	586	0	468	999	0	0	976	0	0
V/C Ratio(X)	0.58	0.00	0.65	0.35	0.00	0.40	0.03	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	3000	0	2713	2892	0	2675	999	0	0	976	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	0.0	16.3	14.9	0.0	15.0	5.0	0.0	0.0	5.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5	0.4	0.0	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	4.1	2.4	0.0	2.2	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	17.2	0.0	17.8	15.3	0.0	15.5	5.1	0.0	0.0	5.1	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		652			392			33			44	
Approach Delay, s/veh		17.5			15.4			5.1			5.1	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.0		18.5		33.0		18.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		29.0		83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s		2.4		10.4		2.6		6.7
Green Ext Time (p_c), s		0.1		4.2		0.2		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	600	10	10	340	10	10	10	10	30	10	10
Future Volume (veh/h)	10	600	10	10	340	10	10	10	10	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	652	11	11	370	11	11	11	11	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	969	16	76	944	28	353	351	310	601	200	175
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	20	3453	58	32	3364	99	465	607	536	863	346	302
Grp Volume(v), veh/h	353	0	321	205	0	187	33	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1846	0	1685	1817	0	1678	1607	0	0	1511	0	0
Q Serve(g_s), s	0.0	0.0	9.6	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.6	0.0	9.6	5.1	0.0	5.1	0.5	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.03		0.03	0.05		0.06	0.33		0.33	0.60		0.20
Lane Grp Cap(c), veh/h	583	0	473	576	0	471	1015	0	0	976	0	0
V/C Ratio(X)	0.61	0.00	0.68	0.36	0.00	0.40	0.03	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2588	0	2335	2490	0	2325	1015	0	0	976	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.2	0.0	18.2	16.6	0.0	16.6	5.1	0.0	0.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	1.7	0.4	0.0	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	4.7	2.6	0.0	2.5	0.2	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	19.2	0.0	19.9	16.9	0.0	17.1	5.2	0.0	0.0	5.3	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		674			392			33			55	
Approach Delay, s/veh		19.6			17.0			5.2			5.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.0		20.0		37.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		33.0		79.0		33.0		79.0
Max Q Clear Time (g_c+I1), s		2.5		11.6		2.8		7.1
Green Ext Time (p_c), s		0.1		4.3		0.3		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	450	10	10	380	510	0	0	0	10	20	50
Future Volume (vph)	100	450	10	10	380	510	0	0	0	10	20	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					0.95	0.91	0.95
Frt		1.00		1.00	0.91					1.00	0.94	0.85
Flt Protected		0.99		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3498		1770	3235					1681	1585	1504
Flt Permitted		0.60		0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		2107		1770	3235					1681	1585	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	489	11	11	413	554	0	0	0	11	22	54
RTOR Reduction (vph)	0	2	0	0	336	0	0	0	0	0	9	19
Lane Group Flow (vph)	0	607	0	11	631	0	0	0	0	10	31	18
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		22.2		1.1	27.3					1.1	34.2	34.2
Effective Green, g (s)		22.2		1.1	27.3					1.1	34.2	34.2
Actuated g/C Ratio		0.32		0.02	0.39					0.02	0.49	0.49
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		673		28	1270					26	779	740
v/s Ratio Prot				0.01	c0.19					c0.01	c0.00	0.01
v/s Ratio Perm		c0.29									0.02	
v/c Ratio		0.90		0.39	0.50					0.38	0.04	0.02
Uniform Delay, d1		22.6		33.9	15.9					33.9	9.1	9.1
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		15.3		8.9	0.3					9.2	0.0	0.1
Delay (s)		37.9		42.7	16.2					43.1	9.2	9.1
Level of Service		D		D	B					D	A	A
Approach Delay (s/veh)		37.9			16.5			0.0			13.1	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	69.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	350	10	10	670	1270	10	10	10	190	10	40
Future Volume (vph)	120	350	10	10	670	1270	10	10	10	190	10	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.96		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		1750		1681	1616	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.90		0.81	0.79	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		1604		1441	1333	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	380	11	11	728	1380	11	11	11	207	11	43
RTOR Reduction (vph)	0	0	3	0	0	232	0	10	0	0	1	34
Lane Group Flow (vph)	130	380	8	11	728	1148	0	23	0	112	109	5
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	9.0	94.4	94.4	0.8	86.2	86.2		16.0		16.0	16.0	16.0
Effective Green, g (s)	9.0	94.4	94.4	0.8	86.2	86.2		16.0		16.0	16.0	16.0
Actuated g/C Ratio	0.07	0.77	0.77	0.01	0.70	0.70		0.13		0.13	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	129	2711	1212	11	2476	1107		208		187	173	195
v/s Ratio Prot	c0.07	0.11		0.01	0.21							
v/s Ratio Perm			0.01			c0.72		0.01		0.08	c0.08	0.00
v/c Ratio	1.01	0.14	0.01	1.00	0.29	1.04		0.11		0.60	0.63	0.03
Uniform Delay, d1	57.1	3.8	3.4	61.2	7.0	18.5		47.3		50.6	50.8	46.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	81.3	0.0	0.0	271.4	0.1	37.0		1.1		13.4	16.2	0.2
Delay (s)	138.4	3.8	3.4	332.6	7.1	55.5		48.4		64.0	67.0	47.0
Level of Service	F	A	A	F	A	E		D		E	E	D
Approach Delay (s/veh)		37.4			40.3			48.4			62.7	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	30	30	230	80	20	90	800	150	10	1300	10
Future Volume (veh/h)	10	30	30	230	80	20	90	800	150	10	1300	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	33	33	250	87	22	98	870	163	11	1413	11
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	109	427	63	0	427	231	2300	1029	363	2340	18
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	0	405	1583	0	0	1583	375	3539	1583	544	3599	28
Grp Volume(v), veh/h	44	0	33	337	0	22	98	870	163	11	694	730
Grp Sat Flow(s),veh/h/ln	405	0	1583	0	0	1583	375	1770	1583	544	1770	1858
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	1.0	20.4	11.4	4.0	1.0	22.6	22.6
Cycle Q Clear(g_c), s	27.0	0.0	1.6	27.0	0.0	1.0	43.0	11.4	4.0	12.4	22.6	22.6
Prop In Lane	0.25		1.00	0.74		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	154	0	427	63	0	427	231	2300	1029	363	1150	1208
V/C Ratio(X)	0.28	0.00	0.08	5.37	0.00	0.05	0.42	0.38	0.16	0.03	0.60	0.60
Avail Cap(c_a), veh/h	154	0	427	63	0	427	231	2300	1029	363	1150	1208
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	27.2	50.0	0.0	27.0	22.5	8.1	6.8	11.0	10.1	10.1
Incr Delay (d2), s/veh	1.0	0.0	0.1	2003.1	0.0	0.0	5.6	0.5	0.3	0.2	2.4	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.7	36.6	0.0	0.5	2.5	5.7	1.8	0.2	11.6	12.1
LnGrp Delay(d), s/veh	30.5	0.0	27.3	2053.1	0.0	27.1	28.1	8.6	7.2	11.1	12.4	12.3
LnGrp LOS	C		C	F		C	C	A	A	B	B	B
Approach Vol, veh/h		77			359			1131			1435	
Approach Delay, s/veh		29.1			1928.9			10.1			12.4	
Approach LOS		C			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		31.0		69.0		31.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		16.0		65.0		27.0
Max Q Clear Time (g_c+I1), s		45.0		29.0		24.6		29.0
Green Ext Time (p_c), s		8.1		0.0		14.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		241.1
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	4.5

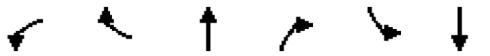
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	30	1720	30	70	800
Future Vol, veh/h	20	30	1720	30	70	800
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	32	1849	32	75	860

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2446	942	0	0	1882	0
Stage 1	1866	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	26	266	-	-	319	-
Stage 1	109	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 20	266	-	-	319	-
Mov Cap-2 Maneuver	~ 20	-	-	-	-	-
Stage 1	109	-	-	-	-	-
Stage 2	402	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	211.2	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	20	266	319	-
HCM Lane V/C Ratio	-	-	1.075	0.121	0.236	-
HCM Control Delay (s/veh)	-	-	$ 497.5	20.4	19.7	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	2.9	0.4	0.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	150	250	1170	220	150	670
Future Volume (vph)	150	250	1170	220	150	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	1599	3466		1787	3574
Flt Permitted	0.95	1.00	1.00		0.11	1.00
Satd. Flow (perm)	1787	1599	3466		207	3574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	156	260	1219	229	156	698
RTOR Reduction (vph)	0	47	12	0	0	0
Lane Group Flow (vph)	156	213	1436	0	156	698
Confl. Peds. (#/hr)	12			6	6	
Confl. Bikes (#/hr)				3		
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)	14.9	31.4	70.2		86.7	90.7
Effective Green, g (s)	14.9	31.4	70.2		86.7	90.7
Actuated g/C Ratio	0.13	0.28	0.62		0.76	0.80
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	234	498	2141		387	2853
v/s Ratio Prot	c0.09	c0.06	c0.41		0.06	0.20
v/s Ratio Perm		0.07			0.25	
v/c Ratio	0.67	0.43	0.67		0.40	0.24
Uniform Delay, d1	47.0	33.7	14.2		23.6	2.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.0	0.6	1.7		0.7	0.0
Delay (s)	54.0	34.3	15.9		24.3	2.9
Level of Service	D	C	B		C	A
Approach Delay (s/veh)	41.7		15.9			6.8
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	113.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	10	30	0	0	10	40	1640	10	10	540	70
Future Vol, veh/h	20	10	30	0	0	10	40	1640	10	10	540	70
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	4	4	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	11	33	0	0	11	44	1822	11	11	600	78

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1482	2590	344	2189	2624	921	682	0	0	1837	0	0
Stage 1	665	665	-	1920	1920	-	-	-	-	-	-	-
Stage 2	817	1925	-	269	704	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	132	25	557	48	24	234	556	-	-	151	-	-
Stage 1	339	456	-	44	113	-	-	-	-	-	-	-
Stage 2	305	113	-	655	438	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	111	21	555	24	20	233	554	-	-	150	-	-
Mov Cap-2 Maneuver	111	21	-	24	20	-	-	-	-	-	-	-
Stage 1	311	421	-	40	104	-	-	-	-	-	-	-
Stage 2	267	104	-	555	405	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	133.6	21.2	0.3	0.5
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	554	-	-	84	233	150	-	-
HCM Lane V/C Ratio	0.08	-	-	0.794	0.048	0.074	-	-
HCM Control Delay (s/veh)	12.1	-	-	133.6	21.2	30.9	-	-
HCM Lane LOS	B	-	-	F	C	D	-	-
HCM 95th %tile Q(veh)	0.3	-	-	4	0.1	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	280	20	130	280	230	30	870	100	110	330	150
Future Volume (veh/h)	190	280	20	130	280	230	30	870	100	110	330	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.98		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	202	298	21	138	298	245	32	926	106	117	351	160
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	646	46	447	330	272	372	1571	179	270	1300	543
Arrive On Green	0.09	0.38	0.38	0.07	0.35	0.35	0.02	0.34	0.34	0.06	0.38	0.38
Sat Flow, veh/h	1774	1716	121	1774	940	773	1774	4593	523	1774	3440	1436
Grp Volume(v), veh/h	202	0	319	138	0	543	32	682	350	117	345	166
Grp Sat Flow(s),veh/h/ln	1774	0	1837	1774	0	1712	1774	1695	1726	1774	1695	1487
Q Serve(g_s), s	7.3	0.0	13.5	5.1	0.0	31.1	1.2	17.1	17.2	4.2	7.3	8.0
Cycle Q Clear(g_c), s	7.3	0.0	13.5	5.1	0.0	31.1	1.2	17.1	17.2	4.2	7.3	8.0
Prop In Lane	1.00		0.07	1.00		0.45	1.00		0.30	1.00		0.97
Lane Grp Cap(c), veh/h	276	0	692	447	0	602	372	1160	590	270	1282	562
V/C Ratio(X)	0.73	0.00	0.46	0.31	0.00	0.90	0.09	0.59	0.59	0.43	0.27	0.29
Avail Cap(c_a), veh/h	354	0	962	449	0	780	400	1160	590	337	1282	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	24.3	19.6	0.0	31.8	21.3	28.0	28.0	20.9	22.2	22.5
Incr Delay (d2), s/veh	5.5	0.0	0.5	0.4	0.0	11.4	0.1	2.2	4.3	1.1	0.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	6.9	2.5	0.0	16.5	0.6	8.3	8.9	2.1	3.5	3.5
LnGrp Delay(d), s/veh	29.2	0.0	24.7	20.0	0.0	43.2	21.3	30.1	32.3	22.0	22.7	23.8
LnGrp LOS	C		C	B		D	C	C	C	C	C	C
Approach Vol, veh/h		521			681			1064			628	
Approach Delay, s/veh		26.5			38.5			30.6			22.9	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	39.3	10.9	42.8	6.4	43.0	13.5	40.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	33.0	7.0	54.0	4.0	39.0	14.0	47.0
Max Q Clear Time (g_c+I1), s	6.2	19.2	7.1	15.5	3.2	10.0	9.3	33.1
Green Ext Time (p_c), s	0.1	5.5	0.0	2.1	0.0	3.4	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	870	50	90	60	30	10
Future Vol, veh/h	870	50	90	60	30	10
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	906	52	94	63	31	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	959	0	1184	933
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	251	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	725	-	211	325
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	724	-	182	325
Mov Cap-2 Maneuver	-	-	-	-	182	-
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	688	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	6.4	25.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	182	325	-	-	724	-
HCM Lane V/C Ratio	0.172	0.032	-	-	0.129	-
HCM Control Delay (s/veh)	28.8	16.4	-	-	10.7	0
HCM Lane LOS	D	C	-	-	B	A
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.4	-

Intersection	
Int Delay, s/veh	10

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	70	900	20	30	880
Future Vol, veh/h	60	70	900	20	30	880
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	70	81	1047	23	35	1023

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1642	536	0	0	1071	0
Stage 1	1060	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	92	492	-	-	652	-
Stage 1	296	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	80	492	-	-	651	-
Mov Cap-2 Maneuver	80	-	-	-	-	-
Stage 1	296	-	-	-	-	-
Stage 2	459	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	145.1	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	146	651	-
HCM Lane V/C Ratio	-	-	1.035	0.054	-
HCM Control Delay (s/veh)	-	-	145.1	10.8	0.6
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	7.9	0.2	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	50	40	10	810	970	20
Future Volume (veh/h)	50	40	10	810	970	20
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	55	44	11	890	1066	22
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	388	346	371	2562	2565	53
Arrive On Green	0.22	0.22	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1792	1599	521	3668	3673	74
Grp Volume(v), veh/h	55	44	11	890	532	556
Grp Sat Flow(s),veh/h/ln	1792	1599	521	1787	1787	1866
Q Serve(g_s), s	3.0	2.7	1.0	11.3	14.4	14.4
Cycle Q Clear(g_c), s	3.0	2.7	15.5	11.3	14.4	14.4
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	388	346	371	2562	1281	1337
V/C Ratio(X)	0.14	0.13	0.03	0.35	0.42	0.42
Avail Cap(c_a), veh/h	388	346	371	2562	1281	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	37.9	10.0	6.4	6.9	6.9
Incr Delay (d2), s/veh	0.8	0.8	0.0	0.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.2	0.2	5.5	7.3	7.6
LnGrp Delay(d), s/veh	38.7	38.6	10.0	6.5	7.9	7.8
LnGrp LOS	D	D	B	A	A	A
Approach Vol, veh/h	99			901	1088	
Approach Delay, s/veh	38.7			6.5	7.8	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				90.0		30.0		90.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				86.0		26.0		86.0
Max Q Clear Time (g_c+I1), s				17.5		5.0		16.4
Green Ext Time (p_c), s				7.1		0.2		8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.7
HCM 2010 LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	790	470	300	1260	0	20	0	540	60	200	10
Future Volume (veh/h)	0	790	470	300	1260	0	20	0	540	60	200	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1827	1827	1827	0	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	0	898	534	341	1432	0	15	0	622	68	227	11
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	4	4	4	4	0	4	4	4	4	4	4
Cap, veh/h	0	2124	652	427	3736	0	24	0	756	119	919	411
Arrive On Green	0.00	0.43	0.43	0.13	0.59	0.00	0.01	0.00	0.24	0.04	0.26	0.26
Sat Flow, veh/h	0	5152	1532	3375	6540	0	1740	0	3106	3375	3471	1553
Grp Volume(v), veh/h	0	898	534	341	1432	0	15	0	622	68	227	11
Grp Sat Flow(s),veh/h/ln	0	1663	1532	1688	1571	0	1740	0	1553	1688	1736	1553
Q Serve(g_s), s	0.0	11.9	29.0	9.3	11.3	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Cycle Q Clear(g_c), s	0.0	11.9	29.0	9.3	11.3	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2124	652	427	3736	0	24	0	756	119	919	411
V/C Ratio(X)	0.00	0.42	0.82	0.80	0.38	0.00	0.63	0.00	0.82	0.57	0.25	0.03
Avail Cap(c_a), veh/h	0	3060	940	643	5319	0	110	0	756	179	919	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.0	23.9	40.1	10.1	0.0	46.4	0.0	33.8	44.9	27.3	25.7
Incr Delay (d2), s/veh	0.0	0.1	3.8	4.2	0.1	0.0	23.8	0.0	9.9	4.3	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	12.9	4.6	4.9	0.0	0.5	0.0	8.7	0.9	2.4	0.2
LnGrp Delay(d), s/veh	0.0	19.1	27.7	44.4	10.1	0.0	70.1	0.0	43.7	49.2	28.0	25.9
LnGrp LOS		B	C	D	B		E		D	D	C	C
Approach Vol, veh/h		1432			1773			637			306	
Approach Delay, s/veh		22.3			16.7			44.3			32.6	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	27.0	15.9	44.2	5.3	29.0		60.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	23.0	18.0	58.0	6.0	22.0		80.0
Max Q Clear Time (g_c+I1), s	3.9	19.9	11.3	31.0	2.8	6.9		13.3
Green Ext Time (p_c), s	0.0	0.9	0.7	9.2	0.0	1.1		14.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	1450	0	0	1120	90	0	0	0	320	360	350
Future Volume (vph)	70	1450	0	0	1120	90	0	0	0	320	360	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	0.99				1.00	0.99	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.94	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3367	6285			5912	1240				1406	5472	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3367	6285			5912	1240				1406	5472	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	80	1667	0	0	1287	103	0	0	0	368	414	402
RTOR Reduction (vph)	0	0	0	0	1	62	0	0	0	0	6	0
Lane Group Flow (vph)	80	1667	0	0	1296	31	0	0	0	243	935	0
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	6.5	45.3			34.8	34.8				51.4	51.4	
Effective Green, g (s)	6.5	45.3			34.8	34.8				51.4	51.4	
Actuated g/C Ratio	0.06	0.43			0.33	0.33				0.49	0.49	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	209	2719			1965	412				690	2686	
v/s Ratio Prot	0.02	c0.27			c0.22					c0.17	0.17	
v/s Ratio Perm						0.02						
v/c Ratio	0.38	0.61			0.66	0.08				0.35	0.35	
Uniform Delay, d1	47.2	22.9			29.9	23.9				16.4	16.4	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	1.2	0.4			0.8	0.1				0.3	0.1	
Delay (s)	48.3	23.3			30.7	24.0				16.7	16.4	
Level of Service	D	C			C	C				B	B	
Approach Delay (s/veh)		24.5			30.3			0.0			16.5	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	104.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	1230	50	40	800	60	60	70	20	80	10	360
Future Volume (veh/h)	440	1230	50	40	800	60	60	70	20	80	10	360
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	518	1447	59	47	941	71	71	82	24	94	12	424
Adj No. of Lanes	1	3	1	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	565	2689	815	59	1239	378	350	404	118	395	546	456
Arrive On Green	0.32	0.54	0.54	0.03	0.25	0.25	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1740	4988	1512	1740	4988	1521	930	1353	396	1256	1827	1528
Grp Volume(v), veh/h	518	1447	59	47	941	71	71	0	106	94	12	424
Grp Sat Flow(s),veh/h/ln	1740	1663	1512	1740	1663	1521	930	0	1749	1256	1827	1528
Q Serve(g_s), s	26.8	17.7	1.8	2.5	16.4	3.4	5.5	0.0	4.2	5.7	0.4	25.3
Cycle Q Clear(g_c), s	26.8	17.7	1.8	2.5	16.4	3.4	5.9	0.0	4.2	9.9	0.4	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	565	2689	815	59	1239	378	350	0	523	395	546	456
V/C Ratio(X)	0.92	0.54	0.07	0.79	0.76	0.19	0.20	0.00	0.20	0.24	0.02	0.93
Avail Cap(c_a), veh/h	928	3831	1161	148	1596	487	350	0	523	395	546	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	14.0	10.4	44.9	32.6	27.8	25.3	0.0	24.5	28.2	23.2	31.9
Incr Delay (d2), s/veh	8.7	0.2	0.0	20.4	1.6	0.2	1.3	0.0	0.9	1.4	0.1	27.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	8.1	0.7	1.5	7.7	1.5	1.5	0.0	2.2	2.1	0.2	14.1
LnGrp Delay(d), s/veh	39.2	14.2	10.4	65.4	34.2	28.0	26.6	0.0	25.4	29.6	23.3	59.6
LnGrp LOS	D	B	B	E	C	C	C		C	C	C	E
Approach Vol, veh/h		2024			1059			177			530	
Approach Delay, s/veh		20.5			35.2			25.9			53.5	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	7.2	54.5		32.0	34.4	27.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		28.0	8.0	72.0		28.0	50.0	30.0
Max Q Clear Time (g_c+I1), s		7.9	4.5	19.7		27.3	28.8	18.4
Green Ext Time (p_c), s		0.8	0.0	14.9		0.2	1.6	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Future Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.98		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1770	4932		3433	4956		1770		2787	1770		2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1770	4932		3433	4956		1770		2787	1770		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	43	204	43	22	129	22	183	0	97	43	0	11
RTOR Reduction (vph)	0	34	0	0	20	0	0	0	29	0	0	3
Lane Group Flow (vph)	43	213	0	22	131	0	183	0	68	43	0	8
Confl. Peds. (#/hr)	4		4	4		4						
Confl. Bikes (#/hr)			3			3						
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Effective Green, g (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Actuated g/C Ratio	0.06	0.13		0.03	0.10		0.70		0.70	0.70		0.70
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	100	639		99	504		1243		1957	1243		1957
v/s Ratio Prot	c0.02	c0.04		0.01	0.03							
v/s Ratio Perm							c0.10		0.02	0.02		0.00
v/c Ratio	0.43	0.33		0.22	0.26		0.15		0.03	0.03		0.00
Uniform Delay, d1	39.4	34.2		41.0	35.8		4.3		3.9	3.9		3.8
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0	0.3		1.1	0.3		0.2		0.0	0.1		0.0
Delay (s)	42.4	34.5		42.1	36.1		4.5		4.0	4.0		3.8
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		35.7			36.8			4.3			3.9	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Future Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	278	1072	464	392	948	134	124	557	134	320	1206	247
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1034	447	399	1574	222	143	1171	349	383	1260	258
Arrive On Green	0.17	0.30	0.30	0.22	0.35	0.35	0.04	0.23	0.23	0.11	0.30	0.30
Sat Flow, veh/h	1774	3448	1492	1774	4489	632	3442	5085	1513	3442	4199	860
Grp Volume(v), veh/h	278	1054	482	392	715	367	124	557	134	320	974	479
Grp Sat Flow(s),veh/h/ln	1774	1695	1549	1774	1695	1732	1721	1695	1513	1721	1695	1669
Q Serve(g_s), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Cycle Q Clear(g_c), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Prop In Lane	1.00		0.96	1.00		0.37	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	309	1017	465	399	1189	607	143	1171	349	383	1017	501
V/C Ratio(X)	0.90	1.04	1.04	0.98	0.60	0.60	0.86	0.48	0.38	0.84	0.96	0.96
Avail Cap(c_a), veh/h	429	1017	465	399	1189	607	143	1171	349	488	1017	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	42.0	42.0	46.3	32.1	32.1	57.2	39.9	39.0	52.2	41.2	41.2
Incr Delay (d2), s/veh	16.9	38.1	51.6	40.2	0.9	1.7	38.7	1.4	3.2	9.7	19.6	30.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.2	22.0	17.4	9.9	10.3	2.8	5.5	4.0	5.7	18.6	19.9
LnGrp Delay(d), s/veh	65.4	80.1	93.6	86.4	32.9	33.8	95.8	41.3	42.2	62.0	60.9	72.1
LnGrp LOS	E	F	F	F	C	C	F	D	D	E	E	E
Approach Vol, veh/h		1814			1474			815			1773	
Approach Delay, s/veh		81.4			47.4			49.7			64.1	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	31.6	31.0	40.0	9.0	40.0	24.9	46.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	24.0	27.0	36.0	5.0	36.0	29.0	34.0
Max Q Clear Time (g_c+I1), s	12.9	13.4	28.4	38.0	6.3	35.8	20.4	23.0
Green Ext Time (p_c), s	0.4	3.0	0.0	0.0	0.0	0.1	0.5	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Future Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	21	31	31	83	115	52	604	73	260	1438	312
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	136	201	299	143	198	222	3704	1127	587	3034	656
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1178	672	992	1339	705	977	274	5085	1547	759	4166	901
Grp Volume(v), veh/h	94	0	52	31	0	198	52	604	73	260	1169	581
Grp Sat Flow(s),veh/h/ln	1178	0	1664	1339	0	1682	274	1695	1547	759	1695	1677
Q Serve(g_s), s	9.1	0.0	3.0	2.3	0.0	12.4	11.4	4.3	1.6	18.8	16.7	16.8
Cycle Q Clear(g_c), s	21.6	0.0	3.0	5.3	0.0	12.4	28.2	4.3	1.6	23.0	16.7	16.8
Prop In Lane	1.00		0.60	1.00		0.58	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	176	0	338	299	0	342	222	3704	1127	587	2469	1221
V/C Ratio(X)	0.53	0.00	0.15	0.10	0.00	0.58	0.23	0.16	0.06	0.44	0.47	0.48
Avail Cap(c_a), veh/h	209	0	385	337	0	389	222	3704	1127	587	2469	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	38.2	40.4	0.0	42.0	12.4	4.9	4.5	8.4	6.6	6.6
Incr Delay (d2), s/veh	2.5	0.0	0.2	0.2	0.0	1.7	2.5	0.1	0.1	2.4	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.4	0.9	0.0	5.9	1.0	2.0	0.7	4.3	8.0	8.2
LnGrp Delay(d), s/veh	54.2	0.0	38.5	40.6	0.0	43.7	14.9	5.0	4.6	10.9	7.2	7.9
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		146			229			729			2010	
Approach Delay, s/veh		48.6			43.2			5.7			7.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		27.7		89.0		27.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		30.2		23.6		25.0		14.4
Green Ext Time (p_c), s		6.6		0.2		25.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Future Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	290	86	54	344	161	75	677	32	333	1247	215
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	933	271	336	811	372	97	1621	76	373	2097	362
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.05	0.33	0.33	0.21	0.48	0.48
Sat Flow, veh/h	890	2696	783	1002	2345	1076	1774	4973	234	1774	4354	751
Grp Volume(v), veh/h	172	188	188	54	258	247	75	461	248	333	971	491
Grp Sat Flow(s),veh/h/ln	890	1770	1710	1002	1770	1651	1774	1695	1816	1774	1695	1714
Q Serve(g_s), s	18.7	7.9	8.2	4.3	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Cycle Q Clear(g_c), s	30.5	7.9	8.2	12.5	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Prop In Lane	1.00		0.46	1.00		0.65	1.00		0.13	1.00		0.44
Lane Grp Cap(c), veh/h	276	612	591	336	612	571	97	1105	592	373	1633	826
V/C Ratio(X)	0.62	0.31	0.32	0.16	0.42	0.43	0.78	0.42	0.42	0.89	0.59	0.59
Avail Cap(c_a), veh/h	388	835	807	463	835	779	192	1105	592	593	1633	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	24.4	24.4	29.0	25.5	25.6	47.5	26.7	26.8	39.1	19.2	19.2
Incr Delay (d2), s/veh	2.3	0.3	0.3	0.2	0.5	0.5	12.4	1.2	2.2	10.4	1.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	3.9	3.9	1.2	5.6	5.4	2.4	5.2	5.8	10.1	10.2	10.7
LnGrp Delay(d), s/veh	39.6	24.6	24.8	29.2	25.9	26.1	59.9	27.9	29.0	49.4	20.8	22.3
LnGrp LOS	D	C	C	C	C	C	E	C	C	D	C	C
Approach Vol, veh/h		548			559			784			1795	
Approach Delay, s/veh		29.4			26.3			31.3			26.5	
Approach LOS		C			C			C			C	

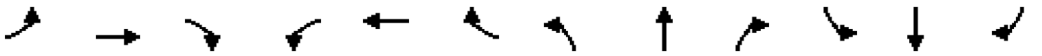
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.4	37.2		39.2	9.5	53.0		39.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	34.0	26.0		48.0	11.0	49.0		48.0
Max Q Clear Time (g_c+I1), s	20.6	12.9		32.5	6.2	23.2		14.5
Green Ext Time (p_c), s	0.8	3.5		2.7	0.0	11.2		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Future Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	11	0	622	11	100	56	722	478	122	1289	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	45	32	0	570	9	872	72	922	421	148	1637	14
Arrive On Green	0.55	0.55	0.00	0.55	0.55	0.55	0.04	0.27	0.27	0.08	0.31	0.31
Sat Flow, veh/h	0	58	0	932	16	1595	1792	3424	1562	1792	5252	45
Grp Volume(v), veh/h	22	0	0	633	0	100	56	722	478	122	840	460
Grp Sat Flow(s),veh/h/ln	58	0	0	949	0	1595	1792	1712	1562	1792	1712	1873
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Cycle Q Clear(g_c), s	65.0	0.0	0.0	65.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Prop In Lane	0.50		0.00	0.98		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	77	0	0	579	0	872	72	922	421	148	1067	584
V/C Ratio(X)	0.29	0.00	0.00	1.09	0.00	0.11	0.78	0.78	1.14	0.82	0.79	0.79
Avail Cap(c_a), veh/h	77	0	0	579	0	872	90	922	421	166	1067	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	30.3	0.0	13.0	56.5	40.2	43.4	53.7	37.3	37.3
Incr Delay (d2), s/veh	2.0	0.0	0.0	65.3	0.0	0.1	27.3	6.6	86.6	25.3	5.9	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	29.3	0.0	1.6	2.4	11.8	23.8	5.0	13.5	15.5
LnGrp Delay(d), s/veh	31.0	0.0	0.0	95.5	0.0	13.1	83.8	46.8	130.0	79.0	43.2	47.6
LnGrp LOS	C			F		B	F	D	F	E	D	D
Approach Vol, veh/h		22			733			1256			1422	
Approach Delay, s/veh		31.0			84.3			80.1			47.7	
Approach LOS		C			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	36.0		69.0	8.8	41.0		69.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	32.0		65.0	6.0	37.0		65.0
Max Q Clear Time (g_c+I1), s	10.0	34.0		67.0	5.7	28.6		67.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.3
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	520	200	690	600	40	160	650	500	140	1310	270
Future Volume (vph)	320	520	200	690	600	40	160	650	500	140	1310	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5898	1235	3433	5085	1541	3433	5085	1537	3433	5085	1548
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5898	1235	3433	5085	1541	3433	5085	1537	3433	5085	1548
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	337	547	211	726	632	42	168	684	526	147	1379	284
RTOR Reduction (vph)	0	20	116	0	0	32	0	0	317	0	0	173
Lane Group Flow (vph)	337	603	19	726	632	10	168	684	209	147	1379	111
Confl. Peds. (#/hr)	7		12	12		7	4		8	8		4
Confl. Bikes (#/hr)									1			3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	15.6	15.4	15.4	28.6	28.4	28.4	9.4	45.2	45.2	8.7	44.5	44.5
Effective Green, g (s)	15.6	15.4	15.4	28.6	28.4	28.4	9.4	45.2	45.2	8.7	44.5	44.5
Actuated g/C Ratio	0.14	0.14	0.14	0.25	0.25	0.25	0.08	0.40	0.40	0.08	0.39	0.39
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	470	797	166	862	1267	384	283	2017	609	262	1986	604
v/s Ratio Prot	0.10	c0.10		c0.21	0.12		c0.05	0.13		0.04	c0.27	
v/s Ratio Perm			0.02			0.01			0.14			0.07
v/c Ratio	0.72	0.76	0.12	0.84	0.50	0.03	0.59	0.34	0.34	0.56	0.69	0.18
Uniform Delay, d1	47.0	47.4	43.3	40.5	36.6	32.3	50.4	23.9	24.0	50.8	29.0	22.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	4.1	0.3	7.5	0.3	0.0	3.3	0.5	1.5	2.7	2.0	0.7
Delay (s)	52.2	51.6	43.6	48.0	37.0	32.3	53.7	24.4	25.5	53.5	31.0	23.4
Level of Service	D	D	D	D	D	C	D	C	C	D	C	C
Approach Delay (s/veh)		50.8			42.6			28.4			31.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	113.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	20	300	0	0	0	130	1070	10	10	1670	510
Future Volume (veh/h)	390	20	300	0	0	0	130	1070	10	10	1670	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	429	22	330	0	0	0	143	1176	11	11	1835	560
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	556	491	431	66	981	0	189	3131	29	36	2173	635
Arrive On Green	0.28	0.28	0.28	0.00	0.00	0.00	0.05	0.60	0.60	0.01	0.56	0.56
Sat Flow, veh/h	1768	1770	1554	1025	3632	0	3442	5196	49	3442	3894	1138
Grp Volume(v), veh/h	429	22	330	0	0	0	143	767	420	11	1587	808
Grp Sat Flow(s),veh/h/ln	1768	1770	1554	1025	1770	0	1721	1695	1854	1721	1695	1642
Q Serve(g_s), s	25.3	1.0	21.3	0.0	0.0	0.0	4.5	12.7	12.7	0.3	42.5	46.8
Cycle Q Clear(g_c), s	25.3	1.0	21.3	0.0	0.0	0.0	4.5	12.7	12.7	0.3	42.5	46.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.03	1.00		0.69
Lane Grp Cap(c), veh/h	556	491	431	66	981	0	189	2043	1117	36	1892	916
V/C Ratio(X)	0.77	0.04	0.77	0.00	0.00	0.00	0.76	0.38	0.38	0.31	0.84	0.88
Avail Cap(c_a), veh/h	729	664	583	166	1328	0	189	2043	1117	126	1892	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	28.9	36.2	0.0	0.0	0.0	50.9	11.2	11.2	53.7	20.1	21.0
Incr Delay (d2), s/veh	3.7	0.0	4.2	0.0	0.0	0.0	16.0	0.5	1.0	4.8	4.7	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	0.5	9.7	0.0	0.0	0.0	2.5	6.0	6.7	0.2	21.1	24.1
LnGrp Delay(d), s/veh	41.4	28.9	40.4	0.0	0.0	0.0	67.0	11.7	12.1	58.5	24.7	33.0
LnGrp LOS	D	C	D				E	B	B	E	C	C
Approach Vol, veh/h		781			0			1330			2406	
Approach Delay, s/veh		40.7			0.0			17.8			27.6	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	69.9		34.3	10.0	65.0		34.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	63.0		41.0	6.0	61.0		41.0
Max Q Clear Time (g_c+I1), s	2.3	14.7		27.3	6.5	48.8		0.0
Green Ext Time (p_c), s	0.0	9.6		3.0	0.0	10.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		27.0
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1470	80	180	620	50	360	860	630	260	1550	280
Future Volume (veh/h)	210	1470	80	180	620	50	360	860	630	260	1550	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	1598	87	196	674	54	391	935	685	283	1685	304
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	288	1659	90	203	1495	119	406	1828	589	342	1984	358
Arrive On Green	0.08	0.33	0.33	0.06	0.31	0.31	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	3476	4980	271	3476	4843	385	3476	4853	1565	3476	5536	999
Grp Volume(v), veh/h	228	1098	587	196	475	253	391	935	685	283	1477	512
Grp Sat Flow(s),veh/h/ln	1738	1712	1827	1738	1712	1804	1738	1618	1565	1738	1618	1681
Q Serve(g_s), s	7.7	37.8	37.8	6.8	13.4	13.5	13.4	17.8	45.2	9.6	33.7	33.7
Cycle Q Clear(g_c), s	7.7	37.8	37.8	6.8	13.4	13.5	13.4	17.8	45.2	9.6	33.7	33.7
Prop In Lane	1.00		0.15	1.00		0.21	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	288	1141	609	203	1057	557	406	1828	589	342	1740	603
V/C Ratio(X)	0.79	0.96	0.96	0.97	0.45	0.45	0.96	0.51	1.16	0.83	0.85	0.85
Avail Cap(c_a), veh/h	377	1141	609	203	1057	557	406	1828	589	406	1740	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	39.3	39.3	56.4	33.3	33.3	52.7	28.9	37.4	53.1	35.5	35.5
Incr Delay (d2), s/veh	8.3	18.3	27.5	53.4	0.3	0.6	35.3	1.0	90.6	11.5	5.4	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	20.8	23.7	4.7	6.4	6.8	8.5	8.1	34.3	5.1	15.9	18.0
LnGrp Delay(d), s/veh	62.3	57.6	66.8	109.8	33.6	33.9	88.0	29.9	128.0	64.6	40.9	49.5
LnGrp LOS	E	E	E	F	C	C	F	C	F	E	D	D
Approach Vol, veh/h		1913			924			2011			2272	
Approach Delay, s/veh		61.0			49.8			74.6			45.8	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	49.2	11.0	44.0	18.0	47.0	13.9	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	43.0	7.0	40.0	14.0	43.0	13.0	34.0
Max Q Clear Time (g_c+I1), s	11.6	47.2	8.8	39.8	15.4	35.7	9.7	15.5
Green Ext Time (p_c), s	0.2	0.0	0.0	0.1	0.0	6.0	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1040	240	70	1150	70	240	0	170	100	0	30
Future Volume (vph)	10	1040	240	70	1150	70	240	0	170	100	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.98	1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3396	6151		3400	6285		1752	1453	1453	1752		1531
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3396	6151		3400	6285		1752	1453	1453	1752		1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1130	261	76	1250	76	261	0	185	109	0	33
RTOR Reduction (vph)	0	35	0	0	7	0	0	61	60	0	0	24
Lane Group Flow (vph)	11	1356	0	76	1319	0	261	32	32	109	0	9
Confl. Peds. (#/hr)	2		1	1		2	6		6	6		6
Confl. Bikes (#/hr)						3			1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	0.7	34.9		5.8	40.0		20.7	36.8	36.8	11.9		28.0
Effective Green, g (s)	0.7	34.9		5.8	40.0		20.7	36.8	36.8	11.9		28.0
Actuated g/C Ratio	0.01	0.33		0.06	0.38		0.20	0.35	0.35	0.11		0.27
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	22	2036		187	2385		344	507	507	197		406
v/s Ratio Prot	0.00	c0.22		c0.02	0.21		c0.15	c0.02		0.06		
v/s Ratio Perm									0.02			0.01
v/c Ratio	0.50	0.67		0.41	0.55		0.76	0.06	0.06	0.55		0.02
Uniform Delay, d1	52.2	30.2		48.1	25.7		40.0	22.8	22.8	44.2		28.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	16.8	0.8		1.4	0.3		9.2	0.2	0.2	3.3		0.1
Delay (s)	68.9	31.1		49.6	26.0		49.2	23.1	23.1	47.6		28.7
Level of Service	E	C		D	C		D	C	C	D		C
Approach Delay (s/veh)		31.4			27.2			38.4			43.2	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	105.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Future Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	1283	40	556	1424	182	40	91	152	859	556	222
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1224	38	488	1239	544	203	251	214	717	1120	446
Arrive On Green	0.03	0.24	0.24	0.14	0.35	0.35	0.03	0.14	0.14	0.34	0.46	0.46
Sat Flow, veh/h	3442	5063	158	3442	3539	1555	1774	1770	1510	1774	2452	976
Grp Volume(v), veh/h	91	859	464	556	1424	182	40	91	152	859	401	377
Grp Sat Flow(s),veh/h/ln	1721	1695	1831	1721	1770	1555	1774	1770	1510	1774	1770	1658
Q Serve(g_s), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Cycle Q Clear(g_c), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	115	819	443	488	1239	544	203	251	214	717	809	758
V/C Ratio(X)	0.79	1.05	1.05	1.14	1.15	0.33	0.20	0.36	0.71	1.20	0.50	0.50
Avail Cap(c_a), veh/h	115	819	443	488	1239	544	230	251	214	717	809	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	45.5	45.5	51.5	39.0	28.7	42.5	46.6	49.2	26.8	22.9	22.9
Incr Delay (d2), s/veh	30.6	44.9	56.1	85.4	77.1	0.4	0.5	4.0	18.2	102.2	2.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	18.6	21.5	13.8	33.7	4.5	1.1	3.0	5.9	44.1	9.7	9.3
LnGrp Delay(d), s/veh	88.2	90.4	101.6	136.9	116.1	29.1	43.0	50.6	67.3	129.0	25.0	25.2
LnGrp LOS	F	F	F	F	F	C	D	D	E	F	C	C
Approach Vol, veh/h		1414			2162			283			1637	
Approach Delay, s/veh		93.9			114.1			58.5			79.6	
Approach LOS		F			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	45.0	21.0	21.0	33.0	7.2	58.8	8.0	46.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	41.0	17.0	17.0	29.0	5.0	53.0	4.0	42.0
Max Q Clear Time (g_c+I1), s	43.0	13.5	19.0	31.0	4.3	21.2	5.2	44.0
Green Ext Time (p_c), s	0.0	0.4	0.0	0.0	0.0	5.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	95.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Future Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	77	505	44	11	330	44	22	99	55	626	473	264
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	171	669	58	112	638	84	426	1658	864	945	754	421
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1014	3324	289	863	3168	419	725	2274	1185	1211	1034	578
Grp Volume(v), veh/h	77	271	278	11	185	189	22	76	78	631	0	732
Grp Sat Flow(s),veh/h/ln	1014	1787	1826	863	1787	1800	725	1787	1672	1221	0	1601
Q Serve(g_s), s	8.4	16.4	16.5	1.4	10.6	10.8	1.8	1.4	1.5	33.7	0.0	26.2
Cycle Q Clear(g_c), s	19.3	16.4	16.5	17.9	10.6	10.8	28.0	1.4	1.5	35.2	0.0	26.2
Prop In Lane	1.00		0.16	1.00		0.23	1.00		0.71	0.99		0.36
Lane Grp Cap(c), veh/h	171	360	367	112	360	362	426	1303	1219	953	0	1168
V/C Ratio(X)	0.45	0.75	0.76	0.10	0.51	0.52	0.05	0.06	0.06	0.66	0.00	0.63
Avail Cap(c_a), veh/h	214	434	444	148	434	437	426	1303	1219	953	0	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.7	43.3	43.3	51.8	41.0	41.1	14.8	4.4	4.4	9.4	0.0	7.8
Incr Delay (d2), s/veh	1.8	5.9	6.0	0.4	1.1	1.2	0.2	0.1	0.1	3.6	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	8.7	9.0	0.3	5.3	5.5	0.4	0.7	0.7	12.4	0.0	12.2
LnGrp Delay(d), s/veh	51.5	49.2	49.4	52.2	42.1	42.2	15.0	4.5	4.5	13.1	0.0	10.3
LnGrp LOS	D	D	D	D	D	D	B	A	A	B		B
Approach Vol, veh/h		626			385			176			1363	
Approach Delay, s/veh		49.6			42.5			5.8			11.6	
Approach LOS		D			D			A			B	

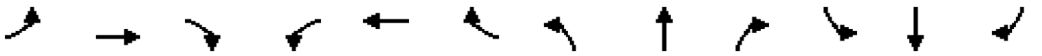
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		88.0		27.2		88.0		27.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		84.0		28.0		84.0		28.0
Max Q Clear Time (g_c+I1), s		30.0		21.3		37.2		19.9
Green Ext Time (p_c), s		1.1		1.9		13.6		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	280	940	90	150	940	550	570	100	350	10	20	20
Future Volume (vph)	280	940	90	150	940	550	570	100	350	10	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1568	3400	5036	1568	3400	1589	1469	1752	1845	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1568	3400	5036	1568	3400	1589	1469	1752	1845	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	295	989	95	158	989	579	600	105	368	11	21	21
RTOR Reduction (vph)	0	0	62	0	0	405	0	41	173	0	0	17
Lane Group Flow (vph)	295	989	33	158	989	174	600	204	55	11	21	4
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	13.9	37.0	37.0	9.3	32.4	32.4	26.0	26.0	26.0	19.3	19.3	19.3
Effective Green, g (s)	13.9	37.0	37.0	9.3	32.4	32.4	26.0	26.0	26.0	19.3	19.3	19.3
Actuated g/C Ratio	0.13	0.34	0.34	0.09	0.30	0.30	0.24	0.24	0.24	0.18	0.18	0.18
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	439	1731	539	293	1516	472	821	383	354	314	330	281
v/s Ratio Prot	c0.09	0.20		0.05	c0.20		c0.18	0.13		0.01	c0.01	
v/s Ratio Perm			0.02			0.11			0.04			0.00
v/c Ratio	0.67	0.57	0.06	0.54	0.65	0.37	0.73	0.53	0.16	0.04	0.06	0.01
Uniform Delay, d1	44.7	28.8	23.7	47.1	32.7	29.6	37.6	35.5	32.2	36.5	36.6	36.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.5	0.0	1.9	1.0	0.5	3.4	1.4	0.2	0.2	0.4	0.1
Delay (s)	48.7	29.3	23.7	49.0	33.7	30.1	40.9	36.9	32.4	36.7	37.0	36.4
Level of Service	D	C	C	D	C	C	D	D	C	D	D	D
Approach Delay (s/veh)		33.1			33.9			38.2			36.7	
Approach LOS		C			C			D			D	

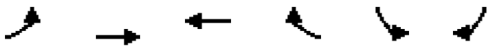
Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	107.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



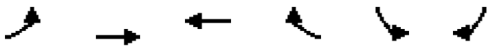
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Future Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frt		0.99		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3554		1787	3574		1626	2916				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3554		1787	3574		1626	2916				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1913	76	196	1000	0	22	0	120	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	102	0	0	0	0
Lane Group Flow (vph)	0	1987	0	196	1000	0	20	20	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		60.0		12.0	76.0		16.0	16.0				
Effective Green, g (s)		60.0		12.0	76.0		16.0	16.0				
Actuated g/C Ratio		0.60		0.12	0.76		0.16	0.16				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		2132		214	2716		260	466				
v/s Ratio Prot		c0.56		c0.11	0.28		c0.01	0.01				
v/s Ratio Perm												
v/c Ratio		0.93		0.92	0.37		0.08	0.04				
Uniform Delay, d1		18.1		43.5	4.0		35.7	35.5				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		8.1		38.7	0.1		0.6	0.2				
Delay (s)		26.3		82.2	4.1		36.3	35.7				
Level of Service		C		F	A		D	D				
Approach Delay (s/veh)		26.3			16.9			35.8			0.0	
Approach LOS		C			B			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



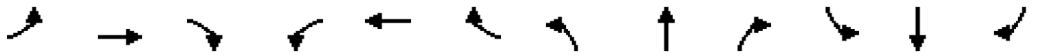
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1490	1030	0	980	750
Future Volume (vph)	0	1490	1030	0	980	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5036	5036		1744	1490
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5036	5036		1744	1490
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1536	1062	0	1010	773
RTOR Reduction (vph)	0	0	0	0	2	3
Lane Group Flow (vph)	0	1536	1062	0	1085	693
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		37.0	37.0		75.0	75.0
Effective Green, g (s)		37.0	37.0		75.0	75.0
Actuated g/C Ratio		0.31	0.31		0.63	0.63
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1552	1552		1090	931
v/s Ratio Prot		c0.31	0.21		c0.62	
v/s Ratio Perm						0.46
v/c Ratio		0.99	0.68		1.00	0.74
Uniform Delay, d1		41.3	36.4		22.3	15.8
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		20.2	1.3		26.1	5.4
Delay (s)		61.5	37.6		48.5	21.1
Level of Service		E	D		D	C
Approach Delay (s/veh)		61.5	37.6		37.8	
Approach LOS		E	D		D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	1210	1000	0	250	350
Future Volume (vph)	0	1210	1000	0	250	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.94	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5036	5036		3271	1427
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5036	5036		3271	1427
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1274	1053	0	263	368
RTOR Reduction (vph)	0	0	0	0	38	38
Lane Group Flow (vph)	0	1274	1053	0	391	164
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				7		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		30.8	30.8		46.2	46.2
Effective Green, g (s)		30.8	30.8		46.2	46.2
Actuated g/C Ratio		0.36	0.36		0.54	0.54
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1824	1824		1777	775
v/s Ratio Prot		c0.25	0.21		c0.12	
v/s Ratio Perm						0.11
v/c Ratio		0.70	0.58		0.22	0.21
Uniform Delay, d1		23.1	21.9		10.1	10.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.2	0.4		0.3	0.6
Delay (s)		24.3	22.3		10.3	10.6
Level of Service		C	C		B	B
Approach Delay (s/veh)		24.3	22.3		10.4	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Future Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.92	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3413	1436	1787	3574					1698	1558	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3413	1436	1787	3574					1698	1558	1519
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	2011	409	409	557	0	0	0	0	330	68	398
RTOR Reduction (vph)	0	1	148	0	0	0	0	0	0	0	35	215
Lane Group Flow (vph)	0	2051	220	409	557	0	0	0	0	274	232	40
Confl. Peds. (#/hr)	5					5						
Confl. Bikes (#/hr)			3			9						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Effective Green, g (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Actuated g/C Ratio		0.53	0.53	0.21	0.78					0.16	0.16	0.16
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1820	765	372	2769					268	246	240
v/s Ratio Prot		c0.60		c0.23	0.16							
v/s Ratio Perm			0.15							c0.16	0.15	0.03
v/c Ratio		1.13	0.29	1.10	0.20					1.02	0.95	0.17
Uniform Delay, d1		28.0	15.4	47.5	3.6					50.5	50.0	43.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		64.9	0.2	76.2	0.0					60.9	44.8	1.5
Delay (s)		92.9	15.6	123.7	3.6					111.4	94.8	45.2
Level of Service		F	B	F	A					F	F	D
Approach Delay (s/veh)		81.1			54.5			0.0			84.6	
Approach LOS		F			D			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Future Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	22	1587	174	87	685	0	22	11	11	174	54	185
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	34	2180	239	113	1821	0	153	76	200	224	70	254
Arrive On Green	0.02	0.47	0.47	0.06	0.51	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	1792	4683	512	1792	3668	0	1214	607	1584	1383	429	1564
Grp Volume(v), veh/h	22	1160	601	87	685	0	33	0	11	228	0	185
Grp Sat Flow(s),veh/h/ln	1792	1712	1771	1792	1787	0	1821	0	1584	1812	0	1564
Q Serve(g_s), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Cycle Q Clear(g_c), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Prop In Lane	1.00		0.29	1.00		0.00	0.67		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	34	1594	825	113	1821	0	229	0	200	294	0	254
V/C Ratio(X)	0.65	0.73	0.73	0.77	0.38	0.00	0.14	0.00	0.06	0.78	0.00	0.73
Avail Cap(c_a), veh/h	103	2117	1095	246	2497	0	229	0	200	560	0	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.5	18.9	18.9	40.3	13.0	0.0	34.0	0.0	33.6	35.0	0.0	34.7
Incr Delay (d2), s/veh	18.9	0.9	1.7	10.6	0.1	0.0	1.3	0.0	0.5	4.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	11.5	12.1	2.4	5.0	0.0	0.8	0.0	0.3	5.6	0.0	4.5
LnGrp Delay(d), s/veh	61.4	19.7	20.6	50.9	13.1	0.0	35.3	0.0	34.1	39.4	0.0	38.7
LnGrp LOS	E	B	C	D	B		D		C	D		D
Approach Vol, veh/h		1783			772			44			413	
Approach Delay, s/veh		20.5			17.4			35.0			39.1	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	9.5	44.7		18.2	5.7	48.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		11.0	12.0	54.0		27.0	5.0	61.0
Max Q Clear Time (g_c+I1), s		3.4	6.2	26.0		12.5	3.1	12.2
Green Ext Time (p_c), s		0.1	0.1	14.7		1.5	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1380	0	0	660	520	690
Future Volume (veh/h)	1380	0	0	660	520	690
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	0	0	1845	1845	1845
Adj Flow Rate, veh/h	1516	0	0	725	571	758
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	1713	0	0	1713	1040	929
Arrive On Green	0.34	0.00	0.00	0.34	0.59	0.59
Sat Flow, veh/h	5368	0	0	5368	1757	1568
Grp Volume(v), veh/h	1516	0	0	725	571	758
Grp Sat Flow(s),veh/h/ln	1679	0	0	1679	1757	1568
Q Serve(g_s), s	33.6	0.0	0.0	13.1	23.2	45.1
Cycle Q Clear(g_c), s	33.6	0.0	0.0	13.1	23.2	45.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1713	0	0	1713	1040	929
V/C Ratio(X)	0.89	0.00	0.00	0.42	0.55	0.82
Avail Cap(c_a), veh/h	1789	0	0	1789	1040	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	0.0	30.1	14.6	19.0
Incr Delay (d2), s/veh	5.6	0.0	0.0	0.2	2.1	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.5	0.0	0.0	6.1	11.7	21.4
LnGrp Delay(d), s/veh	42.4	0.0	0.0	30.2	16.6	26.9
LnGrp LOS	D			C	B	C
Approach Vol, veh/h	1516			725	1329	
Approach Delay, s/veh	42.4			30.2	22.5	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		44.2				44.2
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		47.1		35.6				15.1
Green Ext Time (p_c), s		5.3		4.6				5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑↑			↑↑↑↑	↰↰	↱
Traffic Volume (vph)	750	0	0	1160	790	1300
Future Volume (vph)	750	0	0	1160	790	1300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.93	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7471			6346	3249	1427
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7471			6346	3249	1427
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	806	0	0	1247	849	1398
RTOR Reduction (vph)	0	0	0	0	4	4
Lane Group Flow (vph)	806	0	0	1247	1530	709
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	29.1			29.1	82.0	82.0
Effective Green, g (s)	29.1			29.1	82.0	82.0
Actuated g/C Ratio	0.24			0.24	0.69	0.69
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1825			1550	2236	982
v/s Ratio Prot	0.11			c0.20	0.47	
v/s Ratio Perm						c0.50
v/c Ratio	0.44			0.80	0.68	0.72
Uniform Delay, d1	38.1			42.3	10.9	11.5
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.2			3.1	1.7	4.6
Delay (s)	38.3			45.5	12.6	16.1
Level of Service	D			D	B	B
Approach Delay (s/veh)	38.3			45.5	13.7	
Approach LOS	D			D	B	

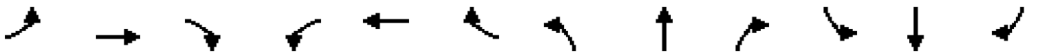
Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	119.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



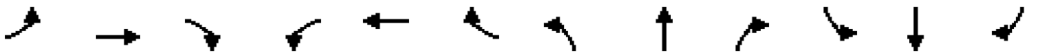
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1870	0	0	930	70	470
Future Volume (vph)	1870	0	0	930	70	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.88	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3574			3574	3191	1455
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3574			3574	3191	1455
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2101	0	0	1045	79	528
RTOR Reduction (vph)	0	0	0	0	11	11
Lane Group Flow (vph)	2101	0	0	1045	332	253
Confl. Peds. (#/hr)		1	1			
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	75.3			75.3	31.2	31.2
Effective Green, g (s)	75.3			75.3	31.2	31.2
Actuated g/C Ratio	0.66			0.66	0.27	0.27
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2350			2350	869	396
v/s Ratio Prot	c0.59			0.29	0.10	
v/s Ratio Perm						c0.17
v/c Ratio	0.89			0.44	0.38	0.64
Uniform Delay, d1	16.3			9.5	33.8	36.7
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	4.8			0.1	1.3	7.7
Delay (s)	21.1			9.6	35.1	44.4
Level of Service	C			A	D	D
Approach Delay (s/veh)	21.1			9.6	39.1	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	114.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Future Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00		0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			
Frt	1.00	1.00			0.97		1.00		0.85			
Flt Protected	0.95	1.00			1.00		0.95		1.00			
Satd. Flow (prot)	1787	3574			4966		1787		1579			
Flt Permitted	0.18	1.00			1.00		0.95		1.00			
Satd. Flow (perm)	346	3574			4966		1787		1579			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1380	0	0	957	228	76	0	163	0	0	0
RTOR Reduction (vph)	0	0	0	0	47	0	0	0	72	0	0	0
Lane Group Flow (vph)	11	1380	0	0	1138	0	76	0	91	0	0	0
Confl. Peds. (#/hr)	1		7	7		1						
Confl. Bikes (#/hr)			7			1			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			1
Actuated Green, G (s)	35.2	35.2			35.2		25.3		25.3			
Effective Green, g (s)	35.2	35.2			35.2		25.3		25.3			
Actuated g/C Ratio	0.51	0.51			0.51		0.37		0.37			
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	177	1836			2551		660		583			
v/s Ratio Prot		c0.39			0.23		0.04					
v/s Ratio Perm	0.03								c0.06			
v/c Ratio	0.06	0.75			0.45		0.12		0.16			
Uniform Delay, d1	8.4	13.2			10.5		14.2		14.5			
Progression Factor	1.00	1.00			1.00		1.00		1.00			
Incremental Delay, d2	0.1	1.8			0.1		0.4		0.6			
Delay (s)	8.5	15.0			10.6		14.6		15.0			
Level of Service	A	B			B		B		B			
Approach Delay (s/veh)		14.9			10.6			14.9			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



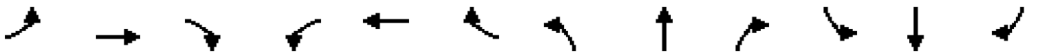
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	800	620	120	630	310	620	90	60	400	110	190
Future Volume (vph)	620	800	620	120	630	310	620	90	60	400	110	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1546	3400	5036	1542	3400	1845	1514	1752	1673	1490
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1546	3400	5036	1542	3400	1845	1514	1752	1673	1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	870	674	130	685	337	674	98	65	435	120	207
RTOR Reduction (vph)	0	0	470	0	0	289	0	0	49	0	13	24
Lane Group Flow (vph)	674	870	204	130	685	48	674	98	16	435	159	131
Confl. Peds. (#/hr)	2		1	1		2			9	9		
Confl. Bikes (#/hr)									3			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	24.8	35.8	35.8	6.0	17.0	17.0	29.0	29.0	29.0	31.6	31.6	56.4
Effective Green, g (s)	24.8	35.8	35.8	6.0	17.0	17.0	29.0	29.0	29.0	31.6	31.6	56.4
Actuated g/C Ratio	0.21	0.30	0.30	0.05	0.14	0.14	0.24	0.24	0.24	0.27	0.27	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	712	1522	467	172	723	221	832	451	370	467	446	760
v/s Ratio Prot	c0.20	0.17		0.04	c0.14		c0.20	0.05		c0.25	0.09	0.04
v/s Ratio Perm			0.13			0.03			0.01			0.05
v/c Ratio	0.95	0.57	0.44	0.76	0.95	0.22	0.81	0.22	0.04	0.93	0.36	0.17
Uniform Delay, d1	46.1	34.8	33.2	55.5	50.3	44.8	42.1	35.6	34.1	42.3	35.2	17.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.4	0.5	0.7	17.1	21.3	0.5	8.4	1.1	0.2	25.5	0.5	0.1
Delay (s)	67.6	35.4	33.8	72.6	71.6	45.3	50.5	36.8	34.3	67.8	35.6	17.8
Level of Service	E	D	C	E	E	D	D	D	C	E	D	B
Approach Delay (s/veh)		44.7			64.0			47.6			50.4	
Approach LOS		D			E			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	50.5	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.90				
Actuated Cycle Length (s)	118.4	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	78.8%	ICU Level of Service	D		
Analysis Period (min)	15				
c Critical Lane Group					



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	200	0	0	20	0	0
Future Volume (vph)	200	0	0	20	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.98		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3400			1536		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3400			1536		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	213	0	0	21	0	0
RTOR Reduction (vph)	0	0	0	19	0	0
Lane Group Flow (vph)	213	0	0	2	0	0
Confl. Peds. (#/hr)	4			1	1	
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	2.6			0.9		
Effective Green, g (s)	2.6			0.9		
Actuated g/C Ratio	0.23			0.08		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	768			120		
v/s Ratio Prot	c0.06					
v/s Ratio Perm				c0.00		
v/c Ratio	0.28			0.01		
Uniform Delay, d1	3.7			4.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	3.9			4.9		
Level of Service	A			A		
Approach Delay (s/veh)	3.9		4.9			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-1.47		
Actuated Cycle Length (s)	11.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	16.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Future Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (perm)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	103	1247	474	464	742	21	206	41	175	21	93	93
RTOR Reduction (vph)	0	0	193	0	0	10	0	0	150	0	31	0
Lane Group Flow (vph)	103	1247	281	464	742	11	122	125	25	21	155	0
Confl. Peds. (#/hr)	3		3	3		3			2	2		
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Effective Green, g (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Actuated g/C Ratio	0.09	0.35	0.35	0.25	0.51	0.51	0.14	0.14	0.14	0.12	0.12	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	164	1203	528	440	1756	761	237	241	219	208	203	
v/s Ratio Prot	0.06	c0.36		c0.27	0.21		0.07	c0.07		0.01	c0.09	
v/s Ratio Perm			0.18			0.01			0.02			
v/c Ratio	0.63	1.04	0.53	1.05	0.42	0.01	0.51	0.52	0.11	0.10	0.76	
Uniform Delay, d1	51.5	38.6	30.9	44.1	18.3	14.5	46.8	46.8	44.1	46.3	50.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.3	35.9	1.0	58.0	0.2	0.0	7.8	7.8	1.1	0.2	15.7	
Delay (s)	58.8	74.5	31.9	102.1	18.5	14.5	54.6	54.6	45.1	46.5	66.0	
Level of Service	E	E	C	F	B	B	D	D	D	D	E	
Approach Delay (s/veh)		62.6			50.1			50.7			64.1	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	118.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Future Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
Arrive On Green	0.10	0.18	0.18	0.18	0.27	0.27	0.06	0.42	0.42	0.05	0.42	0.42
Sat Flow, veh/h	1774	5085	1532	1774	5085	1542	3442	3539	1537	1774	3539	1535
Grp Volume(v), veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Grp Sat Flow(s),veh/h/ln	1774	1695	1532	1774	1695	1542	1721	1770	1537	1774	1770	1535
Q Serve(g_s), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Cycle Q Clear(g_c), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
V/C Ratio(X)	0.81	0.71	0.79	0.88	0.56	0.19	0.68	0.16	0.25	0.78	0.55	0.26
Avail Cap(c_a), veh/h	301	1115	336	548	1824	638	309	1500	651	177	1481	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	38.4	39.0	40.1	31.7	24.7	46.3	17.8	18.6	46.9	22.1	19.1
Incr Delay (d2), s/veh	8.9	1.8	10.1	7.9	0.4	0.2	4.0	0.2	0.9	12.6	1.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.0	6.7	8.2	6.1	1.9	2.0	2.0	3.0	2.4	8.8	3.3
LnGrp Delay(d), s/veh	53.4	40.2	49.1	48.0	32.1	24.9	50.3	18.1	19.5	59.5	23.6	20.1
LnGrp LOS	D	D	D	D	C	C	D	B	B	E	C	C
Approach Vol, veh/h		1031			1139			532			1063	
Approach Delay, s/veh		43.9			35.4			26.8			25.5	
Approach LOS		D			D			C			C	

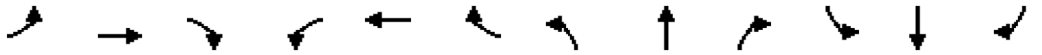
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	46.5	21.9	22.5	9.9	46.0	13.6	30.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	31.0	22.0	9.0	42.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	6.1	8.7	17.3	15.9	5.9	19.6	9.7	15.0
Green Ext Time (p_c), s	0.0	2.0	0.7	2.6	0.1	6.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Future Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.80	0.80	0.80	0.80	0.80	0.80
Sat Flow, veh/h	1325	1863	1530	1077	1863	1559	449	3539	1580	912	3539	1562
Grp Volume(v), veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Grp Sat Flow(s),veh/h/ln	1325	1863	1530	1077	1863	1559	449	1770	1580	912	1770	1562
Q Serve(g_s), s	1.7	6.4	13.3	2.2	1.8	1.4	19.0	3.5	0.3	1.8	11.9	0.9
Cycle Q Clear(g_c), s	3.6	6.4	13.3	8.6	1.8	1.4	30.8	3.5	0.3	5.3	11.9	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
V/C Ratio(X)	0.10	0.44	0.86	0.15	0.13	0.10	0.42	0.16	0.02	0.07	0.42	0.05
Avail Cap(c_a), veh/h	257	303	249	178	303	254	374	2818	1258	760	2818	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	46.4	49.4	50.4	44.5	44.3	8.3	2.8	2.5	3.4	3.6	2.5
Incr Delay (d2), s/veh	0.2	1.2	22.0	0.5	0.2	0.2	3.4	0.1	0.0	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.4	6.9	0.7	1.0	0.6	2.7	1.8	0.2	0.5	5.9	0.4
LnGrp Delay(d), s/veh	46.2	47.7	71.4	50.9	44.7	44.5	11.7	2.9	2.5	3.6	4.1	2.6
LnGrp LOS	D	D	E	D	D	D	B	A	A	A	A	A
Approach Vol, veh/h		311			77			634			1290	
Approach Delay, s/veh		61.1			46.4			5.1			4.0	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		19.8		97.0		19.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		19.0		93.0		19.0
Max Q Clear Time (g_c+I1), s		32.8		15.3		13.9		10.6
Green Ext Time (p_c), s		6.4		0.4		12.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Future Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	72	113	21	258	340	113	41	454	186	72	969	237
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	243	107	301	659	289	52	1307	531	93	1973	882
Arrive On Green	0.05	0.07	0.07	0.17	0.19	0.19	0.03	0.53	0.53	0.05	0.56	0.56
Sat Flow, veh/h	1774	3539	1556	1774	3539	1551	1774	2447	994	1774	3539	1582
Grp Volume(v), veh/h	72	113	21	258	340	113	41	327	313	72	969	237
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1774	1770	1551	1774	1770	1671	1774	1770	1582
Q Serve(g_s), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Cycle Q Clear(g_c), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	93	243	107	301	659	289	52	945	893	93	1973	882
V/C Ratio(X)	0.77	0.46	0.20	0.86	0.52	0.39	0.79	0.35	0.35	0.77	0.49	0.27
Avail Cap(c_a), veh/h	194	619	272	582	1393	610	136	945	893	194	1973	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	41.0	40.2	36.9	33.5	32.7	44.1	12.2	12.2	42.8	12.3	10.5
Incr Delay (d2), s/veh	12.8	1.4	0.9	7.0	0.6	0.9	23.2	1.0	1.1	12.8	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.4	0.5	6.9	3.9	2.6	1.4	5.0	4.8	2.1	7.6	3.2
LnGrp Delay(d), s/veh	55.6	42.3	41.1	43.9	34.1	33.5	67.4	13.2	13.3	55.6	13.2	11.3
LnGrp LOS	E	D	D	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		206			711			681			1278	
Approach Delay, s/veh		46.8			37.6			16.5			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	52.9	19.5	10.3	6.7	55.0	8.8	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	48.0	30.0	16.0	7.0	51.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	5.7	11.8	14.9	4.8	4.1	17.3	5.7	9.9
Green Ext Time (p_c), s	0.0	4.1	0.6	0.4	0.0	8.8	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Future Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	356	494	839	161	322	23	287	517	92	23	1080	218
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	413	434	641	275	266	19	317	1648	717	32	1081	481
Arrive On Green	0.23	0.23	0.23	0.15	0.15	0.15	0.18	0.46	0.46	0.02	0.30	0.30
Sat Flow, veh/h	1792	1881	1553	1792	1730	124	1792	3574	1556	1792	3574	1589
Grp Volume(v), veh/h	356	494	839	161	0	345	287	517	92	23	1080	218
Grp Sat Flow(s),veh/h/ln	1792	1881	1553	1792	0	1854	1792	1787	1556	1792	1787	1589
Q Serve(g_s), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Cycle Q Clear(g_c), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	434	641	275	0	285	317	1648	717	32	1081	481
V/C Ratio(X)	0.86	1.14	1.31	0.58	0.00	1.21	0.91	0.31	0.13	0.71	1.00	0.45
Avail Cap(c_a), veh/h	413	434	641	275	0	285	367	1648	717	76	1081	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	45.1	34.9	46.1	0.0	49.6	47.3	19.9	18.1	57.2	40.8	33.0
Incr Delay (d2), s/veh	16.8	87.0	150.5	3.2	0.0	122.9	23.4	0.5	0.4	25.1	27.2	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	24.5	47.5	5.1	0.0	18.9	11.1	5.4	1.8	1.0	21.5	6.1
LnGrp Delay(d), s/veh	60.0	132.0	185.3	49.2	0.0	172.4	70.6	20.4	18.4	82.3	68.0	36.1
LnGrp LOS	E	F	F	D		F	E	C	B	F	E	D
Approach Vol, veh/h		1689			506			896			1321	
Approach Delay, s/veh		143.3			133.2			36.3			63.0	
Approach LOS		F			F			D			E	

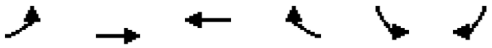
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	58.0		31.0	24.7	39.4		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	54.0		27.0	24.0	35.0		18.0
Max Q Clear Time (g_c+I1), s	3.5	12.7		29.0	20.4	37.4		20.0
Green Ext Time (p_c), s	0.0	4.1		0.0	0.3	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	96.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Future Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	184	1184	214	122	878	61	194	541	194	245	1082	194
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	218	1477	267	152	1555	463	263	1111	474	317	1677	497
Arrive On Green	0.12	0.35	0.35	0.09	0.31	0.31	0.08	0.32	0.32	0.09	0.33	0.33
Sat Flow, veh/h	1757	4260	770	1757	5036	1499	3408	3505	1495	3408	5036	1494
Grp Volume(v), veh/h	184	933	465	122	878	61	194	541	194	245	1082	194
Grp Sat Flow(s),veh/h/ln	1757	1679	1672	1757	1679	1499	1704	1752	1495	1704	1679	1494
Q Serve(g_s), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Cycle Q Clear(g_c), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	1164	580	152	1555	463	263	1111	474	317	1677	497
V/C Ratio(X)	0.84	0.80	0.80	0.80	0.56	0.13	0.74	0.49	0.41	0.77	0.65	0.39
Avail Cap(c_a), veh/h	361	1381	688	275	1825	543	401	1111	474	467	1677	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	30.2	30.2	45.8	29.5	25.4	46.1	28.2	27.4	45.2	28.9	26.1
Incr Delay (d2), s/veh	9.0	3.0	5.8	9.5	0.3	0.1	4.0	1.5	2.6	4.7	1.9	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	12.4	12.8	3.8	7.0	1.2	2.8	6.4	4.6	3.6	8.9	4.5
LnGrp Delay(d), s/veh	52.8	33.1	36.0	55.3	29.9	25.5	50.1	29.7	30.0	49.9	30.9	28.4
LnGrp LOS	D	C	D	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1582			1061			929			1521	
Approach Delay, s/veh		36.3			32.5			34.0			33.6	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	36.4	12.8	39.4	11.9	38.0	16.7	35.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	32.0	16.0	42.0	12.0	34.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	9.2	14.7	9.0	27.7	7.7	20.6	12.5	16.9
Green Ext Time (p_c), s	0.3	3.8	0.1	7.7	0.2	6.7	0.3	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.3
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	170	1150	1130	190	550	480
Future Volume (veh/h)	170	1150	1130	190	550	480
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	177	1198	1177	198	573	500
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	211	2518	1477	248	1442	663
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4489	727	3408	1568
Grp Volume(v), veh/h	177	1198	914	461	573	500
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1693	1704	1568
Q Serve(g_s), s	10.3	16.2	25.6	25.6	12.1	28.1
Cycle Q Clear(g_c), s	10.3	16.2	25.6	25.6	12.1	28.1
Prop In Lane	1.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	211	2518	1147	579	1442	663
V/C Ratio(X)	0.84	0.48	0.80	0.80	0.40	0.75
Avail Cap(c_a), veh/h	355	3292	1388	700	1442	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	17.1	31.0	31.0	20.8	25.4
Incr Delay (d2), s/veh	8.7	0.1	2.8	5.4	0.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	7.5	12.2	12.8	5.9	24.2
LnGrp Delay(d), s/veh	53.5	17.2	33.7	36.3	21.6	33.2
LnGrp LOS	D	B	C	D	C	C
Approach Vol, veh/h		1375	1375		1073	
Approach Delay, s/veh		21.9	34.6		27.0	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				56.0		48.0	16.5	39.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				68.0		44.0	21.0	43.0
Max Q Clear Time (g_c+I1), s				18.2		30.1	12.3	27.6
Green Ext Time (p_c), s				10.7		3.6	0.3	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1340	220	360	1100	120	50	130	140	10	30	10
Future Volume (veh/h)	110	1340	220	360	1100	120	50	130	140	10	30	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	117	1426	234	383	1170	128	53	138	149	11	32	11
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	150	2131	653	498	2223	243	447	530	442	333	377	129
Arrive On Green	0.09	0.42	0.42	0.15	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1757	5036	1544	3408	4595	502	1339	1845	1540	1074	1311	451
Grp Volume(v), veh/h	117	1426	234	383	855	443	53	138	149	11	0	43
Grp Sat Flow(s),veh/h/ln	1757	1679	1544	1704	1679	1740	1339	1845	1540	1074	0	1762
Q Serve(g_s), s	5.5	19.0	8.6	9.0	14.7	14.8	2.5	4.8	6.4	0.7	0.0	1.5
Cycle Q Clear(g_c), s	5.5	19.0	8.6	9.0	14.7	14.8	4.0	4.8	6.4	5.5	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	150	2131	653	498	1624	842	447	530	442	333	0	506
V/C Ratio(X)	0.78	0.67	0.36	0.77	0.53	0.53	0.12	0.26	0.34	0.03	0.00	0.08
Avail Cap(c_a), veh/h	441	3434	1053	1101	2531	1312	447	530	442	333	0	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.4	19.4	16.4	34.3	14.9	15.0	23.2	23.0	23.5	25.1	0.0	21.8
Incr Delay (d2), s/veh	8.3	0.4	0.3	2.5	0.3	0.5	0.5	1.2	2.1	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	8.8	3.7	4.4	6.8	7.1	1.0	2.6	3.0	0.2	0.0	0.8
LnGrp Delay(d), s/veh	45.8	19.8	16.7	36.9	15.2	15.5	23.8	24.1	25.6	25.3	0.0	22.1
LnGrp LOS	D	B	B	D	B	B	C	C	C	C		C
Approach Vol, veh/h		1777			1681			340			54	
Approach Delay, s/veh		21.1			20.2			24.7			22.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	16.2	39.4		28.0	11.2	44.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	27.0	57.0		24.0	21.0	63.0
Max Q Clear Time (g_c+I1), s		8.4	11.0	21.0		7.5	7.5	16.8
Green Ext Time (p_c), s		1.1	1.2	14.3		0.2	0.2	11.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Future Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	77	615	66	99	440	33	33	220	77	110	407	88
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1178	523	233	1178	518	46	1562	698	143	1756	775
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.03	0.44	0.44	0.08	0.50	0.50
Sat Flow, veh/h	916	3539	1571	756	3539	1555	1774	3539	1581	1774	3539	1561
Grp Volume(v), veh/h	77	615	66	99	440	33	33	220	77	110	407	88
Grp Sat Flow(s),veh/h/ln	916	1770	1571	756	1770	1555	1774	1770	1581	1774	1770	1561
Q Serve(g_s), s	5.8	11.6	2.4	10.1	7.8	1.2	1.5	3.1	2.4	5.0	5.4	2.5
Cycle Q Clear(g_c), s	13.6	11.6	2.4	21.7	7.8	1.2	1.5	3.1	2.4	5.0	5.4	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1178	523	233	1178	518	46	1562	698	143	1756	775
V/C Ratio(X)	0.25	0.52	0.13	0.43	0.37	0.06	0.72	0.14	0.11	0.77	0.23	0.11
Avail Cap(c_a), veh/h	621	2399	1065	493	2399	1054	236	1562	698	537	1756	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	22.3	19.2	31.0	21.0	18.8	40.0	13.7	13.6	37.2	11.8	11.1
Incr Delay (d2), s/veh	0.4	0.4	0.1	1.2	0.2	0.1	19.3	0.2	0.3	8.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.7	1.1	2.2	3.8	0.5	1.0	1.5	1.1	2.8	2.7	1.1
LnGrp Delay(d), s/veh	26.6	22.6	19.3	32.2	21.2	18.8	59.3	13.9	13.9	45.6	12.2	11.4
LnGrp LOS	C	C	B	C	C	B	E	B	B	D	B	B
Approach Vol, veh/h		758			572			330			605	
Approach Delay, s/veh		22.7			23.0			18.5			18.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	40.5		31.5	6.1	45.0		31.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	27.0		56.0	11.0	41.0		56.0
Max Q Clear Time (g_c+I1), s	7.0	5.1		15.6	3.5	7.4		23.7
Green Ext Time (p_c), s	0.2	1.4		5.1	0.0	2.8		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Future Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1699	140	462	430	0	140	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	2183	178	145	2336	0	456	0	412	0	2	0
Arrive On Green	0.00	0.66	0.66	0.66	0.66	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	954	3308	269	251	3632	0	1756	0	1583	0	1863	0
Grp Volume(v), veh/h	0	899	940	462	430	0	140	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	954	1770	1807	251	1770	0	1756	0	1583	0	1863	0
Q Serve(g_s), s	0.0	35.1	36.9	29.1	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.1	36.9	66.0	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1168	1193	145	2336	0	456	0	412	0	2	0
V/C Ratio(X)	0.00	0.77	0.79	3.18	0.18	0.00	0.31	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1168	1193	145	2336	0	456	0	412	0	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.7	12.0	42.7	6.6	0.0	29.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.2	3.6	1000.3	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.0	19.2	44.3	2.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	14.9	15.7	1043.0	6.6	0.0	31.5	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		B	B	F	A		C					
Approach Vol, veh/h		1839			892			140			0	
Approach Delay, s/veh		15.3			543.4			31.5			0.0	
Approach LOS		B			F			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		70.0		0.0		70.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		26.0		66.0		16.0		66.0
Max Q Clear Time (g_c+I1), s		8.4		38.9		0.0		68.0
Green Ext Time (p_c), s		0.6		16.4		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	180.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Future Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	206	1371	175	423	567	155	62	392	237	72	639	31
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1415	181	448	1522	671	80	469	387	89	884	43
Arrive On Green	0.13	0.31	0.31	0.25	0.43	0.43	0.04	0.25	0.25	0.05	0.26	0.26
Sat Flow, veh/h	1774	4553	581	1774	3539	1561	1774	1863	1537	1774	3431	166
Grp Volume(v), veh/h	206	1021	525	423	567	155	62	392	237	72	329	341
Grp Sat Flow(s),veh/h/ln	1774	1695	1743	1774	1770	1561	1774	1863	1537	1774	1770	1827
Q Serve(g_s), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Cycle Q Clear(g_c), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	236	1054	542	448	1522	671	80	469	387	89	456	471
V/C Ratio(X)	0.87	0.97	0.97	0.94	0.37	0.23	0.78	0.84	0.61	0.81	0.72	0.72
Avail Cap(c_a), veh/h	343	1054	542	462	1522	671	104	469	387	89	456	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	40.5	40.5	43.7	23.0	21.5	56.3	42.2	39.4	55.9	40.3	40.3
Incr Delay (d2), s/veh	15.3	20.5	30.8	28.0	0.2	0.2	23.5	16.0	7.0	39.8	9.6	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	19.6	21.7	17.1	6.3	3.3	2.5	14.3	7.7	3.3	11.1	11.4
LnGrp Delay(d), s/veh	65.9	61.0	71.3	71.7	23.2	21.6	79.8	58.2	46.4	95.7	49.9	49.7
LnGrp LOS	E	E	E	E	C	C	E	E	D	F	D	D
Approach Vol, veh/h		1752			1145			691			742	
Approach Delay, s/veh		64.7			40.9			56.1			54.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	34.0	34.1	41.0	9.3	34.7	19.9	55.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	30.0	31.0	37.0	7.0	29.0	23.0	45.0
Max Q Clear Time (g_c+I1), s	6.8	25.7	29.9	37.4	6.1	22.3	15.6	14.9
Green Ext Time (p_c), s	0.0	1.3	0.2	0.0	0.0	2.1	0.3	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Future Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1516	495	74	611	0	1095	1389	379			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2069	630	122	2432	0	1582	1829	497			
Arrive On Green	0.00	0.40	0.40	0.04	0.47	0.00	0.46	0.46	0.46			
Sat Flow, veh/h	0	5305	1563	3476	5305	0	3476	4020	1093			
Grp Volume(v), veh/h	0	1516	495	74	611	0	1095	1182	586			
Grp Sat Flow(s),veh/h/ln	0	1712	1563	1738	1712	0	1738	1712	1688			
Q Serve(g_s), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Cycle Q Clear(g_c), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.65			
Lane Grp Cap(c), veh/h	0	2069	630	122	2432	0	1582	1558	768			
V/C Ratio(X)	0.00	0.73	0.79	0.61	0.25	0.00	0.69	0.76	0.76			
Avail Cap(c_a), veh/h	0	2383	726	155	2796	0	1582	1558	768			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	28.4	29.2	53.3	17.6	0.0	24.3	25.4	25.5			
Incr Delay (d2), s/veh	0.0	1.0	5.0	4.8	0.1	0.0	2.5	3.5	7.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	13.4	14.2	1.2	3.7	0.0	13.9	15.9	16.6			
LnGrp Delay(d), s/veh	0.0	29.4	34.3	58.1	17.7	0.0	26.8	28.9	32.5			
LnGrp LOS		C	C	E	B		C	C	C			
Approach Vol, veh/h		2011			685			2863				
Approach Delay, s/veh		30.6			22.1			28.9				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			7.9	49.1		55.0		57.1
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			5.0	52.0		51.0		61.0
Max Q Clear Time (g_c+I1), s			4.4	33.0		34.4		10.0
Green Ext Time (p_c), s			0.0	12.1		13.6		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1670	290	340	710	80	100	750	380	240	1540	420
Future Volume (veh/h)	230	1670	290	340	710	80	100	750	380	240	1540	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.85	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	247	1796	312	366	763	86	108	806	409	258	1656	452
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
Arrive On Green	0.09	0.36	0.36	0.11	0.37	0.37	0.03	0.31	0.31	0.09	0.37	0.37
Sat Flow, veh/h	3442	5085	1475	3442	5085	1501	3442	5085	2381	3442	5085	1388
Grp Volume(v), veh/h	247	1796	312	366	763	86	108	806	409	258	1656	452
Grp Sat Flow(s),veh/h/ln	1721	1695	1475	1721	1695	1501	1721	1695	1190	1721	1695	1388
Q Serve(g_s), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	15.7	14.6	8.8	36.7	31.4
Cycle Q Clear(g_c), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	15.7	14.6	8.8	36.7	31.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
V/C Ratio(X)	0.78	0.99	0.54	0.98	0.40	0.15	0.94	0.52	0.40	0.81	0.89	0.69
Avail Cap(c_a), veh/h	631	1822	581	373	1905	562	115	1562	1033	430	1865	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	38.2	28.2	53.4	27.6	24.9	57.9	34.2	24.8	53.4	35.7	26.1
Incr Delay (d2), s/veh	4.2	17.7	1.0	41.6	0.1	0.1	65.6	1.2	1.1	8.0	6.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	22.6	8.1	8.2	6.2	1.9	2.8	7.5	4.9	4.5	18.3	13.0
LnGrp Delay(d), s/veh	57.5	55.9	29.1	94.9	27.7	25.0	123.5	35.5	25.9	61.4	42.4	32.0
LnGrp LOS	E	E	C	F	C	C	F	D	C	E	D	C
Approach Vol, veh/h		2355			1215			1323			2366	
Approach Delay, s/veh		52.5			47.8			39.7			42.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	40.9	17.0	47.0	8.0	48.0	15.0	49.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	33.0	13.0	43.0	4.0	44.0	22.0	34.0
Max Q Clear Time (g_c+I1), s	10.8	17.7	14.7	44.0	5.8	38.7	10.4	15.2
Green Ext Time (p_c), s	0.3	6.7	0.0	0.0	0.0	4.5	0.6	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Future Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	333	2280	0	0	667	237				86	86	43
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	479	4047	0	0	3022	926				159	205	97
Arrive On Green	0.14	0.79	0.00	0.00	0.59	0.59				0.09	0.09	0.09
Sat Flow, veh/h	3476	5305	0	0	5305	1573				1792	2308	1089
Grp Volume(v), veh/h	333	2280	0	0	667	237				86	62	67
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1573				1792	1712	1685
Q Serve(g_s), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Cycle Q Clear(g_c), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Prop In Lane	1.00		0.00	0.00		1.00				1.00		0.65
Lane Grp Cap(c), veh/h	479	4047	0	0	3022	926				159	152	149
V/C Ratio(X)	0.69	0.56	0.00	0.00	0.22	0.26				0.54	0.41	0.45
Avail Cap(c_a), veh/h	1393	7204	0	0	4829	1479				580	554	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	2.6	0.0	0.0	6.3	6.5				28.3	28.0	28.0
Incr Delay (d2), s/veh	1.8	0.1	0.0	0.0	0.0	0.1				2.8	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	5.1	0.0	0.0	1.9	2.1				1.6	1.1	1.2
LnGrp Delay(d), s/veh	28.5	2.7	0.0	0.0	6.3	6.6				31.1	29.7	30.1
LnGrp LOS	C	A			A	A				C	C	C
Approach Vol, veh/h		2613			904						215	
Approach Delay, s/veh		6.0			6.4						30.4	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		9.8		55.1			12.9	42.2
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		91.0			26.0	61.0
Max Q Clear Time (g_c+I1), s		5.0		13.0			7.9	6.7
Green Ext Time (p_c), s		0.9		38.1			1.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Future Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	34	2079	67	663	1067	90	45	11	180	764	438	34
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1472	47	459	2038	600	251	264	747	532	997	77
Arrive On Green	0.02	0.29	0.29	0.13	0.40	0.40	0.14	0.14	0.14	0.30	0.30	0.30
Sat Flow, veh/h	1774	5048	162	3442	5085	1496	1774	1863	2651	1774	3323	257
Grp Volume(v), veh/h	34	1394	752	663	1067	90	45	11	180	764	232	240
Grp Sat Flow(s),veh/h/ln	1774	1695	1820	1721	1695	1496	1774	1863	1325	1774	1770	1810
Q Serve(g_s), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Cycle Q Clear(g_c), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	43	989	531	459	2038	600	251	264	747	532	531	543
V/C Ratio(X)	0.79	1.41	1.42	1.44	0.52	0.15	0.18	0.04	0.24	1.44	0.44	0.44
Avail Cap(c_a), veh/h	89	989	531	459	2038	600	251	264	747	532	531	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	42.5	42.5	52.0	27.3	22.9	45.4	44.5	33.8	42.0	33.8	33.9
Incr Delay (d2), s/veh	26.5	190.5	198.6	212.2	0.2	0.1	1.6	0.3	0.8	206.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	42.5	46.8	21.1	8.9	1.9	1.4	0.3	2.4	48.1	6.3	6.5
LnGrp Delay(d), s/veh	84.8	233.0	241.1	264.2	27.5	23.0	46.9	44.8	34.6	248.6	34.4	34.4
LnGrp LOS	F	F	F	F	C	C	D	D	C	F	C	C
Approach Vol, veh/h		2180			1820			236			1236	
Approach Delay, s/veh		233.4			113.5			37.4			166.8	
Approach LOS		F			F			D			F	

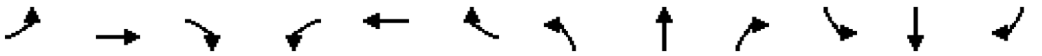
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.0	20.0	39.0		40.0	6.9	52.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		17.0	16.0	35.0		36.0	6.0	45.0
Max Q Clear Time (g_c+I1), s		8.3	18.0	37.0		38.0	4.3	21.1
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	170.0
HCM 2010 LOS	F



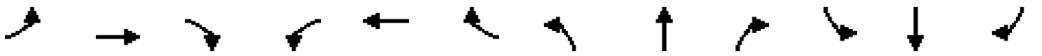
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	450	480	0	0	0	0	840	40	0	2260	0
Future Volume (vph)	40	450	480	0	0	0	0	840	40	0	2260	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1786	2814					7542			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1786	2814					7542			6471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	489	522	0	0	0	0	913	43	0	2457	0
RTOR Reduction (vph)	0	0	6	0	0	0	0	6	0	0	0	0
Lane Group Flow (vph)	39	493	516	0	0	0	0	950	0	0	2457	0
Confl. Peds. (#/hr)							6		16	16		6
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	36.3	36.3	36.3					61.5			61.5	
Effective Green, g (s)	36.3	36.3	36.3					61.5			61.5	
Actuated g/C Ratio	0.34	0.34	0.34					0.58			0.58	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	582	612	965					4384			3761	
v/s Ratio Prot	0.02	c0.28						0.13			c0.38	
v/s Ratio Perm			0.18									
v/c Ratio	0.07	0.81	0.53					0.22			0.65	
Uniform Delay, d1	23.4	31.5	28.0					10.6			15.0	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.0	7.6	0.6					0.1			0.9	
Delay (s)	23.4	39.2	28.5					10.7			15.8	
Level of Service	C	D	C					B			B	
Approach Delay (s/veh)		33.3			0.0			10.7			15.8	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



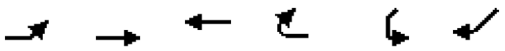
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Future Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.98	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5900	1229	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5900	1229	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1613	731	151	645	0	602	0	65	376	0	11
RTOR Reduction (vph)	0	29	226	0	0	0	0	0	43	0	0	7
Lane Group Flow (vph)	0	1891	198	151	645	0	602	0	22	376	0	4
Confl. Peds. (#/hr)			18	18								
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Effective Green, g (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Actuated g/C Ratio		0.47	0.47	0.09	0.59		0.34		0.34	0.34		0.34
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2760	574	304	3032		1178		543	1178		543
v/s Ratio Prot		c0.32		c0.04	0.13							
v/s Ratio Perm			0.16				c0.17		0.01	0.11		0.00
v/c Ratio		0.69	0.35	0.50	0.21		0.51		0.04	0.32		0.01
Uniform Delay, d1		24.0	19.4	50.0	11.0		30.3		25.4	28.1		25.1
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.7	0.4	1.3	0.0		1.6		0.1	0.7		0.0
Delay (s)		24.7	19.8	51.3	11.1		31.9		25.5	28.8		25.1
Level of Service		C	B	D	B		C		C	C		C
Approach Delay (s/veh)		23.8			18.7			31.3			28.7	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	120	840	40	750	0	60	2330	30
Future Volume (vph)	0	0	0	210	120	840	40	750	0	60	2330	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3346	2814	3467	6471		1787	6471	1552
Flt Permitted				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3346	2814	3467	6471		1787	6471	1552
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	228	130	913	43	815	0	65	2533	33
RTOR Reduction (vph)	0	0	0	0	0	238	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	0	116	242	675	43	815	0	65	2533	19
Confl. Peds. (#/hr)							8		15	15		8
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				32.2	32.2	32.2	2.2	58.0		7.1	62.9	62.9
Effective Green, g (s)				32.2	32.2	32.2	2.2	58.0		7.1	62.9	62.9
Actuated g/C Ratio				0.29	0.29	0.29	0.02	0.53		0.06	0.58	0.58
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				479	985	829	69	3433		116	3723	893
v/s Ratio Prot				0.07	0.07		0.01	0.13		c0.04	c0.39	
v/s Ratio Perm						c0.24						0.01
v/c Ratio				0.24	0.25	0.81	0.62	0.24		0.56	0.68	0.02
Uniform Delay, d1				29.3	29.3	35.8	53.1	13.8		49.6	16.2	10.0
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.3	0.1	6.2	16.2	0.2		6.1	1.0	0.0
Delay (s)				29.5	29.4	41.9	69.4	13.9		55.6	17.2	10.0
Level of Service				C	C	D	E	B		E	B	B
Approach Delay (s/veh)		0.0			38.4			16.7			18.1	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	109.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	160	1830	750	210	60	200
Future Volume (veh/h)	160	1830	750	210	60	200
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	176	2011	824	231	66	220
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	217	3363	1807	493	704	628
Arrive On Green	0.12	0.52	0.36	0.36	0.39	0.39
Sat Flow, veh/h	1792	6735	5352	1387	1792	1599
Grp Volume(v), veh/h	176	2011	785	270	66	220
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1622	1792	1599
Q Serve(g_s), s	8.8	19.8	11.4	11.8	2.1	8.9
Cycle Q Clear(g_c), s	8.8	19.8	11.4	11.8	2.1	8.9
Prop In Lane	1.00			0.86	1.00	1.00
Lane Grp Cap(c), veh/h	217	3363	1723	576	704	628
V/C Ratio(X)	0.81	0.60	0.46	0.47	0.09	0.35
Avail Cap(c_a), veh/h	626	5369	2119	709	704	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	15.3	22.7	22.9	17.5	19.6
Incr Delay (d2), s/veh	7.2	0.2	0.2	0.6	0.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	8.8	5.1	5.3	1.1	9.2
LnGrp Delay(d), s/veh	46.4	15.5	22.9	23.5	17.8	21.1
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		2187	1055		286	
Approach Delay, s/veh		18.0	23.1		20.3	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.6		40.0	15.1	36.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				76.0		36.0	32.0	40.0
Max Q Clear Time (g_c+I1), s				21.8		10.9	10.8	13.8
Green Ext Time (p_c), s				25.8		0.9	0.4	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.7
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	SBR	NWL2	NWR
Lane Configurations											
Traffic Volume (vph)	160	10	10	350	30	30	400	30	160	10	10
Future Volume (vph)	160	10	10	350	30	30	400	30	160	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.93		1.00	0.87		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1641	1468	1641	2584	3003		1641	2867		1641	1468
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1641	1468	1641	2584	3003		1641	2867		1641	1468
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	213	13	13	467	40	40	533	40	213	13	13
RTOR Reduction (vph)	0	11	0	0	0	0	0	83	0	0	0
Lane Group Flow (vph)	213	2	13	467	80	0	533	170	0	13	13
Confl. Peds. (#/hr)			2			5					
Confl. Bikes (#/hr)						1					
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA		Prot	Prot
Protected Phases	4	4	8	1	2		1	6		7	7
Permitted Phases				8							
Actuated Green, G (s)	16.2	16.2	1.3	37.7	16.2		36.4	56.6		2.7	2.7
Effective Green, g (s)	16.2	16.2	1.3	37.7	16.2		36.4	56.6		2.7	2.7
Actuated g/C Ratio	0.17	0.17	0.01	0.41	0.17		0.39	0.61		0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	286	256	22	1161	524		643	1748		47	42
v/s Ratio Prot	c0.13	0.00	0.01	c0.16	c0.03		c0.32	0.06		0.01	c0.01
v/s Ratio Perm				0.02							
v/c Ratio	0.74	0.01	0.59	0.40	0.15		0.83	0.10		0.28	0.31
Uniform Delay, d1	36.3	31.7	45.5	19.6	32.5		25.4	7.5		44.1	44.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	10.1	0.0	36.0	0.2	0.6		8.7	0.1		3.2	4.2
Delay (s)	46.4	31.7	81.5	19.8	33.1		34.1	7.6		47.3	48.3
Level of Service	D	C	F	B	C		C	A		D	D
Approach Delay (s/veh)					33.1			25.6			
Approach LOS					C			C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	92.8	Sum of lost time (s)	20.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	0	10	0	0	0	0	60	0	30	10	10
Future Volume (veh/h)	20	0	10	0	0	0	0	60	0	30	10	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	0	1681				0	1681	0	1681	1681	1900
Adj Flow Rate, veh/h	29	0	15				0	88	0	44	15	15
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.68	0.68	0.68				0.68	0.68	0.68	0.68	0.68	0.68
Percent Heavy Veh, %	13	0	13				0	13	0	13	13	13
Cap, veh/h	48	0	43				0	2559	0	54	1431	1233
Arrive On Green	0.03	0.00	0.03				0.00	0.80	0.00	0.03	0.88	0.88
Sat Flow, veh/h	1601	0	1429				0	3363	0	1601	1626	1402
Grp Volume(v), veh/h	29	0	15				0	88	0	44	15	15
Grp Sat Flow(s),veh/h/ln	1601	0	1429				0	1597	0	1601	1597	1430
Q Serve(g_s), s	1.6	0.0	0.9				0.0	0.5	0.0	2.4	0.1	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.9				0.0	0.5	0.0	2.4	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.98
Lane Grp Cap(c), veh/h	48	0	43				0	2559	0	54	1406	1259
V/C Ratio(X)	0.61	0.00	0.35				0.00	0.03	0.00	0.82	0.01	0.01
Avail Cap(c_a), veh/h	614	0	548				0	2559	0	650	1406	1259
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	42.2				0.0	1.8	0.0	42.6	0.6	0.6
Incr Delay (d2), s/veh	11.8	0.0	4.9				0.0	0.0	0.0	24.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4				0.0	0.2	0.0	1.4	0.0	0.0
LnGrp Delay(d), s/veh	54.3	0.0	47.0				0.0	1.8	0.0	67.2	0.7	0.7
LnGrp LOS	D		D					A		E	A	A
Approach Vol, veh/h		44						88			74	
Approach Delay, s/veh		51.8						1.8			40.2	
Approach LOS		D						A			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	7.0	75.0		6.6		82.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	36.0	38.0		34.0		78.0		
Max Q Clear Time (g_c+I1), s	4.4	2.5		3.6		2.1		
Green Ext Time (p_c), s	0.1	0.5		0.1		0.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	10	70	0	10	30
Future Vol, veh/h	0	10	70	0	10	30
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	14	99	0	14	42

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	149	52	0	0	100	0
Stage 1	100	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	834	1011	-	-	1505	-
Stage 1	919	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	825	1009	-	-	1504	-
Mov Cap-2 Maneuver	825	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	963	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.6	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	1009	1504	-
HCM Lane V/C Ratio	-	-	0.014	0.009	-
HCM Control Delay (s/veh)	-	-	8.6	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1410	40	0	910	0	10
Future Vol, veh/h	1410	40	0	910	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1533	43	0	989	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	767
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	-	-	0	-	0	294
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	294
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	294	-	-	-
HCM Lane V/C Ratio	0.037	-	-	-
HCM Control Delay (s/veh)	17.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	400	250	1020	150	620	660	290	190	1010	420
Future Volume (veh/h)	190	1190	400	250	1020	150	620	660	290	190	1010	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	209	1308	440	275	1121	165	681	725	319	209	1110	462
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1405	429	317	1306	192	734	2136	656	268	1447	436
Arrive On Green	0.08	0.28	0.28	0.09	0.29	0.29	0.21	0.42	0.42	0.08	0.28	0.28
Sat Flow, veh/h	3442	5085	1554	3442	4458	656	3442	5085	1562	3442	5085	1531
Grp Volume(v), veh/h	209	1308	440	275	852	434	681	725	319	209	1110	462
Grp Sat Flow(s),veh/h/ln	1721	1695	1554	1721	1695	1723	1721	1695	1562	1721	1695	1531
Q Serve(g_s), s	7.1	29.9	33.0	9.4	28.4	28.4	23.2	11.5	17.8	7.1	23.9	34.0
Cycle Q Clear(g_c), s	7.1	29.9	33.0	9.4	28.4	28.4	23.2	11.5	17.8	7.1	23.9	34.0
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	1405	429	317	993	505	734	2136	656	268	1447	436
V/C Ratio(X)	0.81	0.93	1.02	0.87	0.86	0.86	0.93	0.34	0.49	0.78	0.77	1.06
Avail Cap(c_a), veh/h	259	1405	429	317	993	505	749	2136	656	346	1447	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	42.1	43.2	53.5	39.9	39.9	46.1	23.4	25.3	54.1	39.1	42.7
Incr Delay (d2), s/veh	16.8	11.3	49.9	21.7	7.6	13.9	17.6	0.4	2.6	8.4	3.9	60.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	15.5	20.1	5.4	14.3	15.4	12.8	5.5	8.1	3.7	11.7	21.6
LnGrp Delay(d), s/veh	71.2	53.4	93.2	75.2	47.5	53.8	63.7	23.9	27.8	62.5	43.1	102.8
LnGrp LOS	E	D	F	E	D	D	E	C	C	E	D	F
Approach Vol, veh/h		1957			1561			1725			1781	
Approach Delay, s/veh		64.3			54.1			40.3			60.8	
Approach LOS		E			D			D			E	

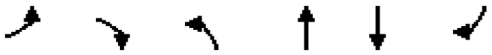
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	54.2	15.0	37.0	29.5	38.0	13.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	48.0	11.0	33.0	26.0	34.0	9.0	35.0
Max Q Clear Time (g_c+I1), s	9.1	19.8	11.4	35.0	25.2	36.0	9.1	30.4
Green Ext Time (p_c), s	0.2	7.3	0.0	0.0	0.3	0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.3
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	90	1360	690	0	30	1560
Future Volume (vph)	90	1360	690	0	30	1560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.87	0.85	1.00		1.00	1.00
Flt Protected	0.99	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3087	1427	5036		1752	6346
Flt Permitted	0.99	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3087	1427	5036		1752	6346
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	93	1402	711	0	31	1608
RTOR Reduction (vph)	105	105	0	0	0	0
Lane Group Flow (vph)	689	596	711	0	31	1608
Confl. Peds. (#/hr)				17	17	
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	45.1	45.1	35.7		3.3	43.0
Effective Green, g (s)	45.1	45.1	35.7		3.3	43.0
Actuated g/C Ratio	0.47	0.47	0.37		0.03	0.45
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1448	669	1870		60	2839
v/s Ratio Prot	0.22		0.14		0.02	c0.25
v/s Ratio Perm		c0.42				
v/c Ratio	0.48	0.89	0.38		0.52	0.57
Uniform Delay, d1	17.4	23.3	22.1		45.6	19.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	14.1	0.6		7.3	0.8
Delay (s)	17.7	37.4	22.7		52.9	20.5
Level of Service	B	D	C		D	C
Approach Delay (s/veh)	26.9		22.7			21.1
Approach LOS	C		C			C

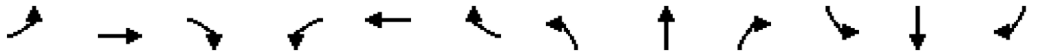
Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	96.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	480	40	640	1460	0
Future Volume (veh/h)	210	480	40	640	1460	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	221	505	42	674	1537	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	682	314	54	4653	3371	0
Arrive On Green	0.20	0.20	0.03	0.73	0.67	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	221	505	42	674	1537	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	6.7	24.0	2.8	3.8	17.4	0.0
Cycle Q Clear(g_c), s	6.7	24.0	2.8	3.8	17.4	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	682	314	54	4653	3371	0
V/C Ratio(X)	0.32	1.61	0.78	0.14	0.46	0.00
Avail Cap(c_a), veh/h	682	314	176	4653	3371	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.1	48.0	57.8	4.8	9.4	0.0
Incr Delay (d2), s/veh	0.3	289.1	21.2	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	43.9	1.7	1.7	8.1	0.0
LnGrp Delay(d), s/veh	41.3	337.1	78.9	4.8	9.9	0.0
LnGrp LOS	D	F	E	A	A	
Approach Vol, veh/h	726			716	1537	
Approach Delay, s/veh	247.0			9.2	9.9	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		92.0		28.0	7.7	84.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		88.0		24.0	12.0	72.0		
Max Q Clear Time (g_c+I1), s		5.8		26.0	4.8	19.4		
Green Ext Time (p_c), s		5.3		0.0	0.0	16.9		

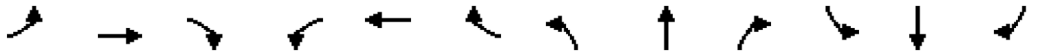
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.5
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	930	90	300	580	110	80	440	270	100	500	120
Future Volume (veh/h)	100	930	90	300	580	110	80	440	270	100	500	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.88	1.00		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	108	1000	97	323	624	118	86	473	290	108	538	129
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	166	1318	348	404	1670	456	138	1955	523	166	1996	536
Arrive On Green	0.05	0.27	0.27	0.12	0.34	0.34	0.04	0.40	0.40	0.05	0.41	0.41
Sat Flow, veh/h	3312	4893	1291	3312	4893	1337	3312	4893	1308	3312	4893	1314
Grp Volume(v), veh/h	108	1000	97	323	624	118	86	473	290	108	538	129
Grp Sat Flow(s),veh/h/ln	1656	1631	1291	1656	1631	1337	1656	1631	1308	1656	1631	1314
Q Serve(g_s), s	3.2	18.9	6.0	9.5	9.7	6.4	2.6	6.5	17.2	3.2	7.4	6.5
Cycle Q Clear(g_c), s	3.2	18.9	6.0	9.5	9.7	6.4	2.6	6.5	17.2	3.2	7.4	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	1318	348	404	1670	456	138	1955	523	166	1996	536
V/C Ratio(X)	0.65	0.76	0.28	0.80	0.37	0.26	0.62	0.24	0.55	0.65	0.27	0.24
Avail Cap(c_a), veh/h	264	1752	462	659	2336	638	231	1955	523	264	1996	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	33.7	29.0	42.9	25.0	23.9	47.4	20.1	23.3	46.9	19.8	19.5
Incr Delay (d2), s/veh	4.3	1.4	0.4	3.7	0.1	0.3	4.5	0.3	4.2	4.3	0.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.7	2.2	4.6	4.4	2.4	1.3	2.9	6.8	1.6	3.3	2.5
LnGrp Delay(d), s/veh	51.2	35.1	29.4	46.6	25.1	24.2	51.9	20.4	27.5	51.2	20.1	20.6
LnGrp LOS	D	D	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1205			1065			849			775	
Approach Delay, s/veh		36.1			31.6			26.0			24.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	44.2	16.3	31.1	8.2	45.0	9.0	38.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	20.0	36.0	7.0	41.0	8.0	48.0
Max Q Clear Time (g_c+I1), s	5.2	19.2	11.5	20.9	4.6	9.4	5.2	11.7
Green Ext Time (p_c), s	0.1	4.2	0.7	6.2	0.0	4.5	0.1	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Future Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	21	11	32	372	21	106	85	1000	574	223	1362	53
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	462	134	388	478	593	501	108	2024	615	259	2420	94
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.41	0.41	0.15	0.49	0.49
Sat Flow, veh/h	1228	411	1196	1325	1827	1543	1740	4988	1517	1740	4916	191
Grp Volume(v), veh/h	21	0	43	372	21	106	85	1000	574	223	921	494
Grp Sat Flow(s),veh/h/ln	1228	0	1607	1325	1827	1543	1740	1663	1517	1740	1663	1783
Q Serve(g_s), s	1.2	0.0	1.8	27.0	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Cycle Q Clear(g_c), s	2.0	0.0	1.8	28.8	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Prop In Lane	1.00		0.74	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	462	0	522	478	593	501	108	2024	615	259	1637	878
V/C Ratio(X)	0.05	0.00	0.08	0.78	0.04	0.21	0.78	0.49	0.93	0.86	0.56	0.56
Avail Cap(c_a), veh/h	642	0	759	673	863	729	210	2024	615	402	1637	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	23.3	33.3	23.0	24.4	46.0	22.0	28.3	41.4	17.7	17.7
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.8	0.0	0.2	11.6	0.9	23.0	11.0	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.8	10.3	0.4	2.1	2.7	6.9	18.9	6.8	9.1	10.1
LnGrp Delay(d), s/veh	23.7	0.0	23.4	37.1	23.0	24.6	57.6	22.8	51.3	52.4	19.2	20.4
LnGrp LOS	C		C	D	C	C	E	C	D	D	B	C
Approach Vol, veh/h		64			499			1659			1638	
Approach Delay, s/veh		23.5			33.8			34.5			24.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.8	44.4		36.3	10.2	53.0		36.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	23.0	38.0		47.0	12.0	49.0		47.0
Max Q Clear Time (g_c+I1), s	14.5	38.0		4.0	6.8	21.4		30.8
Green Ext Time (p_c), s	0.4	0.0		0.3	0.1	11.4		1.5

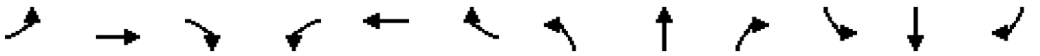
Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		29.8
HCM 2010 LOS		C



Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	90	0	0	420	1060	60
Future Volume (veh/h)	90	0	0	420	1060	60
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	93	0	0	433	1093	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2155	0	0	2155	1465	464
Arrive On Green	0.60	0.00	0.00	0.60	0.29	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	93	0	0	433	1093	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	0.8	0.0	0.0	4.1	14.6	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.1	14.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2155	0	0	2155	1465	464
V/C Ratio(X)	0.04	0.00	0.00	0.20	0.75	0.00
Avail Cap(c_a), veh/h	2155	0	0	2155	4534	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	0.0	6.7	24.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.0	6.9	0.0
LnGrp Delay(d), s/veh	6.1	0.0	0.0	6.9	24.8	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	93			433	1093	
Approach Delay, s/veh	6.1			6.9	24.8	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		49.0				49.0		25.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		45.0				45.0		67.0
Max Q Clear Time (g_c+I1), s		2.8				6.1		16.6
Green Ext Time (p_c), s		0.5				2.8		5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	1070	120	340	700	110	130	320	240	580	480	120
Future Volume (vph)	290	1070	120	340	700	110	130	320	240	580	480	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	0.99		1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	3433	5085	1366	3433	4942		1610	3107	1418	1522	4584	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.72	
Satd. Flow (perm)	3433	5085	1366	3433	4942		1610	2911	1418	1522	3377	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	299	1103	124	351	722	113	134	330	247	598	495	124
RTOR Reduction (vph)	0	0	94	0	17	0	0	12	50	0	16	0
Lane Group Flow (vph)	299	1103	30	351	818	0	121	398	130	305	896	0
Confl. Peds. (#/hr)	21		58	58		21	26		5	5		26
Confl. Bikes (#/hr)			1			3						
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	14.4	28.6	28.6	13.9	28.1		13.2	44.5	45.2	27.0	62.3	
Effective Green, g (s)	14.4	28.6	28.6	13.9	28.1		13.2	44.5	45.2	27.0	62.3	
Actuated g/C Ratio	0.12	0.24	0.24	0.12	0.24		0.11	0.38	0.39	0.23	0.53	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	423	1245	334	408	1188		181	1131	597	351	2080	
v/s Ratio Prot	0.09	c0.22		c0.10	0.17		0.08	0.04	0.03	c0.20	0.10	
v/s Ratio Perm			0.02					0.09	0.07		c0.13	
v/c Ratio	0.71	0.89	0.09	0.86	0.69		0.67	0.35	0.22	0.87	0.43	
Uniform Delay, d1	49.2	42.5	34.1	50.5	40.4		49.7	25.8	24.0	43.2	16.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.3	7.9	0.1	16.7	1.7		9.0	0.2	0.2	19.8	0.1	
Delay (s)	54.5	50.4	34.2	67.2	42.0		58.7	26.0	24.1	63.0	16.7	
Level of Service	D	D	C	E	D		E	C	C	E	B	
Approach Delay (s/veh)		49.9			49.5			31.1			28.3	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	116.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Future Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
Arrive On Green	0.12	0.27	0.27	0.20	0.35	0.35	0.07	0.27	0.27	0.13	0.32	0.32
Sat Flow, veh/h	1792	3574	1571	1792	3574	1550	3476	3574	1555	1792	3574	1553
Grp Volume(v), veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1550	1738	1787	1555	1792	1787	1553
Q Serve(g_s), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Cycle Q Clear(g_c), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
V/C Ratio(X)	0.85	0.91	0.63	0.92	0.61	0.17	0.76	0.70	0.16	0.87	0.79	0.34
Avail Cap(c_a), veh/h	312	995	551	405	1254	748	272	947	730	265	1150	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.6	31.8	45.1	30.9	17.0	52.5	38.1	17.9	49.2	35.4	29.6
Incr Delay (d2), s/veh	13.7	11.7	2.2	23.6	0.9	0.1	11.2	4.3	0.5	23.6	5.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	14.9	9.3	12.5	10.2	2.3	3.3	10.0	2.2	7.7	13.9	4.3
LnGrp Delay(d), s/veh	63.5	52.3	34.0	68.7	31.7	17.1	63.6	42.4	18.3	72.8	40.9	31.5
LnGrp LOS	E	D	C	E	C	B	E	D	B	E	D	C
Approach Vol, veh/h		1390			1220			968			1273	
Approach Delay, s/veh		49.3			40.1			43.7			44.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	34.5	26.8	35.0	12.2	41.0	17.5	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	26.0	32.0	9.0	37.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	14.6	21.2	22.5	29.2	8.1	28.4	13.3	22.4
Green Ext Time (p_c), s	0.1	2.9	0.3	1.8	0.1	4.1	0.2	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.6
HCM 2010 LOS	D

ANAHEIM - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	870	440	580	2720	0	30	0	310	80	70	10
Future Volume (veh/h)	0	870	440	580	2720	0	30	0	310	80	70	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	0	906	458	604	2833	0	21	0	334	83	73	10
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	0	2228	691	700	4351	0	31	0	566	135	709	317
Arrive On Green	0.00	0.43	0.43	0.20	0.67	0.00	0.02	0.00	0.18	0.04	0.20	0.20
Sat Flow, veh/h	0	5305	1592	3476	6735	0	1792	0	3198	3476	3574	1599
Grp Volume(v), veh/h	0	906	458	604	2833	0	21	0	334	83	73	10
Grp Sat Flow(s),veh/h/ln	0	1712	1592	1738	1618	0	1792	0	1599	1738	1787	1599
Q Serve(g_s), s	0.0	13.0	24.5	18.0	27.4	0.0	1.3	0.0	10.3	2.5	1.8	0.5
Cycle Q Clear(g_c), s	0.0	13.0	24.5	18.0	27.4	0.0	1.3	0.0	10.3	2.5	1.8	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2228	691	700	4351	0	31	0	566	135	709	317
V/C Ratio(X)	0.00	0.41	0.66	0.86	0.65	0.00	0.68	0.00	0.59	0.62	0.10	0.03
Avail Cap(c_a), veh/h	0	2393	742	939	5005	0	100	0	566	194	709	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.9	24.2	41.4	10.2	0.0	52.4	0.0	40.6	50.8	35.2	34.7
Incr Delay (d2), s/veh	0.0	0.1	2.0	6.5	0.2	0.0	22.6	0.0	4.5	4.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	11.2	9.3	12.1	0.0	0.8	0.0	4.9	1.3	0.9	0.3
LnGrp Delay(d), s/veh	0.0	21.0	26.2	47.9	10.5	0.0	75.0	0.0	45.0	55.3	35.5	34.9
LnGrp LOS		C	C	D	B		E		D	E	D	C
Approach Vol, veh/h		1364			3437			355			166	
Approach Delay, s/veh		22.7			17.1			46.8			45.3	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	23.0	25.6	50.6	5.9	25.3		76.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	19.0	29.0	50.0	6.0	19.0		83.0
Max Q Clear Time (g_c+I1), s	4.5	12.3	20.0	26.5	3.3	3.8		29.4
Green Ext Time (p_c), s	0.0	0.7	1.6	8.3	0.0	0.3		42.8

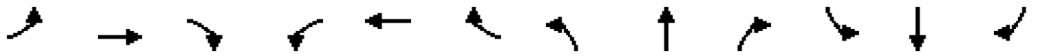
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.4
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	60	1280	0	0	2410	160	0	0	0	830	1170	180
Future Volume (vph)	60	1280	0	0	2410	160	0	0	0	830	1170	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.98	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3467	6471			6089	1295				1448	5925	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3467	6471			6089	1295				1448	5925	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	66	1407	0	0	2648	176	0	0	0	912	1286	198
RTOR Reduction (vph)	0	0	0	0	1	24	0	0	0	0	15	0
Lane Group Flow (vph)	66	1407	0	0	2665	134	0	0	0	474	1907	0
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	3.2	62.2			55.0	55.0				49.0	49.0	
Effective Green, g (s)	3.2	62.2			55.0	55.0				49.0	49.0	
Actuated g/C Ratio	0.03	0.52			0.46	0.46				0.41	0.41	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	93	3376			2809	597				595	2435	
v/s Ratio Prot	c0.02	0.22			c0.44					c0.33	0.32	
v/s Ratio Perm						0.10						
v/c Ratio	0.71	0.42			0.95	0.22				0.80	0.78	
Uniform Delay, d1	57.5	17.4			30.8	19.3				30.7	30.5	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	21.9	0.1			8.0	0.2				7.3	1.7	
Delay (s)	79.4	17.5			38.7	19.5				38.0	32.2	
Level of Service	E	B			D	B				D	C	
Approach Delay (s/veh)		20.3			37.7			0.0			33.4	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1170	20	40	1900	60	150	180	30	70	10	660
Future Volume (vph)	180	1170	20	40	1900	60	150	180	30	70	10	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	5136	1529	1787	5136	1569	1787	1837		1785	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00		0.52	1.00	1.00
Satd. Flow (perm)	1787	5136	1529	1787	5136	1569	1412	1837		971	1881	1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	198	1286	22	44	2088	66	165	198	33	77	11	725
RTOR Reduction (vph)	0	0	11	0	0	39	0	5	0	0	0	117
Lane Group Flow (vph)	198	1286	11	44	2088	27	165	226	0	77	11	608
Confl. Peds. (#/hr)	3		6	6		3			1	1		
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Effective Green, g (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Actuated g/C Ratio	0.12	0.48	0.48	0.05	0.41	0.41	0.37	0.37		0.37	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	207	2474	736	82	2117	646	525	684		361	700	595
v/s Ratio Prot	c0.11	0.25		0.02	c0.41			0.12			0.01	
v/s Ratio Perm			0.01			0.02	0.12			0.08		c0.38
v/c Ratio	0.96	0.52	0.01	0.54	0.99	0.04	0.31	0.33		0.21	0.02	1.02
Uniform Delay, d1	53.1	21.6	16.3	56.3	35.2	21.2	26.9	27.1		25.8	23.9	37.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	49.7	0.2	0.0	6.6	16.3	0.0	1.6	1.3		1.3	0.0	42.7
Delay (s)	102.8	21.8	16.3	62.9	51.4	21.3	28.5	28.4		27.2	24.0	80.6
Level of Service	F	C	B	E	D	C	C	C		C	C	F
Approach Delay (s/veh)		32.4			50.8			28.4			74.7	
Approach LOS		C			D			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	47.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Future Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.93		1.00	0.97		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1805	4845		3502	5042		1805		2804	1802		2842
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1805	4845		3502	5042		1805		2804	1802		2842
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	80	102	80	34	386	80	23	0	91	284	0	23
RTOR Reduction (vph)	0	64	0	0	30	0	0	0	34	0	0	9
Lane Group Flow (vph)	80	118	0	34	436	0	23	0	57	284	0	14
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Effective Green, g (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Actuated g/C Ratio	0.09	0.20		0.04	0.15		0.63		0.63	0.63		0.63
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	157	959		151	775		1130		1755	1128		1779
v/s Ratio Prot	c0.04	c0.02		0.01	c0.09							
v/s Ratio Perm							0.01		0.02	c0.16		0.01
v/c Ratio	0.51	0.12		0.23	0.56		0.02		0.03	0.25		0.01
Uniform Delay, d1	39.4	29.8		41.8	35.4		6.4		6.4	7.5		6.4
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	2.6	0.1		0.8	0.9		0.0		0.0	0.5		0.0
Delay (s)	42.0	29.9		42.6	36.4		6.4		6.5	8.0		6.4
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		33.6			36.8			6.5			7.9	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Future Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	281	1198	271	198	1115	229	469	1312	219	292	760	240
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	311	1398	316	227	1227	252	531	1523	462	352	942	294
Arrive On Green	0.17	0.34	0.34	0.13	0.29	0.29	0.15	0.30	0.30	0.10	0.25	0.25
Sat Flow, veh/h	1792	4161	941	1792	4242	871	3476	5136	1557	3476	3843	1199
Grp Volume(v), veh/h	281	986	483	198	900	444	469	1312	219	292	676	324
Grp Sat Flow(s),veh/h/ln	1792	1712	1679	1792	1712	1689	1738	1712	1557	1738	1712	1618
Q Serve(g_s), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Cycle Q Clear(g_c), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Prop In Lane	1.00		0.56	1.00		0.52	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	311	1150	564	227	990	488	531	1523	462	352	839	396
V/C Ratio(X)	0.90	0.86	0.86	0.87	0.91	0.91	0.88	0.86	0.47	0.83	0.81	0.82
Avail Cap(c_a), veh/h	359	1194	586	266	1015	501	576	1523	462	394	839	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	35.5	35.5	49.2	39.3	39.3	47.6	38.1	33.0	50.6	40.7	40.9
Incr Delay (d2), s/veh	23.3	6.2	11.8	23.1	11.6	20.3	14.3	6.7	3.5	12.7	8.1	16.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	15.5	16.1	7.6	15.3	16.3	8.4	14.1	6.1	5.2	11.0	11.6
LnGrp Delay(d), s/veh	69.8	41.7	47.3	72.2	50.9	59.6	61.9	44.8	36.5	63.2	48.9	57.7
LnGrp LOS	E	D	D	E	D	E	E	D	D	E	D	E
Approach Vol, veh/h		1750			1542			2000			1292	
Approach Delay, s/veh		47.8			56.1			47.9			54.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	38.0	18.5	42.5	21.5	32.1	23.9	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	34.0	17.0	40.0	19.0	28.0	23.0	34.0
Max Q Clear Time (g_c+I1), s	11.5	29.7	14.4	32.8	17.2	23.7	19.6	31.1
Green Ext Time (p_c), s	0.2	3.1	0.1	4.9	0.4	2.4	0.3	2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Future Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	149	34	34	92	57	310	46	1529	46	138	1149	207
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	156	259	259	424	75	410	263	3253	989	216	2761	497
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1021	864	864	1340	251	1366	404	5136	1562	327	4360	785
Grp Volume(v), veh/h	149	0	68	92	0	367	46	1529	46	138	902	454
Grp Sat Flow(s),veh/h/ln	1021	0	1728	1340	0	1617	404	1712	1562	327	1712	1721
Q Serve(g_s), s	11.3	0.0	3.4	6.4	0.0	24.7	7.7	18.7	1.3	45.6	15.7	15.8
Cycle Q Clear(g_c), s	36.0	0.0	3.4	9.9	0.0	24.7	23.4	18.7	1.3	64.3	15.7	15.8
Prop In Lane	1.00		0.50	1.00		0.84	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
V/C Ratio(X)	0.95	0.00	0.13	0.22	0.00	0.76	0.17	0.47	0.05	0.64	0.42	0.42
Avail Cap(c_a), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	30.6	34.2	0.0	38.0	16.8	11.5	8.3	28.3	11.0	11.0
Incr Delay (d2), s/veh	57.8	0.0	0.1	0.3	0.0	6.7	1.4	0.5	0.1	13.5	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.7	2.4	0.0	11.9	1.0	8.9	0.6	4.9	7.6	7.8
LnGrp Delay(d), s/veh	114.1	0.0	30.7	34.5	0.0	44.8	18.2	12.0	8.4	41.8	11.5	12.1
LnGrp LOS	F		C	C		D	B	B	A	D	B	B
Approach Vol, veh/h		217			459			1621			1494	
Approach Delay, s/veh		88.0			42.7			12.1			14.5	
Approach LOS		F			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		25.4		38.0		66.3		26.7
Green Ext Time (p_c), s		17.6		0.0		6.9		1.8

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		21.1
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Future Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	667	871	151	86	484	366	108	1118	43	75	1043	118
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	422	2031	352	356	1287	971	75	1014	39	60	895	101
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.04	0.20	0.20	0.03	0.19	0.19
Sat Flow, veh/h	652	3046	528	555	1930	1456	1792	5070	195	1792	4668	527
Grp Volume(v), veh/h	667	511	511	86	448	402	108	755	406	75	764	397
Grp Sat Flow(s),veh/h/ln	652	1787	1787	555	1787	1599	1792	1712	1841	1792	1712	1772
Q Serve(g_s), s	66.6	16.0	16.0	10.3	13.4	13.4	5.0	24.0	24.0	4.0	23.0	23.0
Cycle Q Clear(g_c), s	80.0	16.0	16.0	26.3	13.4	13.4	5.0	24.0	24.0	4.0	23.0	23.0
Prop In Lane	1.00		0.30	1.00		0.91	1.00		0.11	1.00		0.30
Lane Grp Cap(c), veh/h	422	1191	1191	356	1191	1066	75	685	368	60	656	340
V/C Ratio(X)	1.58	0.43	0.43	0.24	0.38	0.38	1.45	1.10	1.10	1.26	1.16	1.17
Avail Cap(c_a), veh/h	422	1191	1191	356	1191	1066	75	685	368	60	656	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	9.3	9.3	15.5	8.9	8.9	57.5	48.0	48.0	58.0	48.5	48.5
Incr Delay (d2), s/veh	272.6	0.2	0.2	0.3	0.2	0.2	261.1	65.8	77.7	200.2	90.2	102.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	45.9	7.9	7.9	1.6	6.7	6.0	7.9	17.6	20.1	5.3	19.1	20.9
LnGrp Delay(d), s/veh	304.0	9.6	9.6	15.8	9.1	9.1	318.6	113.8	125.7	258.2	138.7	151.1
LnGrp LOS	F	A	A	B	A	A	F	F	F	F	F	F
Approach Vol, veh/h		1689			936			1269			1236	
Approach Delay, s/veh		125.9			9.7			135.1			149.9	
Approach LOS		F			A			F			F	

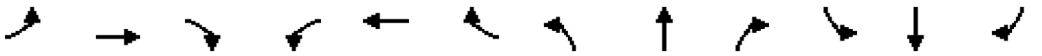
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	28.0		84.0	9.0	27.0		84.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	24.0		80.0	5.0	23.0		80.0
Max Q Clear Time (g_c+I1), s	6.0	26.0		82.0	7.0	25.0		28.3
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		7.7

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		112.7	
HCM 2010 LOS		F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Future Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	21	11	716	11	168	21	1168	358	74	1179	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	38	65	22	324	4	877	30	1195	366	75	1748	16
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.02	0.31	0.31	0.04	0.33	0.33
Sat Flow, veh/h	0	118	41	481	7	1594	1792	3877	1188	1792	5246	49
Grp Volume(v), veh/h	43	0	0	727	0	168	21	1031	495	74	769	421
Grp Sat Flow(s),veh/h/ln	159	0	0	489	0	1594	1792	1712	1641	1792	1712	1871
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Cycle Q Clear(g_c), s	66.0	0.0	0.0	66.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Prop In Lane	0.26		0.26	0.98		1.00	1.00		0.72	1.00		0.03
Lane Grp Cap(c), veh/h	125	0	0	328	0	877	30	1056	506	75	1141	624
V/C Ratio(X)	0.34	0.00	0.00	2.21	0.00	0.19	0.70	0.98	0.98	0.99	0.67	0.67
Avail Cap(c_a), veh/h	125	0	0	328	0	877	60	1056	506	75	1141	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	0.0	33.0	0.0	13.6	58.7	41.1	41.1	57.5	34.4	34.4
Incr Delay (d2), s/veh	1.6	0.0	0.0	555.9	0.0	0.1	25.3	22.7	34.8	101.1	3.2	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	61.6	0.0	2.8	0.9	20.2	21.1	4.5	11.5	13.0
LnGrp Delay(d), s/veh	29.2	0.0	0.0	588.9	0.0	13.7	84.0	63.8	75.9	158.5	37.6	40.2
LnGrp LOS	C			F		B	F	E	E	F	D	D
Approach Vol, veh/h		43			895			1547			1264	
Approach Delay, s/veh		29.2			480.9			67.9			45.5	
Approach LOS		C			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	41.0		70.0	6.0	44.0		70.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0		66.0	4.0	38.0		66.0
Max Q Clear Time (g_c+I1), s	7.0	37.8		68.0	3.4	25.2		68.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		158.5
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	520	100	640	990	70	290	680	470	160	1020	520
Future Volume (vph)	290	520	100	640	990	70	290	680	470	160	1020	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.93	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	6069	1206	3467	5136	1558	3467	5136	1494	3467	5136	1556
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	6069	1206	3467	5136	1558	3467	5136	1494	3467	5136	1556
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	547	105	674	1042	74	305	716	495	168	1074	547
RTOR Reduction (vph)	0	2	81	0	0	56	0	0	291	0	0	199
Lane Group Flow (vph)	305	556	13	674	1042	18	305	716	204	168	1074	348
Confl. Peds. (#/hr)	6		26	26		6	7		25	25		7
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	13.9	16.3	16.3	26.6	29.0	29.0	13.9	48.1	48.1	9.5	43.7	43.7
Effective Green, g (s)	13.9	16.3	16.3	26.6	29.0	29.0	13.9	48.1	48.1	9.5	43.7	43.7
Actuated g/C Ratio	0.12	0.14	0.14	0.23	0.25	0.25	0.12	0.41	0.41	0.08	0.38	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	413	849	168	791	1278	387	413	2120	616	282	1926	583
v/s Ratio Prot	0.09	0.09		c0.19	c0.20		c0.09	0.14		0.05	0.21	
v/s Ratio Perm			0.01			0.01			0.14			c0.22
v/c Ratio	0.74	0.66	0.08	0.85	0.82	0.05	0.74	0.34	0.33	0.60	0.56	0.60
Uniform Delay, d1	49.5	47.4	43.6	43.1	41.2	33.3	49.5	23.3	23.3	51.6	28.8	29.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	1.8	0.2	8.8	4.1	0.1	6.8	0.4	1.4	3.4	1.2	4.5
Delay (s)	56.3	49.3	43.8	51.9	45.4	33.3	56.3	23.8	24.7	55.0	29.9	33.8
Level of Service	E	D	D	D	D	C	E	C	C	E	C	C
Approach Delay (s/veh)		51.0			47.3			30.6			33.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	116.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	0	240	10	10	10	420	1220	10	10	1410	970
Future Volume (veh/h)	340	0	240	10	10	10	420	1220	10	10	1410	970
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	347	0	245	10	10	10	429	1245	10	10	1439	990
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	425	476	424	212	485	416	435	3281	26	33	1742	798
Arrive On Green	0.27	0.00	0.27	0.27	0.27	0.27	0.13	0.62	0.62	0.01	0.51	0.51
Sat Flow, veh/h	1396	1787	1594	1141	1822	1564	3476	5255	42	3476	3424	1568
Grp Volume(v), veh/h	347	0	245	10	10	10	429	811	444	10	1439	990
Grp Sat Flow(s),veh/h/ln	1396	1787	1594	1141	1787	1599	1738	1712	1873	1738	1712	1568
Q Serve(g_s), s	29.3	0.0	16.0	0.9	0.5	0.6	14.8	14.0	14.0	0.3	42.7	61.0
Cycle Q Clear(g_c), s	29.9	0.0	16.0	16.9	0.5	0.6	14.8	14.0	14.0	0.3	42.7	61.0
Prop In Lane	1.00		1.00	1.00		0.98	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	425	476	424	212	476	425	435	2138	1170	33	1742	798
V/C Ratio(X)	0.82	0.00	0.58	0.05	0.02	0.02	0.99	0.38	0.38	0.30	0.83	1.24
Avail Cap(c_a), veh/h	426	477	425	212	477	427	435	2138	1170	116	1742	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	0.0	38.2	45.5	32.5	32.5	52.4	11.1	11.1	59.0	25.0	29.5
Incr Delay (d2), s/veh	11.7	0.0	1.9	0.1	0.0	0.0	39.5	0.5	0.9	5.1	4.6	119.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	7.2	0.3	0.2	0.3	9.5	6.7	7.5	0.2	21.3	52.8
LnGrp Delay(d), s/veh	55.3	0.0	40.1	45.6	32.5	32.5	91.9	11.6	12.0	64.1	29.6	148.5
LnGrp LOS	E		D	D	C	C	F	B	B	E	C	F
Approach Vol, veh/h		592			30			1684			2439	
Approach Delay, s/veh		49.0			36.9			32.2			78.0	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	78.9		35.9	19.0	65.0		35.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	72.0		32.0	15.0	61.0		32.0
Max Q Clear Time (g_c+I1), s	2.3	16.0		31.9	16.8	63.0		18.9
Green Ext Time (p_c), s	0.0	10.6		0.0	0.0	0.0		0.1

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		57.9	
HCM 2010 LOS		E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	730	430	870	1560	170	280	1010	210	140	1350	210
Future Volume (veh/h)	230	730	430	870	1560	170	280	1010	210	140	1350	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	256	811	478	967	1733	189	311	1122	233	156	1500	233
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	310	799	367	956	1967	214	319	1603	330	213	1516	235
Arrive On Green	0.09	0.23	0.23	0.28	0.42	0.42	0.09	0.30	0.30	0.06	0.27	0.27
Sat Flow, veh/h	3476	3424	1571	3476	4694	510	3476	5398	1110	3476	5684	882
Grp Volume(v), veh/h	256	811	478	967	1262	660	311	1008	347	156	1281	452
Grp Sat Flow(s),veh/h/ln	1738	1712	1571	1738	1712	1780	1738	1618	1654	1738	1618	1713
Q Serve(g_s), s	8.7	28.0	28.0	33.0	40.7	41.1	10.7	22.1	22.4	5.3	31.5	31.6
Cycle Q Clear(g_c), s	8.7	28.0	28.0	33.0	40.7	41.1	10.7	22.1	22.4	5.3	31.5	31.6
Prop In Lane	1.00		1.00	1.00		0.29	1.00		0.67	1.00		0.52
Lane Grp Cap(c), veh/h	310	799	367	956	1435	746	319	1441	491	213	1294	457
V/C Ratio(X)	0.82	1.02	1.30	1.01	0.88	0.88	0.98	0.70	0.71	0.73	0.99	0.99
Avail Cap(c_a), veh/h	319	799	367	956	1435	746	319	1441	491	290	1294	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	46.0	46.0	43.5	32.1	32.2	54.4	37.4	37.5	55.3	43.8	43.8
Incr Delay (d2), s/veh	15.7	35.7	155.4	32.0	6.6	12.2	43.8	2.8	8.3	6.1	22.6	39.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	17.2	27.9	20.0	20.4	22.7	7.1	10.3	11.4	2.7	16.8	20.0
LnGrp Delay(d), s/veh	69.5	81.7	201.4	75.5	38.7	44.4	98.2	40.3	45.9	61.4	66.5	83.7
LnGrp LOS	E	F	F	F	D	D	F	D	D	E	E	F
Approach Vol, veh/h		1545			2889			1666			1889	
Approach Delay, s/veh		116.7			52.3			52.2			70.2	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	39.6	37.0	32.0	15.0	36.0	14.7	54.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	33.0	33.0	28.0	11.0	32.0	11.0	50.0
Max Q Clear Time (g_c+I1), s	7.3	24.4	35.0	30.0	12.7	33.6	10.7	43.1
Green Ext Time (p_c), s	0.1	5.2	0.0	0.0	0.0	0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	69.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	880	250	170	1670	130	250	0	100	80	0	30
Future Volume (vph)	20	880	250	170	1670	130	250	0	100	80	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97	0.97	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3467	6237		3467	6386		1787	1467	1467	1787		1547
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3467	6237		3467	6386		1787	1467	1467	1787		1547
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	22	978	278	189	1856	144	278	0	111	89	0	33
RTOR Reduction (vph)	0	44	0	0	10	0	0	36	36	0	0	26
Lane Group Flow (vph)	22	1212	0	189	1990	0	278	20	19	89	0	7
Confl. Peds. (#/hr)	10		1	1		10	8		11	11		8
Confl. Bikes (#/hr)						2						4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	2.2	37.7		10.2	45.7		22.5	38.9	38.9	8.7		25.1
Effective Green, g (s)	2.2	37.7		10.2	45.7		22.5	38.9	38.9	8.7		25.1
Actuated g/C Ratio	0.02	0.34		0.09	0.41		0.20	0.35	0.35	0.08		0.23
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	68	2108		317	2617		360	511	511	139		348
v/s Ratio Prot	0.01	0.19		c0.05	c0.31		c0.16	c0.01		0.05		
v/s Ratio Perm									0.01			0.00
v/c Ratio	0.32	0.58		0.60	0.76		0.77	0.04	0.04	0.64		0.02
Uniform Delay, d1	53.9	30.3		48.7	28.2		42.1	24.0	23.9	49.9		33.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.8	0.4		3.0	1.3		9.9	0.1	0.1	9.7		0.1
Delay (s)	56.7	30.7		51.7	29.6		51.9	24.1	24.1	59.5		33.7
Level of Service	E	C		D	C		D	C	C	E		C
Approach Delay (s/veh)		31.1			31.5			44.0			52.6	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	111.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Future Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	232	1379	32	453	1421	1116	105	484	442	368	295	189
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	174	1865	43	511	1638	721	324	402	350	299	647	402
Arrive On Green	0.05	0.36	0.36	0.15	0.46	0.46	0.05	0.22	0.22	0.13	0.31	0.31
Sat Flow, veh/h	3476	5162	120	3476	3574	1574	1792	1787	1556	1792	2099	1304
Grp Volume(v), veh/h	232	915	496	453	1421	1116	105	484	442	368	250	234
Grp Sat Flow(s),veh/h/ln	1738	1712	1858	1738	1787	1574	1792	1787	1556	1792	1787	1616
Q Serve(g_s), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Cycle Q Clear(g_c), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	174	1237	671	511	1638	721	324	402	350	299	551	498
V/C Ratio(X)	1.33	0.74	0.74	0.89	0.87	1.55	0.32	1.20	1.26	1.23	0.45	0.47
Avail Cap(c_a), veh/h	174	1237	671	550	1638	721	324	402	350	299	551	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	33.4	33.4	50.2	29.2	32.5	33.6	46.5	46.5	35.3	33.4	33.6
Incr Delay (d2), s/veh	184.5	2.4	4.3	15.2	5.2	253.0	0.6	113.1	139.0	129.8	2.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	13.6	15.1	8.4	22.3	74.5	2.7	25.9	25.1	20.7	7.1	6.7
LnGrp Delay(d), s/veh	241.5	35.8	37.8	65.4	34.5	285.5	34.2	159.6	185.5	165.1	36.0	36.7
LnGrp LOS	F	D	D	E	C	F	C	F	F	F	D	D
Approach Vol, veh/h		1643			2990			1031			852	
Approach Delay, s/veh		65.4			132.9			157.9			92.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	31.0	21.7	47.3	10.0	41.0	10.0	59.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	27.0	19.0	42.0	6.0	37.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	18.0	29.0	17.3	29.9	7.4	16.1	8.0	57.0
Green Ext Time (p_c), s	0.0	0.0	0.3	6.8	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	114.5
HCM 2010 LOS	F

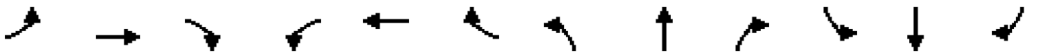
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Future Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	217	735	36	120	1313	795	36	277	241	458	277	157
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	60	2219	109	440	1422	776	102	555	467	214	310	175
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	197	3503	172	709	2246	1225	970	1851	1556	514	1032	585
Grp Volume(v), veh/h	217	379	392	120	1027	1081	36	270	248	458	0	434
Grp Sat Flow(s),veh/h/ln	197	1805	1870	709	1805	1665	970	1805	1602	514	0	1616
Q Serve(g_s), s	0.0	11.7	11.7	11.3	58.1	76.0	4.4	14.8	15.4	20.6	0.0	30.8
Cycle Q Clear(g_c), s	76.0	11.7	11.7	23.0	58.1	76.0	35.3	14.8	15.4	36.0	0.0	30.8
Prop In Lane	1.00		0.09	1.00		0.74	1.00		0.97	1.00		0.36
Lane Grp Cap(c), veh/h	60	1143	1184	440	1143	1055	102	542	481	214	0	485
V/C Ratio(X)	3.62	0.33	0.33	0.27	0.90	1.03	0.35	0.50	0.52	2.14	0.00	0.89
Avail Cap(c_a), veh/h	60	1143	1184	440	1143	1055	102	542	481	214	0	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	10.2	10.2	15.6	18.7	22.0	57.1	34.6	34.8	52.6	0.0	40.2
Incr Delay (d2), s/veh	1217.6	0.2	0.2	0.3	9.7	34.3	9.4	3.3	3.9	528.0	0.0	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.3	5.8	6.0	2.2	31.6	44.6	1.5	7.8	7.3	38.5	0.0	16.7
LnGrp Delay(d), s/veh	1277.6	10.4	10.4	15.9	28.4	56.3	66.4	37.8	38.7	580.6	0.0	61.9
LnGrp LOS	F	B	B	B	C	F	E	D	D	F		E
Approach Vol, veh/h		988			2228			554			892	
Approach Delay, s/veh		288.7			41.2			40.1			328.2	
Approach LOS		F			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.0		80.0		40.0		80.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		36.0		76.0		36.0		76.0
Max Q Clear Time (g_c+I1), s		37.3		78.0		38.0		78.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		148.4
HCM 2010 LOS		F

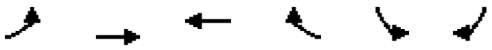
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	400	940	40	80	1170	710	1560	110	1570	110	170	190
Future Volume (vph)	400	940	40	80	1170	710	1560	110	1570	110	170	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5136	1599	3467	5136	1599	3467	1531	1493	1787	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5136	1599	3467	5136	1599	3467	1531	1493	1787	1881	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	1022	43	87	1272	772	1696	120	1707	120	185	207
RTOR Reduction (vph)	0	0	32	0	0	606	0	182	182	0	0	100
Lane Group Flow (vph)	435	1022	11	87	1272	166	1696	740	723	120	185	107
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	12.0	31.0	31.0	6.0	25.0	25.0	49.0	49.0	49.0	18.0	18.0	18.0
Effective Green, g (s)	12.0	31.0	31.0	6.0	25.0	25.0	49.0	49.0	49.0	18.0	18.0	18.0
Actuated g/C Ratio	0.10	0.26	0.26	0.05	0.21	0.21	0.41	0.41	0.41	0.15	0.15	0.15
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	346	1326	413	173	1070	333	1415	625	609	268	282	239
v/s Ratio Prot	c0.13	0.20		0.03	c0.25		c0.49	0.48		0.07	c0.10	
v/s Ratio Perm			0.01			0.10			0.48			0.07
v/c Ratio	1.26	0.77	0.03	0.50	1.19	0.50	1.20	1.18	1.19	0.45	0.66	0.45
Uniform Delay, d1	54.0	41.2	33.2	55.5	47.5	42.0	35.5	35.5	35.5	46.5	48.1	46.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	137.2	2.8	0.0	2.3	94.5	1.2	96.5	98.2	99.9	5.3	11.3	5.9
Delay (s)	191.2	44.0	33.3	57.8	142.0	43.2	132.0	133.7	135.4	51.8	59.4	52.4
Level of Service	F	D	C	E	F	D	F	F	F	D	E	D
Approach Delay (s/veh)		86.4			102.7			133.3			54.8	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	110.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



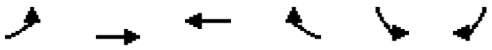
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Future Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Frt		0.99		1.00	1.00		1.00	0.86				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3567		1805	3610		1643	2953				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3567		1805	3610		1643	2953				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	978	67	191	2360	0	79	0	213	0	0	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	176	0	0	0	0
Lane Group Flow (vph)	0	1042	0	191	2360	0	71	45	0	0	0	0
Confl. Peds. (#/hr)			5	5								
Confl. Bikes (#/hr)			3									
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		49.1		14.9	68.0		16.0	16.0				
Effective Green, g (s)		49.1		14.9	68.0		16.0	16.0				
Actuated g/C Ratio		0.53		0.16	0.74		0.17	0.17				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1903		292	2668		285	513				
v/s Ratio Prot		0.29		0.11	c0.65		c0.04	0.02				
v/s Ratio Perm												
v/c Ratio		0.55		0.65	0.88		0.25	0.09				
Uniform Delay, d1		14.1		36.1	9.0		32.8	31.9				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.3		5.2	3.9		2.1	0.3				
Delay (s)		14.5		41.3	12.9		34.9	32.2				
Level of Service		B		D	B		C	C				
Approach Delay (s/veh)		14.5			15.1			32.9			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	92.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1890	1460	0	900	730
Future Volume (vph)	0	1890	1460	0	900	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5136	5136		1778	1519
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5136	5136		1778	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1969	1521	0	938	760
RTOR Reduction (vph)	0	0	0	0	2	2
Lane Group Flow (vph)	0	1969	1521	0	1012	682
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		45.0	45.0		67.0	67.0
Effective Green, g (s)		45.0	45.0		67.0	67.0
Actuated g/C Ratio		0.38	0.38		0.56	0.56
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1926	1926		992	848
v/s Ratio Prot		c0.38	0.30		c0.57	
v/s Ratio Perm						0.45
v/c Ratio		1.02	0.79		1.02	0.80
Uniform Delay, d1		37.5	33.3		26.5	21.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		26.4	2.2		33.8	8.0
Delay (s)		63.9	35.5		60.3	29.3
Level of Service		E	D		E	C
Approach Delay (s/veh)		63.9	35.5		47.8	
Approach LOS		E	D		D	

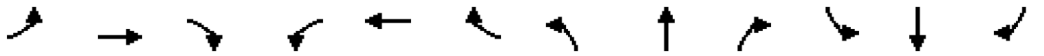
Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	1050	1320	0	190	610
Future Volume (vph)	0	1050	1320	0	190	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.91	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5136	5136		3250	1455
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5136	5136		3250	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1129	1419	0	204	656
RTOR Reduction (vph)	0	0	0	0	9	9
Lane Group Flow (vph)	0	1129	1419	0	523	319
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		38.4	38.4		55.2	55.2
Effective Green, g (s)		38.4	38.4		55.2	55.2
Actuated g/C Ratio		0.38	0.38		0.54	0.54
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1941	1941		1765	790
v/s Ratio Prot		0.22	c0.28		0.16	
v/s Ratio Perm						c0.22
v/c Ratio		0.58	0.73		0.30	0.40
Uniform Delay, d1		25.2	27.2		12.6	13.6
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.4	1.4		0.4	1.5
Delay (s)		25.6	28.6		13.1	15.1
Level of Service		C	C		B	B
Approach Delay (s/veh)		25.6	28.6		13.8	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	101.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Future Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.89	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3409	1436	1787	3574					1698	1511	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3409	1436	1787	3574					1698	1511	1519
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	912	253	1066	1527	0	0	0	0	253	77	747
RTOR Reduction (vph)	0	2	177	0	0	0	0	0	0	0	52	52
Lane Group Flow (vph)	0	935	51	1066	1527	0	0	0	0	228	379	366
Confl. Bikes (#/hr)			1			14						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Effective Green, g (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Actuated g/C Ratio		0.23	0.23	0.47	0.73					0.21	0.21	0.21
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		767	323	833	2591					353	314	316
v/s Ratio Prot		c0.27		c0.60	0.43							
v/s Ratio Perm			0.04							0.13	0.25	0.24
v/c Ratio		1.22	0.16	1.28	0.59					0.65	1.21	1.16
Uniform Delay, d1		46.5	37.4	32.0	7.9					43.5	47.5	47.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		110.5	0.2	135.1	0.3					8.8	119.0	100.4
Delay (s)		157.0	37.6	167.1	8.3					52.3	166.5	147.9
Level of Service		F	D	F	A					D	F	F
Approach Delay (s/veh)		133.6			73.6			0.0			135.1	
Approach LOS		F			E			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	101.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Future Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	1464	41	31	1216	0	165	31	103	134	10	258
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	17	2020	57	41	1455	0	379	71	398	301	22	287
Arrive On Green	0.01	0.39	0.39	0.02	0.41	0.00	0.25	0.25	0.25	0.18	0.18	0.18
Sat Flow, veh/h	1792	5126	144	1792	3668	0	1520	286	1595	1673	125	1594
Grp Volume(v), veh/h	10	978	527	31	1216	0	196	0	103	144	0	258
Grp Sat Flow(s),veh/h/ln	1792	1712	1845	1792	1787	0	1805	0	1595	1798	0	1594
Q Serve(g_s), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Cycle Q Clear(g_c), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Prop In Lane	1.00		0.08	1.00		0.00	0.84		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	17	1349	727	41	1455	0	450	0	398	324	0	287
V/C Ratio(X)	0.58	0.72	0.72	0.76	0.84	0.00	0.44	0.00	0.26	0.44	0.00	0.90
Avail Cap(c_a), veh/h	69	1709	921	103	1852	0	450	0	398	345	0	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	26.8	26.8	50.6	27.8	0.0	32.9	0.0	31.4	38.1	0.0	41.8
Incr Delay (d2), s/veh	27.0	1.1	2.1	24.7	2.8	0.0	3.0	0.0	1.6	1.0	0.0	26.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	12.2	13.3	1.2	16.3	0.0	5.1	0.0	2.6	3.8	0.0	9.4
LnGrp Delay(d), s/veh	78.4	27.9	28.9	75.3	30.6	0.0	36.0	0.0	32.9	39.0	0.0	68.3
LnGrp LOS	E	C	C	E	C		D		C	D		E
Approach Vol, veh/h		1515			1247			299			402	
Approach Delay, s/veh		28.6			31.7			34.9			57.8	
Approach LOS		C			C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.4	45.1		22.8	5.0	46.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	52.0		20.0	4.0	54.0
Max Q Clear Time (g_c+I1), s		11.5	3.8	27.2		18.5	2.6	33.9
Green Ext Time (p_c), s		1.2	0.0	11.2		0.3	0.0	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.6
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1140	0	0	1530	860	360
Future Volume (veh/h)	1140	0	0	1530	860	360
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863
Adj Flow Rate, veh/h	1239	0	0	1663	935	391
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1770	0	0	1770	1038	926
Arrive On Green	0.35	0.00	0.00	0.35	0.59	0.59
Sat Flow, veh/h	5421	0	0	5421	1774	1583
Grp Volume(v), veh/h	1239	0	0	1663	935	391
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1774	1583
Q Serve(g_s), s	25.1	0.0	0.0	37.9	55.3	16.3
Cycle Q Clear(g_c), s	25.1	0.0	0.0	37.9	55.3	16.3
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1770	0	0	1770	1038	926
V/C Ratio(X)	0.70	0.00	0.00	0.94	0.90	0.42
Avail Cap(c_a), veh/h	1785	0	0	1785	1038	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	0.0	37.8	21.8	13.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	10.2	12.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	0.0	0.0	19.4	30.3	7.4
LnGrp Delay(d), s/veh	34.8	0.0	0.0	48.0	34.1	15.1
LnGrp LOS	C			D	C	B
Approach Vol, veh/h	1239			1663	1326	
Approach Delay, s/veh	34.8			48.0	28.5	
Approach LOS	C			D	C	

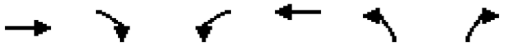
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		45.7				45.7
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		57.3		27.1				39.9
Green Ext Time (p_c), s		4.4		7.2				1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.0
HCM 2010 LOS	D



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑↑			↑↑↑↑	↰↰	↱
Traffic Volume (vph)	670	0	0	1670	1000	1100
Future Volume (vph)	670	0	0	1670	1000	1100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.95	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7544			6408	3332	1441
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7544			6408	3332	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	713	0	0	1777	1064	1170
RTOR Reduction (vph)	0	0	0	0	25	25
Lane Group Flow (vph)	713	0	0	1777	1507	677
Confl. Bikes (#/hr)		1				
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	39.6			39.6	72.0	72.0
Effective Green, g (s)	39.6			39.6	72.0	72.0
Actuated g/C Ratio	0.33			0.33	0.60	0.60
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2497			2121	2005	867
v/s Ratio Prot	0.09			c0.28	0.45	
v/s Ratio Perm						c0.47
v/c Ratio	0.29			0.84	0.75	0.78
Uniform Delay, d1	29.5			37.0	17.3	17.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			3.1	2.7	6.9
Delay (s)	29.6			40.1	20.0	24.8
Level of Service	C			D	B	C
Approach Delay (s/veh)	29.6			40.1	21.5	
Approach LOS	C			D	C	

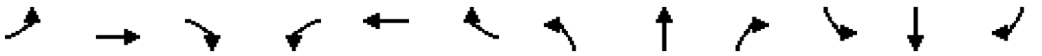
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	119.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	940	0	0	2000	230	470
Future Volume (vph)	940	0	0	2000	230	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.92	0.85
Flt Protected	1.00			1.00	0.98	1.00
Satd. Flow (prot)	3574			3574	3291	1455
Flt Permitted	1.00			1.00	0.98	1.00
Satd. Flow (perm)	3574			3574	3291	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1011	0	0	2151	247	505
RTOR Reduction (vph)	0	0	0	0	135	135
Lane Group Flow (vph)	1011	0	0	2151	365	117
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	76.2			76.2	25.3	25.3
Effective Green, g (s)	76.2			76.2	25.3	25.3
Actuated g/C Ratio	0.70			0.70	0.23	0.23
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2487			2487	760	336
v/s Ratio Prot	0.28			c0.60	c0.11	
v/s Ratio Perm						0.08
v/c Ratio	0.41			0.86	0.48	0.35
Uniform Delay, d1	7.1			12.7	36.4	35.2
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			3.4	2.2	2.9
Delay (s)	7.2			16.1	38.6	38.1
Level of Service	A			B	D	D
Approach Delay (s/veh)	7.2			16.1	38.4	
Approach LOS	A			B	D	

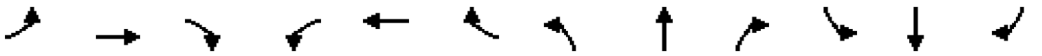
Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	109.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Future Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Frt	1.00	1.00			0.97		1.00		0.85			0.87
Flt Protected	0.95	1.00			1.00		0.95		1.00			1.00
Satd. Flow (prot)	1787	3574			4983		1787		1599			1627
Flt Permitted	0.09	1.00			1.00		0.95		1.00			1.00
Satd. Flow (perm)	175	3574			4983		1787		1599			1627
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	1165	0	0	1629	330	41	0	113	0	0	10
RTOR Reduction (vph)	0	0	0	0	28	0	0	0	85	0	0	10
Lane Group Flow (vph)	10	1165	0	0	1931	0	41	0	28	0	0	0
Confl. Peds. (#/hr)	3		17	17		3						
Confl. Bikes (#/hr)			22			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			6
Actuated Green, G (s)	43.0	43.0			43.0		18.7		18.7			0.8
Effective Green, g (s)	43.0	43.0			43.0		18.7		18.7			0.8
Actuated g/C Ratio	0.58	0.58			0.58		0.25		0.25			0.01
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	101	2062			2876		448		401			17
v/s Ratio Prot		0.33			c0.39		c0.02					
v/s Ratio Perm	0.06								0.02			c0.00
v/c Ratio	0.10	0.56			0.67		0.09		0.07			0.01
Uniform Delay, d1	7.1	9.9			10.9		21.4		21.3			36.5
Progression Factor	1.00	1.00			1.00		1.00		1.00			1.00
Incremental Delay, d2	0.4	0.4			0.6		0.4		0.3			0.1
Delay (s)	7.5	10.2			11.5		21.8		21.6			36.6
Level of Service	A	B			B		C		C			D
Approach Delay (s/veh)		10.2			11.5			21.7			36.6	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	720	540	80	830	580	710	580	170	1070	560	1590
Future Volume (vph)	350	720	540	80	830	580	710	580	170	1070	560	1590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1527	3433	5085	1562	3433	1863	1539	1770	1637	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1527	3433	5085	1562	3433	1863	1539	1770	1637	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	365	750	562	83	865	604	740	604	177	1115	583	1656
RTOR Reduction (vph)	0	0	404	0	0	518	0	0	89	0	30	24
Lane Group Flow (vph)	365	750	159	83	865	86	740	604	89	1115	1133	1052
Confl. Peds. (#/hr)			9	9					7	7		
Confl. Bikes (#/hr)			3			1			1			
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.0	22.0	22.0	4.0	17.0	17.0	30.0	30.0	30.0	48.0	48.0	57.0
Effective Green, g (s)	9.0	22.0	22.0	4.0	17.0	17.0	30.0	30.0	30.0	48.0	48.0	57.0
Actuated g/C Ratio	0.08	0.18	0.18	0.03	0.14	0.14	0.25	0.25	0.25	0.40	0.40	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	257	932	279	114	720	221	858	465	384	708	654	764
v/s Ratio Prot	c0.11	0.15		0.02	c0.17		0.22	c0.32		0.63	c0.69	c0.10
v/s Ratio Perm			0.10			0.05			0.06			0.60
v/c Ratio	1.42	0.80	0.57	0.73	1.20	0.39	0.86	1.30	0.23	1.57	1.73	1.38
Uniform Delay, d1	55.5	46.9	44.7	57.5	51.5	46.8	43.0	45.0	35.8	36.0	36.0	31.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	210.4	5.1	2.7	20.6	103.7	1.1	11.1	149.6	1.4	265.5	336.0	178.1
Delay (s)	265.9	52.1	47.3	78.0	155.2	47.9	54.2	194.6	37.2	301.5	372.0	209.6
Level of Service	F	D	D	E	F	D	D	F	D	F	F	F
Approach Delay (s/veh)		97.0			109.3			108.0			296.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	183.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	129.2%	ICU Level of Service	H
Analysis Period (min)	15		

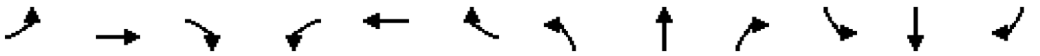
c Critical Lane Group



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	310	0	0	1330	0	0
Future Volume (vph)	310	0	0	1330	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.97		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3433			1529		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3433			1529		
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	352	0	0	1511	0	0
RTOR Reduction (vph)	0	0	0	227	0	0
Lane Group Flow (vph)	352	0	0	1284	0	0
Confl. Peds. (#/hr)	5			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	15.1			88.0		
Effective Green, g (s)	15.1			88.0		
Actuated g/C Ratio	0.14			0.79		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	466			1211		
v/s Ratio Prot	c0.10					
v/s Ratio Perm				c0.84		
v/c Ratio	0.76			1.06		
Uniform Delay, d1	46.2			11.5		
Progression Factor	1.00			1.00		
Incremental Delay, d2	6.8			43.5		
Delay (s)	53.1			55.0		
Level of Service	D			E		
Approach Delay (s/veh)	53.1		55.0			0.0
Approach LOS	D		E			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Future Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	77	1176	330	253	1341	11	396	33	264	22	44	165
RTOR Reduction (vph)	0	0	141	0	0	6	0	0	211	0	117	0
Lane Group Flow (vph)	77	1176	189	253	1341	5	214	215	53	22	92	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Confl. Bikes (#/hr)			3									1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Effective Green, g (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Actuated g/C Ratio	0.06	0.39	0.39	0.17	0.50	0.50	0.20	0.20	0.20	0.10	0.10	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	107	1374	603	303	1764	770	334	338	310	173	158	
v/s Ratio Prot	0.04	c0.33		c0.14	0.38		c0.13	0.13		0.01	c0.06	
v/s Ratio Perm			0.12			0.00			0.03			
v/c Ratio	0.72	0.86	0.31	0.83	0.76	0.01	0.64	0.64	0.17	0.13	0.58	
Uniform Delay, d1	51.4	31.2	23.8	44.7	22.6	14.1	41.0	40.9	37.0	46.0	48.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	20.6	5.5	0.3	17.7	2.0	0.0	9.1	8.8	1.2	0.3	5.3	
Delay (s)	72.0	36.7	24.1	62.4	24.5	14.1	50.1	49.8	38.2	46.3	53.4	
Level of Service	E	D	C	E	C	B	D	D	D	D	D	
Approach Delay (s/veh)		35.8			30.4			45.5			52.8	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	111.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Future Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
Arrive On Green	0.07	0.27	0.27	0.17	0.37	0.37	0.12	0.32	0.32	0.07	0.26	0.26
Sat Flow, veh/h	1774	5085	1538	1774	5085	1567	3442	3539	1544	1774	3539	1532
Grp Volume(v), veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Grp Sat Flow(s),veh/h/ln	1774	1695	1538	1774	1695	1567	1721	1770	1544	1774	1770	1532
Q Serve(g_s), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Cycle Q Clear(g_c), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
V/C Ratio(X)	0.78	0.73	0.24	0.86	0.49	0.20	0.78	0.35	0.66	0.78	0.40	0.39
Avail Cap(c_a), veh/h	235	1852	560	587	2862	985	684	1133	494	235	934	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	30.2	26.0	36.5	21.8	15.7	38.6	23.6	26.6	41.7	27.4	27.4
Incr Delay (d2), s/veh	10.6	1.0	0.3	6.9	0.2	0.1	3.2	0.8	6.8	10.6	1.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.7	2.0	6.8	5.9	2.1	4.1	3.9	8.0	2.6	4.0	3.5
LnGrp Delay(d), s/veh	52.3	31.2	26.3	43.4	22.0	15.8	41.8	24.4	33.3	52.3	28.7	30.2
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1191			1314			1045			618	
Approach Delay, s/veh		32.4			25.5			32.6			32.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	33.0	19.4	28.3	15.0	27.9	9.9	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	29.0	30.0	33.0	18.0	23.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	6.5	18.5	14.8	18.2	10.3	9.8	6.5	14.6
Green Ext Time (p_c), s	0.1	2.7	0.6	6.1	0.7	2.3	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Future Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1227	1863	1560	907	1863	1558	697	3539	1580	603	3539	1560
Grp Volume(v), veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Grp Sat Flow(s),veh/h/ln	1227	1863	1560	907	1863	1558	697	1770	1580	603	1770	1560
Q Serve(g_s), s	4.0	2.9	29.3	2.1	5.0	2.3	18.7	14.1	0.3	3.2	10.3	1.5
Cycle Q Clear(g_c), s	9.0	2.9	29.3	5.0	5.0	2.3	29.0	14.1	0.3	17.3	10.3	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
V/C Ratio(X)	0.15	0.12	0.92	0.07	0.20	0.10	0.42	0.40	0.01	0.09	0.32	0.06
Avail Cap(c_a), veh/h	444	661	553	362	661	553	445	2260	1009	373	2260	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	29.4	38.8	31.3	30.2	29.2	15.8	9.9	7.4	14.1	9.2	7.6
Incr Delay (d2), s/veh	0.2	0.1	18.9	0.1	0.2	0.1	2.9	0.5	0.0	0.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.5	14.9	0.5	2.6	1.0	3.9	7.0	0.1	0.6	5.1	0.7
LnGrp Delay(d), s/veh	33.8	29.5	57.7	31.4	30.3	29.3	18.7	10.5	7.4	14.6	9.6	7.7
LnGrp LOS	C	C	E	C	C	C	B	B	A	B	A	A
Approach Vol, veh/h		539			176			1110			802	
Approach Delay, s/veh		51.8			30.2			11.8			9.7	
Approach LOS		D			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		36.7		76.0		36.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		31.0		31.3		19.3		7.0
Green Ext Time (p_c), s		9.7		1.5		6.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Future Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	109	239	43	228	196	141	33	815	283	152	978	109
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	340	149	263	592	260	42	1254	435	183	2011	886
Arrive On Green	0.08	0.10	0.10	0.15	0.17	0.17	0.02	0.49	0.49	0.10	0.57	0.57
Sat Flow, veh/h	1757	3505	1533	1757	3505	1542	1757	2542	882	1757	3505	1545
Grp Volume(v), veh/h	109	239	43	228	196	141	33	561	537	152	978	109
Grp Sat Flow(s),veh/h/ln	1757	1752	1533	1757	1752	1542	1757	1752	1672	1757	1752	1545
Q Serve(g_s), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Cycle Q Clear(g_c), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	137	340	149	263	592	260	42	864	824	183	2011	886
V/C Ratio(X)	0.80	0.70	0.29	0.87	0.33	0.54	0.79	0.65	0.65	0.83	0.49	0.12
Avail Cap(c_a), veh/h	256	545	238	393	818	360	103	864	824	273	2011	886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	45.0	43.1	42.7	37.6	39.1	49.9	19.4	19.5	45.1	13.0	10.0
Incr Delay (d2), s/veh	10.0	2.6	1.1	12.6	0.3	1.8	27.3	3.8	4.0	12.4	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.4	1.2	7.3	2.5	3.8	1.2	12.8	12.2	4.9	8.4	1.5
LnGrp Delay(d), s/veh	56.6	47.6	44.2	55.3	37.9	40.8	77.3	23.2	23.4	57.5	13.8	10.3
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	B	B
Approach Vol, veh/h		391			565			1131			1239	
Approach Delay, s/veh		49.7			45.7			24.9			18.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	54.7	19.4	14.0	6.4	63.0	12.0	21.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	49.0	23.0	16.0	6.0	59.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	10.7	26.6	15.0	8.8	3.9	19.0	8.3	10.6
Green Ext Time (p_c), s	0.2	7.4	0.4	0.8	0.0	8.5	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Future Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	216	320	567	82	464	21	443	845	82	31	918	309
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	284	298	604	418	416	19	403	1620	706	39	894	391
Arrive On Green	0.16	0.16	0.16	0.23	0.23	0.23	0.22	0.45	0.45	0.02	0.25	0.25
Sat Flow, veh/h	1792	1881	1541	1792	1784	81	1792	3574	1559	1792	3574	1565
Grp Volume(v), veh/h	216	320	567	82	0	485	443	845	82	31	918	309
Grp Sat Flow(s),veh/h/ln	1792	1881	1541	1792	0	1864	1792	1787	1559	1792	1787	1565
Q Serve(g_s), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Cycle Q Clear(g_c), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	298	604	418	0	435	403	1620	706	39	894	391
V/C Ratio(X)	0.76	1.07	0.94	0.20	0.00	1.11	1.10	0.52	0.12	0.79	1.03	0.79
Avail Cap(c_a), veh/h	284	298	604	418	0	435	403	1620	706	90	894	391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	50.5	35.9	37.0	0.0	46.0	46.5	23.5	18.9	58.4	45.0	42.1
Incr Delay (d2), s/veh	11.5	73.3	22.7	0.2	0.0	78.2	74.3	1.2	0.3	28.9	37.3	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	15.9	21.9	2.2	0.0	23.8	21.6	10.2	1.6	1.3	19.4	11.1
LnGrp Delay(d), s/veh	59.8	123.8	58.6	37.2	0.0	124.2	120.8	24.7	19.3	87.3	82.3	57.0
LnGrp LOS	E	F	E	D		F	F	C	B	F	F	E
Approach Vol, veh/h		1103			567			1370			1258	
Approach Delay, s/veh		77.7			111.6			55.4			76.2	
Approach LOS		E			F			E			E	

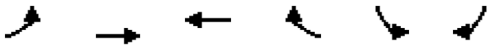
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	58.4		23.0	31.0	34.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	51.0		19.0	27.0	30.0		28.0
Max Q Clear Time (g_c+I1), s	4.1	22.3		21.0	29.0	32.0		30.0
Green Ext Time (p_c), s	0.0	6.8		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	74.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Future Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.94	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	264	1121	154	231	1813	231	374	1209	132	110	956	242
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1553	213	259	1737	513	430	1209	510	115	1272	365
Arrive On Green	0.15	0.35	0.35	0.15	0.34	0.34	0.12	0.34	0.34	0.03	0.25	0.25
Sat Flow, veh/h	1774	4490	616	1774	5085	1501	3442	3539	1493	3442	5085	1460
Grp Volume(v), veh/h	264	846	429	231	1813	231	374	1209	132	110	956	242
Grp Sat Flow(s),veh/h/ln	1774	1695	1717	1774	1695	1501	1721	1770	1493	1721	1695	1460
Q Serve(g_s), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Cycle Q Clear(g_c), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1172	594	259	1737	513	430	1209	510	115	1272	365
V/C Ratio(X)	0.99	0.72	0.72	0.89	1.04	0.45	0.87	1.00	0.26	0.96	0.75	0.66
Avail Cap(c_a), veh/h	266	1172	594	296	1737	513	459	1209	510	115	1272	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	34.2	34.2	50.3	39.5	30.7	51.6	39.5	28.5	57.9	41.5	40.4
Incr Delay (d2), s/veh	52.9	2.2	4.3	25.0	33.9	0.6	15.7	25.8	1.2	70.9	4.1	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	12.6	13.1	9.3	24.6	6.1	7.0	24.3	3.3	2.9	10.2	8.1
LnGrp Delay(d), s/veh	103.8	36.4	38.5	75.4	73.4	31.4	67.3	65.3	29.8	128.8	45.7	49.6
LnGrp LOS	F	D	D	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1539			2275			1715			1308	
Approach Delay, s/veh		48.6			69.3			63.0			53.4	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	45.0	21.5	45.5	19.0	34.0	22.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	41.0	20.0	39.0	16.0	29.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	5.8	43.0	17.3	28.2	14.8	22.8	19.8	43.0
Green Ext Time (p_c), s	0.0	0.0	0.2	5.9	0.2	3.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.0
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	1290	1280	410	400	270
Future Volume (veh/h)	390	1290	1280	410	400	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	411	1358	1347	432	421	284
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	451	3659	1618	516	733	337
Arrive On Green	0.25	0.71	0.42	0.42	0.21	0.21
Sat Flow, veh/h	1792	5305	4001	1222	3476	1599
Grp Volume(v), veh/h	411	1358	1203	576	421	284
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1630	1738	1599
Q Serve(g_s), s	23.2	10.8	32.6	33.0	11.3	17.8
Cycle Q Clear(g_c), s	23.2	10.8	32.6	33.0	11.3	17.8
Prop In Lane	1.00			0.75	1.00	1.00
Lane Grp Cap(c), veh/h	451	3659	1446	688	733	337
V/C Ratio(X)	0.91	0.37	0.83	0.84	0.57	0.84
Avail Cap(c_a), veh/h	653	4431	1575	750	733	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	5.9	26.8	26.9	37.0	39.5
Incr Delay (d2), s/veh	12.9	0.1	3.7	7.8	3.3	21.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	5.1	16.1	16.2	5.8	16.7
LnGrp Delay(d), s/veh	50.8	5.9	30.5	34.7	40.2	61.3
LnGrp LOS	D	A	C	C	D	E
Approach Vol, veh/h		1769	1779		705	
Approach Delay, s/veh		16.4	31.9		48.7	
Approach LOS		B	C		D	

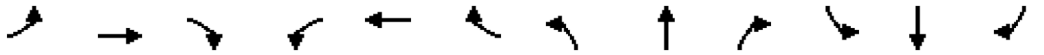
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				78.3		26.0	30.3	48.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	38.0	48.0
Max Q Clear Time (g_c+I1), s				12.8		19.8	25.2	35.0
Green Ext Time (p_c), s				13.5		0.7	1.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Future Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	77	1703	264	297	1505	44	209	55	286	77	198	110
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	99	1985	608	359	2227	65	364	765	648	468	459	255
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1792	5136	1573	3476	5124	150	1077	1881	1593	1043	1130	628
Grp Volume(v), veh/h	77	1703	264	297	1006	543	209	55	286	77	0	308
Grp Sat Flow(s),veh/h/ln	1792	1712	1573	1738	1712	1850	1077	1881	1593	1043	0	1757
Q Serve(g_s), s	4.9	35.2	14.3	9.7	27.2	27.2	20.0	2.1	15.0	5.6	0.0	14.6
Cycle Q Clear(g_c), s	4.9	35.2	14.3	9.7	27.2	27.2	34.6	2.1	15.0	7.7	0.0	14.6
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	99	1985	608	359	1488	804	364	765	648	468	0	714
V/C Ratio(X)	0.78	0.86	0.43	0.83	0.68	0.68	0.57	0.07	0.44	0.16	0.00	0.43
Avail Cap(c_a), veh/h	170	2088	640	421	1488	804	364	765	648	468	0	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.9	32.6	26.1	50.8	26.2	26.2	37.1	21.0	24.8	23.3	0.0	24.7
Incr Delay (d2), s/veh	12.5	3.7	0.5	11.4	1.2	2.3	6.4	0.2	2.2	0.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	17.2	6.3	5.2	13.1	14.4	6.6	1.1	7.0	1.7	0.0	7.5
LnGrp Delay(d), s/veh	66.4	36.2	26.6	62.2	27.4	28.4	43.6	21.2	27.0	24.1	0.0	26.6
LnGrp LOS	E	D	C	E	C	C	D	C	C	C		C
Approach Vol, veh/h		2044			1846			550			385	
Approach Delay, s/veh		36.1			33.3			32.7			26.1	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	15.9	48.7		51.0	10.4	54.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	14.0	47.0		47.0	11.0	50.0
Max Q Clear Time (g_c+I1), s		36.6	11.7	37.2		16.6	6.9	29.2
Green Ext Time (p_c), s		1.6	0.2	7.5		2.4	0.0	10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Future Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	202	1483	112	90	629	56	45	315	11	135	629	101
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	2162	946	171	2162	954	57	662	292	164	874	386
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.03	0.19	0.19	0.09	0.25	0.25
Sat Flow, veh/h	753	3539	1548	318	3539	1562	1774	3539	1560	1774	3539	1561
Grp Volume(v), veh/h	202	1483	112	90	629	56	45	315	11	135	629	101
Grp Sat Flow(s),veh/h/ln	753	1770	1548	318	1770	1562	1774	1770	1560	1774	1770	1561
Q Serve(g_s), s	19.0	30.7	3.3	28.9	9.2	1.6	2.8	8.7	0.6	8.2	17.8	5.7
Cycle Q Clear(g_c), s	28.1	30.7	3.3	59.6	9.2	1.6	2.8	8.7	0.6	8.2	17.8	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	2162	946	171	2162	954	57	662	292	164	874	386
V/C Ratio(X)	0.44	0.69	0.12	0.53	0.29	0.06	0.78	0.48	0.04	0.83	0.72	0.26
Avail Cap(c_a), veh/h	526	2460	1076	198	2460	1086	81	662	292	211	874	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	14.2	8.9	34.2	10.1	8.6	52.5	39.6	36.4	48.8	37.7	33.1
Incr Delay (d2), s/veh	0.6	0.7	0.1	2.5	0.1	0.0	26.7	2.4	0.2	18.3	5.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	15.0	1.4	2.6	4.5	0.7	1.8	4.5	0.3	4.8	9.3	2.6
LnGrp Delay(d), s/veh	17.4	14.9	9.0	36.7	10.1	8.6	79.3	42.1	36.6	67.1	42.8	34.8
LnGrp LOS	B	B	A	D	B	A	E	D	D	E	D	C
Approach Vol, veh/h		1797			775			371			865	
Approach Delay, s/veh		14.8			13.1			46.4			45.6	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.1	24.5		70.8	7.5	31.0		70.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	19.0		76.0	5.0	27.0		76.0
Max Q Clear Time (g_c+I1), s	10.2	10.7		32.7	4.8	19.8		61.6
Green Ext Time (p_c), s	0.1	1.1		19.1	0.0	2.4		5.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		24.6
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Future Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	0	854	202	607	1000	0	326	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	72	1911	452	356	2395	0	441	0	400	0	2	0
Arrive On Green	0.00	0.67	0.67	0.67	0.67	0.00	0.25	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	567	2852	674	537	3668	0	1764	0	1599	0	1881	0
Grp Volume(v), veh/h	0	535	521	607	1000	0	326	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	567	1787	1739	537	1787	0	1764	0	1599	0	1881	0
Q Serve(g_s), s	0.0	14.1	14.1	52.9	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.1	14.1	67.0	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.39	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1197	1165	356	2395	0	441	0	400	0	2	0
V/C Ratio(X)	0.00	0.45	0.45	1.70	0.42	0.00	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1197	1165	356	2395	0	441	0	400	0	301	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.8	7.8	28.9	7.6	0.0	34.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	328.6	0.1	0.0	10.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.9	6.7	42.3	6.3	0.0	9.5	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	8.0	8.0	357.5	7.7	0.0	45.1	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	F	A		D					
Approach Vol, veh/h		1056			1607			326			0	
Approach Delay, s/veh		8.0			139.8			45.1			0.0	
Approach LOS		A			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		71.0		0.0		71.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		67.0		16.0		67.0
Max Q Clear Time (g_c+I1), s		19.0		16.1		0.0		69.0
Green Ext Time (p_c), s		0.9		8.3		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	82.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Future Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	206	990	124	299	1371	258	206	598	412	144	567	186
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	1306	163	328	1281	541	234	611	507	134	708	231
Arrive On Green	0.11	0.28	0.28	0.18	0.36	0.36	0.13	0.32	0.32	0.08	0.27	0.27
Sat Flow, veh/h	1792	4602	575	1792	3574	1510	1792	1881	1559	1792	2627	859
Grp Volume(v), veh/h	206	736	378	299	1371	258	206	598	412	144	385	368
Grp Sat Flow(s),veh/h/ln	1792	1712	1754	1792	1787	1510	1792	1881	1559	1792	1787	1698
Q Serve(g_s), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Cycle Q Clear(g_c), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	194	972	498	328	1281	541	234	611	507	134	481	458
V/C Ratio(X)	1.06	0.76	0.76	0.91	1.07	0.48	0.88	0.98	0.81	1.07	0.80	0.80
Avail Cap(c_a), veh/h	194	972	498	373	1281	541	269	611	507	134	481	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.2	39.2	48.1	38.5	29.8	51.2	40.1	37.2	55.5	40.8	40.9
Incr Delay (d2), s/veh	81.8	3.5	6.7	24.4	46.3	0.7	24.7	31.4	13.3	98.1	13.1	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	11.6	12.4	11.9	29.4	6.7	8.3	24.9	14.4	8.1	13.6	13.1
LnGrp Delay(d), s/veh	135.3	42.7	46.0	72.5	84.8	30.4	75.9	71.5	50.5	153.6	53.9	54.8
LnGrp LOS	F	D	D	E	F	C	E	E	D	F	D	D
Approach Vol, veh/h		1320			1928			1216			897	
Approach Delay, s/veh		58.1			75.6			65.1			70.3	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	43.0	25.9	38.1	19.7	36.3	17.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.0	25.0	31.0	18.0	30.0	13.0	43.0
Max Q Clear Time (g_c+I1), s	11.0	39.7	21.6	25.6	15.6	26.2	15.0	45.0
Green Ext Time (p_c), s	0.0	0.0	0.3	3.1	0.1	1.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Future Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1425	345	253	1448	0	460	161	241			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2099	642	344	2832	0	1255	1236	577			
Arrive On Green	0.00	0.41	0.41	0.10	0.55	0.00	0.36	0.36	0.36			
Sat Flow, veh/h	0	5305	1572	3476	5305	0	3476	3424	1599			
Grp Volume(v), veh/h	0	1425	345	253	1448	0	460	161	241			
Grp Sat Flow(s),veh/h/ln	0	1712	1572	1738	1712	0	1738	1712	1599			
Q Serve(g_s), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Cycle Q Clear(g_c), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2099	642	344	2832	0	1255	1236	577			
V/C Ratio(X)	0.00	0.68	0.54	0.74	0.51	0.00	0.37	0.13	0.42			
Avail Cap(c_a), veh/h	0	3147	963	723	4439	0	1255	1236	577			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	22.1	20.5	40.0	12.8	0.0	21.5	19.6	22.0			
Incr Delay (d2), s/veh	0.0	0.4	0.7	3.1	0.1	0.0	0.8	0.2	2.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	9.8	6.7	3.2	7.5	0.0	4.4	1.4	4.9			
LnGrp Delay(d), s/veh	0.0	22.5	21.2	43.1	13.0	0.0	22.3	19.8	24.2			
LnGrp LOS		C	C	D	B		C	B	C			
Approach Vol, veh/h		1770			1701			862				
Approach Delay, s/veh		22.2			17.4			22.4				
Approach LOS		C			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	41.3		37.0		54.4
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			19.0	56.0		33.0		79.0
Max Q Clear Time (g_c+I1), s			8.5	22.8		12.4		18.1
Green Ext Time (p_c), s			0.6	14.6		4.1		14.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	1450	100	310	1120	130	170	1260	830	190	1540	450
Future Volume (veh/h)	420	1450	100	310	1120	130	170	1260	830	190	1540	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	457	1576	109	337	1217	141	185	1370	902	207	1674	489
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	515	1626	574	377	1422	419	203	1883	1264	261	1969	807
Arrive On Green	0.15	0.32	0.32	0.11	0.28	0.28	0.06	0.37	0.37	0.08	0.38	0.38
Sat Flow, veh/h	3476	5136	1518	3476	5136	1513	3476	5136	2616	3476	5136	1488
Grp Volume(v), veh/h	457	1576	109	337	1217	141	185	1370	902	207	1674	489
Grp Sat Flow(s),veh/h/ln	1738	1712	1518	1738	1712	1513	1738	1712	1308	1738	1712	1488
Q Serve(g_s), s	15.5	36.3	5.8	11.5	26.9	8.9	6.4	27.6	33.1	7.0	35.8	27.5
Cycle Q Clear(g_c), s	15.5	36.3	5.8	11.5	26.9	8.9	6.4	27.6	33.1	7.0	35.8	27.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	1626	574	377	1422	419	203	1883	1264	261	1969	807
V/C Ratio(X)	0.89	0.97	0.19	0.89	0.86	0.34	0.91	0.73	0.71	0.79	0.85	0.61
Avail Cap(c_a), veh/h	550	1626	574	377	1422	419	203	1883	1264	261	1969	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	40.4	25.3	52.8	41.1	34.6	56.2	32.8	25.2	54.6	33.9	19.6
Incr Delay (d2), s/veh	15.5	15.6	0.2	22.9	5.4	0.5	39.7	2.5	3.5	15.5	4.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	19.4	2.4	6.7	13.4	3.8	4.2	13.5	12.5	3.9	17.8	12.1
LnGrp Delay(d), s/veh	65.7	56.0	25.4	75.7	46.5	35.1	95.9	35.3	28.7	70.0	38.7	23.0
LnGrp LOS	E	E	C	E	D	D	F	D	C	E	D	C
Approach Vol, veh/h		2142			1695			2457			2370	
Approach Delay, s/veh		56.5			51.4			37.5			38.2	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	48.0	17.0	42.0	11.0	50.0	21.8	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	44.0	13.0	38.0	7.0	46.0	19.0	32.0
Max Q Clear Time (g_c+I1), s	9.0	35.1	13.5	38.3	8.4	37.8	17.5	28.9
Green Ext Time (p_c), s	0.0	7.2	0.0	0.0	0.0	6.7	0.3	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Future Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	506	1333	0	0	1586	816				218	897	23
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	521	3552	0	0	2611	802				235	1043	27
Arrive On Green	0.15	0.69	0.00	0.00	0.51	0.51				0.24	0.24	0.24
Sat Flow, veh/h	3476	5305	0	0	5305	1578				973	4318	113
Grp Volume(v), veh/h	506	1333	0	0	1586	816				411	349	379
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1578				1833	1712	1859
Q Serve(g_s), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Cycle Q Clear(g_c), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Prop In Lane	1.00		0.00	0.00		1.00				0.53		0.06
Lane Grp Cap(c), veh/h	521	3552	0	0	2611	802				443	414	449
V/C Ratio(X)	0.97	0.38	0.00	0.00	0.61	1.02				0.93	0.84	0.84
Avail Cap(c_a), veh/h	521	3552	0	0	2611	802				443	414	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	7.7	0.0	0.0	21.0	29.5				44.5	43.3	43.3
Incr Delay (d2), s/veh	31.9	0.1	0.0	0.0	0.4	36.3				27.9	18.5	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	6.1	0.0	0.0	12.4	34.4				16.7	13.2	14.2
LnGrp Delay(d), s/veh	82.6	7.8	0.0	0.0	21.4	65.8				72.4	61.8	60.6
LnGrp LOS	F	A			C	F				E	E	E
Approach Vol, veh/h		1839			2402						1138	
Approach Delay, s/veh		28.4			36.5						65.2	
Approach LOS		C			D						E	

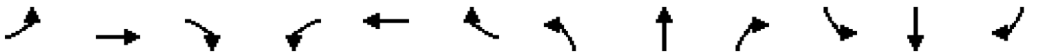
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.0		87.0			22.0	65.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		29.0		83.0			18.0	61.0
Max Q Clear Time (g_c+I1), s		28.3		15.0			19.4	63.0
Green Ext Time (p_c), s		0.5		13.0			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Future Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	93	1330	72	165	1598	72	155	41	505	175	93	93
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	119	2056	111	240	2135	639	388	408	777	244	243	206
Arrive On Green	0.07	0.41	0.41	0.07	0.42	0.42	0.22	0.22	0.22	0.14	0.14	0.14
Sat Flow, veh/h	1792	4976	269	3476	5136	1538	1792	1881	2690	1792	1787	1518
Grp Volume(v), veh/h	93	915	487	165	1598	72	155	41	505	175	93	93
Grp Sat Flow(s),veh/h/ln	1792	1712	1821	1738	1712	1538	1792	1881	1345	1792	1787	1518
Q Serve(g_s), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Cycle Q Clear(g_c), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	1415	752	240	2135	639	388	408	777	244	243	206
V/C Ratio(X)	0.78	0.65	0.65	0.69	0.75	0.11	0.40	0.10	0.65	0.72	0.38	0.45
Avail Cap(c_a), veh/h	222	1696	902	502	2649	793	388	408	777	388	387	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	22.8	22.8	44.1	24.0	17.4	32.6	30.4	30.4	40.1	38.2	38.5
Incr Delay (d2), s/veh	10.4	0.6	1.2	3.5	0.9	0.1	3.0	0.5	4.2	3.9	1.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.9	10.7	2.3	12.2	1.2	3.9	0.9	6.4	4.7	2.3	2.4
LnGrp Delay(d), s/veh	55.0	23.4	24.0	47.6	25.0	17.4	35.6	30.9	34.6	44.0	39.1	40.1
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	D	D
Approach Vol, veh/h		1495			1835			701			361	
Approach Delay, s/veh		25.6			26.7			34.6			41.8	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.0	10.7	44.0		17.2	10.5	44.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	14.0	48.0		21.0	12.0	50.0
Max Q Clear Time (g_c+I1), s		18.0	6.5	22.8		11.1	7.0	27.6
Green Ext Time (p_c), s		0.9	0.3	10.8		1.1	0.1	12.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.8
HCM 2010 LOS	C

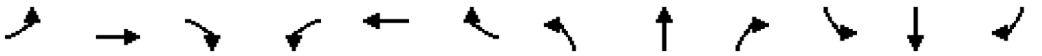


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	290	240	0	0	0	0	1680	70	0	2470	0
Future Volume (vph)	60	290	240	0	0	0	0	1680	70	0	2470	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1785	2814					7560			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1785	2814					7560			6471	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	322	267	0	0	0	0	1867	78	0	2744	0
RTOR Reduction (vph)	0	0	7	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	60	329	260	0	0	0	0	1940	0	0	2744	0
Confl. Peds. (#/hr)							5		6	6		5
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	25.7	25.7	25.7					73.3			73.3	
Effective Green, g (s)	25.7	25.7	25.7					73.3			73.3	
Actuated g/C Ratio	0.24	0.24	0.24					0.69			0.69	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	407	428	675					5178			4432	
v/s Ratio Prot	0.04	c0.18						0.26			c0.42	
v/s Ratio Perm			0.09									
v/c Ratio	0.15	0.77	0.39					0.37			0.62	
Uniform Delay, d1	32.0	37.9	34.0					7.1			9.2	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.2	8.1	0.4					0.2			0.7	
Delay (s)	32.2	46.0	34.4					7.3			9.9	
Level of Service	C	D	C					A			A	
Approach Delay (s/veh)		40.0			0.0			7.3			9.9	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Future Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.96	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5772	1236	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5772	1236	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1429	1071	214	1296	0	449	0	61	357	0	31
RTOR Reduction (vph)	0	58	256	0	0	0	0	0	45	0	0	23
Lane Group Flow (vph)	0	1907	279	214	1296	0	449	0	16	357	0	8
Confl. Peds. (#/hr)	2		16	16		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Effective Green, g (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Actuated g/C Ratio		0.52	0.52	0.11	0.66		0.27		0.27	0.27		0.27
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		3006	643	365	3398		927		427	927		427
v/s Ratio Prot		c0.33		c0.06	0.25							
v/s Ratio Perm			0.23				c0.13		0.01	0.10		0.01
v/c Ratio		0.63	0.43	0.59	0.38		0.48		0.04	0.39		0.02
Uniform Delay, d1		19.4	16.7	48.2	8.6		34.8		30.6	33.8		30.4
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.4	0.5	2.4	0.1		1.8		0.2	1.2		0.1
Delay (s)		19.8	17.2	50.6	8.7		36.6		30.8	35.0		30.5
Level of Service		B	B	D	A		D		C	C		C
Approach Delay (s/veh)		19.2			14.6			35.9			34.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	112.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	100	1030	670	230	1390	0	40	2690	30
Future Volume (vph)	0	0	0	100	1030	670	230	1390	0	40	2690	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3422	2814	3467	6471		1787	6471	1567
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3422	2814	3467	6471		1787	6471	1567
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	112	1157	753	258	1562	0	45	3022	34
RTOR Reduction (vph)	0	0	0	0	0	167	0	0	0	0	0	18
Lane Group Flow (vph)	0	0	0	101	1168	586	258	1562	0	45	3022	16
Confl. Peds. (#/hr)							3		5	5		3
Confl. Bikes (#/hr)									4			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				42.0	42.0	42.0	9.0	60.6		6.2	57.8	57.8
Effective Green, g (s)				42.0	42.0	42.0	9.0	60.6		6.2	57.8	57.8
Actuated g/C Ratio				0.35	0.35	0.35	0.07	0.50		0.05	0.48	0.48
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				565	1189	978	258	3246		91	3096	749
v/s Ratio Prot				0.06	c0.34		c0.07	c0.24		0.03	c0.47	
v/s Ratio Perm						0.21						0.01
v/c Ratio				0.18	0.98	0.60	1.00	0.48		0.49	0.98	0.02
Uniform Delay, d1				27.4	39.0	32.5	55.9	19.8		55.8	30.8	16.6
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.2	21.8	1.0	56.0	0.5		4.2	11.5	0.1
Delay (s)				27.6	60.8	33.5	111.9	20.3		60.0	42.3	16.7
Level of Service				C	E	C	F	C		E	D	B
Approach Delay (s/veh)		0.0			49.0			33.3			42.3	
Approach LOS		A			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	210	1620	1780	360	60	180
Future Volume (veh/h)	210	1620	1780	360	60	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	221	1705	1874	379	63	189
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	261	4447	2708	546	411	367
Arrive On Green	0.15	0.69	0.50	0.50	0.23	0.23
Sat Flow, veh/h	1792	6735	5683	1093	1792	1599
Grp Volume(v), veh/h	221	1705	1678	575	63	189
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1659	1792	1599
Q Serve(g_s), s	11.5	10.7	25.4	25.5	2.7	9.9
Cycle Q Clear(g_c), s	11.5	10.7	25.4	25.5	2.7	9.9
Prop In Lane	1.00			0.66	1.00	1.00
Lane Grp Cap(c), veh/h	261	4447	2425	829	411	367
V/C Ratio(X)	0.85	0.38	0.69	0.69	0.15	0.52
Avail Cap(c_a), veh/h	523	6073	2935	1003	411	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	6.4	18.3	18.4	29.5	32.3
Incr Delay (d2), s/veh	7.4	0.1	0.5	1.6	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	4.8	11.3	11.9	1.4	9.4
LnGrp Delay(d), s/veh	47.3	6.4	18.9	20.0	30.3	37.4
LnGrp LOS	D	A	B	B	C	D
Approach Vol, veh/h		1926	2253		252	
Approach Delay, s/veh		11.1	19.2		35.6	
Approach LOS		B	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				69.9		26.0	18.0	51.9
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	28.0	58.0
Max Q Clear Time (g_c+I1), s				12.7		11.9	13.5	27.5
Green Ext Time (p_c), s				20.7		0.6	0.5	20.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.6
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	SBR	NWL2	NWR
Lane Configurations											
Traffic Volume (vph)	180	10	20	440	80	10	350	40	150	10	10
Future Volume (vph)	180	10	20	440	80	10	350	40	150	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.98		1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1671	1495	1671	2632	3280		1671	2946		1671	1495
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1671	1495	1671	2632	3280		1671	2946		1671	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	11	22	478	87	11	380	43	163	11	11
RTOR Reduction (vph)	0	9	0	0	0	0	0	64	0	0	0
Lane Group Flow (vph)	196	2	22	478	98	0	380	142	0	11	11
Confl. Peds. (#/hr)			12			2					
Confl. Bikes (#/hr)						1					
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA		Prot	Prot
Protected Phases	4	4	8	1	2		1	6		7	7
Permitted Phases				8							
Actuated Green, G (s)	14.8	14.8	2.7	27.2	26.9		24.5	55.4		2.4	2.4
Effective Green, g (s)	14.8	14.8	2.7	27.2	26.9		24.5	55.4		2.4	2.4
Actuated g/C Ratio	0.16	0.16	0.03	0.30	0.29		0.27	0.61		0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	270	242	49	899	966		448	1787		43	39
v/s Ratio Prot	c0.12	0.00	0.01	c0.14	c0.03		c0.23	0.05		0.01	c0.01
v/s Ratio Perm				0.04							
v/c Ratio	0.73	0.01	0.45	0.53	0.10		0.85	0.08		0.26	0.28
Uniform Delay, d1	36.3	32.1	43.6	26.7	23.4		31.6	7.4		43.6	43.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	9.3	0.0	6.4	0.6	0.2		13.9	0.1		3.1	3.9
Delay (s)	45.6	32.1	50.0	27.3	23.6		45.5	7.5		46.7	47.5
Level of Service	D	C	D	C	C		D	A		D	D
Approach Delay (s/veh)					23.6			32.2			
Approach LOS					C			C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	0	0	0	0	0	0	90	0	20	20	10
Future Volume (veh/h)	10	0	0	0	0	0	0	90	0	20	20	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	0	1712				0	1712	0	1712	1712	1900
Adj Flow Rate, veh/h	11	0	0				0	99	0	22	22	11
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	0	11				0	11	0	11	11	11
Cap, veh/h	17	0	15				0	2747	0	30	1955	906
Arrive On Green	0.01	0.00	0.00				0.00	0.84	0.00	0.02	0.91	0.91
Sat Flow, veh/h	1630	0	1455				0	3423	0	1630	2159	1001
Grp Volume(v), veh/h	11	0	0				0	99	0	22	16	17
Grp Sat Flow(s),veh/h/ln	1630	0	1455				0	1626	0	1630	1626	1534
Q Serve(g_s), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.1	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.65
Lane Grp Cap(c), veh/h	17	0	15				0	2747	0	30	1472	1389
V/C Ratio(X)	0.64	0.00	0.00				0.00	0.04	0.00	0.73	0.01	0.01
Avail Cap(c_a), veh/h	446	0	398				0	2747	0	635	1472	1389
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	0.0	0.0				0.0	1.2	0.0	46.4	0.4	0.4
Incr Delay (d2), s/veh	32.8	0.0	0.0				0.0	0.0	0.0	28.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0				0.0	0.2	0.0	0.8	0.0	0.0
LnGrp Delay(d), s/veh	79.6	0.0	0.0				0.0	1.2	0.0	74.4	0.4	0.4
LnGrp LOS	E							A		E	A	A
Approach Vol, veh/h		11						99			55	
Approach Delay, s/veh		79.6						1.2			30.0	
Approach LOS		E						A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.8	84.2		5.0		90.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	37.0	45.0		26.0		86.0		
Max Q Clear Time (g_c+I1), s	3.3	2.5		2.6		2.1		
Green Ext Time (p_c), s	0.0	0.6		0.0		0.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	10	110	0	10	30
Future Vol, veh/h	0	10	110	0	10	30
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	124	0	11	34

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	164	62	0	0	124	0
Stage 1	124	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	811	990	-	-	1461	-
Stage 1	888	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	804	990	-	-	1461	-
Mov Cap-2 Maneuver	804	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	968	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.7	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	990	1461	-
HCM Lane V/C Ratio	-	-	0.011	0.008	-
HCM Control Delay (s/veh)	-	-	8.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1090	30	0	1410	0	20
Future Vol, veh/h	1090	30	0	1410	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1160	32	0	1500	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	580
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	392
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	392
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	392	-	-	-
HCM Lane V/C Ratio	0.054	-	-	-
HCM Control Delay (s/veh)	14.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	870	440	250	1990	180	670	1110	400	150	830	310
Future Volume (veh/h)	320	870	440	250	1990	180	670	1110	400	150	830	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	333	906	458	260	2073	188	698	1156	417	156	865	323
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	2067	613	322	1931	173	660	1554	468	210	890	261
Arrive On Green	0.09	0.41	0.41	0.09	0.41	0.41	0.19	0.31	0.31	0.06	0.17	0.17
Sat Flow, veh/h	3442	5085	1509	3442	4730	424	3442	5085	1532	3442	5085	1490
Grp Volume(v), veh/h	333	906	458	260	1479	782	698	1156	417	156	865	323
Grp Sat Flow(s),veh/h/ln	1721	1695	1509	1721	1695	1764	1721	1695	1532	1721	1695	1490
Q Serve(g_s), s	11.0	15.4	31.0	8.9	49.0	49.0	23.0	24.5	31.2	5.3	20.3	21.0
Cycle Q Clear(g_c), s	11.0	15.4	31.0	8.9	49.0	49.0	23.0	24.5	31.2	5.3	20.3	21.0
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	2067	613	322	1384	720	660	1554	468	210	890	261
V/C Ratio(X)	1.06	0.44	0.75	0.81	1.07	1.09	1.06	0.74	0.89	0.74	0.97	1.24
Avail Cap(c_a), veh/h	315	2067	613	430	1384	720	660	1554	468	229	890	261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	25.7	30.3	53.3	35.5	35.5	48.5	37.5	39.8	55.4	49.2	49.5
Incr Delay (d2), s/veh	66.0	0.1	5.0	8.2	44.8	59.2	51.4	3.3	21.7	11.1	24.1	135.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	7.2	13.7	4.6	31.5	35.7	15.6	11.9	16.0	2.9	11.5	18.5
LnGrp Delay(d), s/veh	120.5	25.9	35.3	61.5	80.3	94.7	99.9	40.7	61.5	66.5	73.3	185.4
LnGrp LOS	F	C	D	E	F	F	F	D	E	E	E	F
Approach Vol, veh/h		1697			2521			2271			1344	
Approach Delay, s/veh		47.0			82.8			62.7			99.5	
Approach LOS		D			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	40.7	15.2	52.8	27.0	25.0	15.0	53.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	36.0	15.0	45.0	23.0	21.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	7.3	33.2	10.9	33.0	25.0	23.0	13.0	51.0
Green Ext Time (p_c), s	0.0	2.2	0.3	6.0	0.0	0.0	0.0	0.0

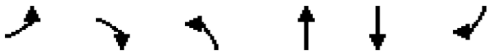
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.1
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	810	1310	0	60	1440
Future Volume (vph)	40	810	1310	0	60	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.86	0.85	1.00		1.00	1.00
Flt Protected	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3107	1441	5085		1770	6408
Flt Permitted	1.00	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3107	1441	5085		1770	6408
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	42	844	1365	0	62	1500
RTOR Reduction (vph)	158	158	0	0	0	0
Lane Group Flow (vph)	306	264	1365	0	63	1500
Confl. Peds. (#/hr)				13	13	
Confl. Bikes (#/hr)				4		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	22.6	22.6	55.4		7.2	66.6
Effective Green, g (s)	22.6	22.6	55.4		7.2	66.6
Actuated g/C Ratio	0.23	0.23	0.57		0.07	0.69
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	722	335	2898		131	4390
v/s Ratio Prot	0.10		c0.27		c0.04	0.23
v/s Ratio Perm		c0.18				
v/c Ratio	0.42	0.79	0.47		0.48	0.34
Uniform Delay, d1	31.8	35.0	12.3		43.2	6.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	11.6	0.6		2.8	0.2
Delay (s)	32.2	46.6	12.8		46.0	6.5
Level of Service	C	D	B		D	A
Approach Delay (s/veh)	39.1		12.8			8.1
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	97.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	270	270	70	1510	700	0
Future Volume (veh/h)	270	270	70	1510	700	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	290	290	75	1624	753	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	726	334	97	4530	3132	0
Arrive On Green	0.21	0.21	0.06	0.71	0.62	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	290	290	75	1624	753	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	8.0	19.5	4.6	10.8	7.3	0.0
Cycle Q Clear(g_c), s	8.0	19.5	4.6	10.8	7.3	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	726	334	97	4530	3132	0
V/C Ratio(X)	0.40	0.87	0.77	0.36	0.24	0.00
Avail Cap(c_a), veh/h	1061	488	386	4530	3132	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	41.5	50.9	6.0	9.2	0.0
Incr Delay (d2), s/veh	0.4	11.0	12.1	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	16.7	2.6	4.7	3.4	0.0
LnGrp Delay(d), s/veh	37.3	52.5	63.0	6.2	9.4	0.0
LnGrp LOS	D	D	E	A	A	
Approach Vol, veh/h	580			1699	753	
Approach Delay, s/veh	44.9			8.7	9.4	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		82.0		27.3	10.0	72.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		78.0		34.0	24.0	50.0		
Max Q Clear Time (g_c+I1), s		12.8		21.5	6.6	9.3		
Green Ext Time (p_c), s		19.5		1.7	0.1	5.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1050	80	310	1750	140	160	780	370	120	730	190
Future Volume (veh/h)	180	1050	80	310	1750	140	160	780	370	120	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	194	1129	86	333	1882	151	172	839	398	129	785	204
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	248	1824	499	398	2045	566	230	1693	442	172	1608	422
Arrive On Green	0.07	0.36	0.36	0.12	0.41	0.41	0.07	0.34	0.34	0.05	0.32	0.32
Sat Flow, veh/h	3408	5036	1376	3408	5036	1393	3408	5036	1314	3408	5036	1321
Grp Volume(v), veh/h	194	1129	86	333	1882	151	172	839	398	129	785	204
Grp Sat Flow(s),veh/h/ln	1704	1679	1376	1704	1679	1393	1704	1679	1314	1704	1679	1321
Q Serve(g_s), s	6.7	21.9	5.1	11.4	42.2	8.6	5.9	15.8	34.3	4.4	15.0	14.8
Cycle Q Clear(g_c), s	6.7	21.9	5.1	11.4	42.2	8.6	5.9	15.8	34.3	4.4	15.0	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1824	499	398	2045	566	230	1693	442	172	1608	422
V/C Ratio(X)	0.78	0.62	0.17	0.84	0.92	0.27	0.75	0.50	0.90	0.75	0.49	0.48
Avail Cap(c_a), veh/h	258	1824	499	516	2074	574	315	1693	442	172	1608	422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	31.2	25.8	51.4	33.5	23.5	54.5	31.5	37.6	55.8	32.7	32.6
Incr Delay (d2), s/veh	13.9	0.6	0.2	9.2	7.2	0.3	6.4	1.0	24.1	16.7	1.1	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	10.2	1.9	5.9	20.9	3.3	3.0	7.5	15.3	2.5	7.1	5.8
LnGrp Delay(d), s/veh	68.1	31.8	26.0	60.7	40.7	23.8	60.9	32.5	61.7	72.5	33.7	36.5
LnGrp LOS	E	C	C	E	D	C	E	C	E	E	C	D
Approach Vol, veh/h		1409			2366			1409			1118	
Approach Delay, s/veh		36.5			42.5			44.2			38.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	44.0	17.9	47.1	12.0	42.0	12.7	52.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	40.0	18.0	40.0	11.0	35.0	9.0	49.0
Max Q Clear Time (g_c+I1), s	6.4	36.3	13.4	23.9	7.9	17.0	8.7	44.2
Green Ext Time (p_c), s	0.0	2.3	0.5	7.2	0.1	5.9	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Future Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	62	115	583	52	250	62	1208	906	375	1146	31
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	262	487	521	838	699	80	1356	409	325	2059	56
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.04	0.27	0.27	0.18	0.41	0.41
Sat Flow, veh/h	1069	583	1081	1200	1863	1554	1774	5085	1533	1774	5084	137
Grp Volume(v), veh/h	31	0	177	583	52	250	62	1208	906	375	764	413
Grp Sat Flow(s),veh/h/ln	1069	0	1664	1200	1863	1554	1774	1695	1533	1774	1695	1831
Q Serve(g_s), s	2.0	0.0	7.9	46.1	1.9	12.7	4.2	27.4	32.0	22.0	20.8	20.8
Cycle Q Clear(g_c), s	3.9	0.0	7.9	54.0	1.9	12.7	4.2	27.4	32.0	22.0	20.8	20.8
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	524	0	749	521	838	699	80	1356	409	325	1373	742
V/C Ratio(X)	0.06	0.00	0.24	1.12	0.06	0.36	0.78	0.89	2.22	1.15	0.56	0.56
Avail Cap(c_a), veh/h	524	0	749	521	838	699	133	1356	409	325	1373	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	20.3	39.6	18.7	21.6	56.7	42.3	44.0	49.0	27.4	27.4
Incr Delay (d2), s/veh	0.0	0.0	0.2	76.0	0.0	0.3	14.9	9.1	555.0	98.1	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.6	28.2	1.0	5.5	2.4	14.0	76.6	19.6	10.0	11.1
LnGrp Delay(d), s/veh	19.8	0.0	20.5	115.6	18.7	21.9	71.6	51.5	599.0	147.1	29.0	30.4
LnGrp LOS	B		C	F	B	C	E	D	F	F	C	C
Approach Vol, veh/h		208			885			2176			1552	
Approach Delay, s/veh		20.4			83.4			280.0			57.9	
Approach LOS		C			F			F			E	

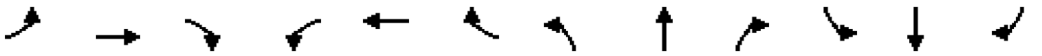
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.0	36.0		58.0	9.4	52.6		58.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	22.0	32.0		54.0	9.0	45.0		54.0
Max Q Clear Time (g_c+I1), s	24.0	34.0		9.9	6.2	22.8		56.0
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	8.2		0.0

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		161.2	
HCM 2010 LOS		F	

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	230	0	0	170	770	40
Future Volume (veh/h)	230	0	0	170	770	40
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	240	0	0	177	802	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2302	0	0	2302	1164	368
Arrive On Green	0.64	0.00	0.00	0.64	0.23	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	240	0	0	177	802	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	1.6	0.0	0.0	1.2	9.2	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.2	9.2	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2302	0	0	2302	1164	368
V/C Ratio(X)	0.10	0.00	0.00	0.08	0.69	0.00
Avail Cap(c_a), veh/h	2302	0	0	2302	5635	1783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	4.2	22.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.6	4.4	0.0
LnGrp Delay(d), s/veh	4.4	0.0	0.0	4.3	23.2	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	240			177	802	
Approach Delay, s/veh	4.4			4.3	23.2	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.0				45.0		18.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		41.0				41.0		71.0
Max Q Clear Time (g_c+I1), s		3.6				3.2		11.2
Green Ext Time (p_c), s		1.4				1.0		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	780	120	510	1290	270	200	840	410	290	590	70
Future Volume (vph)	280	780	120	510	1290	270	200	840	410	290	590	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.99		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3467	5136	1496	3467	4954		1626	3209	1455	1537	4734	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.80	
Satd. Flow (perm)	3467	5136	1496	3467	4954		1626	3015	1455	1537	3813	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	298	830	128	543	1372	287	213	894	436	309	628	74
RTOR Reduction (vph)	0	0	99	0	27	0	0	3	26	0	9	0
Lane Group Flow (vph)	298	830	29	543	1632	0	192	956	366	247	755	0
Confl. Peds. (#/hr)	18		23	23		18	23					23
Confl. Bikes (#/hr)			2			6						1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pt+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	2 3	1	6	
Permitted Phases			4									
Actuated Green, G (s)	11.0	26.9	26.9	23.1	39.0		18.7	52.7	61.1	20.0	55.3	
Effective Green, g (s)	11.0	26.9	26.9	23.1	39.0		18.7	52.7	61.1	20.0	55.3	
Actuated g/C Ratio	0.09	0.22	0.22	0.19	0.33		0.16	0.44	0.51	0.17	0.46	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	317	1151	335	667	1610		253	1354	740	256	1910	
v/s Ratio Prot	c0.09	0.16		0.16	c0.33		0.12	0.11	0.25	c0.16	0.07	
v/s Ratio Perm			0.02					c0.20			0.12	
v/c Ratio	0.94	0.72	0.09	0.81	1.01		0.76	0.71	0.50	0.96	0.40	
Uniform Delay, d1	54.2	43.1	36.8	46.4	40.5		48.5	27.4	19.3	49.7	21.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	35.0	2.3	0.1	7.5	25.9		12.3	1.7	0.5	46.1	0.1	
Delay (s)	89.2	45.3	36.9	53.9	66.4		60.8	29.1	19.9	95.8	21.5	
Level of Service	F	D	D	D	E		E	C	B	F	C	
Approach Delay (s/veh)		54.9			63.3			30.7			39.6	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Future Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
Arrive On Green	0.13	0.37	0.37	0.13	0.37	0.37	0.13	0.28	0.28	0.08	0.24	0.24
Sat Flow, veh/h	1792	3574	1543	1792	3574	1539	3476	3574	1536	1792	3574	1497
Grp Volume(v), veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Grp Sat Flow(s),veh/h/ln	1792	1787	1543	1792	1787	1539	1738	1787	1536	1792	1787	1497
Q Serve(g_s), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Cycle Q Clear(g_c), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
V/C Ratio(X)	1.01	0.56	0.26	0.87	1.01	0.28	0.89	0.91	0.37	1.03	0.80	0.64
Avail Cap(c_a), veh/h	239	1310	765	343	1311	698	434	1013	649	149	864	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	30.3	17.8	51.0	38.0	20.8	51.7	41.5	24.2	55.0	42.8	40.8
Incr Delay (d2), s/veh	61.6	0.6	0.2	15.7	26.4	0.2	19.3	13.6	1.6	82.2	7.7	8.4
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	9.8	3.8	7.8	26.5	4.2	7.4	16.7	5.8	8.3	11.7	7.7
LnGrp Delay(d), s/veh	113.7	30.9	18.0	66.7	64.4	21.1	70.9	55.2	25.9	137.6	50.5	49.2
LnGrp LOS	F	C	B	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1176			1726			1550			1077	
Approach Delay, s/veh		45.8			59.7			54.5			62.7	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	38.0	20.0	48.0	19.0	33.0	20.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	34.0	23.0	37.0	15.0	29.0	16.0	44.0
Max Q Clear Time (g_c+I1), s	12.0	31.9	15.7	21.7	15.1	23.8	18.0	46.0
Green Ext Time (p_c), s	0.0	1.3	0.3	4.9	0.0	2.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.9
HCM 2010 LOS	E

Fullerton - 2040 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	720	170	170	500	80	130	1020	120	240	1340	30
Future Volume (veh/h)	50	720	170	170	500	80	130	1020	120	240	1340	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	52	742	175	175	515	82	134	1052	124	247	1381	31
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	274	809	191	216	1011	160	205	1328	156	291	1601	36
Arrive On Green	0.03	0.28	0.28	0.08	0.33	0.33	0.06	0.41	0.41	0.09	0.45	0.45
Sat Flow, veh/h	1792	2872	677	1792	3092	490	1792	3221	379	1792	3573	80
Grp Volume(v), veh/h	52	462	455	175	297	300	134	583	593	247	690	722
Grp Sat Flow(s),veh/h/ln	1792	1787	1762	1792	1787	1795	1792	1787	1813	1792	1787	1866
Q Serve(g_s), s	2.4	29.6	29.6	8.0	15.9	16.0	5.1	33.7	33.8	9.0	41.1	41.2
Cycle Q Clear(g_c), s	2.4	29.6	29.6	8.0	15.9	16.0	5.1	33.7	33.8	9.0	41.1	41.2
Prop In Lane	1.00		0.38	1.00		0.27	1.00		0.21	1.00		0.04
Lane Grp Cap(c), veh/h	274	503	496	216	584	587	205	737	748	291	801	836
V/C Ratio(X)	0.19	0.92	0.92	0.81	0.51	0.51	0.65	0.79	0.79	0.85	0.86	0.86
Avail Cap(c_a), veh/h	280	529	521	216	604	607	205	737	748	334	801	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	41.2	41.2	30.7	32.1	32.2	26.2	30.3	30.3	24.6	29.3	29.4
Incr Delay (d2), s/veh	0.3	20.5	20.8	20.0	0.7	0.7	7.3	8.5	8.5	16.4	11.8	11.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	17.5	17.3	5.1	7.9	8.0	2.9	18.3	18.5	5.7	22.8	23.7
LnGrp Delay(d), s/veh	29.6	61.7	61.9	50.7	32.8	32.9	33.5	38.8	38.8	41.0	41.1	40.8
LnGrp LOS	C	E	E	D	C	C	C	D	D	D	D	D
Approach Vol, veh/h		969			772			1310			1659	
Approach Delay, s/veh		60.1			36.9			38.3			41.0	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	52.8	13.0	37.3	11.0	57.0	7.6	42.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	46.0	9.0	35.0	7.0	53.0	4.0	40.0
Max Q Clear Time (g_c+I1), s	11.0	35.8	10.0	31.6	7.1	43.2	4.4	18.0
Green Ext Time (p_c), s	0.2	5.3	0.0	1.7	0.0	6.2	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	640	80	200	360	60	60	1020	250	180	1370	160
Future Volume (veh/h)	170	640	80	200	360	60	60	1020	250	180	1370	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	674	84	211	379	63	63	1074	263	189	1442	168
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	713	89	249	703	116	146	1659	730	284	1627	188
Arrive On Green	0.09	0.23	0.23	0.10	0.23	0.23	0.03	0.47	0.47	0.07	0.51	0.51
Sat Flow, veh/h	1774	3161	393	1774	3032	499	1774	3539	1557	1774	3192	368
Grp Volume(v), veh/h	179	377	381	211	220	222	63	1074	263	189	793	817
Grp Sat Flow(s),veh/h/ln	1774	1770	1785	1774	1770	1762	1774	1770	1557	1774	1770	1791
Q Serve(g_s), s	9.1	25.1	25.2	10.9	13.0	13.3	2.2	27.7	12.9	6.3	47.7	49.2
Cycle Q Clear(g_c), s	9.1	25.1	25.2	10.9	13.0	13.3	2.2	27.7	12.9	6.3	47.7	49.2
Prop In Lane	1.00		0.22	1.00		0.28	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	341	399	403	249	411	409	146	1659	730	284	902	913
V/C Ratio(X)	0.53	0.94	0.95	0.85	0.54	0.54	0.43	0.65	0.36	0.67	0.88	0.89
Avail Cap(c_a), veh/h	382	399	403	249	411	409	150	1659	730	379	902	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	45.6	45.6	33.9	40.3	40.4	25.8	24.2	20.3	20.0	26.1	26.4
Incr Delay (d2), s/veh	1.3	31.1	31.4	23.0	1.4	1.5	2.0	2.0	1.4	2.7	12.0	13.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	15.7	15.9	6.9	6.5	6.7	1.1	13.9	5.8	3.3	26.1	27.6
LnGrp Delay(d), s/veh	32.9	76.7	77.0	56.8	41.7	41.9	27.8	26.2	21.7	22.7	38.0	39.6
LnGrp LOS	C	E	E	E	D	D	C	C	C	C	D	D
Approach Vol, veh/h		937			653			1400			1799	
Approach Delay, s/veh		68.5			46.6			25.4			37.1	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	60.1	16.0	31.0	7.7	65.0	15.2	31.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	12.0	27.0	4.0	61.0	14.0	25.0
Max Q Clear Time (g_c+I1), s	8.3	29.7	12.9	27.2	4.2	51.2	11.1	15.3
Green Ext Time (p_c), s	0.3	8.7	0.0	0.0	0.0	7.0	0.1	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Future Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	65	1140	108	129	667	11	97	97	86	32	172	75
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	457	1918	181	245	2096	35	359	611	504	106	521	517
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	765	3292	311	448	3598	59	1137	1881	1553	177	1605	1592
Grp Volume(v), veh/h	65	618	630	129	331	347	97	97	86	204	0	75
Grp Sat Flow(s),veh/h/ln	765	1787	1817	448	1787	1870	1137	1881	1553	1781	0	1592
Q Serve(g_s), s	4.1	19.0	19.1	22.3	8.2	8.2	6.1	3.2	3.4	0.0	0.0	2.9
Cycle Q Clear(g_c), s	12.3	19.0	19.1	41.4	8.2	8.2	13.2	3.2	3.4	7.1	0.0	2.9
Prop In Lane	1.00		0.17	1.00		0.03	1.00		1.00	0.16		1.00
Lane Grp Cap(c), veh/h	457	1041	1058	245	1041	1090	359	611	504	627	0	517
V/C Ratio(X)	0.14	0.59	0.60	0.53	0.32	0.32	0.27	0.16	0.17	0.33	0.00	0.15
Avail Cap(c_a), veh/h	756	1741	1769	421	1741	1822	359	611	504	627	0	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	11.5	11.5	24.7	9.2	9.2	27.0	20.7	20.8	22.1	0.0	20.6
Incr Delay (d2), s/veh	0.1	0.5	0.5	1.7	0.2	0.2	1.8	0.6	0.7	1.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.4	9.6	2.9	4.0	4.2	2.1	1.7	1.6	3.9	0.0	1.4
LnGrp Delay(d), s/veh	12.5	12.0	12.0	26.5	9.4	9.4	28.9	21.3	21.5	23.4	0.0	21.2
LnGrp LOS	B	B	B	C	A	A	C	C	C	C		C
Approach Vol, veh/h		1313			807			280			279	
Approach Delay, s/veh		12.1			12.1			24.0			22.8	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		54.2		32.0		54.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		15.2		21.1		9.1		43.4
Green Ext Time (p_c), s		1.0		11.7		1.4		6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	940	180	110	430	20	200	230	140	40	240	50
Future Volume (veh/h)	100	940	180	110	430	20	200	230	140	40	240	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	109	1022	196	120	467	22	217	250	152	43	261	54
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	459	1803	781	208	1803	779	417	791	657	395	791	657
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	910	3574	1547	461	3574	1544	1068	1881	1562	987	1881	1562
Grp Volume(v), veh/h	109	1022	196	120	467	22	217	250	152	43	261	54
Grp Sat Flow(s),veh/h/ln	910	1787	1547	461	1787	1544	1068	1881	1562	987	1881	1562
Q Serve(g_s), s	8.3	21.2	7.7	26.1	8.0	0.8	18.3	9.5	6.7	3.3	10.0	2.2
Cycle Q Clear(g_c), s	16.3	21.2	7.7	47.3	8.0	0.8	28.3	9.5	6.7	12.8	10.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	459	1803	781	208	1803	779	417	791	657	395	791	657
V/C Ratio(X)	0.24	0.57	0.25	0.58	0.26	0.03	0.52	0.32	0.23	0.11	0.33	0.08
Avail Cap(c_a), veh/h	570	2239	969	265	2239	967	417	791	657	395	791	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	18.4	15.0	34.8	15.1	13.3	30.4	20.7	19.9	25.0	20.8	18.6
Incr Delay (d2), s/veh	0.3	0.3	0.2	2.5	0.1	0.0	4.6	1.0	0.8	0.6	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	10.4	3.3	3.5	3.9	0.3	6.0	5.2	3.0	0.9	5.4	1.0
LnGrp Delay(d), s/veh	20.0	18.7	15.2	37.3	15.2	13.3	34.9	21.7	20.7	25.5	22.0	18.8
LnGrp LOS	C	B	B	D	B	B	C	C	C	C	C	B
Approach Vol, veh/h		1327			609			619			358	
Approach Delay, s/veh		18.3			19.5			26.1			21.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		58.0		49.0		58.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0		45.0		67.0
Max Q Clear Time (g_c+I1), s		30.3		23.2		14.8		49.3
Green Ext Time (p_c), s		2.6		11.2		2.1		4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	10	560	40	10	380
Future Vol, veh/h	20	10	560	40	10	380
Conflicting Peds, #/hr	0	0	0	22	22	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	24	12	659	47	12	447

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1152	681	0	0	728	0
Stage 1	681	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	220	452	-	-	880	-
Stage 1	504	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	213	444	-	-	864	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	621	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	213	444	864	-
HCM Lane V/C Ratio	-	-	0.11	0.026	0.014	-
HCM Control Delay (s/veh)	-	-	24	13.3	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.1	0	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	20	30	20	10	40	400	20	20	260	10
Future Vol, veh/h	10	10	20	30	20	10	40	400	20	20	260	10
Conflicting Peds, #/hr	3	0	1	1	0	3	22	0	22	22	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	11	22	33	22	11	44	440	22	22	286	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	911	924	309	903	913	465	319	0	0	484	0	0
Stage 1	352	352	-	550	550	-	-	-	-	-	-	-
Stage 2	559	572	-	353	363	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	254	268	729	257	272	595	1235	-	-	1074	-	-
Stage 1	663	630	-	518	514	-	-	-	-	-	-	-
Stage 2	512	503	-	662	623	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	218	244	715	226	248	583	1212	-	-	1054	-	-
Mov Cap-2 Maneuver	218	244	-	226	248	-	-	-	-	-	-	-
Stage 1	627	605	-	490	487	-	-	-	-	-	-	-
Stage 2	461	476	-	616	599	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.3	22.7	0.7	0.6
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1212	-	-	230	715	234	583	1054	-	-
HCM Lane V/C Ratio	0.036	-	-	0.096	0.031	0.235	0.019	0.021	-	-
HCM Control Delay (s/veh)	8.1	-	-	22.3	10.2	25	11.3	8.5	-	-
HCM Lane LOS	A	-	-	C	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0.9	0.1	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Future Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
Arrive On Green	0.21	0.21	0.00	0.00	0.21	0.21	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Grp Volume(v), veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Grp Sat Flow(s),veh/h/ln	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Q Serve(g_s), s	5.9	13.6	0.0	0.0	5.1	4.6	0.3	4.2	0.6	3.8	1.4	7.2
Cycle Q Clear(g_c), s	11.0	13.6	0.0	0.0	5.1	4.6	1.7	4.2	0.6	8.0	1.4	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
V/C Ratio(X)	0.33	0.80	0.00	0.00	0.34	0.30	0.02	0.20	0.03	0.15	0.07	0.31
Avail Cap(c_a), veh/h	694	1129	959	508	1129	913	733	1302	1070	780	1302	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	32.3	0.0	0.0	29.0	28.7	4.4	4.5	4.0	5.9	4.1	5.0
Incr Delay (d2), s/veh	0.8	3.9	0.0	0.0	0.5	0.5	0.0	0.3	0.1	0.4	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.4	0.0	0.0	2.7	1.9	0.1	2.2	0.3	1.2	0.8	3.2
LnGrp Delay(d), s/veh	34.4	36.2	0.0	0.0	29.5	29.3	4.4	4.9	4.0	6.3	4.2	5.7
LnGrp LOS	C	D			C	C	A	A	A	A	A	A
Approach Vol, veh/h		393			226			310			547	
Approach Delay, s/veh		35.8			29.4			4.8			5.6	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		21.8		64.0		21.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		6.2		15.6		10.0		7.1
Green Ext Time (p_c), s		1.9		2.3		2.4		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Future Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	129	1452	32	54	839	75	65	86	140	86	43	86
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	2146	47	221	1839	164	561	732	604	505	732	603
Arrive On Green	0.07	0.42	0.42	0.04	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1774	5114	113	1774	4734	421	1240	1863	1537	1138	1863	1534
Grp Volume(v), veh/h	129	963	521	54	600	314	65	86	140	86	43	86
Grp Sat Flow(s),veh/h/ln	1774	1695	1837	1774	1695	1765	1240	1863	1537	1138	1863	1534
Q Serve(g_s), s	3.3	18.1	18.1	1.4	10.4	10.5	2.7	2.3	4.8	4.1	1.1	2.8
Cycle Q Clear(g_c), s	3.3	18.1	18.1	1.4	10.4	10.5	3.8	2.3	4.8	6.4	1.1	2.8
Prop In Lane	1.00		0.06	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	1423	771	221	1317	685	561	732	604	505	732	603
V/C Ratio(X)	0.35	0.68	0.68	0.24	0.46	0.46	0.12	0.12	0.23	0.17	0.06	0.14
Avail Cap(c_a), veh/h	652	2880	1560	383	2536	1320	561	732	604	505	732	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	18.5	18.5	15.4	17.9	17.9	16.1	15.2	16.0	17.3	14.9	15.4
Incr Delay (d2), s/veh	0.6	0.6	1.0	0.6	0.2	0.5	0.4	0.3	0.9	0.7	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.5	9.3	0.7	4.9	5.2	1.0	1.3	2.2	1.4	0.6	1.3
LnGrp Delay(d), s/veh	13.9	19.1	19.6	15.9	18.2	18.4	16.5	15.6	16.9	18.0	15.0	15.9
LnGrp LOS	B	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1613			968			291			215	
Approach Delay, s/veh		18.9			18.1			16.4			16.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	6.8	37.1		35.0	9.2	34.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	18.0	59.0
Max Q Clear Time (g_c+I1), s		6.8	3.4	20.1		8.4	5.3	12.5
Green Ext Time (p_c), s		1.1	0.0	12.9		0.8	0.2	6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	29.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	990	100	120	690	10	30	10	150	10	20	110
Future Vol, veh/h	60	990	100	120	690	10	30	10	150	10	20	110
Conflicting Peds, #/hr	1	0	5	5	0	1	2	0	3	3	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	62	1021	103	124	711	10	31	10	155	10	21	113

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	722	0	0	1129	0	0	1818	2172	570	1608	2218	364
Stage 1	-	-	-	-	-	-	1202	1202	-	965	965	-
Stage 2	-	-	-	-	-	-	616	970	-	643	1253	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	883	-	-	620	-	-	49	47	467	71	44	636
Stage 1	-	-	-	-	-	-	197	258	-	276	334	-
Stage 2	-	-	-	-	-	-	447	332	-	431	244	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	882	-	-	617	-	-	~ 17	35	464	30	33	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 17	35	-	30	33	-
Stage 1	-	-	-	-	-	-	182	239	-	256	267	-
Stage 2	-	-	-	-	-	-	270	265	-	255	226	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.5	1.8	202	192
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	20	464	882	-	-	617	-	-	126
HCM Lane V/C Ratio	2.062	0.333	0.07	-	-	0.201	-	-	1.145
HCM Control Delay (s/veh)	$ 897.3	16.6	9.4	-	-	12.3	-	-	192
HCM Lane LOS	F	C	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	5.5	1.4	0.2	-	-	0.7	-	-	8.6

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	990	120	30	460	20	40	110	20	30	120	70
Future Volume (veh/h)	110	990	120	30	460	20	40	110	20	30	120	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	120	1076	130	33	500	22	43	120	22	33	130	76
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	441	1474	653	208	1348	597	99	248	663	87	311	663
Arrive On Green	0.06	0.41	0.41	0.03	0.38	0.38	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1792	3574	1583	1792	3574	1582	104	597	1596	82	749	1596
Grp Volume(v), veh/h	120	1076	130	33	500	22	163	0	22	163	0	76
Grp Sat Flow(s),veh/h/ln	1792	1787	1583	1792	1787	1582	701	0	1596	831	0	1596
Q Serve(g_s), s	3.2	20.7	4.3	0.9	8.3	0.7	2.3	0.0	0.7	1.9	0.0	2.4
Cycle Q Clear(g_c), s	3.2	20.7	4.3	0.9	8.3	0.7	28.0	0.0	0.7	27.9	0.0	2.4
Prop In Lane	1.00		1.00	1.00		1.00	0.26		1.00	0.20		1.00
Lane Grp Cap(c), veh/h	441	1474	653	208	1348	597	347	0	663	398	0	663
V/C Ratio(X)	0.27	0.73	0.20	0.16	0.37	0.04	0.47	0.00	0.03	0.41	0.00	0.11
Avail Cap(c_a), veh/h	550	2969	1315	293	2794	1237	347	0	663	398	0	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	13.9	20.2	15.4	17.0	18.5	16.1	18.1	0.0	14.2	17.6	0.0	14.7
Incr Delay (d2), s/veh	0.3	0.7	0.1	0.4	0.2	0.0	4.5	0.0	0.1	3.1	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	10.3	1.9	0.5	4.1	0.3	2.8	0.0	0.3	2.7	0.0	1.1
LnGrp Delay(d), s/veh	14.2	20.9	15.5	17.3	18.6	16.1	22.6	0.0	14.3	20.7	0.0	15.0
LnGrp LOS	B	C	B	B	B	B	C		B	C		B
Approach Vol, veh/h		1326			555			185			239	
Approach Delay, s/veh		19.8			18.5			21.6			18.9	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	6.1	37.8		38.0	9.0	34.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0	6.0	68.0		34.0	10.0	64.0
Max Q Clear Time (g_c+I1), s		30.0	2.9	22.7		29.9	5.2	10.3
Green Ext Time (p_c), s		0.3	0.0	11.0		0.4	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1450	850	480	1470	110	510	630	310	170	1260	190
Future Volume (veh/h)	200	1450	850	480	1470	110	510	630	310	170	1260	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	208	1510	885	500	1531	115	531	656	323	177	1312	198
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1300	597	402	2151	667	430	1518	470	235	1229	380
Arrive On Green	0.08	0.38	0.38	0.12	0.42	0.42	0.13	0.30	0.30	0.07	0.24	0.24
Sat Flow, veh/h	3442	3390	1556	3442	5085	1578	3442	5085	1575	3442	5085	1574
Grp Volume(v), veh/h	208	1510	885	500	1531	115	531	656	323	177	1312	198
Grp Sat Flow(s),veh/h/ln	1721	1695	1556	1721	1695	1578	1721	1695	1575	1721	1695	1574
Q Serve(g_s), s	7.1	46.0	46.0	14.0	29.8	5.4	15.0	12.5	21.7	6.1	29.0	13.1
Cycle Q Clear(g_c), s	7.1	46.0	46.0	14.0	29.8	5.4	15.0	12.5	21.7	6.1	29.0	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1300	597	402	2151	667	430	1518	470	235	1229	380
V/C Ratio(X)	0.79	1.16	1.48	1.25	0.71	0.17	1.23	0.43	0.69	0.75	1.07	0.52
Avail Cap(c_a), veh/h	315	1300	597	402	2151	667	430	1518	470	315	1229	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	37.0	37.0	53.0	28.6	21.5	52.5	33.9	37.1	54.9	45.5	39.5
Incr Delay (d2), s/veh	10.4	81.7	226.4	129.7	1.1	0.1	124.2	0.9	7.9	6.9	45.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	36.2	57.2	13.9	14.1	2.4	14.5	6.0	10.5	3.1	18.8	6.2
LnGrp Delay(d), s/veh	64.9	118.7	263.4	182.7	29.7	21.7	176.7	34.8	45.1	61.8	91.3	44.5
LnGrp LOS	E	F	F	F	C	C	F	C	D	E	F	D
Approach Vol, veh/h		2603			2146			1510			1687	
Approach Delay, s/veh		163.6			64.9			86.9			82.7	
Approach LOS		F			E			F			F	

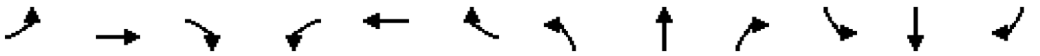
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	39.8	18.0	50.0	19.0	33.0	13.2	54.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	33.0	14.0	46.0	15.0	29.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	8.1	23.7	16.0	48.0	17.0	31.0	9.1	31.8
Green Ext Time (p_c), s	0.1	3.6	0.0	0.0	0.0	0.0	0.1	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	105.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	1200	250	450	1130	200	310	1300	190	440	1780	290
Future Volume (veh/h)	320	1200	250	450	1130	200	310	1300	190	440	1780	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	333	1250	260	469	1177	208	323	1354	198	458	1854	302
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	314	1131	235	434	1113	338	319	1685	512	511	1704	274
Arrive On Green	0.17	0.27	0.27	0.13	0.22	0.22	0.09	0.33	0.33	0.15	0.38	0.38
Sat Flow, veh/h	1792	4242	882	3476	5136	1559	3476	5136	1560	3476	4445	714
Grp Volume(v), veh/h	333	1009	501	469	1177	208	323	1354	198	458	1422	734
Grp Sat Flow(s),veh/h/ln	1792	1712	1700	1738	1712	1559	1738	1712	1560	1738	1712	1736
Q Serve(g_s), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	28.9	11.7	15.5	46.0	46.0
Cycle Q Clear(g_c), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	28.9	11.7	15.5	46.0	46.0
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	314	913	453	434	1113	338	319	1685	512	511	1312	665
V/C Ratio(X)	1.06	1.11	1.11	1.08	1.06	0.62	1.01	0.80	0.39	0.90	1.08	1.10
Avail Cap(c_a), veh/h	314	913	453	434	1113	338	319	1685	512	521	1312	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	44.0	44.0	52.5	47.0	42.5	54.5	36.8	31.0	50.3	37.0	37.0
Incr Delay (d2), s/veh	68.2	62.9	74.0	66.2	43.6	3.3	54.0	4.2	2.2	17.9	50.8	66.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	23.1	24.3	11.2	16.8	6.6	7.7	14.3	5.4	8.7	30.9	34.3
LnGrp Delay(d), s/veh	117.7	106.9	118.0	118.7	90.6	45.8	108.5	41.0	33.2	68.2	87.8	103.5
LnGrp LOS	F	F	F	F	F	D	F	D	C	E	F	F
Approach Vol, veh/h		1843			1854			1875			2614	
Approach Delay, s/veh		111.8			92.7			51.8			88.8	
Approach LOS		F			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	43.4	19.0	36.0	15.0	50.0	25.0	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	39.0	15.0	32.0	11.0	46.0	21.0	26.0
Max Q Clear Time (g_c+I1), s	17.5	30.9	17.0	34.0	13.0	48.0	23.0	28.0
Green Ext Time (p_c), s	0.1	5.3	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	86.4
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	90	30	740	150	210	40	1060	510	90	1700	90
Future Volume (vph)	50	90	30	740	150	210	40	1060	510	90	1700	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1881	1599	1698	1730	1564	1787	5136	1571	1787	5089	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1881	1599	1698	1730	1564	1787	5136	1571	1787	5089	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	52	94	31	771	156	219	42	1104	531	94	1771	94
RTOR Reduction (vph)	0	0	28	0	0	150	0	0	327	0	4	0
Lane Group Flow (vph)	52	94	3	463	464	69	42	1104	204	94	1861	0
Confl. Peds. (#/hr)	3					3	2		2	2		2
Confl. Bikes (#/hr)						5			3			4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	10.8	10.8	10.8	31.3	31.3	31.3	5.3	42.2	42.2	9.4	46.3	
Effective Green, g (s)	10.8	10.8	10.8	31.3	31.3	31.3	5.3	42.2	42.2	9.4	46.3	
Actuated g/C Ratio	0.10	0.10	0.10	0.29	0.29	0.29	0.05	0.38	0.38	0.09	0.42	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	175	185	157	484	493	446	86	1975	604	153	2147	
v/s Ratio Prot	0.03	c0.05		c0.27	0.27		0.02	0.21		c0.05	c0.37	
v/s Ratio Perm			0.00			0.04			0.13			
v/c Ratio	0.30	0.51	0.02	0.96	0.94	0.15	0.49	0.56	0.34	0.61	0.87	
Uniform Delay, d1	45.9	46.9	44.7	38.5	38.3	29.3	50.9	26.5	23.9	48.4	28.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	2.2	0.0	29.8	26.4	0.2	4.3	1.1	1.5	7.1	4.0	
Delay (s)	46.9	49.1	44.7	68.4	64.7	29.5	55.2	27.6	25.4	55.5	32.9	
Level of Service	D	D	D	E	E	C	E	C	C	E	C	
Approach Delay (s/veh)		47.7			59.5			27.6			33.9	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	200	80	70	160	450	130	950	100	840	1600	70
Future Volume (veh/h)	70	200	80	70	160	450	130	950	100	840	1600	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	78	222	89	78	178	500	144	1056	111	933	1778	78
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	145	366	297	154	366	766	171	1340	141	1017	2175	939
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.41	0.41	0.29	0.61	0.61
Sat Flow, veh/h	763	1881	1525	1070	1881	1534	1792	3256	342	3476	3574	1544
Grp Volume(v), veh/h	78	222	89	78	178	500	144	579	588	933	1778	78
Grp Sat Flow(s),veh/h/ln	763	1881	1525	1070	1881	1534	1792	1787	1811	1738	1787	1544
Q Serve(g_s), s	12.0	12.8	5.9	8.5	10.0	23.0	9.4	33.4	33.5	30.7	45.8	2.5
Cycle Q Clear(g_c), s	22.0	12.8	5.9	21.2	10.0	23.0	9.4	33.4	33.5	30.7	45.8	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	145	366	297	154	366	766	171	736	745	1017	2175	939
V/C Ratio(X)	0.54	0.61	0.30	0.51	0.49	0.65	0.84	0.79	0.79	0.92	0.82	0.08
Avail Cap(c_a), veh/h	145	366	297	154	366	766	197	736	745	1116	2175	939
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	43.5	40.8	53.2	42.4	23.1	52.6	30.3	30.3	40.5	18.0	9.5
Incr Delay (d2), s/veh	3.9	2.9	0.6	2.7	1.0	2.0	24.1	8.3	8.3	11.2	3.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.0	2.5	2.6	5.3	12.7	5.8	18.1	18.4	16.4	23.5	1.1
LnGrp Delay(d), s/veh	56.1	46.4	41.3	56.0	43.4	25.1	76.7	38.6	38.6	51.7	21.6	9.7
LnGrp LOS	E	D	D	E	D	C	E	D	D	D	C	A
Approach Vol, veh/h		389			756			1311			2789	
Approach Delay, s/veh		47.2			32.6			42.8			31.3	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.6	52.7		27.0	15.3	76.0		27.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	38.0	47.0		23.0	13.0	72.0		23.0
Max Q Clear Time (g_c+I1), s	32.7	35.5		24.0	11.4	47.8		25.0
Green Ext Time (p_c), s	1.9	5.7		0.0	0.1	15.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	930	70	270	670	220	40	860	420	330	1450	90
Future Volume (veh/h)	150	930	70	270	670	220	40	860	420	330	1450	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	158	979	74	284	705	232	42	905	442	347	1526	95
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	264	865	65	239	994	417	123	864	415	299	1644	102
Arrive On Green	0.08	0.26	0.26	0.10	0.28	0.28	0.03	0.38	0.38	0.13	0.48	0.48
Sat Flow, veh/h	1792	3350	253	1792	3574	1499	1792	2303	1107	1792	3403	210
Grp Volume(v), veh/h	158	522	531	284	705	232	42	699	648	347	796	825
Grp Sat Flow(s),veh/h/ln	1792	1787	1816	1792	1787	1499	1792	1787	1624	1792	1787	1826
Q Serve(g_s), s	7.7	31.0	31.0	12.0	21.3	15.9	1.7	45.0	45.0	16.0	49.9	51.0
Cycle Q Clear(g_c), s	7.7	31.0	31.0	12.0	21.3	15.9	1.7	45.0	45.0	16.0	49.9	51.0
Prop In Lane	1.00		0.14	1.00		1.00	1.00		0.68	1.00		0.12
Lane Grp Cap(c), veh/h	264	462	469	239	994	417	123	670	609	299	864	883
V/C Ratio(X)	0.60	1.13	1.13	1.19	0.71	0.56	0.34	1.04	1.06	1.16	0.92	0.93
Avail Cap(c_a), veh/h	270	462	469	239	994	417	138	670	609	299	864	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	44.5	44.5	33.3	39.0	37.0	29.1	37.5	37.5	39.0	28.9	29.2
Incr Delay (d2), s/veh	3.5	82.9	82.7	118.4	2.4	1.6	1.6	46.4	54.8	103.0	16.7	18.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	25.9	26.3	15.8	10.8	6.7	0.9	30.8	29.4	18.4	28.6	30.1
LnGrp Delay(d), s/veh	34.3	127.4	127.2	151.6	41.3	38.6	30.7	83.9	92.3	141.9	45.6	47.2
LnGrp LOS	C	F	F	F	D	D	C	F	F	F	D	D
Approach Vol, veh/h		1211			1221			1389			1968	
Approach Delay, s/veh		115.2			66.5			86.3			63.3	
Approach LOS		F			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	49.0	16.0	35.0	7.0	62.0	13.6	37.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	45.0	12.0	31.0	4.0	57.0	10.0	33.0
Max Q Clear Time (g_c+I1), s	18.0	47.0	14.0	33.0	3.7	53.0	9.7	23.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	3.2	0.0	4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	80.3
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1100	100	310	440	60	60	850	540	200	1320	50
Future Volume (veh/h)	150	1100	100	310	440	60	60	850	540	200	1320	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	163	1196	109	337	478	65	65	924	587	217	1435	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	427	1102	480	299	1311	573	120	1221	525	248	1374	52
Arrive On Green	0.08	0.31	0.31	0.13	0.37	0.37	0.03	0.34	0.34	0.08	0.39	0.39
Sat Flow, veh/h	1792	3574	1557	1792	3574	1562	1792	3574	1535	1792	3508	132
Grp Volume(v), veh/h	163	1196	109	337	478	65	65	924	587	217	730	759
Grp Sat Flow(s),veh/h/ln	1792	1787	1557	1792	1787	1562	1792	1787	1535	1792	1787	1852
Q Serve(g_s), s	7.4	37.0	6.2	16.0	11.7	3.3	2.8	27.5	41.0	9.2	47.0	47.0
Cycle Q Clear(g_c), s	7.4	37.0	6.2	16.0	11.7	3.3	2.8	27.5	41.0	9.2	47.0	47.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	427	1102	480	299	1311	573	120	1221	525	248	700	726
V/C Ratio(X)	0.38	1.09	0.23	1.13	0.36	0.11	0.54	0.76	1.12	0.87	1.04	1.05
Avail Cap(c_a), veh/h	427	1102	480	299	1311	573	120	1221	525	248	700	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	41.5	30.9	37.3	27.8	25.1	31.3	35.1	39.5	27.8	36.5	36.5
Incr Delay (d2), s/veh	0.6	53.3	0.2	91.0	0.2	0.1	4.9	4.4	76.2	27.2	45.5	46.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	26.4	2.7	17.4	5.8	1.4	1.5	14.4	28.4	6.4	32.0	33.3
LnGrp Delay(d), s/veh	25.8	94.8	31.1	128.3	28.0	25.2	36.3	39.5	115.7	55.0	82.0	82.8
LnGrp LOS	C	F	C	F	C	C	D	D	F	D	F	F
Approach Vol, veh/h		1468			880			1576			1706	
Approach Delay, s/veh		82.4			66.2			67.7			78.9	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	45.0	20.0	41.0	8.0	51.0	13.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	16.0	37.0	4.0	47.0	9.0	44.0
Max Q Clear Time (g_c+I1), s	11.2	43.0	18.0	39.0	4.8	49.0	9.4	13.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	74.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	180	90	50	230	110	70	1050	110	150	1550	90
Future Volume (veh/h)	100	180	90	50	230	110	70	1050	110	150	1550	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	108	194	97	54	247	118	75	1129	118	161	1667	97
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	41	39	546	35	136	546	150	1780	791	287	1876	816
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.03	0.50	0.50	0.06	0.52	0.52
Sat Flow, veh/h	0	115	1599	0	399	1599	1792	3574	1588	1792	3574	1554
Grp Volume(v), veh/h	302	0	97	301	0	118	75	1129	118	161	1667	97
Grp Sat Flow(s),veh/h/ln	115	0	1599	399	0	1599	1792	1787	1588	1792	1787	1554
Q Serve(g_s), s	0.0	0.0	5.1	0.0	0.0	6.3	2.5	27.8	4.8	5.1	49.8	3.8
Cycle Q Clear(g_c), s	41.0	0.0	5.1	41.0	0.0	6.3	2.5	27.8	4.8	5.1	49.8	3.8
Prop In Lane	0.36		1.00	0.18		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	80	0	546	172	0	546	150	1780	791	287	1876	816
V/C Ratio(X)	3.78	0.00	0.18	1.75	0.00	0.22	0.50	0.63	0.15	0.56	0.89	0.12
Avail Cap(c_a), veh/h	80	0	546	172	0	546	150	1780	791	359	1876	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.5	0.0	27.7	38.5	0.0	28.1	26.0	22.1	16.3	17.8	25.4	14.4
Incr Delay (d2), s/veh	1280.7	0.0	0.2	362.2	0.0	0.2	2.6	1.7	0.4	1.7	6.7	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	31.1	0.0	2.3	21.8	0.0	2.8	1.3	14.1	2.2	2.6	26.1	1.7
LnGrp Delay(d), s/veh	1321.2	0.0	27.8	400.6	0.0	28.3	28.6	23.8	16.7	19.5	32.1	14.7
LnGrp LOS	F		C	F		C	C	C	B	B	C	B
Approach Vol, veh/h		399			419			1322			1925	
Approach Delay, s/veh		1006.8			295.8			23.5			30.2	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.2	63.8		45.0	8.0	67.0		45.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	55.0		41.0	4.0	63.0		41.0
Max Q Clear Time (g_c+I1), s	7.1	29.8		43.0	4.5	51.8		43.0
Green Ext Time (p_c), s	0.2	9.5		0.0	0.0	8.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		151.2
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	40	0	0	60	0	1220	10	0	1670	10
Future Vol, veh/h	0	0	40	0	0	60	0	1220	10	0	1670	10
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	5	5	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	43	0	0	65	0	1312	11	0	1796	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	898	-	-	656	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	284	0	0	410	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	284	-	-	410	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

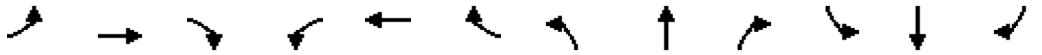
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	19.9	15.4	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	284	410	-
HCM Lane V/C Ratio	-	0.151	0.157	-
HCM Control Delay (s/veh)	-	19.9	15.4	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.5	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1140	300	130	420	130	100	1060	210	230	1680	120
Future Volume (veh/h)	240	1140	300	130	420	130	100	1060	210	230	1680	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1226	323	140	452	140	108	1140	226	247	1806	129
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	320	1417	423	195	858	368	161	1585	689	306	2370	169
Arrive On Green	0.09	0.28	0.28	0.06	0.24	0.24	0.05	0.44	0.44	0.09	0.49	0.49
Sat Flow, veh/h	3476	5136	1534	3476	3574	1531	3476	3574	1553	3476	4884	348
Grp Volume(v), veh/h	258	1226	323	140	452	140	108	1140	226	247	1265	670
Grp Sat Flow(s),veh/h/ln	1738	1712	1534	1738	1787	1531	1738	1787	1553	1738	1712	1808
Q Serve(g_s), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	30.6	11.1	8.2	35.4	35.6
Cycle Q Clear(g_c), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	30.6	11.1	8.2	35.4	35.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	320	1417	423	195	858	368	161	1585	689	306	1662	877
V/C Ratio(X)	0.81	0.86	0.76	0.72	0.53	0.38	0.67	0.72	0.33	0.81	0.76	0.76
Avail Cap(c_a), veh/h	414	1487	444	207	858	368	178	1585	689	355	1662	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	40.4	39.0	54.5	38.8	37.3	55.1	26.7	21.3	52.6	24.7	24.7
Incr Delay (d2), s/veh	8.6	5.4	7.3	10.6	0.6	0.6	8.3	2.8	1.3	11.4	3.3	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	13.3	10.5	2.5	6.5	3.8	1.9	15.7	5.0	4.4	17.5	19.2
LnGrp Delay(d), s/veh	60.9	45.9	46.3	65.1	39.4	38.0	63.5	29.5	22.5	64.0	28.0	31.0
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1807			732			1474			2182	
Approach Delay, s/veh		48.1			44.1			31.0			33.0	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	56.1	10.6	36.4	9.4	61.0	14.8	32.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	51.0	7.0	34.0	6.0	57.0	14.0	27.0
Max Q Clear Time (g_c+I1), s	10.2	32.6	6.7	28.7	5.6	37.6	10.5	14.9
Green Ext Time (p_c), s	0.1	8.4	0.0	3.8	0.0	12.9	0.3	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	160	380	130	150	1260	0	0	1560	780
Future Volume (veh/h)	0	0	0	160	380	130	150	1260	0	0	1560	780
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				168	400	137	158	1326	0	0	1642	821
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				250	498	223	216	4020	0	0	2350	1079
Arrive On Green				0.14	0.14	0.14	0.06	0.79	0.00	0.00	0.69	0.69
Sat Flow, veh/h				1774	3539	1583	3442	5253	0	0	3558	1557
Grp Volume(v), veh/h				168	400	137	158	1326	0	0	1642	821
Grp Sat Flow(s),veh/h/ln				1774	1770	1583	1721	1695	0	0	1695	1557
Q Serve(g_s), s				10.5	12.7	9.5	5.2	8.6	0.0	0.0	33.5	39.8
Cycle Q Clear(g_c), s				10.5	12.7	9.5	5.2	8.6	0.0	0.0	33.5	39.8
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				250	498	223	216	4020	0	0	2350	1079
V/C Ratio(X)				0.67	0.80	0.61	0.73	0.33	0.00	0.00	0.70	0.76
Avail Cap(c_a), veh/h				305	608	272	296	4020	0	0	2350	1079
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				47.5	48.4	47.0	53.6	3.5	0.0	0.0	10.6	11.6
Incr Delay (d2), s/veh				4.3	6.4	2.8	5.8	0.2	0.0	0.0	1.8	5.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.4	6.7	4.3	2.7	4.0	0.0	0.0	16.1	18.4
LnGrp Delay(d), s/veh				51.7	54.8	49.8	59.4	3.7	0.0	0.0	12.4	16.7
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					705			1484			2463	
Approach Delay, s/veh					53.1			9.6			13.8	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		96.0			11.3	84.7		20.4
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		92.0			10.0	78.0		20.0
Max Q Clear Time (g_c+I1), s		10.6			7.2	41.8		14.7
Green Ext Time (p_c), s		13.1			0.1	26.7		1.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		18.4
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	610	280	130	0	0	0	0	850	280	370	1300	0
Future Volume (veh/h)	610	280	130	0	0	0	0	850	280	370	1300	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	678	311	144				0	944	311	411	1444	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	846	458	389				0	2518	768	502	3451	0
Arrive On Green	0.25	0.25	0.25				0.00	0.50	0.50	0.15	0.68	0.00
Sat Flow, veh/h	3442	1863	1583				0	5253	1550	3442	5253	0
Grp Volume(v), veh/h	678	311	144				0	944	311	411	1444	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583				0	1695	1550	1721	1695	0
Q Serve(g_s), s	19.6	16.0	8.0				0.0	12.2	13.4	12.3	13.5	0.0
Cycle Q Clear(g_c), s	19.6	16.0	8.0				0.0	12.2	13.4	12.3	13.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	846	458	389				0	2518	768	502	3451	0
V/C Ratio(X)	0.80	0.68	0.37				0.00	0.37	0.41	0.82	0.42	0.00
Avail Cap(c_a), veh/h	1298	702	597				0	2518	768	876	3451	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.6	36.2	33.2				0.0	16.6	16.9	43.9	7.6	0.0
Incr Delay (d2), s/veh	2.1	1.8	0.6				0.0	0.4	1.6	3.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	8.4	3.5				0.0	5.8	6.0	6.1	6.4	0.0
LnGrp Delay(d), s/veh	39.7	38.0	33.8				0.0	17.0	18.5	47.3	8.0	0.0
LnGrp LOS	D	D	C					B	B	D	A	
Approach Vol, veh/h		1133						1255			1855	
Approach Delay, s/veh		38.5						17.4			16.7	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	19.5	56.5		30.1		76.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	27.0	41.0		40.0		72.0		
Max Q Clear Time (g_c+I1), s	14.3	15.4		21.6		15.5		
Green Ext Time (p_c), s	1.2	8.5		4.5		14.6		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1750	230	470	1100	130	160	490	250	280	1220	380
Future Volume (veh/h)	240	1750	230	470	1100	130	160	490	250	280	1220	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	270	1966	258	528	1236	146	180	551	281	315	1371	427
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
Arrive On Green	0.10	0.32	0.32	0.13	0.35	0.35	0.08	0.32	0.32	0.11	0.34	0.34
Sat Flow, veh/h	3476	5136	1591	3476	5136	1592	1792	3574	1565	3476	3574	1564
Grp Volume(v), veh/h	270	1966	258	528	1236	146	180	551	281	315	1371	427
Grp Sat Flow(s),veh/h/ln	1738	1712	1591	1738	1712	1592	1792	1787	1565	1738	1787	1564
Q Serve(g_s), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	15.0	14.7	10.7	41.0	25.3
Cycle Q Clear(g_c), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	15.0	14.7	10.7	41.0	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
V/C Ratio(X)	0.81	1.21	0.51	1.22	0.70	0.27	1.21	0.49	0.40	0.83	1.12	0.62
Avail Cap(c_a), veh/h	492	1626	504	434	1773	550	149	1129	694	492	1221	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	41.0	33.4	52.5	33.9	28.3	55.0	33.2	22.9	52.4	39.5	26.1
Incr Delay (d2), s/veh	6.1	100.0	0.9	116.4	1.2	0.3	139.4	1.5	1.8	9.1	66.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	33.0	7.1	14.2	12.0	3.5	10.7	7.6	6.7	5.6	31.4	11.6
LnGrp Delay(d), s/veh	59.2	141.0	34.3	168.9	35.1	28.6	194.4	34.7	24.6	61.4	105.9	30.2
LnGrp LOS	E	F	C	F	D	C	F	C	C	E	F	C
Approach Vol, veh/h		2494			1910			1012			2113	
Approach Delay, s/veh		121.1			71.6			60.3			84.0	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	41.9	19.0	42.0	14.0	45.0	15.6	45.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	34.0	15.0	38.0	10.0	41.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	12.7	17.0	17.0	40.0	12.0	43.0	11.1	26.9
Green Ext Time (p_c), s	0.4	4.0	0.0	0.0	0.0	0.0	0.4	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	90.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1140	180	360	740	150	110	520	280	70	590	90
Future Volume (veh/h)	280	1140	180	360	740	150	110	520	280	70	590	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.86	1.00		0.80	0.99		0.79
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	295	1200	189	379	779	158	116	547	295	74	621	95
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	329	1330	207	434	1358	521	191	949	340	209	743	113
Arrive On Green	0.18	0.44	0.44	0.12	0.38	0.38	0.05	0.27	0.27	0.03	0.25	0.25
Sat Flow, veh/h	1792	3033	473	3476	3574	1372	1792	3574	1282	1792	2991	455
Grp Volume(v), veh/h	295	703	686	379	779	158	116	547	295	74	370	346
Grp Sat Flow(s),veh/h/ln	1792	1787	1719	1738	1787	1372	1792	1787	1282	1792	1787	1659
Q Serve(g_s), s	18.8	42.5	43.6	12.5	20.2	9.4	5.7	15.5	25.7	3.6	22.9	23.2
Cycle Q Clear(g_c), s	18.8	42.5	43.6	12.5	20.2	9.4	5.7	15.5	25.7	3.6	22.9	23.2
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	329	784	754	434	1358	521	191	949	340	209	444	412
V/C Ratio(X)	0.90	0.90	0.91	0.87	0.57	0.30	0.61	0.58	0.87	0.35	0.83	0.84
Avail Cap(c_a), veh/h	475	826	795	446	1358	521	191	949	340	209	444	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	30.3	30.7	50.2	28.7	25.4	33.4	37.2	40.9	32.2	41.6	41.7
Incr Delay (d2), s/veh	14.7	12.1	14.2	16.8	0.6	0.3	5.5	2.6	24.5	1.0	16.6	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	23.5	23.6	7.0	10.1	3.6	3.0	8.0	11.4	1.8	13.3	12.7
LnGrp Delay(d), s/veh	61.3	42.4	44.9	67.0	29.3	25.7	38.8	39.8	65.5	33.3	58.2	60.0
LnGrp LOS	E	D	D	E	C	C	D	D	E	C	E	E
Approach Vol, veh/h		1684			1316			958			790	
Approach Delay, s/veh		46.7			39.7			47.6			56.7	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	35.0	18.6	55.2	10.0	33.0	25.4	48.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	31.0	15.0	54.0	6.0	29.0	31.0	38.0
Max Q Clear Time (g_c+I1), s	5.6	27.7	14.5	45.6	7.7	25.2	20.8	22.2
Green Ext Time (p_c), s	0.0	1.6	0.1	5.6	0.0	1.6	0.6	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1190	430	190	500	80	320	910	190	70	1090	120
Future Volume (veh/h)	130	1190	430	190	500	80	320	910	190	70	1090	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	138	1266	457	202	532	85	340	968	202	74	1160	128
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	166	1162	497	203	1039	452	299	1587	706	245	1134	125
Arrive On Green	0.09	0.32	0.32	0.06	0.29	0.29	0.13	0.44	0.44	0.04	0.35	0.35
Sat Flow, veh/h	1792	3574	1530	3476	3574	1555	1792	3574	1590	1792	3240	357
Grp Volume(v), veh/h	138	1266	457	202	532	85	340	968	202	74	639	649
Grp Sat Flow(s),veh/h/ln	1792	1787	1530	1738	1787	1555	1792	1787	1590	1792	1787	1810
Q Serve(g_s), s	9.1	39.0	34.5	7.0	14.9	4.9	16.0	24.8	9.7	3.2	42.0	42.0
Cycle Q Clear(g_c), s	9.1	39.0	34.5	7.0	14.9	4.9	16.0	24.8	9.7	3.2	42.0	42.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	166	1162	497	203	1039	452	299	1587	706	245	625	633
V/C Ratio(X)	0.83	1.09	0.92	1.00	0.51	0.19	1.14	0.61	0.29	0.30	1.02	1.03
Avail Cap(c_a), veh/h	254	1162	497	203	1039	452	299	1587	706	249	625	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	40.5	39.0	56.5	35.5	31.9	38.3	25.4	21.2	24.2	39.0	39.0
Incr Delay (d2), s/veh	12.9	54.4	22.3	62.1	0.4	0.2	94.5	1.8	1.0	0.7	41.4	42.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	28.0	17.7	5.1	7.4	2.1	17.7	12.6	4.4	1.6	27.9	28.4
LnGrp Delay(d), s/veh	66.4	94.9	61.3	118.6	35.9	32.1	132.9	27.2	22.3	24.9	80.4	81.3
LnGrp LOS	E	F	E	F	D	C	F	C	C	C	F	F
Approach Vol, veh/h		1861			819			1510			1362	
Approach Delay, s/veh		84.5			55.9			50.3			77.8	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	57.3	11.0	43.0	20.0	46.0	15.1	38.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	7.0	39.0	16.0	42.0	17.0	29.0
Max Q Clear Time (g_c+I1), s	5.2	26.8	9.0	41.0	18.0	44.0	11.1	16.9
Green Ext Time (p_c), s	0.0	8.0	0.0	0.0	0.0	0.0	0.2	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	69.4
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1341.2

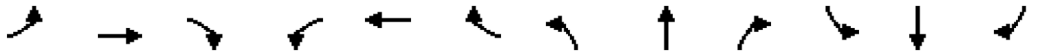
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	100	0	280	10	0	10	290	1580	140	10	1500	130
Future Vol, veh/h	100	0	280	10	0	10	290	1580	140	10	1500	130
Conflicting Peds, #/hr	0	0	1	1	0	0	11	0	29	29	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	150	-	50	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	105	0	295	11	0	11	305	1663	147	11	1579	137

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3123	4130	870	3115	4051	861	1727	0	0	1839	0	0
Stage 1	1681	1681	-	2302	2302	-	-	-	-	-	-	-
Stage 2	1442	2449	-	813	1749	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	6.52	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	4.01	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 5	2	297	~ 5	3	301	366	-	-	331	-	-
Stage 1	~ 99	151	-	40	73	-	-	-	-	-	-	-
Stage 2	140	61	-	341	140	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 1	0	~ 294	-	0	294	363	-	-	323	-	-
Mov Cap-2 Maneuver	~ 1	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 16	145	-	~ 6	11	-	-	-	-	-	-	-
Stage 2	~ 22	10	-	-	134	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	$ 4255.5		7.2	0.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	363	-	-	1	294	-	294	323	-	-
HCM Lane V/C Ratio	0.841	-	-	105.263	1.003	-	0.036	0.033	-	-
HCM Control Delay (s/veh)	50.1	-	-	$ 53913.1	92.1	-	17.7	16.5	-	-
HCM Lane LOS	F	-	-	F	F	-	C	C	-	-
HCM 95th %tile Q(veh)	7.7	-	-	15.6	10.6	-	0.1	0.1	-	-

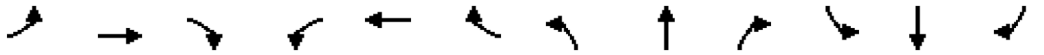
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1090	200	90	430	270	110	1190	120	360	1250	100
Future Volume (veh/h)	260	1090	200	90	430	270	110	1190	120	360	1250	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	271	1135	208	94	448	281	115	1240	125	375	1302	104
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	284	1340	245	144	399	248	219	1251	546	360	1645	722
Arrive On Green	0.16	0.31	0.31	0.04	0.19	0.19	0.06	0.35	0.35	0.17	0.46	0.46
Sat Flow, veh/h	1792	4342	795	3476	2080	1294	1792	3574	1561	1792	3574	1568
Grp Volume(v), veh/h	271	895	448	94	384	345	115	1240	125	375	1302	104
Grp Sat Flow(s),veh/h/ln	1792	1712	1714	1738	1787	1587	1792	1787	1561	1792	1787	1568
Q Serve(g_s), s	18.0	29.4	29.4	3.2	23.0	23.0	4.9	41.4	6.8	20.0	37.1	4.6
Cycle Q Clear(g_c), s	18.0	29.4	29.4	3.2	23.0	23.0	4.9	41.4	6.8	20.0	37.1	4.6
Prop In Lane	1.00		0.46	1.00		0.82	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	1056	529	144	343	304	219	1251	546	360	1645	722
V/C Ratio(X)	0.96	0.85	0.85	0.65	1.12	1.13	0.52	0.99	0.23	1.04	0.79	0.14
Avail Cap(c_a), veh/h	284	1056	529	145	343	304	238	1251	546	360	1645	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	38.8	38.8	56.7	48.5	48.5	26.0	38.8	27.6	38.7	27.5	18.7
Incr Delay (d2), s/veh	41.3	6.5	12.2	9.9	85.9	92.6	1.9	23.4	1.0	58.2	4.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	14.9	15.7	1.7	19.5	17.9	2.5	24.4	3.1	17.7	19.2	2.1
LnGrp Delay(d), s/veh	91.4	45.4	51.0	66.6	134.4	141.1	27.9	62.3	28.5	96.9	31.5	19.1
LnGrp LOS	F	D	D	E	F	F	C	E	C	F	C	B
Approach Vol, veh/h		1614			823			1480			1781	
Approach Delay, s/veh		54.7			129.4			56.7			44.5	
Approach LOS		D			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	46.0	9.0	41.0	10.8	59.2	23.0	27.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	42.0	5.0	37.0	8.0	54.0	19.0	23.0
Max Q Clear Time (g_c+I1), s	22.0	43.4	5.2	31.4	6.9	39.1	20.0	25.0
Green Ext Time (p_c), s	0.0	0.0	0.0	3.7	0.0	8.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.8
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	250	300	690	60	780	0	0	1430	340
Future Volume (veh/h)	0	0	0	250	300	690	60	780	0	0	1430	340
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				266	319	734	64	830	0	0	1521	362
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				693	907	712	74	2458	0	0	1672	395
Arrive On Green				0.45	0.45	0.45	0.04	0.48	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1540	2015	1583	1774	5253	0	0	4263	968
Grp Volume(v), veh/h				308	277	734	64	830	0	0	1257	626
Grp Sat Flow(s),veh/h/ln				1786	1770	1583	1774	1695	0	0	1695	1673
Q Serve(g_s), s				13.8	12.2	54.0	4.3	12.1	0.0	0.0	41.8	42.4
Cycle Q Clear(g_c), s				13.8	12.2	54.0	4.3	12.1	0.0	0.0	41.8	42.4
Prop In Lane				0.86		1.00	1.00		0.00	0.00		0.58
Lane Grp Cap(c), veh/h				804	796	712	74	2458	0	0	1384	683
V/C Ratio(X)				0.38	0.35	1.03	0.87	0.34	0.00	0.00	0.91	0.92
Avail Cap(c_a), veh/h				804	796	712	74	2458	0	0	1384	683
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.9	21.5	33.0	57.2	19.1	0.0	0.0	33.4	33.6
Incr Delay (d2), s/veh				0.3	0.3	41.7	61.5	0.4	0.0	0.0	10.3	19.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.8	6.1	31.8	3.4	5.7	0.0	0.0	21.5	23.1
LnGrp Delay(d), s/veh				22.2	21.8	74.7	118.6	19.5	0.0	0.0	43.7	52.6
LnGrp LOS				C	C	F	F	B			D	D
Approach Vol, veh/h					1319			894			1883	
Approach Delay, s/veh					51.3			26.6			46.7	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		62.0			9.0	53.0		58.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		58.0			5.0	49.0		54.0
Max Q Clear Time (g_c+I1), s		14.1			6.3	44.4		56.0
Green Ext Time (p_c), s		6.4			0.0	3.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		43.8
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	560	150	0	0	0	0	790	740	680	1050	0
Future Volume (veh/h)	210	560	150	0	0	0	0	790	740	680	1050	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	233	622	167				0	878	822	756	1167	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	247	703	419				0	1353	620	811	2365	0
Arrive On Green	0.26	0.26	0.26				0.00	0.40	0.40	0.24	0.67	0.00
Sat Flow, veh/h	934	2652	1583				0	3558	1554	3442	3632	0
Grp Volume(v), veh/h	453	402	167				0	878	822	756	1167	0
Grp Sat Flow(s),veh/h/ln	1816	1770	1583				0	1695	1554	1721	1770	0
Q Serve(g_s), s	29.3	25.9	10.4				0.0	25.1	47.8	25.8	19.5	0.0
Cycle Q Clear(g_c), s	29.3	25.9	10.4				0.0	25.1	47.8	25.8	19.5	0.0
Prop In Lane	0.51		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	481	469	419				0	1353	620	811	2365	0
V/C Ratio(X)	0.94	0.86	0.40				0.00	0.65	1.32	0.93	0.49	0.00
Avail Cap(c_a), veh/h	485	473	423				0	1353	620	834	2365	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.1	41.8	36.2				0.0	29.2	36.0	44.8	9.8	0.0
Incr Delay (d2), s/veh	26.8	14.4	0.6				0.0	2.4	157.2	16.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	14.5	4.6				0.0	12.2	47.4	14.2	9.6	0.0
LnGrp Delay(d), s/veh	69.9	56.2	36.8				0.0	31.6	193.2	61.6	10.6	0.0
LnGrp LOS	E	E	D					C	F	E	B	
Approach Vol, veh/h		1022						1700			1923	
Approach Delay, s/veh		59.1						109.7			30.7	
Approach LOS		E						F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	32.2	51.8		35.7		84.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	29.0	47.0		32.0		80.0		
Max Q Clear Time (g_c+I1), s	27.8	49.8		31.3		21.5		
Green Ext Time (p_c), s	0.4	0.0		0.5		10.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	65.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1380	70	180	1640	60	60	140	140	150	270	70
Future Volume (veh/h)	50	1380	70	180	1640	60	60	140	140	150	270	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.93	0.92		0.79	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	60	1643	83	214	1952	71	71	167	167	179	321	83
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	135	1914	96	245	2120	76	199	289	194	270	531	133
Arrive On Green	0.03	0.55	0.55	0.08	0.60	0.60	0.03	0.15	0.15	0.08	0.20	0.20
Sat Flow, veh/h	1792	3455	173	1792	3509	127	1792	1881	1261	1792	2707	676
Grp Volume(v), veh/h	60	845	881	214	986	1037	71	167	167	179	208	196
Grp Sat Flow(s),veh/h/ln	1792	1787	1841	1792	1787	1848	1792	1881	1261	1792	1787	1596
Q Serve(g_s), s	1.7	46.9	48.0	7.0	57.1	59.4	3.9	9.7	15.2	9.0	12.4	13.2
Cycle Q Clear(g_c), s	1.7	46.9	48.0	7.0	57.1	59.4	3.9	9.7	15.2	9.0	12.4	13.2
Prop In Lane	1.00		0.09	1.00		0.07	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	135	990	1020	245	1080	1117	199	289	194	270	350	313
V/C Ratio(X)	0.45	0.85	0.86	0.87	0.91	0.93	0.36	0.58	0.86	0.66	0.59	0.63
Avail Cap(c_a), veh/h	143	990	1020	331	1112	1150	199	289	194	270	350	313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	22.1	22.4	30.1	20.5	20.9	40.6	46.1	48.4	38.5	42.9	43.2
Incr Delay (d2), s/veh	2.3	7.3	7.8	17.5	11.2	12.8	1.1	8.2	36.7	5.9	7.2	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	25.0	26.5	8.0	31.3	33.9	2.0	5.7	7.3	5.2	6.8	6.6
LnGrp Delay(d), s/veh	28.9	29.4	30.2	47.5	31.7	33.7	41.7	54.3	85.2	44.5	50.1	52.3
LnGrp LOS	C	C	C	D	C	C	D	D	F	D	D	D
Approach Vol, veh/h		1786			2237			405			583	
Approach Delay, s/veh		29.8			34.1			64.8			49.1	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	22.0	13.3	69.0	8.0	27.0	7.4	74.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	18.0	15.0	62.0	4.0	23.0	4.0	73.0
Max Q Clear Time (g_c+I1), s	11.0	17.2	9.0	50.0	5.9	15.2	3.7	61.4
Green Ext Time (p_c), s	0.0	0.1	0.3	8.5	0.0	1.4	0.0	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Future Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	1563	46	34	724	46	57	126	46	184	138	230
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	1858	55	160	1646	105	257	484	168	422	449	389
Arrive On Green	0.07	0.53	0.53	0.02	0.49	0.49	0.04	0.19	0.19	0.10	0.25	0.25
Sat Flow, veh/h	1774	3508	103	1774	3378	215	1774	2551	885	1774	1770	1534
Grp Volume(v), veh/h	172	786	823	34	379	391	57	85	87	184	138	230
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1823	1774	1770	1666	1774	1770	1534
Q Serve(g_s), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Cycle Q Clear(g_c), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Prop In Lane	1.00		0.06	1.00		0.12	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	430	937	975	160	862	888	257	336	316	422	449	389
V/C Ratio(X)	0.40	0.84	0.84	0.21	0.44	0.44	0.22	0.25	0.27	0.44	0.31	0.59
Avail Cap(c_a), veh/h	503	1175	1222	204	1071	1103	279	336	316	469	449	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	20.4	20.5	19.0	17.1	17.1	31.9	35.3	35.5	27.5	30.9	33.6
Incr Delay (d2), s/veh	0.6	4.5	4.5	0.7	0.4	0.3	0.4	1.8	2.1	0.7	1.8	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	19.8	20.9	0.5	7.0	7.3	1.3	2.2	2.3	4.1	3.4	6.4
LnGrp Delay(d), s/veh	12.7	25.0	25.0	19.7	17.5	17.5	32.4	37.1	37.6	28.2	32.7	40.0
LnGrp LOS	B	C	C	B	B	B	C	D	D	C	C	D
Approach Vol, veh/h		1781			804			229			552	
Approach Delay, s/veh		23.8			17.6			36.1			34.2	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	23.5	6.5	58.3	7.7	30.0	10.8	53.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	18.0	5.0	68.0	5.0	26.0	11.0	62.0
Max Q Clear Time (g_c+I1), s	10.2	6.6	3.0	40.9	4.6	15.5	6.7	16.3
Green Ext Time (p_c), s	0.1	0.6	0.0	13.4	0.0	1.6	0.2	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	930	270	240	560	50	250	300	250	40	110	60
Future Volume (veh/h)	120	930	270	240	560	50	250	300	250	40	110	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	136	1057	307	273	636	57	284	341	284	45	125	68
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	167	1337	388	349	1661	148	581	673	550	292	909	394
Arrive On Green	0.10	0.35	0.35	0.10	0.35	0.35	0.14	0.37	0.37	0.03	0.26	0.26
Sat Flow, veh/h	1757	3861	1121	3408	4701	418	1757	1826	1493	1757	3505	1519
Grp Volume(v), veh/h	136	919	445	273	453	240	284	327	298	45	125	68
Grp Sat Flow(s),veh/h/ln	1757	1679	1624	1704	1679	1761	1757	1752	1567	1757	1752	1519
Q Serve(g_s), s	7.8	25.4	25.4	8.1	10.4	10.5	11.6	15.0	15.3	1.9	2.8	3.6
Cycle Q Clear(g_c), s	7.8	25.4	25.4	8.1	10.4	10.5	11.6	15.0	15.3	1.9	2.8	3.6
Prop In Lane	1.00		0.69	1.00		0.24	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	167	1162	562	349	1186	622	581	645	577	292	909	394
V/C Ratio(X)	0.81	0.79	0.79	0.78	0.38	0.39	0.49	0.51	0.52	0.15	0.14	0.17
Avail Cap(c_a), veh/h	323	1432	693	561	1366	717	715	645	577	328	909	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	30.4	30.4	45.2	24.9	25.0	21.2	25.3	25.4	27.0	29.4	29.6
Incr Delay (d2), s/veh	9.1	2.5	5.1	3.9	0.2	0.4	0.6	2.8	3.3	0.2	0.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	12.1	12.2	4.0	4.9	5.2	5.7	7.7	7.1	1.0	1.4	1.6
LnGrp Delay(d), s/veh	54.9	32.9	35.4	49.0	25.1	25.4	21.8	28.1	28.7	27.2	29.7	30.6
LnGrp LOS	D	C	D	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1500			966			909			238	
Approach Delay, s/veh		35.6			32.0			26.3			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	42.0	14.6	39.7	18.1	30.7	13.8	40.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	38.0	17.0	44.0	22.0	21.0	19.0	42.0
Max Q Clear Time (g_c+I1), s	3.9	17.3	10.1	27.4	13.6	5.6	9.8	12.5
Green Ext Time (p_c), s	0.0	3.7	0.5	8.3	0.5	0.7	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1150	80	120	1440	350	50	440	110	280	410	510
Future Volume (veh/h)	520	1150	80	120	1440	350	50	440	110	280	410	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	553	1223	85	128	1532	372	53	468	117	298	436	543
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	611	1908	837	156	1590	695	68	542	223	322	737	590
Arrive On Green	0.18	0.53	0.53	0.09	0.44	0.44	0.04	0.15	0.15	0.09	0.21	0.21
Sat Flow, veh/h	3476	3574	1568	1792	3574	1562	1792	3574	1470	3476	3574	1498
Grp Volume(v), veh/h	553	1223	85	128	1532	372	53	468	117	298	436	543
Grp Sat Flow(s),veh/h/ln	1738	1787	1568	1792	1787	1562	1792	1787	1470	1738	1787	1498
Q Serve(g_s), s	18.5	28.8	3.2	8.3	49.4	20.6	3.5	15.2	8.7	10.1	13.1	24.5
Cycle Q Clear(g_c), s	18.5	28.8	3.2	8.3	49.4	20.6	3.5	15.2	8.7	10.1	13.1	24.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	611	1908	837	156	1590	695	68	542	223	322	737	590
V/C Ratio(X)	0.90	0.64	0.10	0.82	0.96	0.54	0.78	0.86	0.52	0.92	0.59	0.92
Avail Cap(c_a), veh/h	644	1908	837	242	1596	698	91	542	223	322	737	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	19.6	13.6	53.3	32.0	24.0	56.6	49.1	46.4	53.4	42.6	35.3
Incr Delay (d2), s/veh	15.9	0.7	0.1	12.2	14.7	0.8	25.4	16.5	8.6	31.4	3.5	21.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	14.3	1.4	4.7	27.5	9.0	2.2	8.7	4.1	6.2	6.8	20.5
LnGrp Delay(d), s/veh	63.8	20.3	13.7	65.5	46.7	24.8	82.0	65.6	55.0	84.9	46.0	57.2
LnGrp LOS	E	C	B	E	D	C	F	E	D	F	D	E
Approach Vol, veh/h		1861			2032			638			1277	
Approach Delay, s/veh		32.9			43.9			65.0			59.8	
Approach LOS		C			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	22.0	14.3	67.4	8.5	28.5	24.9	56.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	18.0	16.0	59.0	6.0	23.0	22.0	53.0
Max Q Clear Time (g_c+I1), s	12.1	17.2	10.3	30.8	5.5	26.5	20.5	51.4
Green Ext Time (p_c), s	0.0	0.3	0.1	10.4	0.0	0.0	0.4	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Future Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	1.00		0.91	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	304	293	152	217	33	348	783	152	22	1174	196
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	236	192	119	406	60	282	2015	391	429	1071	889
Arrive On Green	0.03	0.13	0.13	0.03	0.13	0.13	0.13	0.68	0.68	0.02	0.57	0.57
Sat Flow, veh/h	1774	1770	1436	1774	3045	452	1774	2952	573	1774	1863	1547
Grp Volume(v), veh/h	207	304	293	152	124	126	348	469	466	22	1174	196
Grp Sat Flow(s),veh/h/ln	1774	1770	1436	1774	1770	1728	1774	1770	1755	1774	1863	1547
Q Serve(g_s), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Cycle Q Clear(g_c), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	189	236	192	119	236	230	282	1208	1198	429	1071	889
V/C Ratio(X)	1.09	1.29	1.53	1.28	0.53	0.55	1.24	0.39	0.39	0.05	1.10	0.22
Avail Cap(c_a), veh/h	189	236	192	119	236	230	282	1208	1198	457	1071	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	52.0	52.0	51.1	48.5	48.6	43.7	8.2	8.2	10.1	25.5	12.4
Incr Delay (d2), s/veh	92.6	157.8	263.1	174.0	2.1	2.7	132.6	0.9	1.0	0.0	57.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	18.1	20.3	9.1	4.0	4.1	19.7	7.0	6.9	0.3	52.3	3.3
LnGrp Delay(d), s/veh	145.6	209.8	315.1	225.1	50.6	51.3	176.2	9.2	9.2	10.1	83.1	13.0
LnGrp LOS	F	F	F	F	D	D	F	A	A	B	F	B
Approach Vol, veh/h		804			402			1283			1392	
Approach Delay, s/veh		231.6			116.8			54.5			72.1	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	85.9	8.0	20.0	19.0	73.0	8.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	80.0	4.0	16.0	15.0	69.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	2.6	15.7	6.0	18.0	17.0	71.0	6.0	10.2
Green Ext Time (p_c), s	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	720	320	370	700	50	370	280	240	60	160	20
Future Volume (veh/h)	80	720	320	370	700	50	370	280	240	60	160	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	85	766	340	394	745	53	394	298	255	64	170	21
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	327	882	387	430	1943	137	597	1223	534	301	887	106
Arrive On Green	0.05	0.26	0.26	0.20	0.41	0.41	0.20	0.35	0.35	0.04	0.20	0.20
Sat Flow, veh/h	1740	3367	1480	1740	4748	336	1740	3471	1517	1740	4501	536
Grp Volume(v), veh/h	85	756	350	394	520	278	394	298	255	64	124	67
Grp Sat Flow(s),veh/h/ln	1740	1663	1521	1740	1663	1759	1740	1736	1517	1740	1663	1712
Q Serve(g_s), s	3.8	23.5	23.8	18.3	11.8	11.9	18.6	6.6	14.1	3.1	3.4	3.5
Cycle Q Clear(g_c), s	3.8	23.5	23.8	18.3	11.8	11.9	18.6	6.6	14.1	3.1	3.4	3.5
Prop In Lane	1.00		0.97	1.00		0.19	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	327	871	398	430	1360	720	597	1223	534	301	655	337
V/C Ratio(X)	0.26	0.87	0.88	0.92	0.38	0.39	0.66	0.24	0.48	0.21	0.19	0.20
Avail Cap(c_a), veh/h	337	925	423	587	1695	897	660	1223	534	311	655	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	38.0	38.2	27.5	22.3	22.4	24.4	24.8	27.2	32.5	36.1	36.2
Incr Delay (d2), s/veh	0.4	8.6	17.8	15.6	0.2	0.3	2.1	0.5	3.0	0.3	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	11.8	12.0	13.2	5.5	5.8	9.2	3.2	6.3	1.5	1.6	1.8
LnGrp Delay(d), s/veh	27.3	46.6	56.0	43.1	22.5	22.7	26.5	25.2	30.2	32.9	36.8	37.5
LnGrp LOS	C	D	E	D	C	C	C	C	C	C	D	D
Approach Vol, veh/h		1191			1192			947			255	
Approach Delay, s/veh		48.0			29.4			27.1			36.0	
Approach LOS		D			C			C			D	

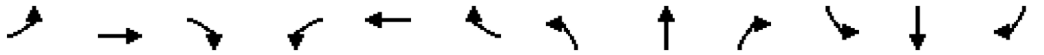
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	42.0	25.3	32.3	25.1	25.3	9.4	48.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	38.0	31.0	30.0	25.0	18.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	5.1	16.1	20.3	25.8	20.6	5.5	5.8	13.9
Green Ext Time (p_c), s	0.0	2.6	0.9	2.5	0.5	0.8	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1290	60	150	1880	410	20	220	170	40	80	80
Future Volume (veh/h)	200	1290	60	150	1880	410	20	220	170	40	80	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.91		0.84	0.99		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	213	1372	64	160	2000	436	21	234	181	43	85	85
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	243	2316	108	322	2248	978	217	326	230	106	333	238
Arrive On Green	0.09	0.67	0.67	0.05	0.63	0.63	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1792	3476	162	1792	3574	1555	1109	1843	1298	967	1881	1342
Grp Volume(v), veh/h	213	704	732	160	2000	436	21	226	189	43	85	85
Grp Sat Flow(s),veh/h/ln	1792	1787	1850	1792	1787	1555	1109	1787	1354	967	1881	1342
Q Serve(g_s), s	7.8	24.5	24.7	3.6	53.3	16.3	1.9	13.5	15.1	4.9	4.4	6.3
Cycle Q Clear(g_c), s	7.8	24.5	24.7	3.6	53.3	16.3	6.3	13.5	15.1	20.0	4.4	6.3
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	243	1191	1233	322	2248	978	217	316	240	106	333	238
V/C Ratio(X)	0.88	0.59	0.59	0.50	0.89	0.45	0.10	0.72	0.79	0.41	0.26	0.36
Avail Cap(c_a), veh/h	292	1218	1261	406	2372	1032	217	316	240	106	333	238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	10.4	10.4	9.6	17.7	10.8	42.8	43.8	44.5	54.1	40.1	40.9
Incr Delay (d2), s/veh	21.6	0.7	0.7	1.2	4.5	0.3	0.9	13.0	22.6	11.1	1.8	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	12.2	12.6	1.8	27.5	7.0	0.6	7.8	7.1	1.7	2.5	2.6
LnGrp Delay(d), s/veh	57.6	11.1	11.1	10.8	22.1	11.1	43.7	56.8	67.0	65.2	41.9	45.0
LnGrp LOS	E	B	B	B	C	B	D	E	E	E	D	D
Approach Vol, veh/h		1649			2596			436			213	
Approach Delay, s/veh		17.1			19.6			60.6			47.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	9.7	79.3		24.0	13.9	75.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	11.0	77.0		20.0	13.0	75.0
Max Q Clear Time (g_c+I1), s		17.1	5.6	26.7		22.0	9.8	55.3
Green Ext Time (p_c), s		0.7	0.2	13.6		0.0	0.2	15.8

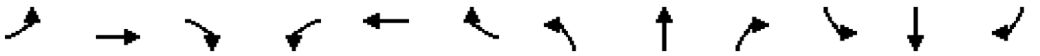
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	630	580	310	2140	0	0	0	0	70	50	140
Future Volume (veh/h)	0	630	580	310	2140	0	0	0	0	70	50	140
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	643	592	316	2184	0				71	51	143
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1721	788	357	2651	0				190	137	286
Arrive On Green	0.00	0.50	0.50	0.20	0.74	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	3593	1568	1792	3668	0				1064	764	1599
Grp Volume(v), veh/h	0	643	592	316	2184	0				122	0	143
Grp Sat Flow(s),veh/h/ln	0	1712	1568	1792	1787	0				1828	0	1599
Q Serve(g_s), s	0.0	11.6	30.3	17.3	40.8	0.0				5.9	0.0	8.1
Cycle Q Clear(g_c), s	0.0	11.6	30.3	17.3	40.8	0.0				5.9	0.0	8.1
Prop In Lane	0.00		1.00	1.00		0.00				0.58		1.00
Lane Grp Cap(c), veh/h	0	1721	788	357	2651	0				327	0	286
V/C Ratio(X)	0.00	0.37	0.75	0.89	0.82	0.00				0.37	0.00	0.50
Avail Cap(c_a), veh/h	0	1905	873	605	3339	0				327	0	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.3	20.0	39.2	8.6	0.0				36.3	0.0	37.3
Incr Delay (d2), s/veh	0.0	0.1	3.3	8.4	1.4	0.0				3.2	0.0	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	13.7	9.3	20.2	0.0				3.3	0.0	4.1
LnGrp Delay(d), s/veh	0.0	15.5	23.3	47.6	10.1	0.0				39.6	0.0	43.4
LnGrp LOS		B	C	D	B					D		D
Approach Vol, veh/h		1235			2500						265	
Approach Delay, s/veh		19.2			14.8						41.6	
Approach LOS		B			B						D	

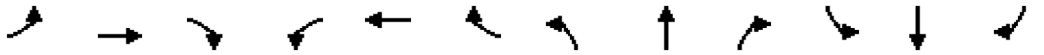
Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			24.0	54.6		22.0		78.6
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			34.0	56.0		18.0		94.0
Max Q Clear Time (g_c+I1), s			19.3	32.3		10.1		42.8
Green Ext Time (p_c), s			0.8	9.2		0.6		31.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	480	0	0	1130	160	1060	0	500	0	0	0
Future Volume (vph)	110	480	0	0	1130	160	1060	0	500	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (prot)	1787	3574			3482		1698	1615	1519			
Flt Permitted	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (perm)	1787	3574			3482		1698	1615	1519			
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	111	485	0	0	1141	162	1071	0	505	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	26	180	0	0	0
Lane Group Flow (vph)	111	485	0	0	1294	0	568	528	274	0	0	0
Confl. Peds. (#/hr)	8		14	14		8						
Confl. Bikes (#/hr)			10			11						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	10.4	61.3			46.9		49.0	49.0	49.0			
Effective Green, g (s)	10.4	61.3			46.9		49.0	49.0	49.0			
Actuated g/C Ratio	0.09	0.52			0.40		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	157	1851			1380		703	668	629			
v/s Ratio Prot	c0.06	0.14			c0.37		c0.33	0.33	0.18			
v/s Ratio Perm												
v/c Ratio	0.71	0.26			0.94		0.81	0.79	0.44			
Uniform Delay, d1	52.5	15.9			34.3		30.5	30.2	24.8			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	13.5	0.1			12.2		9.7	9.2	2.2			
Delay (s)	66.0	16.0			46.4		40.2	39.4	27.0			
Level of Service	E	B			D		D	D	C			
Approach Delay (s/veh)		25.3			46.4			36.1			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	118.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	730	160	120	890	90	340	420	170	350	650	210
Future Volume (veh/h)	150	730	160	120	890	90	340	420	170	350	650	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	167	811	178	133	989	100	378	467	189	389	722	233
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	223	997	631	160	1086	469	437	642	257	419	974	314
Arrive On Green	0.06	0.28	0.28	0.09	0.30	0.30	0.13	0.26	0.26	0.23	0.37	0.37
Sat Flow, veh/h	3476	3574	1542	1792	3574	1544	3476	2461	987	1792	2641	852
Grp Volume(v), veh/h	167	811	178	133	989	100	378	338	318	389	489	466
Grp Sat Flow(s),veh/h/ln	1738	1787	1542	1792	1787	1544	1738	1787	1661	1792	1787	1706
Q Serve(g_s), s	5.5	24.7	9.1	8.5	31.1	5.6	12.4	20.1	20.4	24.8	27.7	27.7
Cycle Q Clear(g_c), s	5.5	24.7	9.1	8.5	31.1	5.6	12.4	20.1	20.4	24.8	27.7	27.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		0.50
Lane Grp Cap(c), veh/h	223	997	631	160	1086	469	437	466	433	419	659	629
V/C Ratio(X)	0.75	0.81	0.28	0.83	0.91	0.21	0.86	0.73	0.73	0.93	0.74	0.74
Avail Cap(c_a), veh/h	238	1012	638	184	1134	490	477	466	433	476	659	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	39.2	23.4	52.2	39.1	30.2	50.0	39.3	39.4	43.7	32.0	32.0
Incr Delay (d2), s/veh	11.5	5.1	0.2	23.7	10.7	0.2	14.3	9.5	10.6	23.1	7.4	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	12.9	3.9	5.3	16.9	2.4	6.9	11.2	10.6	14.9	15.1	14.4
LnGrp Delay(d), s/veh	65.1	44.3	23.6	76.0	49.7	30.4	64.3	48.8	50.0	66.8	39.3	39.7
LnGrp LOS	E	D	C	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1156			1222			1034			1344	
Approach Delay, s/veh		44.1			51.0			54.8			47.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.3	34.4	14.4	36.5	18.7	47.0	11.5	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	28.0	12.0	33.0	16.0	43.0	8.0	37.0
Max Q Clear Time (g_c+I1), s	26.8	22.4	10.5	26.7	14.4	29.7	7.5	33.1
Green Ext Time (p_c), s	0.5	1.9	0.0	3.0	0.2	4.9	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Future Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	247	258	86	118	409	86	527	1151	151	129	1409	753
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	357	294	212	326	268	356	1788	234	292	1051	507
Arrive On Green	0.07	0.19	0.19	0.05	0.17	0.17	0.17	0.57	0.57	0.05	0.46	0.46
Sat Flow, veh/h	1774	1863	1535	1774	1863	1529	1774	3136	410	1774	2293	1107
Grp Volume(v), veh/h	247	258	86	118	409	86	527	648	654	129	1053	1109
Grp Sat Flow(s),veh/h/ln	1774	1863	1535	1774	1863	1529	1774	1770	1777	1774	1770	1630
Q Serve(g_s), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Cycle Q Clear(g_c), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.68
Lane Grp Cap(c), veh/h	178	357	294	212	326	268	356	1009	1013	292	811	747
V/C Ratio(X)	1.39	0.72	0.29	0.56	1.25	0.32	1.48	0.64	0.65	0.44	1.30	1.48
Avail Cap(c_a), veh/h	178	357	294	212	326	268	356	1009	1013	343	811	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	45.5	41.5	40.6	49.5	43.3	41.1	17.5	17.5	17.0	32.5	32.5
Incr Delay (d2), s/veh	204.3	7.0	0.5	3.2	137.3	0.7	231.3	3.1	3.2	1.0	143.4	225.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	8.7	2.5	3.4	23.2	2.5	34.6	15.3	15.6	2.3	59.1	71.4
LnGrp Delay(d), s/veh	247.7	52.5	42.1	43.8	186.8	44.0	272.4	20.6	20.7	18.0	175.9	257.5
LnGrp LOS	F	D	D	D	F	D	F	C	C	B	F	F
Approach Vol, veh/h		591			613			1829			2291	
Approach Delay, s/veh		132.6			139.2			93.2			206.5	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	72.4	10.0	27.0	24.0	59.0	12.0	25.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	65.0	6.0	23.0	20.0	55.0	8.0	21.0
Max Q Clear Time (g_c+I1), s	6.6	32.0	8.0	17.6	22.0	57.0	10.0	23.0
Green Ext Time (p_c), s	0.1	11.1	0.0	0.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	151.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Future Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	0.99		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	131	24	24	24	24	36	24	476	24	71	357	71
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	236	132	132	247	104	156	752	1438	1171	688	1438	1172
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1322	852	852	1335	669	1004	959	1881	1532	899	1881	1533
Grp Volume(v), veh/h	131	0	48	24	0	60	24	476	24	71	357	71
Grp Sat Flow(s),veh/h/ln	1322	0	1704	1335	0	1673	959	1881	1532	899	1881	1533
Q Serve(g_s), s	9.6	0.0	2.4	1.6	0.0	3.1	0.7	7.9	0.4	2.7	5.5	1.1
Cycle Q Clear(g_c), s	12.7	0.0	2.4	4.0	0.0	3.1	6.2	7.9	0.4	10.6	5.5	1.1
Prop In Lane	1.00		0.50	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	0	265	247	0	260	752	1438	1171	688	1438	1172
V/C Ratio(X)	0.55	0.00	0.18	0.10	0.00	0.23	0.03	0.33	0.02	0.10	0.25	0.06
Avail Cap(c_a), veh/h	509	0	617	523	0	606	752	1438	1171	688	1438	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	0.0	36.5	38.3	0.0	36.8	4.3	3.7	2.8	5.4	3.4	2.9
Incr Delay (d2), s/veh	2.0	0.0	0.3	0.2	0.0	0.4	0.1	0.6	0.0	0.3	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.2	0.6	0.0	1.5	0.2	4.3	0.2	0.7	2.9	0.5
LnGrp Delay(d), s/veh	44.4	0.0	36.8	38.4	0.0	37.2	4.4	4.3	2.8	5.7	3.8	3.0
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		179			84			524			499	
Approach Delay, s/veh		42.4			37.6			4.3			4.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		19.4		80.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		9.9		14.7		12.6		6.0
Green Ext Time (p_c), s		3.7		0.6		3.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	10.6
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	30	20	20	20	110	10	10	20	140	60	10
Future Vol, veh/h	20	30	20	20	20	110	10	10	20	140	60	10
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	27	41	27	27	27	151	14	14	27	192	82	14
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	9.1	9	9	12.5
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	25%	40%	0%	50%	0%	70%	0%
Vol Thru, %	25%	60%	0%	50%	0%	30%	0%
Vol Right, %	50%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	50	20	40	110	200	10
LT Vol	10	20	0	20	0	140	0
Through Vol	10	30	0	20	0	60	0
RT Vol	20	0	20	0	110	0	10
Lane Flow Rate	55	68	27	55	151	274	14
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.083	0.113	0.038	0.089	0.205	0.431	0.018
Departure Headway (Hd)	5.431	5.917	5.007	5.852	4.893	5.669	4.614
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	653	601	708	609	728	630	769
Service Time	3.522	3.696	2.785	3.616	2.657	3.44	2.384
HCM Lane V/C Ratio	0.084	0.113	0.038	0.09	0.207	0.435	0.018
HCM Control Delay, s/veh	9	9.5	8	9.2	8.9	12.7	7.5
HCM Lane LOS	A	A	A	A	A	B	A
HCM 95th-tile Q	0.3	0.4	0.1	0.3	0.8	2.2	0.1

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	10	10	30	20
Future Vol, veh/h	20	10	10	10	30	20
Conflicting Peds, #/hr	0	2	2	0	3	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	30	15	15	15	45	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	47	0	88	42
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	-	-	4.16	-	6.46	6.26
Critical Hdwy Stg 1	-	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.254	-	3.554	3.354
Pot Cap-1 Maneuver	-	-	1535	-	903	1017
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	964	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1532	-	890	1014
Mov Cap-2 Maneuver	-	-	-	-	890	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	952	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.7	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	890	1014	-	-	1532	-
HCM Lane V/C Ratio	0.051	0.03	-	-	0.01	-
HCM Control Delay (s/veh)	9.3	8.7	-	-	7.4	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	270	100	20	130	10	30	30	60	10	10	10
Future Vol, veh/h	20	270	100	20	130	10	30	30	60	10	10	10
Conflicting Peds, #/hr	4	0	19	19	0	4	5	0	2	2	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	303	112	22	146	11	34	34	67	11	11	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	161	0	0	434	0	0	634	627	380	656	678	161
Stage 1	-	-	-	-	-	-	422	422	-	200	200	-
Stage 2	-	-	-	-	-	-	212	205	-	456	478	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1418	-	-	1126	-	-	392	400	667	379	374	884
Stage 1	-	-	-	-	-	-	609	588	-	802	736	-
Stage 2	-	-	-	-	-	-	790	732	-	584	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1413	-	-	1108	-	-	358	376	655	305	351	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	376	-	305	351	-
Stage 1	-	-	-	-	-	-	586	566	-	783	718	-
Stage 2	-	-	-	-	-	-	748	714	-	482	535	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	1	15.7	14.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	470	1413	-	-	1108	-	-	413
HCM Lane V/C Ratio	0.287	0.016	-	-	0.02	-	-	0.082
HCM Control Delay (s/veh)	15.7	7.6	0	-	8.3	0	-	14.5
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.2	0	-	-	0.1	-	-	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	150	60	120	130	80	30	1120	40	30	1640	50
Future Volume (veh/h)	110	150	60	120	130	80	30	1120	40	30	1640	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	115	156	62	125	135	83	31	1167	42	31	1708	52
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	185	222	494	150	342	210	126	2138	77	252	2152	65
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	438	684	1521	1170	1051	646	274	3514	126	465	3538	107
Grp Volume(v), veh/h	271	0	62	125	0	218	31	593	616	31	859	901
Grp Sat Flow(s),veh/h/ln	1122	0	1521	1170	0	1697	274	1787	1854	465	1787	1858
Q Serve(g_s), s	17.8	0.0	3.4	9.2	0.0	11.9	11.7	23.4	23.4	5.0	43.5	44.2
Cycle Q Clear(g_c), s	29.8	0.0	3.4	39.0	0.0	11.9	55.9	23.4	23.4	28.4	43.5	44.2
Prop In Lane	0.42		1.00	1.00		0.38	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	407	0	494	150	0	552	126	1087	1128	252	1087	1130
V/C Ratio(X)	0.67	0.00	0.13	0.83	0.00	0.40	0.25	0.55	0.55	0.12	0.79	0.80
Avail Cap(c_a), veh/h	407	0	494	150	0	552	126	1087	1128	252	1087	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	28.5	56.7	0.0	31.4	39.1	13.8	13.8	22.1	17.7	17.9
Incr Delay (d2), s/veh	4.1	0.0	0.1	31.3	0.0	0.5	4.6	2.0	1.9	1.0	5.9	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	1.5	5.4	0.0	5.6	1.0	12.0	12.4	0.7	23.0	24.4
LnGrp Delay(d), s/veh	44.8	0.0	28.6	87.9	0.0	31.8	43.7	15.7	15.7	23.1	23.6	23.7
LnGrp LOS	D		C	F		C	D	B	B	C	C	C
Approach Vol, veh/h		333			343			1240			1791	
Approach Delay, s/veh		41.8			52.3			16.4			23.7	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		43.0		77.0		43.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		57.9		31.8		46.2		41.0
Green Ext Time (p_c), s		7.3		1.1		16.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	17.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	30	50	1990	1760	30
Future Vol, veh/h	30	30	50	1990	1760	30
Conflicting Peds, #/hr	1	1	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	32	32	53	2095	1853	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3020	940	1897	0	-	0
Stage 1	1865	-	-	-	-	-
Stage 2	1155	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	~ 10	267	315	-	-	-
Stage 1	109	-	-	-	-	-
Stage 2	264	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	264	312	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	90	-	-	-	-	-
Stage 2	261	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $/¢	125.9	0.5	0
HCM LOS	F		

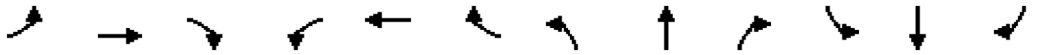
Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	312	-	8	264	-	-
HCM Lane V/C Ratio	0.169	-	3.947	0.12	-	-
HCM Control Delay (s/veh)	18.9	-	$ 2231.3	20.5	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.6	-	5.2	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	50	80	80	130	170	30	1650	20	30	1570	190
Future Volume (veh/h)	140	50	80	80	130	170	30	1650	20	30	1570	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.76	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	149	53	85	85	138	181	32	1755	21	32	1670	202
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	4	411	41	51	365	112	2289	27	137	2025	239
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	0	12	1369	0	170	1217	245	3614	43	269	3197	378
Grp Volume(v), veh/h	202	0	85	223	0	181	32	866	910	32	916	956
Grp Sat Flow(s),veh/h/ln	12	0	1369	170	0	1217	245	1787	1870	269	1787	1788
Q Serve(g_s), s	0.0	0.0	5.6	0.0	0.0	14.7	14.2	41.4	41.7	11.5	46.2	50.6
Cycle Q Clear(g_c), s	36.0	0.0	5.6	36.0	0.0	14.7	64.8	41.4	41.7	53.2	46.2	50.6
Prop In Lane	0.74		1.00	0.38		1.00	1.00		0.02	1.00		0.21
Lane Grp Cap(c), veh/h	56	0	411	92	0	365	112	1132	1185	137	1132	1132
V/C Ratio(X)	3.63	0.00	0.21	2.42	0.00	0.50	0.29	0.77	0.77	0.23	0.81	0.84
Avail Cap(c_a), veh/h	56	0	411	92	0	365	112	1132	1185	137	1132	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	31.3	41.1	0.0	34.5	42.9	15.7	15.7	34.7	16.5	17.3
Incr Delay (d2), s/veh	1225.8	0.0	0.2	668.6	0.0	1.0	6.3	4.9	4.8	4.0	6.3	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	0.0	2.1	20.2	0.0	5.0	1.2	21.8	22.8	1.0	24.6	27.2
LnGrp Delay(d), s/veh	1283.5	0.0	31.6	709.6	0.0	35.6	49.2	20.6	20.5	38.7	22.8	25.1
LnGrp LOS	F		C	F		D	D	C	C	D	C	C
Approach Vol, veh/h		287			404			1808			1904	
Approach Delay, s/veh		912.7			407.6			21.1			24.2	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		66.8		38.0		55.2		38.0
Green Ext Time (p_c), s		7.2		0.0		14.7		0.0

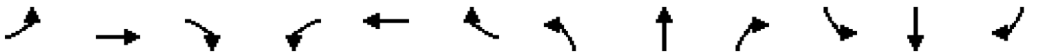
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	116.0
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	630	40	120	850	180	60	340	80	160	500	380
Future Volume (veh/h)	280	630	40	120	850	180	60	340	80	160	500	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	298	670	43	128	904	0	64	362	85	170	532	404
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	334	1539	98	158	1098	342	82	1295	567	236	737	560
Arrive On Green	0.19	0.32	0.32	0.09	0.22	0.00	0.05	0.37	0.37	0.07	0.39	0.39
Sat Flow, veh/h	1757	4832	308	1757	5036	1568	1757	3505	1534	3408	1880	1427
Grp Volume(v), veh/h	298	464	249	128	904	0	64	362	85	170	496	440
Grp Sat Flow(s),veh/h/ln	1757	1679	1783	1757	1679	1568	1757	1752	1534	1704	1752	1555
Q Serve(g_s), s	17.3	11.4	11.6	7.5	17.9	0.0	3.8	7.6	3.9	5.1	25.1	25.1
Cycle Q Clear(g_c), s	17.3	11.4	11.6	7.5	17.9	0.0	3.8	7.6	3.9	5.1	25.1	25.1
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	334	1069	568	158	1098	342	82	1295	567	236	687	610
V/C Ratio(X)	0.89	0.43	0.44	0.81	0.82	0.00	0.78	0.28	0.15	0.72	0.72	0.72
Avail Cap(c_a), veh/h	487	1252	665	269	1252	390	134	1295	567	358	687	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	28.2	28.2	46.7	39.0	0.0	49.3	23.2	22.0	47.7	27.0	27.0
Incr Delay (d2), s/veh	13.6	0.3	0.5	9.5	4.1	0.0	14.6	0.5	0.6	4.1	6.5	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	5.3	5.7	4.0	8.7	0.0	2.2	3.8	1.7	2.5	13.4	12.0
LnGrp Delay(d), s/veh	54.9	28.5	28.8	56.3	43.1	0.0	63.9	23.7	22.6	51.8	33.4	34.2
LnGrp LOS	D	C	C	E	D		E	C	C	D	C	C
Approach Vol, veh/h		1011			1032			511			1106	
Approach Delay, s/veh		36.3			44.7			28.6			36.6	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	42.7	13.4	37.3	8.9	45.0	23.9	26.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	38.0	16.0	39.0	8.0	41.0	29.0	26.0
Max Q Clear Time (g_c+I1), s	7.1	9.6	9.5	13.6	5.8	27.1	19.3	19.9
Green Ext Time (p_c), s	0.2	2.6	0.1	4.4	0.0	5.0	0.6	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

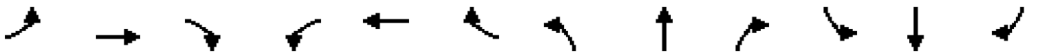


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	370	300	2340	0	0	0	0	80	180	750
Future Volume (vph)	0	330	370	300	2340	0	0	0	0	80	180	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.99	0.96	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.95	0.85	1.00	1.00					1.00	0.91	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3255	1413	3502	3610					1715	1570	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3255	1413	3502	3610					1715	1570	1534
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	344	385	312	2438	0	0	0	0	83	188	781
RTOR Reduction (vph)	0	39	120	0	0	0	0	0	0	0	1	32
Lane Group Flow (vph)	0	463	107	313	2438	0	0	0	0	75	500	445
Confl. Peds. (#/hr)	182		12	12		182						
Confl. Bikes (#/hr)						77						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		56.8	56.8	15.2	76.0					36.0	36.0	36.0
Effective Green, g (s)		56.8	56.8	15.2	76.0					36.0	36.0	36.0
Actuated g/C Ratio		0.47	0.47	0.13	0.63					0.30	0.30	0.30
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1540	668	443	2286					514	471	460
v/s Ratio Prot		0.14		0.09	c0.68					0.04	c0.32	0.29
v/s Ratio Perm			0.08									
v/c Ratio		0.30	0.16	0.71	1.07					0.15	1.06	0.97
Uniform Delay, d1		19.4	18.0	50.3	22.0					30.7	42.0	41.4
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.1	39.5					0.6	58.5	34.4
Delay (s)		19.5	18.1	55.3	61.5					31.3	100.5	75.8
Level of Service		B	B	E	E					C	F	E
Approach Delay (s/veh)		19.1			60.8			0.0			84.4	
Approach LOS		B			E			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	59.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	710	10	10	990	300	10	10	20	270	10	270
Future Volume (vph)	220	710	10	10	990	300	10	10	20	270	10	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	237	763	11	11	1065	323	11	11	22	290	11	290
RTOR Reduction (vph)	0	1	0	0	0	144	0	0	18	0	228	0
Lane Group Flow (vph)	237	773	0	11	1065	179	0	22	4	261	102	0
Confl. Peds. (#/hr)	2		11	11		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	12.4	46.2		0.7	34.5	34.5		18.5	18.5	22.3	22.3	
Effective Green, g (s)	12.4	46.2		0.7	34.5	34.5		18.5	18.5	22.3	22.3	
Actuated g/C Ratio	0.12	0.45		0.01	0.33	0.33		0.18	0.18	0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	402	2215		11	1659	507		317	277	354	322	
v/s Ratio Prot	c0.07	0.16		0.01	c0.21			c0.01		c0.16	0.07	
v/s Ratio Perm						0.12			0.00			
v/c Ratio	0.59	0.35		1.00	0.64	0.35		0.07	0.01	0.74	0.32	
Uniform Delay, d1	43.2	18.9		51.5	29.4	26.2		35.4	35.1	38.0	34.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.2	0.1		271.4	0.9	0.4		0.4	0.1	7.8	0.6	
Delay (s)	45.5	19.0		322.9	30.2	26.6		35.9	35.2	45.8	34.9	
Level of Service	D	B		F	C	C		D	D	D	C	
Approach Delay (s/veh)		25.2			31.7			35.5			39.7	
Approach LOS		C			C			D			D	

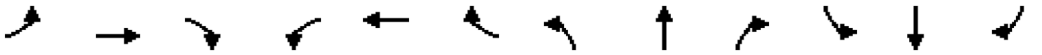
Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	230	0	0	1240	90	1440	250	250	0	0	0
Future Volume (vph)	160	230	0	0	1240	90	1440	250	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.98		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3500		1643	3142	1470			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3500		1643	3142	1470			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	242	0	0	1305	95	1516	263	263	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	86	0	0	0
Lane Group Flow (vph)	168	242	0	0	1400	0	758	1046	151	0	0	0
Confl. Peds. (#/hr)	124		12	12		124						
Confl. Bikes (#/hr)			3			49						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	6.0	57.0			47.0		55.0	55.0	55.0			
Effective Green, g (s)	6.0	57.0			47.0		55.0	55.0	55.0			
Actuated g/C Ratio	0.05	0.48			0.39		0.46	0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	175	1714			1370		753	1440	673			
v/s Ratio Prot	c0.05	0.07			c0.40		c0.46	0.33				
v/s Ratio Perm									0.10			
v/c Ratio	0.96	0.14			1.02		1.01	1.01dl	0.22			
Uniform Delay, d1	56.9	17.7			36.5		32.5	26.4	19.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	56.1	0.0			30.0		34.4	3.2	0.8			
Delay (s)	113.0	17.8			66.5		66.9	29.6	20.4			
Level of Service	F	B			E		E	C	C			
Approach Delay (s/veh)		56.8			66.5			42.4			0.0	
Approach LOS		E			E			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	830	0	0	950	190	360	0	710	0	0	0
Future Volume (veh/h)	130	830	0	0	950	190	360	0	710	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1827	0	0	1827	1900	1827	0	1827			
Adj Flow Rate, veh/h	140	892	0	0	1022	204	387	0	763			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	4	4	4	0	4			
Cap, veh/h	193	1772	0	0	1100	219	1950	0	897			
Arrive On Green	0.06	0.36	0.00	0.00	0.26	0.26	0.58	0.00	0.58			
Sat Flow, veh/h	3375	5152	0	0	4318	827	3375	0	1553			
Grp Volume(v), veh/h	140	892	0	0	818	408	387	0	763			
Grp Sat Flow(s),veh/h/ln	1688	1663	0	0	1663	1656	1688	0	1553			
Q Serve(g_s), s	4.9	16.8	0.0	0.0	28.6	28.7	6.5	0.0	48.7			
Cycle Q Clear(g_c), s	4.9	16.8	0.0	0.0	28.6	28.7	6.5	0.0	48.7			
Prop In Lane	1.00		0.00	0.00		0.50	1.00		1.00			
Lane Grp Cap(c), veh/h	193	1772	0	0	881	438	1950	0	897			
V/C Ratio(X)	0.73	0.50	0.00	0.00	0.93	0.93	0.20	0.00	0.85			
Avail Cap(c_a), veh/h	198	1796	0	0	891	444	1950	0	897			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	55.4	30.2	0.0	0.0	42.8	42.8	12.0	0.0	20.9			
Incr Delay (d2), s/veh	12.3	0.2	0.0	0.0	15.6	26.3	0.2	0.0	9.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	7.7	0.0	0.0	15.1	16.4	3.1	0.0	23.2			
LnGrp Delay(d), s/veh	67.7	30.4	0.0	0.0	58.4	69.1	12.3	0.0	30.9			
LnGrp LOS	E	C			E	E	B		C			
Approach Vol, veh/h		1032			1226			1150				
Approach Delay, s/veh		35.5			62.0			24.6				
Approach LOS		D			E			C				

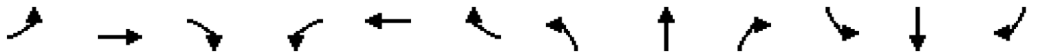
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		73.0		46.4			10.8	35.6
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		69.0		43.0			7.0	32.0
Max Q Clear Time (g_c+I1), s		50.7		18.8			6.9	30.7
Green Ext Time (p_c), s		4.7		6.3			0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1570	420	250	1550	80	420	510	170	220	1030	320
Future Volume (veh/h)	230	1570	420	250	1550	80	420	510	170	220	1030	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	245	1670	447	266	1649	85	447	543	181	234	1096	340
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1695	517	287	1737	537	459	1855	567	293	1121	484
Arrive On Green	0.08	0.33	0.33	0.08	0.34	0.34	0.13	0.36	0.36	0.09	0.32	0.32
Sat Flow, veh/h	3442	5085	1551	3442	5085	1571	3442	5085	1553	3442	3539	1529
Grp Volume(v), veh/h	245	1670	447	266	1649	85	447	543	181	234	1096	340
Grp Sat Flow(s),veh/h/ln	1721	1695	1551	1721	1695	1571	1721	1695	1553	1721	1770	1529
Q Serve(g_s), s	8.5	39.1	32.4	9.2	37.9	4.5	15.5	9.1	10.1	8.0	36.8	23.4
Cycle Q Clear(g_c), s	8.5	39.1	32.4	9.2	37.9	4.5	15.5	9.1	10.1	8.0	36.8	23.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	1695	517	287	1737	537	459	1855	567	293	1121	484
V/C Ratio(X)	0.95	0.99	0.86	0.93	0.95	0.16	0.97	0.29	0.32	0.80	0.98	0.70
Avail Cap(c_a), veh/h	258	1695	517	287	1737	537	459	1855	567	373	1121	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	39.7	37.5	54.6	38.5	27.5	51.8	27.1	27.4	53.9	40.6	36.0
Incr Delay (d2), s/veh	42.2	18.4	14.2	34.6	11.7	0.1	35.2	0.4	1.5	9.2	22.1	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	21.1	15.8	5.8	19.6	2.0	9.6	4.3	4.5	4.2	21.4	11.0
LnGrp Delay(d), s/veh	97.4	58.1	51.7	89.2	50.2	27.6	87.0	27.5	28.9	63.0	62.7	44.3
LnGrp LOS	F	E	D	F	D	C	F	C	C	E	E	D
Approach Vol, veh/h		2362			2000			1171			1670	
Approach Delay, s/veh		60.9			54.5			50.4			59.0	
Approach LOS		E			D			D			E	

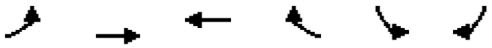
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	47.8	14.0	44.0	20.0	42.0	13.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	41.0	10.0	40.0	16.0	38.0	9.0	41.0
Max Q Clear Time (g_c+I1), s	10.0	12.1	11.2	41.1	17.5	38.8	10.5	39.9
Green Ext Time (p_c), s	0.2	4.2	0.0	0.0	0.0	0.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	380	40	900	310	140	50	310	360	450	1420	250
Future Volume (vph)	90	380	40	900	310	140	50	310	360	450	1420	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.98	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4983		3253	1686	1575	1787	3574	1575	3467	4991	
Flt Permitted		0.78		0.95	0.46	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3929		3253	781	1575	1787	3574	1575	3467	4991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	422	44	1000	344	156	56	344	400	500	1578	278
RTOR Reduction (vph)	0	8	0	0	0	83	0	0	38	0	21	0
Lane Group Flow (vph)	0	558	0	890	454	73	56	344	362	500	1835	0
Confl. Peds. (#/hr)	1		47	47		1	5		9	9		5
Confl. Bikes (#/hr)			5			2			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.4		34.6	56.0	56.0	4.0	30.4	65.0	21.6	48.0	
Effective Green, g (s)		17.4		34.6	56.0	56.0	4.0	30.4	65.0	21.6	48.0	
Actuated g/C Ratio		0.14		0.29	0.47	0.47	0.03	0.25	0.54	0.18	0.40	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		569		937	625	735	59	905	905	624	1996	
v/s Ratio Prot				c0.27	0.21		0.03	0.10	0.12	c0.14	c0.37	
v/s Ratio Perm		c0.14			0.13	0.05			0.11			
v/c Ratio		0.98		0.95	0.73	0.10	0.95	0.38	0.40	0.80	0.92	
Uniform Delay, d1		51.1		41.8	25.8	17.9	57.9	37.0	16.1	47.1	34.2	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		32.8		18.2	4.2	0.1	97.7	1.2	0.3	7.3	8.4	
Delay (s)		83.9		60.1	30.0	18.0	155.6	38.2	16.4	54.5	42.5	
Level of Service		F		E	C	B	F	D	B	D	D	
Approach Delay (s/veh)		83.9			46.6			35.5			45.1	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	580	1690	0	130	470
Future Volume (veh/h)	0	580	1690	0	130	470
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	598	1742	0	134	485
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2160	2160	0	928	828
Arrive On Green	0.00	0.42	0.42	0.00	0.51	0.51
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	598	1742	0	134	485
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	8.6	33.4	0.0	4.4	23.7
Cycle Q Clear(g_c), s	0.0	8.6	33.4	0.0	4.4	23.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2160	2160	0	928	828
V/C Ratio(X)	0.00	0.28	0.81	0.00	0.14	0.59
Avail Cap(c_a), veh/h	0	2476	2476	0	928	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.8	29.0	0.0	14.5	19.2
Incr Delay (d2), s/veh	0.0	0.1	1.8	0.0	0.3	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.1	16.2	0.0	2.3	11.2
LnGrp Delay(d), s/veh	0.0	21.8	30.8	0.0	14.8	22.2
LnGrp LOS		C	C		B	C
Approach Vol, veh/h		598	1742		619	
Approach Delay, s/veh		21.8	30.8		20.6	
Approach LOS		C	C		C	

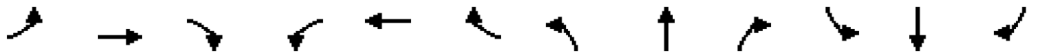
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				51.1		62.0		51.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				54.0		58.0		54.0
Max Q Clear Time (g_c+I1), s				10.6		25.7		35.4
Green Ext Time (p_c), s				4.3		2.3		11.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.9
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	480	0	0	1830	630	1040
Future Volume (vph)	480	0	0	1830	630	1040
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	0.99	0.97
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5136			5136	1724	1466
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5136			5136	1724	1466
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	516	0	0	1968	677	1118
RTOR Reduction (vph)	0	0	0	0	11	89
Lane Group Flow (vph)	516	0	0	1968	923	772
Confl. Peds. (#/hr)						10
Confl. Bikes (#/hr)						2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	47.0			47.0	65.0	65.0
Effective Green, g (s)	47.0			47.0	65.0	65.0
Actuated g/C Ratio	0.39			0.39	0.54	0.54
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2011			2011	933	794
v/s Ratio Prot	0.10			c0.38	c0.54	
v/s Ratio Perm						0.53
v/c Ratio	0.26			0.98	0.99	0.97
Uniform Delay, d1	24.7			36.0	27.1	26.6
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			15.1	26.9	25.9
Delay (s)	24.8			51.2	54.0	52.5
Level of Service	C			D	D	D
Approach Delay (s/veh)	24.8			51.2	53.3	
Approach LOS	C			D	D	

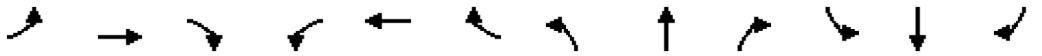
Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Future Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.89						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1645	1544						5036	1539	1752	3505	
Flt Permitted	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1645	1544						5036	1539	1752	3505	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	526	0	268	0	0	0	0	887	412	247	392	0
RTOR Reduction (vph)	0	82	0	0	0	0	0	0	228	0	0	0
Lane Group Flow (vph)	416	296	0	0	0	0	0	887	184	247	392	0
Confl. Peds. (#/hr)							5		3	3		5
Confl. Bikes (#/hr)									1			7
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	3	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA						NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Effective Green, g (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Actuated g/C Ratio	0.31	0.31						0.39	0.39	0.18	0.61	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	513	482						1982	605	320	2150	
v/s Ratio Prot								c0.18		c0.14	0.11	
v/s Ratio Perm	c0.25	0.19							0.12			
v/c Ratio	0.81	0.61						0.45	0.30	0.77	0.18	
Uniform Delay, d1	34.3	31.7						24.1	22.6	42.1	9.1	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.4	2.3						0.7	1.3	11.0	0.2	
Delay (s)	43.7	34.0						24.9	23.9	53.0	9.3	
Level of Service	D	C						C	C	D	A	
Approach Delay (s/veh)		39.1			0.0			24.6			26.2	
Approach LOS		D			A			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	108.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



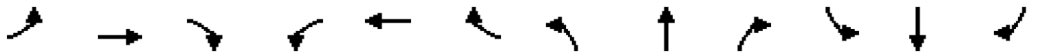
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Future Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1752		1568	1752	3505			5036	1517
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1752		1568	1752	3505			5036	1517
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	219	0	312	583	1021	0	0	500	292
RTOR Reduction (vph)	0	0	0	0	0	132	0	0	0	0	0	194
Lane Group Flow (vph)	0	0	0	219	0	181	583	1021	0	0	500	98
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												5
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm		Perm	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases				8		8						6
Actuated Green, G (s)				19.2		19.2	42.9	84.2			37.3	37.3
Effective Green, g (s)				19.2		19.2	42.9	84.2			37.3	37.3
Actuated g/C Ratio				0.17		0.17	0.39	0.76			0.33	0.33
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				301		270	674	2649			1686	507
v/s Ratio Prot							c0.33	c0.29			0.10	
v/s Ratio Perm				c0.12		0.12						0.06
v/c Ratio				0.73		0.67	0.86	0.39			0.30	0.19
Uniform Delay, d1				43.6		43.1	31.6	4.7			27.4	26.3
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				8.5		6.2	11.2	0.4			0.4	0.8
Delay (s)				52.1		49.3	42.8	5.1			27.8	27.2
Level of Service				D		D	D	A			C	C
Approach Delay (s/veh)		0.0			50.4			18.8			27.6	
Approach LOS		A			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	111.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Future Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				489	0	245	117	1160	0	0	1660	351
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				546	0	858	178	2209	0	0	2712	819
Arrive On Green				0.30	0.00	0.30	0.05	0.62	0.00	0.00	0.53	0.53
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1551
Grp Volume(v), veh/h				489	0	245	117	1160	0	0	1660	351
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1551
Q Serve(g_s), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Cycle Q Clear(g_c), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				546	0	858	178	2209	0	0	2712	819
V/C Ratio(X)				0.90	0.00	0.29	0.66	0.53	0.00	0.00	0.61	0.43
Avail Cap(c_a), veh/h				830	0	1304	268	2209	0	0	2712	819
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.4	0.0	27.4	48.2	11.2	0.0	0.0	17.0	14.9
Incr Delay (d2), s/veh				8.5	0.0	0.2	4.1	0.9	0.0	0.0	1.0	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.6	0.0	2.7	1.7	9.6	0.0	0.0	11.2	6.4
LnGrp Delay(d), s/veh				42.9	0.0	27.6	52.3	12.1	0.0	0.0	18.1	16.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					734			1277			2011	
Approach Delay, s/veh					37.8			15.8			17.8	
Approach LOS					D			B			B	

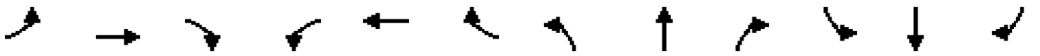
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		68.0			9.3	58.7		35.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			8.0	52.0		48.0
Max Q Clear Time (g_c+I1), s		21.0			5.4	25.3		29.0
Green Ext Time (p_c), s		10.9			0.1	16.1		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.8
HCM 2010 LOS	C



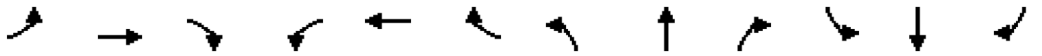
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Future Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.93	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1555	1519					5136	1557	3467	3574	
Flt Permitted	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1555	1519					5136	1557	3467	3574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	0	147	0	0	0	0	1084	737	379	1758	0
RTOR Reduction (vph)	0	40	48	0	0	0	0	0	187	0	0	0
Lane Group Flow (vph)	109	66	52	0	0	0	0	1084	550	379	1758	0
Confl. Peds. (#/hr)							6		6	6		6
Confl. Bikes (#/hr)									5			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Effective Green, g (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Actuated g/C Ratio	0.11	0.11	0.11					0.64	0.64	0.15	0.82	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	183	168	164					3265	989	527	2940	
v/s Ratio Prot								0.21		c0.11	c0.49	
v/s Ratio Perm	c0.06	0.04	0.03						0.35			
v/c Ratio	0.60	0.39	0.32					0.33	0.56	0.72	0.60	
Uniform Delay, d1	49.1	48.0	47.6					9.7	11.9	46.6	3.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	1.5	1.1					0.3	2.3	4.7	0.9	
Delay (s)	54.3	49.5	48.7					10.0	14.1	51.3	4.5	
Level of Service	D	D	D					A	B	D	A	
Approach Delay (s/veh)		50.9			0.0			11.7			12.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Future Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.93	0.85					0.94		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1649	1502	1475					4661		3367	4988	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1649	1502	1475					4661		3367	4988	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	323	0	301	0	0	0	0	742	462	226	473	0
RTOR Reduction (vph)	0	36	161	0	0	0	0	71	0	0	0	0
Lane Group Flow (vph)	216	173	38	0	0	0	0	1133	0	226	473	0
Confl. Peds. (#/hr)							6		4	4		6
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Effective Green, g (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Actuated g/C Ratio	0.19	0.19	0.19					0.58		0.12	0.73	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	316	288	282					2685		393	3648	
v/s Ratio Prot								c0.24		c0.07	0.09	
v/s Ratio Perm	c0.13	0.11	0.03									
v/c Ratio	0.68	0.60	0.14					0.42		0.58	0.13	
Uniform Delay, d1	39.2	38.5	35.0					12.4		43.6	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	6.0	3.3	0.2					0.5		2.0	0.1	
Delay (s)	45.2	41.8	35.2					12.9		45.6	4.2	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.9			0.0			12.9			17.6	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	104.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Future Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.87	0.85	1.00	1.00			0.94	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1431	1475	3367	4988			4653	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1649	1431	1475	3367	4988			4653	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	180	0	337	326	730	0	0	562	337
RTOR Reduction (vph)	0	0	0	0	137	148	0	0	0	0	62	0
Lane Group Flow (vph)	0	0	0	162	43	27	326	730	0	0	837	0
Confl. Peds. (#/hr)							3		4	4		3
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm	NA	Perm	Prot	NA			NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Effective Green, g (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Actuated g/C Ratio				0.16	0.16	0.16	0.15	0.77			0.58	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				258	224	231	491	3820			2704	
v/s Ratio Prot							c0.10	0.15			c0.18	
v/s Ratio Perm				c0.10	0.03	0.02						
v/c Ratio				0.63	0.19	0.12	0.66	0.19			0.31	
Uniform Delay, d1				40.8	37.9	37.5	41.8	3.3			11.1	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				4.7	0.4	0.2	3.4	0.1			0.3	
Delay (s)				45.5	38.3	37.7	45.1	3.4			11.4	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			40.4			16.3			11.4	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	103.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Fullerton - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	740	180	160	730	200	220	1360	130	110	930	30
Future Volume (veh/h)	50	740	180	160	730	200	220	1360	130	110	930	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	56	822	200	178	811	222	244	1511	144	122	1033	33
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	861	209	207	955	261	314	1502	142	136	1418	45
Arrive On Green	0.03	0.30	0.30	0.08	0.34	0.34	0.10	0.45	0.45	0.04	0.40	0.40
Sat Flow, veh/h	1810	2879	700	1810	2792	764	1810	3333	315	1810	3570	114
Grp Volume(v), veh/h	56	515	507	178	524	509	244	813	842	122	522	544
Grp Sat Flow(s),veh/h/ln	1810	1805	1774	1810	1805	1751	1810	1805	1843	1810	1805	1879
Q Serve(g_s), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.9	54.0	4.9	29.4	29.4
Cycle Q Clear(g_c), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.9	54.0	4.9	29.4	29.4
Prop In Lane	1.00		0.39	1.00		0.44	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	159	540	531	207	617	599	314	813	830	136	717	746
V/C Ratio(X)	0.35	0.95	0.95	0.86	0.85	0.85	0.78	1.00	1.01	0.90	0.73	0.73
Avail Cap(c_a), veh/h	161	542	533	207	618	599	368	813	830	136	717	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	41.2	41.2	30.6	36.6	36.6	23.9	32.9	32.9	29.7	30.7	30.7
Incr Delay (d2), s/veh	1.3	27.6	27.9	29.0	10.8	11.1	8.7	31.4	34.8	48.5	6.4	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	20.9	20.6	5.6	17.9	17.4	5.3	33.7	35.3	4.2	15.9	16.5
LnGrp Delay(d), s/veh	32.4	68.8	69.1	59.6	47.4	47.7	32.6	64.3	67.7	78.1	37.1	36.8
LnGrp LOS	C	E	E	E	D	D	C	E	F	E	D	D
Approach Vol, veh/h		1078			1211			1899			1188	
Approach Delay, s/veh		67.0			49.3			61.8			41.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	58.0	13.0	39.8	15.4	51.6	7.9	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	54.0	9.0	36.0	15.0	44.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	6.9	56.0	10.0	35.6	11.2	31.4	4.6	34.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.2	5.4	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	490	80	330	670	210	100	1330	230	120	960	190
Future Volume (veh/h)	180	490	80	330	670	210	100	1330	230	120	960	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	189	516	84	347	705	221	105	1400	242	126	1011	200
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	243	643	104	399	753	236	222	1583	698	184	1336	264
Arrive On Green	0.09	0.21	0.21	0.17	0.28	0.28	0.05	0.44	0.44	0.05	0.45	0.45
Sat Flow, veh/h	1810	3096	502	1810	2687	842	1810	3610	1591	1810	2998	592
Grp Volume(v), veh/h	189	300	300	347	474	452	105	1400	242	126	608	603
Grp Sat Flow(s),veh/h/ln	1810	1805	1793	1810	1805	1724	1810	1805	1591	1810	1805	1785
Q Serve(g_s), s	9.7	18.8	19.0	17.2	30.4	30.5	3.8	42.3	12.0	4.5	33.5	33.7
Cycle Q Clear(g_c), s	9.7	18.8	19.0	17.2	30.4	30.5	3.8	42.3	12.0	4.5	33.5	33.7
Prop In Lane	1.00		0.28	1.00		0.49	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	243	375	373	399	506	483	222	1583	698	184	804	796
V/C Ratio(X)	0.78	0.80	0.81	0.87	0.94	0.94	0.47	0.88	0.35	0.68	0.76	0.76
Avail Cap(c_a), veh/h	243	375	373	451	516	493	228	1583	698	193	804	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	44.8	44.8	30.1	41.8	41.8	22.5	30.6	22.1	26.9	27.6	27.6
Incr Delay (d2), s/veh	14.8	11.6	12.2	15.2	24.5	25.3	1.6	7.6	1.4	9.1	6.5	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	10.5	10.7	10.3	18.6	17.8	2.0	22.7	5.5	2.7	18.0	18.1
LnGrp Delay(d), s/veh	49.8	56.3	57.1	45.2	66.2	67.1	24.1	38.2	23.5	36.0	34.1	34.3
LnGrp LOS	D	E	E	D	E	E	C	D	C	D	C	C
Approach Vol, veh/h		789			1273			1747			1337	
Approach Delay, s/veh		55.0			60.8			35.3			34.4	
Approach LOS		E			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	56.2	23.6	28.7	9.6	57.0	15.0	37.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	52.0	23.0	22.0	6.0	53.0	11.0	34.0
Max Q Clear Time (g_c+I1), s	6.5	44.3	19.2	21.0	5.8	35.7	11.7	32.5
Green Ext Time (p_c), s	0.0	5.6	0.4	0.4	0.0	7.7	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Future Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	41	856	144	124	1082	21	196	134	134	21	124	52
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	226	1556	262	254	1825	35	521	786	646	117	660	663
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	519	3089	520	572	3622	70	1223	1900	1561	179	1596	1604
Grp Volume(v), veh/h	41	500	500	124	539	564	196	134	134	145	0	52
Grp Sat Flow(s),veh/h/ln	519	1805	1804	572	1805	1887	1223	1900	1561	1776	0	1604
Q Serve(g_s), s	5.9	18.4	18.4	18.4	20.4	20.5	11.7	4.3	5.3	0.0	0.0	1.9
Cycle Q Clear(g_c), s	26.3	18.4	18.4	36.8	20.4	20.5	16.4	4.3	5.3	4.7	0.0	1.9
Prop In Lane	1.00		0.29	1.00		0.04	1.00		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	226	909	909	254	909	951	521	786	646	777	0	663
V/C Ratio(X)	0.18	0.55	0.55	0.49	0.59	0.59	0.38	0.17	0.21	0.19	0.00	0.08
Avail Cap(c_a), veh/h	351	1343	1343	392	1343	1405	521	786	646	777	0	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.3	16.5	16.5	29.1	17.0	17.0	23.2	17.9	18.2	18.0	0.0	17.2
Incr Delay (d2), s/veh	0.4	0.5	0.5	1.5	0.6	0.6	2.1	0.5	0.7	0.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.3	9.3	3.0	10.3	10.8	4.3	2.4	2.4	2.6	0.0	0.9
LnGrp Delay(d), s/veh	26.7	17.0	17.0	30.5	17.6	17.6	25.3	18.4	18.9	18.5	0.0	17.4
LnGrp LOS	C	B	B	C	B	B	C	B	B	B		B
Approach Vol, veh/h		1041			1227			464			197	
Approach Delay, s/veh		17.4			18.9			21.5			18.2	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.0		52.7		44.0		52.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s		18.4		28.3		6.7		38.8
Green Ext Time (p_c), s		2.0		8.1		1.1		10.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	630	230	140	650	40	250	290	110	40	330	70
Future Volume (veh/h)	80	630	230	140	650	40	250	290	110	40	330	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	677	247	151	699	43	269	312	118	43	355	75
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	266	1513	641	238	1513	642	451	972	808	466	972	807
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	729	3610	1530	615	3610	1531	972	1900	1579	972	1900	1577
Grp Volume(v), veh/h	86	677	247	151	699	43	269	312	118	43	355	75
Grp Sat Flow(s),veh/h/ln	729	1805	1530	615	1805	1531	972	1900	1579	972	1900	1577
Q Serve(g_s), s	11.1	15.5	12.9	26.9	16.1	1.9	26.5	11.1	4.6	3.1	12.9	2.8
Cycle Q Clear(g_c), s	27.2	15.5	12.9	42.3	16.1	1.9	39.4	11.1	4.6	14.2	12.9	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1513	641	238	1513	642	451	972	808	466	972	807
V/C Ratio(X)	0.32	0.45	0.39	0.64	0.46	0.07	0.60	0.32	0.15	0.09	0.37	0.09
Avail Cap(c_a), veh/h	296	1659	703	262	1659	703	451	972	808	466	972	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	24.0	23.2	39.1	24.1	20.0	28.8	16.5	14.9	20.6	16.9	14.4
Incr Delay (d2), s/veh	0.7	0.2	0.4	4.3	0.2	0.0	5.7	0.9	0.4	0.4	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.8	5.5	4.9	8.0	0.8	7.8	6.0	2.1	0.9	7.1	1.3
LnGrp Delay(d), s/veh	34.6	24.2	23.6	43.4	24.4	20.1	34.5	17.3	15.3	21.0	18.0	14.7
LnGrp LOS	C	C	C	D	C	C	C	B	B	C	B	B
Approach Vol, veh/h		1010			893			699			473	
Approach Delay, s/veh		24.9			27.4			23.6			17.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		63.0		52.3		63.0		52.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		59.0		53.0		59.0		53.0
Max Q Clear Time (g_c+I1), s		41.4		29.2		16.2		44.3
Green Ext Time (p_c), s		3.5		6.5		3.0		4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	40	570	30	20	630
Future Vol, veh/h	50	40	570	30	20	630
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	57	45	648	34	23	716

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1413	651	0	0	685	0
Stage 1	651	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	153	472	-	-	918	-
Stage 1	523	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	149	471	-	-	916	-
Mov Cap-2 Maneuver	149	-	-	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	30.1	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	149	471	916	-
HCM Lane V/C Ratio	-	-	0.381	0.097	0.025	-
HCM Control Delay (s/veh)	-	-	43.3	13.5	9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Future Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Conflicting Peds, #/hr	5	0	0	0	0	5	4	0	18	18	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	11	23	23	11	34	23	580	23	11	534	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1225	1227	538	1223	1215	603	549	0	0	621	0	0
Stage 1	560	560	-	644	644	-	-	-	-	-	-	-
Stage 2	665	667	-	579	571	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	157	180	547	158	183	503	1031	-	-	969	-	-
Stage 1	516	514	-	465	471	-	-	-	-	-	-	-
Stage 2	453	460	-	504	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	171	545	138	174	493	1028	-	-	954	-	-
Mov Cap-2 Maneuver	134	171	-	138	174	-	-	-	-	-	-	-
Stage 1	503	506	-	448	454	-	-	-	-	-	-	-
Stage 2	400	443	-	467	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22.6	24.7	0.3	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	150	545	148	493	954	-	-
HCM Lane V/C Ratio	0.022	-	-	0.152	0.042	0.23	0.069	0.012	-	-
HCM Control Delay (s/veh)	8.6	-	-	33.2	11.9	36.5	12.8	8.8	-	-
HCM Lane LOS	A	-	-	D	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0.8	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Future Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.98		0.95	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Grp Volume(v), veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Grp Sat Flow(s),veh/h/ln	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Q Serve(g_s), s	10.9	6.3	2.7	3.0	6.8	3.2	2.6	6.4	0.6	3.2	7.6	5.2
Cycle Q Clear(g_c), s	17.7	6.3	2.7	9.3	6.8	3.2	10.2	6.4	0.6	9.6	7.6	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
V/C Ratio(X)	0.55	0.35	0.16	0.16	0.38	0.19	0.09	0.26	0.03	0.12	0.30	0.22
Avail Cap(c_a), veh/h	552	918	738	568	918	738	571	1317	1077	715	1317	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	31.2	29.8	35.1	31.4	30.0	7.6	5.5	4.6	7.3	5.7	5.3
Incr Delay (d2), s/veh	1.9	0.5	0.2	0.3	0.6	0.3	0.3	0.5	0.1	0.3	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.4	1.1	1.0	3.6	1.4	0.6	3.5	0.3	1.0	4.2	2.3
LnGrp Delay(d), s/veh	40.8	31.7	30.0	35.4	31.9	30.3	8.0	5.9	4.6	7.6	6.2	5.7
LnGrp LOS	D	C	C	D	C	C	A	A	A	A	A	A
Approach Vol, veh/h		340			267			425			713	
Approach Delay, s/veh		35.1			32.1			6.1			6.2	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		25.2		70.0		25.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		12.2		19.7		11.6		11.3
Green Ext Time (p_c), s		2.8		1.5		4.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Future Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.93	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	289	959	103	103	1062	186	134	165	103	124	155	237
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	371	1927	206	321	1469	257	418	740	605	453	740	603
Arrive On Green	0.13	0.41	0.41	0.06	0.34	0.34	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1792	4675	500	1792	4341	759	988	1881	1538	1105	1881	1535
Grp Volume(v), veh/h	289	701	361	103	837	411	134	165	103	124	155	237
Grp Sat Flow(s),veh/h/ln	1792	1712	1751	1792	1712	1676	988	1881	1538	1105	1881	1535
Q Serve(g_s), s	8.5	13.1	13.2	3.2	18.5	18.6	9.0	5.0	3.8	7.3	4.7	9.6
Cycle Q Clear(g_c), s	8.5	13.1	13.2	3.2	18.5	18.6	13.7	5.0	3.8	12.3	4.7	9.6
Prop In Lane	1.00		0.29	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	1411	722	321	1159	567	418	740	605	453	740	603
V/C Ratio(X)	0.78	0.50	0.50	0.32	0.72	0.72	0.32	0.22	0.17	0.27	0.21	0.39
Avail Cap(c_a), veh/h	781	2494	1276	449	1702	833	418	740	605	453	740	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	18.8	18.8	17.2	25.1	25.1	21.9	17.5	17.1	21.6	17.4	18.8
Incr Delay (d2), s/veh	3.6	0.3	0.5	0.6	0.9	1.8	2.0	0.7	0.6	1.5	0.6	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	6.2	6.4	1.6	8.9	8.8	2.7	2.8	1.7	2.4	2.6	4.4
LnGrp Delay(d), s/veh	21.5	19.1	19.4	17.7	25.9	26.8	23.9	18.2	17.7	23.0	18.0	20.8
LnGrp LOS	C	B	B	B	C	C	C	B	B	C	B	C
Approach Vol, veh/h		1351			1351			402			516	
Approach Delay, s/veh		19.7			25.6			19.9			20.5	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.8	39.6		38.0	15.2	33.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0	11.0	63.0		34.0	31.0	43.0
Max Q Clear Time (g_c+I1), s		15.7	5.2	15.2		14.3	10.5	20.6
Green Ext Time (p_c), s		1.8	0.1	8.0		2.2	0.8	8.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	278.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	880	80	120	1100	30	90	20	200	10	10	130
Future Vol, veh/h	70	880	80	120	1100	30	90	20	200	10	10	130
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	72	907	82	124	1134	31	93	21	206	10	10	134

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1165	0	0	995	0	0	1918	2511	502	2007	2537	583
Stage 1	-	-	-	-	-	-	1098	1098	-	1398	1398	-
Stage 2	-	-	-	-	-	-	820	1413	-	609	1139	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	607	-	-	703	-	-	~ 42	29	520	36	28	461
Stage 1	-	-	-	-	-	-	230	291	-	151	209	-
Stage 2	-	-	-	-	-	-	340	206	-	454	278	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	607	-	-	699	-	-	~ 14	21	517	~ 2	20	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 14	21	-	~ 2	20	-
Stage 1	-	-	-	-	-	-	202	255	-	133	172	-
Stage 2	-	-	-	-	-	-	186	170	-	221	244	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.8	1.1	$ 1235.4	$ 2525.5
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	15	517	607	-	-	699	-	-	26
HCM Lane V/C Ratio	7.56	0.399	0.119	-	-	0.177	-	-	5.948
HCM Control Delay (s/veh)	$ 3451.7	16.5	11.7	-	-	11.3	-	-	$ 2525.5
HCM Lane LOS	F	C	B	-	-	B	-	-	F
HCM 95th %tile Q(veh)	15.1	1.9	0.4	-	-	0.6	-	-	19.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	710	70	30	700	40	120	120	50	40	100	120
Future Volume (veh/h)	100	710	70	30	700	40	120	120	50	40	100	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	724	71	31	714	41	122	122	51	41	102	122
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	249	1088	464	212	964	413	61	43	869	52	106	869
Arrive On Green	0.06	0.30	0.30	0.02	0.27	0.27	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1810	3610	1541	1810	3610	1545	0	79	1611	0	197	1611
Grp Volume(v), veh/h	102	724	71	31	714	41	244	0	51	143	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1541	1810	1805	1545	79	0	1611	197	0	1611
Q Serve(g_s), s	3.5	15.6	3.0	1.1	16.1	1.8	0.0	0.0	1.3	0.0	0.0	3.4
Cycle Q Clear(g_c), s	3.5	15.6	3.0	1.1	16.1	1.8	48.0	0.0	1.3	48.0	0.0	3.4
Prop In Lane	1.00		1.00	1.00		1.00	0.50		1.00	0.29		1.00
Lane Grp Cap(c), veh/h	249	1088	464	212	964	413	103	0	869	158	0	869
V/C Ratio(X)	0.41	0.67	0.15	0.15	0.74	0.10	2.36	0.00	0.06	0.90	0.00	0.14
Avail Cap(c_a), veh/h	387	2192	936	290	1948	834	103	0	869	158	0	869
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	22.6	27.2	22.8	23.7	29.8	24.5	25.1	0.0	9.7	25.9	0.0	10.2
Incr Delay (d2), s/veh	1.1	0.7	0.2	0.3	1.1	0.1	640.2	0.0	0.1	49.6	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	7.8	1.3	0.6	8.2	0.8	20.9	0.0	0.6	4.4	0.0	1.6
LnGrp Delay(d), s/veh	23.7	27.9	22.9	24.0	30.9	24.6	665.3	0.0	9.9	75.5	0.0	10.5
LnGrp LOS	C	C	C	C	C	C	F		A	E		B
Approach Vol, veh/h		897			786			295			265	
Approach Delay, s/veh		27.0			30.3			552.0			45.6	
Approach LOS		C			C			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	6.1	30.8		52.0	9.2	27.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	6.0	54.0		48.0	12.0	48.0
Max Q Clear Time (g_c+I1), s		50.0	3.1	17.6		50.0	5.5	18.1
Green Ext Time (p_c), s		0.0	0.0	6.1		0.0	0.1	5.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	99.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1240	580	480	1680	170	850	1060	290	230	910	190
Future Volume (veh/h)	290	1240	580	480	1680	170	850	1060	290	230	910	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	309	1319	617	511	1787	181	904	1128	309	245	968	202
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	319	1113	508	434	1840	569	782	1696	517	300	984	298
Arrive On Green	0.09	0.32	0.32	0.13	0.36	0.36	0.22	0.33	0.33	0.09	0.19	0.19
Sat Flow, veh/h	3476	3424	1562	3476	5136	1587	3476	5136	1566	3476	5136	1556
Grp Volume(v), veh/h	309	1319	617	511	1787	181	904	1128	309	245	968	202
Grp Sat Flow(s),veh/h/ln	1738	1712	1562	1738	1712	1587	1738	1712	1566	1738	1712	1556
Q Serve(g_s), s	10.6	39.0	39.0	15.0	41.1	9.9	27.0	22.6	19.8	8.3	22.5	14.5
Cycle Q Clear(g_c), s	10.6	39.0	39.0	15.0	41.1	9.9	27.0	22.6	19.8	8.3	22.5	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1113	508	434	1840	569	782	1696	517	300	984	298
V/C Ratio(X)	0.97	1.19	1.22	1.18	0.97	0.32	1.16	0.67	0.60	0.82	0.98	0.68
Avail Cap(c_a), veh/h	319	1113	508	434	1840	569	782	1696	517	319	984	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	40.5	40.5	52.5	37.9	27.9	46.5	34.5	33.5	53.9	48.3	45.1
Incr Delay (d2), s/veh	42.2	92.7	113.8	101.0	14.7	0.3	84.4	2.1	5.0	14.4	25.0	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	32.7	32.8	13.3	21.9	4.4	22.1	11.0	9.3	4.6	12.9	7.2
LnGrp Delay(d), s/veh	96.5	133.2	154.3	153.5	52.6	28.2	130.9	36.6	38.6	68.3	73.3	56.8
LnGrp LOS	F	F	F	F	D	C	F	D	D	E	E	E
Approach Vol, veh/h		2245			2479			2341			1415	
Approach Delay, s/veh		134.0			71.6			73.2			70.1	
Approach LOS		F			E			E			E	

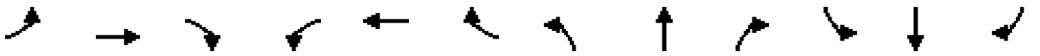
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	43.6	19.0	43.0	31.0	27.0	15.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	15.0	39.0	27.0	23.0	11.0	43.0
Max Q Clear Time (g_c+I1), s	10.3	24.6	17.0	41.0	29.0	24.5	12.6	43.1
Green Ext Time (p_c), s	0.1	7.2	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	88.3
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1430	380	400	1090	250	270	1530	270	340	1660	290
Future Volume (veh/h)	270	1430	380	400	1090	250	270	1530	270	340	1660	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	287	1521	404	426	1160	266	287	1628	287	362	1766	309
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	302	1293	340	351	1297	394	234	1815	554	351	1701	294
Arrive On Green	0.17	0.32	0.32	0.10	0.25	0.25	0.07	0.35	0.35	0.10	0.38	0.38
Sat Flow, veh/h	1810	4082	1074	3510	5187	1575	3510	5187	1584	3510	4437	768
Grp Volume(v), veh/h	287	1286	639	426	1160	266	287	1628	287	362	1372	703
Grp Sat Flow(s),veh/h/ln	1810	1729	1698	1755	1729	1575	1755	1729	1584	1755	1729	1747
Q Serve(g_s), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	35.7	17.3	12.0	46.0	46.0
Cycle Q Clear(g_c), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	35.7	17.3	12.0	46.0	46.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	670
V/C Ratio(X)	0.95	1.17	1.19	1.21	0.89	0.68	1.23	0.90	0.52	1.03	1.03	1.05
Avail Cap(c_a), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	41.0	41.0	54.0	43.5	40.6	56.0	36.9	31.0	54.0	37.0	37.0
Incr Delay (d2), s/veh	38.9	88.4	101.9	119.5	8.4	4.5	133.6	7.4	3.4	56.3	34.2	48.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	31.5	33.0	11.6	13.4	8.5	8.2	18.3	8.1	8.5	28.2	31.2
LnGrp Delay(d), s/veh	88.4	129.4	142.9	173.5	51.8	45.1	189.6	44.4	34.4	110.3	71.2	85.6
LnGrp LOS	F	F	F	F	D	D	F	D	C	F	F	F
Approach Vol, veh/h		2212			1852			2202			2437	
Approach Delay, s/veh		128.0			78.9			62.0			81.2	
Approach LOS		F			E			E			F	

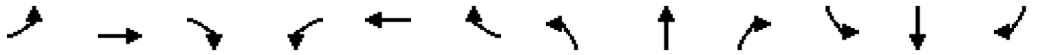
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	46.0	16.0	42.0	12.0	50.0	24.0	34.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	42.0	12.0	38.0	8.0	46.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	14.0	37.7	14.0	40.0	10.0	48.0	20.9	27.9
Green Ext Time (p_c), s	0.0	3.5	0.0	0.0	0.0	0.0	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	87.7
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	190	30	740	140	470	30	1460	570	260	1380	40
Future Volume (vph)	90	190	30	740	140	470	30	1460	570	260	1380	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1900	1615	1715	1745	1559	1805	5187	1594	1805	5158	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1900	1615	1715	1745	1559	1805	5187	1594	1805	5158	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	94	198	31	771	146	490	31	1521	594	271	1438	42
RTOR Reduction (vph)	0	0	27	0	0	261	0	0	346	0	2	0
Lane Group Flow (vph)	94	198	4	455	462	229	31	1521	248	271	1478	0
Confl. Peds. (#/hr)	9					9	6					6
Confl. Bikes (#/hr)						3			1			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	15.2	15.2	15.2	32.0	32.0	32.0	5.2	38.7	38.7	19.0	52.5	
Effective Green, g (s)	15.2	15.2	15.2	32.0	32.0	32.0	5.2	38.7	38.7	19.0	52.5	
Actuated g/C Ratio	0.13	0.13	0.13	0.26	0.26	0.26	0.04	0.32	0.32	0.16	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	226	238	203	453	461	412	77	1660	510	283	2239	
v/s Ratio Prot	0.05	c0.10		c0.27	0.26		0.02	c0.29		c0.15	0.29	
v/s Ratio Perm			0.00			0.15			0.16			
v/c Ratio	0.42	0.83	0.02	1.00	1.00	0.56	0.40	0.92	0.49	0.96	0.66	
Uniform Delay, d1	48.8	51.6	46.3	44.4	44.4	38.3	56.3	39.5	33.1	50.6	27.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	21.3	0.0	43.4	42.5	1.6	3.4	9.5	3.3	41.6	0.7	
Delay (s)	50.0	72.9	46.4	87.8	86.9	39.9	59.8	49.0	36.4	92.1	27.8	
Level of Service	D	E	D	F	F	D	E	D	D	F	C	
Approach Delay (s/veh)		63.7			70.9			45.7			37.8	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	130	60	70	200	530	110	1350	30	580	1130	50
Future Volume (veh/h)	60	130	60	70	200	530	110	1350	30	580	1130	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	61	133	61	71	204	541	112	1378	31	592	1153	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	117	330	275	198	330	590	139	1860	42	689	2292	995
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.08	0.52	0.52	0.20	0.64	0.64
Sat Flow, veh/h	719	1881	1563	1192	1881	1553	1792	3572	80	3476	3574	1552
Grp Volume(v), veh/h	61	133	61	71	204	541	112	689	720	592	1153	51
Grp Sat Flow(s),veh/h/ln	719	1881	1563	1192	1881	1553	1792	1787	1865	1738	1787	1552
Q Serve(g_s), s	8.6	7.1	3.8	6.4	11.4	20.0	7.0	34.2	34.3	18.7	19.5	1.4
Cycle Q Clear(g_c), s	20.0	7.1	3.8	13.5	11.4	20.0	7.0	34.2	34.3	18.7	19.5	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	117	330	275	198	330	590	139	931	971	689	2292	995
V/C Ratio(X)	0.52	0.40	0.22	0.36	0.62	0.92	0.80	0.74	0.74	0.86	0.50	0.05
Avail Cap(c_a), veh/h	117	330	275	198	330	590	236	931	971	1007	2292	995
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	41.6	40.3	47.6	43.4	34.1	51.6	21.3	21.3	44.1	10.8	7.6
Incr Delay (d2), s/veh	4.0	0.8	0.4	1.1	3.4	19.4	10.3	5.3	5.1	5.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	3.8	1.7	2.2	6.3	19.3	3.9	18.2	19.0	9.5	9.7	0.6
LnGrp Delay(d), s/veh	57.1	42.4	40.7	48.7	46.8	53.5	61.9	26.5	26.4	49.3	11.6	7.7
LnGrp LOS	E	D	D	D	D	D	E	C	C	D	B	A
Approach Vol, veh/h		255			816			1521			1796	
Approach Delay, s/veh		45.5			51.5			29.1			23.9	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.6	63.3		24.0	12.9	77.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	33.0	55.0		20.0	15.0	73.0		20.0
Max Q Clear Time (g_c+I1), s	20.7	36.3		22.0	9.0	21.5		22.0
Green Ext Time (p_c), s	1.8	9.5		0.0	0.1	11.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	730	110	410	1030	300	90	970	270	260	990	150
Future Volume (veh/h)	220	730	110	410	1030	300	90	970	270	260	990	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	227	753	113	423	1062	309	93	1000	278	268	1021	155
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	250	723	108	388	1132	490	196	938	259	254	1241	188
Arrive On Green	0.10	0.23	0.23	0.18	0.32	0.32	0.05	0.34	0.34	0.11	0.40	0.40
Sat Flow, veh/h	1792	3097	465	1792	3574	1546	1792	2746	759	1792	3086	468
Grp Volume(v), veh/h	227	434	432	423	1062	309	93	649	629	268	591	585
Grp Sat Flow(s),veh/h/ln	1792	1787	1774	1792	1787	1546	1792	1787	1718	1792	1787	1766
Q Serve(g_s), s	11.6	28.0	28.0	22.0	34.7	20.5	4.0	41.0	41.0	13.0	35.4	35.6
Cycle Q Clear(g_c), s	11.6	28.0	28.0	22.0	34.7	20.5	4.0	41.0	41.0	13.0	35.4	35.6
Prop In Lane	1.00		0.26	1.00		1.00	1.00		0.44	1.00		0.26
Lane Grp Cap(c), veh/h	250	417	414	388	1132	490	196	611	587	254	719	710
V/C Ratio(X)	0.91	1.04	1.04	1.09	0.94	0.63	0.47	1.06	1.07	1.05	0.82	0.82
Avail Cap(c_a), veh/h	250	417	414	388	1132	490	200	611	587	254	719	710
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	46.0	46.0	36.8	39.9	35.0	27.7	39.5	39.5	36.9	32.0	32.1
Incr Delay (d2), s/veh	33.4	55.3	55.7	71.7	14.4	2.6	1.8	54.2	57.9	71.6	10.2	10.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	20.2	20.1	20.6	19.4	9.1	2.1	29.4	28.8	13.5	19.4	19.3
LnGrp Delay(d), s/veh	67.1	101.3	101.7	108.5	54.2	37.6	29.5	93.7	97.4	108.4	42.3	42.6
LnGrp LOS	E	F	F	F	D	D	C	F	F	F	D	D
Approach Vol, veh/h		1093			1794			1371			1444	
Approach Delay, s/veh		94.4			64.2			91.1			54.7	
Approach LOS		F			E			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	45.0	26.0	32.0	9.7	52.3	16.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	41.0	22.0	28.0	6.0	48.0	12.0	38.0
Max Q Clear Time (g_c+I1), s	15.0	43.0	24.0	30.0	6.0	37.6	13.6	36.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.4	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	74.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	110	420	1000	60	140	1040	260	80	1070	80
Future Volume (veh/h)	110	620	110	420	1000	60	140	1040	260	80	1070	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	116	653	116	442	1053	63	147	1095	274	84	1126	84
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	218	688	283	466	1242	527	205	1466	620	195	1321	98
Arrive On Green	0.07	0.19	0.19	0.22	0.35	0.35	0.06	0.41	0.41	0.04	0.39	0.39
Sat Flow, veh/h	1792	3574	1468	1792	3574	1517	1792	3574	1512	1792	3357	250
Grp Volume(v), veh/h	116	653	116	442	1053	63	147	1095	274	84	599	611
Grp Sat Flow(s),veh/h/ln	1792	1787	1468	1792	1787	1517	1792	1787	1512	1792	1787	1820
Q Serve(g_s), s	6.1	21.6	8.3	24.4	32.6	3.4	5.9	31.1	15.6	3.3	36.5	36.6
Cycle Q Clear(g_c), s	6.1	21.6	8.3	24.4	32.6	3.4	5.9	31.1	15.6	3.3	36.5	36.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	218	688	283	466	1242	527	205	1466	620	195	703	716
V/C Ratio(X)	0.53	0.95	0.41	0.95	0.85	0.12	0.72	0.75	0.44	0.43	0.85	0.85
Avail Cap(c_a), veh/h	218	688	283	474	1256	533	205	1466	620	195	703	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	47.7	42.3	33.2	36.0	26.5	27.4	30.0	25.4	24.5	33.1	33.1
Incr Delay (d2), s/veh	2.5	22.6	1.0	28.6	5.6	0.1	11.2	3.5	2.3	1.5	12.4	12.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	12.8	3.4	18.1	17.0	1.4	3.5	16.1	6.9	1.7	20.4	20.8
LnGrp Delay(d), s/veh	38.6	70.3	43.3	61.8	41.6	26.6	38.6	33.5	27.7	26.0	45.5	45.4
LnGrp LOS	D	E	D	E	D	C	D	C	C	C	D	D
Approach Vol, veh/h		885			1558			1516			1294	
Approach Delay, s/veh		62.6			46.7			32.9			44.2	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	53.0	30.5	27.0	11.0	51.0	12.0	45.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0	27.0	23.0	7.0	47.0	8.0	42.0
Max Q Clear Time (g_c+I1), s	5.3	33.1	26.4	23.6	7.9	38.6	8.1	34.6
Green Ext Time (p_c), s	0.0	7.9	0.1	0.0	0.0	5.0	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	170	70	70	230	170	70	1170	130	150	1410	70
Future Volume (veh/h)	110	170	70	70	230	170	70	1170	130	150	1410	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	113	175	72	72	237	175	72	1206	134	155	1454	72
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	42	39	586	37	101	578	174	1690	738	252	1787	766
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.03	0.47	0.47	0.06	0.50	0.50
Sat Flow, veh/h	0	106	1597	0	275	1578	1792	3574	1561	1792	3574	1532
Grp Volume(v), veh/h	288	0	72	309	0	175	72	1206	134	155	1454	72
Grp Sat Flow(s),veh/h/ln	106	0	1597	275	0	1578	1792	1787	1561	1792	1787	1532
Q Serve(g_s), s	0.0	0.0	3.6	0.0	0.0	9.5	2.5	32.2	5.9	5.2	41.1	3.0
Cycle Q Clear(g_c), s	44.0	0.0	3.6	44.0	0.0	9.5	2.5	32.2	5.9	5.2	41.1	3.0
Prop In Lane	0.39		1.00	0.23		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	81	0	586	138	0	578	174	1690	738	252	1787	766
V/C Ratio(X)	3.56	0.00	0.12	2.24	0.00	0.30	0.41	0.71	0.18	0.61	0.81	0.09
Avail Cap(c_a), veh/h	81	0	586	138	0	578	174	1690	738	308	1787	766
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.4	0.0	25.2	35.5	0.0	27.1	22.8	25.2	18.2	21.2	25.3	15.7
Incr Delay (d2), s/veh	1184.4	0.0	0.1	581.7	0.0	0.3	1.6	2.6	0.5	2.5	4.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	29.2	0.0	1.6	25.6	0.0	4.2	1.3	16.5	2.7	2.7	21.2	1.3
LnGrp Delay(d), s/veh	1223.7	0.0	25.3	617.2	0.0	27.4	24.4	27.8	18.8	23.6	29.5	16.0
LnGrp LOS	F		C	F		C	C	C	B	C	C	B
Approach Vol, veh/h		360			484			1412			1681	
Approach Delay, s/veh		984.1			403.9			26.8			28.4	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	11.3	60.7		48.0	8.0	64.0		48.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	53.0		44.0	4.0	60.0		44.0
Max Q Clear Time (g_c+I1), s	7.2	34.2		46.0	4.5	43.1		46.0
Green Ext Time (p_c), s	0.1	8.9		0.0	0.0	10.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		161.3
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	20	0	0	20	0	1400	30	0	1610	20
Future Vol, veh/h	0	0	20	0	0	20	0	1400	30	0	1610	20
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	6	6	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	21	0	0	21	0	1443	31	0	1660	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	830	-	-	722	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	315	0	0	371	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	315	-	-	371	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

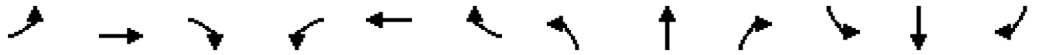
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.2	15.3	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	315	371	-
HCM Lane V/C Ratio	-	0.065	0.056	-
HCM Control Delay (s/veh)	-	17.2	15.3	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	670	220	340	800	250	300	1510	480	310	1320	210
Future Volume (veh/h)	240	670	220	340	800	250	300	1510	480	310	1320	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.90	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	242	677	222	343	808	253	303	1525	485	313	1333	212
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	261	1036	283	397	860	346	366	1640	700	319	1974	314
Arrive On Green	0.08	0.20	0.20	0.11	0.24	0.24	0.11	0.46	0.46	0.09	0.45	0.45
Sat Flow, veh/h	3476	5136	1402	3476	3574	1437	3476	3574	1525	3476	4431	705
Grp Volume(v), veh/h	242	677	222	343	808	253	303	1525	485	313	1030	515
Grp Sat Flow(s),veh/h/ln	1738	1712	1402	1738	1787	1437	1738	1787	1525	1738	1712	1712
Q Serve(g_s), s	8.3	14.5	18.0	11.6	26.6	19.4	10.2	48.3	30.2	10.8	28.6	28.6
Cycle Q Clear(g_c), s	8.3	14.5	18.0	11.6	26.6	19.4	10.2	48.3	30.2	10.8	28.6	28.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	261	1036	283	397	860	346	366	1640	700	319	1525	763
V/C Ratio(X)	0.93	0.65	0.78	0.86	0.94	0.73	0.83	0.93	0.69	0.98	0.68	0.68
Avail Cap(c_a), veh/h	261	1036	283	406	865	348	464	1640	700	319	1525	763
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	44.0	45.4	52.2	44.6	41.9	52.6	30.6	25.7	54.3	26.4	26.4
Incr Delay (d2), s/veh	36.7	1.5	13.5	17.1	17.6	7.6	9.6	10.8	5.6	45.1	2.4	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	7.0	8.0	6.5	15.2	8.5	5.4	26.2	13.7	7.1	14.0	14.5
LnGrp Delay(d), s/veh	91.8	45.5	58.9	69.3	62.3	49.6	62.2	41.4	31.3	99.4	28.8	31.1
LnGrp LOS	F	D	E	E	E	D	E	D	C	F	C	C
Approach Vol, veh/h		1141			1404			2313			1858	
Approach Delay, s/veh		57.9			61.7			42.0			41.3	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	59.0	17.7	28.2	16.6	57.4	13.0	32.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	55.0	14.0	24.0	16.0	50.0	9.0	29.0
Max Q Clear Time (g_c+I1), s	12.8	50.3	13.6	20.0	12.2	30.6	10.3	28.6
Green Ext Time (p_c), s	0.0	4.0	0.1	1.9	0.4	10.3	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.6
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	180	440	220	90	2080	0	0	1390	800
Future Volume (veh/h)	0	0	0	180	440	220	90	2080	0	0	1390	800
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				184	449	224	92	2122	0	0	1418	816
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				319	636	284	145	3858	0	0	2309	1053
Arrive On Green				0.18	0.18	0.18	0.04	0.75	0.00	0.00	0.67	0.67
Sat Flow, veh/h				1792	3574	1596	3476	5305	0	0	3593	1562
Grp Volume(v), veh/h				184	449	224	92	2122	0	0	1418	816
Grp Sat Flow(s),veh/h/ln				1792	1787	1596	1738	1712	0	0	1712	1562
Q Serve(g_s), s				10.6	13.4	15.2	2.9	19.8	0.0	0.0	26.1	40.3
Cycle Q Clear(g_c), s				10.6	13.4	15.2	2.9	19.8	0.0	0.0	26.1	40.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				319	636	284	145	3858	0	0	2309	1053
V/C Ratio(X)				0.58	0.71	0.79	0.64	0.55	0.00	0.00	0.61	0.77
Avail Cap(c_a), veh/h				428	853	381	215	3858	0	0	2309	1053
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.6	43.7	44.5	53.4	6.0	0.0	0.0	10.2	12.6
Incr Delay (d2), s/veh				1.6	1.7	7.7	4.6	0.6	0.0	0.0	1.2	5.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.4	6.8	7.3	1.5	9.4	0.0	0.0	12.6	18.9
LnGrp Delay(d), s/veh				44.2	45.4	52.2	57.9	6.5	0.0	0.0	11.5	18.1
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					857			2214			2234	
Approach Delay, s/veh					46.9			8.7			13.9	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		89.0			8.7	80.3		24.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		85.0			7.0	74.0		27.0
Max Q Clear Time (g_c+I1), s		21.8			4.9	42.3		17.2
Green Ext Time (p_c), s		30.3			0.0	21.9		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1140	370	200	0	0	0	0	1280	210	270	1270	0
Future Volume (veh/h)	1140	370	200	0	0	0	0	1280	210	270	1270	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881				0	1881	1881	1881	1881	0
Adj Flow Rate, veh/h	1163	378	204				0	1306	214	276	1296	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	1340	725	616				0	2100	640	343	2790	0
Arrive On Green	0.39	0.39	0.39				0.00	0.41	0.41	0.10	0.54	0.00
Sat Flow, veh/h	3476	1881	1599				0	5305	1564	3476	5305	0
Grp Volume(v), veh/h	1163	378	204				0	1306	214	276	1296	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1599				0	1712	1564	1738	1712	0
Q Serve(g_s), s	34.7	17.4	10.1				0.0	22.6	10.5	8.7	17.3	0.0
Cycle Q Clear(g_c), s	34.7	17.4	10.1				0.0	22.6	10.5	8.7	17.3	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1340	725	616				0	2100	640	343	2790	0
V/C Ratio(X)	0.87	0.52	0.33				0.00	0.62	0.33	0.80	0.46	0.00
Avail Cap(c_a), veh/h	1579	855	726				0	2100	640	464	2790	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.9	26.5	24.3				0.0	26.3	22.7	49.5	15.7	0.0
Incr Delay (d2), s/veh	4.8	0.6	0.3				0.0	1.4	1.4	7.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.5	9.1	4.5				0.0	10.9	4.8	4.5	8.3	0.0
LnGrp Delay(d), s/veh	36.7	27.1	24.6				0.0	27.7	24.1	56.8	16.2	0.0
LnGrp LOS	D	C	C					C	C	E	B	
Approach Vol, veh/h		1745						1520			1572	
Approach Delay, s/veh		33.2						27.2			23.3	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.1	49.9		47.3		65.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	15.0	42.0		51.0		61.0		
Max Q Clear Time (g_c+I1), s	10.7	24.6		36.7		19.3		
Green Ext Time (p_c), s	0.4	9.3		6.6		11.6		

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		28.1	
HCM 2010 LOS		C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	570	1710	120	480	1170	230	110	990	530	220	720	290
Future Volume (veh/h)	570	1710	120	480	1170	230	110	990	530	220	720	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	600	1800	126	505	1232	242	116	1042	558	232	758	305
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
Arrive On Green	0.19	0.34	0.34	0.15	0.30	0.30	0.08	0.31	0.31	0.07	0.30	0.30
Sat Flow, veh/h	3510	5187	1592	3510	5187	1612	1810	3610	1590	3510	3610	1585
Grp Volume(v), veh/h	600	1800	126	505	1232	242	116	1042	558	232	758	305
Grp Sat Flow(s),veh/h/ln	1755	1729	1592	1755	1729	1612	1810	1805	1590	1755	1805	1585
Q Serve(g_s), s	20.1	41.0	6.8	17.1	26.0	14.8	7.6	33.7	35.1	7.9	22.4	14.7
Cycle Q Clear(g_c), s	20.1	41.0	6.8	17.1	26.0	14.8	7.6	33.7	35.1	7.9	22.4	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
V/C Ratio(X)	0.91	1.02	0.23	0.96	0.78	0.49	0.82	0.94	0.76	0.99	0.71	0.39
Avail Cap(c_a), veh/h	702	1772	544	527	1574	489	166	1113	733	234	1071	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	39.5	28.2	50.6	38.2	34.2	54.5	40.4	27.1	56.0	37.6	19.7
Incr Delay (d2), s/veh	15.2	25.4	0.2	29.1	2.6	0.8	23.4	15.4	7.4	56.3	4.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	23.7	3.0	10.4	12.8	6.7	4.7	19.2	16.8	5.7	11.7	6.7
LnGrp Delay(d), s/veh	62.9	64.9	28.5	79.7	40.8	35.0	77.9	55.8	34.5	112.2	41.5	21.2
LnGrp LOS	E	F	C	E	D	D	E	E	C	F	D	C
Approach Vol, veh/h		2526			1979			1716			1295	
Approach Delay, s/veh		62.6			50.0			50.3			49.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	41.0	22.0	45.0	13.4	39.6	26.6	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	37.0	18.0	41.0	11.0	34.0	24.0	35.0
Max Q Clear Time (g_c+I1), s	9.9	37.1	19.1	43.0	9.6	24.4	22.1	28.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	4.0	0.5	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	870	150	550	1190	210	140	780	300	140	540	150
Future Volume (veh/h)	220	870	150	550	1190	210	140	780	300	140	540	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.87	1.00		0.83	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	242	956	165	604	1308	231	154	857	330	154	593	165
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	1037	179	647	1380	538	215	999	371	191	736	204
Arrive On Green	0.15	0.35	0.35	0.18	0.38	0.38	0.06	0.28	0.28	0.06	0.28	0.28
Sat Flow, veh/h	1810	2997	516	3510	3610	1407	1810	3610	1340	1810	2660	736
Grp Volume(v), veh/h	242	575	546	604	1308	231	154	857	330	154	401	357
Grp Sat Flow(s),veh/h/ln	1810	1805	1708	1755	1805	1407	1810	1805	1340	1810	1805	1591
Q Serve(g_s), s	15.7	36.5	36.6	20.2	41.9	14.5	7.0	26.9	28.2	7.0	24.7	24.9
Cycle Q Clear(g_c), s	15.7	36.5	36.6	20.2	41.9	14.5	7.0	26.9	28.2	7.0	24.7	24.9
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	269	625	591	647	1380	538	215	999	371	191	499	440
V/C Ratio(X)	0.90	0.92	0.92	0.93	0.95	0.43	0.72	0.86	0.89	0.81	0.80	0.81
Avail Cap(c_a), veh/h	273	636	601	647	1392	543	215	999	371	191	499	440
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	37.4	37.5	47.9	35.7	27.2	33.2	40.9	41.4	34.0	40.1	40.2
Incr Delay (d2), s/veh	30.0	18.7	19.8	20.6	13.6	0.5	10.8	9.5	25.9	21.7	12.9	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	21.5	20.5	11.7	23.5	5.7	4.2	14.6	13.1	4.7	14.1	12.7
LnGrp Delay(d), s/veh	79.9	56.1	57.3	68.5	49.3	27.8	44.0	50.4	67.3	55.7	53.0	55.1
LnGrp LOS	E	E	E	E	D	C	D	D	E	E	D	E
Approach Vol, veh/h		1363			2143			1341			912	
Approach Delay, s/veh		60.8			52.4			53.8			54.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	37.0	26.0	45.3	11.0	37.0	21.7	49.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	33.0	22.0	42.0	7.0	33.0	18.0	46.0
Max Q Clear Time (g_c+I1), s	9.0	30.2	22.2	38.6	9.0	26.9	17.7	43.9
Green Ext Time (p_c), s	0.0	1.8	0.0	2.2	0.0	2.5	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	510	280	590	870	160	450	900	490	110	980	190
Future Volume (veh/h)	120	510	280	590	870	160	450	900	490	110	980	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	125	531	292	615	906	167	469	938	510	115	1021	198
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	134	536	225	608	894	385	433	1730	756	274	993	192
Arrive On Green	0.08	0.15	0.15	0.17	0.25	0.25	0.21	0.48	0.48	0.06	0.33	0.33
Sat Flow, veh/h	1792	3574	1499	3476	3574	1541	1792	3574	1561	1792	2979	576
Grp Volume(v), veh/h	125	531	292	615	906	167	469	938	510	115	612	607
Grp Sat Flow(s),veh/h/ln	1792	1787	1499	1738	1787	1541	1792	1787	1561	1792	1787	1768
Q Serve(g_s), s	8.3	17.8	18.0	21.0	30.0	10.9	25.0	22.0	30.1	5.0	40.0	40.0
Cycle Q Clear(g_c), s	8.3	17.8	18.0	21.0	30.0	10.9	25.0	22.0	30.1	5.0	40.0	40.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	134	536	225	608	894	385	433	1730	756	274	596	589
V/C Ratio(X)	0.93	0.99	1.30	1.01	1.01	0.43	1.08	0.54	0.68	0.42	1.03	1.03
Avail Cap(c_a), veh/h	134	536	225	608	894	385	433	1730	756	305	596	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	50.9	51.0	49.5	45.0	37.9	38.4	21.6	23.7	23.9	40.0	40.0
Incr Delay (d2), s/veh	56.7	36.3	162.9	39.3	33.6	0.8	67.2	1.2	4.8	1.0	43.9	45.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.5	17.6	13.4	18.9	4.7	22.4	11.1	13.9	2.5	27.0	26.9
LnGrp Delay(d), s/veh	111.9	87.2	213.9	88.8	78.6	38.6	105.7	22.9	28.5	24.9	83.9	85.2
LnGrp LOS	F	F	F	F	F	D	F	C	C	C	F	F
Approach Vol, veh/h		948			1688			1917			1334	
Approach Delay, s/veh		129.5			78.4			44.6			79.4	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	62.1	25.0	22.0	29.0	44.0	13.0	34.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	56.0	21.0	18.0	25.0	40.0	9.0	30.0
Max Q Clear Time (g_c+I1), s	7.0	32.1	23.0	20.0	27.0	42.0	10.3	32.0
Green Ext Time (p_c), s	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	340	30	10	10	270	1720	60	10	1700	150
Future Volume (veh/h)	100	0	340	30	10	10	270	1720	60	10	1700	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	106	0	362	32	11	11	287	1830	64	11	1809	160
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	273	0	258	61	140	140	316	2592	1121	185	2017	175
Arrive On Green	0.16	0.00	0.16	0.16	0.16	0.16	0.13	0.73	0.73	0.01	0.61	0.61
Sat Flow, veh/h	1395	0	1594	1026	863	863	1792	3574	1546	1792	3317	288
Grp Volume(v), veh/h	106	0	362	32	0	22	287	1830	64	11	959	1010
Grp Sat Flow(s),veh/h/ln	1395	0	1594	1026	0	1727	1792	1787	1546	1792	1787	1818
Q Serve(g_s), s	8.2	0.0	19.0	0.0	0.0	1.3	12.7	33.8	1.4	0.3	53.2	57.4
Cycle Q Clear(g_c), s	9.4	0.0	19.0	19.0	0.0	1.3	12.7	33.8	1.4	0.3	53.2	57.4
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	273	0	258	61	0	280	316	2592	1121	185	1087	1105
V/C Ratio(X)	0.39	0.00	1.40	0.52	0.00	0.08	0.91	0.71	0.06	0.06	0.88	0.91
Avail Cap(c_a), veh/h	273	0	258	61	0	280	363	2592	1121	228	1087	1105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	49.1	58.6	0.0	41.7	38.7	9.1	4.6	10.4	19.4	20.3
Incr Delay (d2), s/veh	0.9	0.0	202.1	7.7	0.0	0.1	23.9	1.6	0.1	0.1	10.4	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	22.8	1.2	0.0	0.6	11.2	17.1	0.6	0.1	29.3	32.6
LnGrp Delay(d), s/veh	46.6	0.0	251.2	66.3	0.0	41.8	62.6	10.7	4.7	10.5	29.9	33.2
LnGrp LOS	D		F	E		D	E	B	A	B	C	C
Approach Vol, veh/h		468			54			2181			1980	
Approach Delay, s/veh		204.9			56.3			17.4			31.4	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	89.0		23.0	18.9	75.3		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	85.0		19.0	18.0	71.0		19.0
Max Q Clear Time (g_c+I1), s	2.3	35.8		21.0	14.7	59.4		21.0
Green Ext Time (p_c), s	0.0	23.6		0.0	0.3	9.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	810	190	250	770	290	290	1350	80	280	1490	230
Future Volume (veh/h)	290	810	190	250	770	290	290	1350	80	280	1490	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	293	818	192	253	778	293	293	1364	81	283	1505	232
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1244	289	314	646	243	209	1370	593	225	1400	607
Arrive On Green	0.13	0.30	0.30	0.09	0.26	0.26	0.08	0.38	0.38	0.09	0.39	0.39
Sat Flow, veh/h	1792	4129	960	3476	2502	942	1792	3574	1547	1792	3574	1551
Grp Volume(v), veh/h	293	677	333	253	555	516	293	1364	81	283	1505	232
Grp Sat Flow(s),veh/h/ln	1792	1712	1666	1738	1787	1657	1792	1787	1547	1792	1787	1551
Q Serve(g_s), s	16.0	20.7	20.9	8.6	31.0	31.0	10.0	45.7	4.1	11.0	47.0	12.8
Cycle Q Clear(g_c), s	16.0	20.7	20.9	8.6	31.0	31.0	10.0	45.7	4.1	11.0	47.0	12.8
Prop In Lane	1.00		0.58	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1032	502	314	462	428	209	1370	593	225	1400	607
V/C Ratio(X)	1.23	0.66	0.66	0.81	1.20	1.20	1.40	1.00	0.14	1.26	1.08	0.38
Avail Cap(c_a), veh/h	239	1032	502	406	462	428	209	1370	593	225	1400	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	36.5	36.6	53.5	44.5	44.5	35.2	36.9	24.1	35.9	36.5	26.1
Incr Delay (d2), s/veh	133.2	1.5	3.3	8.9	110.5	112.3	206.2	23.3	0.5	146.2	47.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	10.0	10.1	4.5	29.4	27.5	18.9	27.0	1.8	16.6	32.3	5.8
LnGrp Delay(d), s/veh	185.2	38.0	39.9	62.4	155.0	156.8	241.4	60.2	24.6	182.2	83.5	27.9
LnGrp LOS	F	D	D	E	F	F	F	E	C	F	F	C
Approach Vol, veh/h		1303			1324			1738			2020	
Approach Delay, s/veh		71.6			138.0			89.1			91.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	50.0	14.8	40.2	14.0	51.0	20.0	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	46.0	14.0	33.0	10.0	47.0	16.0	31.0
Max Q Clear Time (g_c+I1), s	13.0	47.7	10.6	22.9	12.0	49.0	18.0	33.0
Green Ext Time (p_c), s	0.0	0.0	0.3	4.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	96.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	240	350	690	110	1320	0	0	1690	390
Future Volume (veh/h)	0	0	0	240	350	690	110	1320	0	0	1690	390
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				250	365	719	115	1375	0	0	1760	406
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				569	900	653	119	2696	0	0	1773	401
Arrive On Green				0.41	0.41	0.41	0.07	0.52	0.00	0.00	0.43	0.43
Sat Flow, veh/h				1394	2205	1599	1792	5305	0	0	4342	944
Grp Volume(v), veh/h				325	290	719	115	1375	0	0	1438	728
Grp Sat Flow(s),veh/h/ln				1811	1787	1599	1792	1712	0	0	1712	1693
Q Serve(g_s), s				15.5	13.8	49.0	7.7	20.8	0.0	0.0	50.0	51.0
Cycle Q Clear(g_c), s				15.5	13.8	49.0	7.7	20.8	0.0	0.0	50.0	51.0
Prop In Lane				0.77		1.00	1.00		0.00	0.00		0.56
Lane Grp Cap(c), veh/h				740	730	653	119	2696	0	0	1455	719
V/C Ratio(X)				0.44	0.40	1.10	0.96	0.51	0.00	0.00	0.99	1.01
Avail Cap(c_a), veh/h				740	730	653	119	2696	0	0	1455	719
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.6	25.1	35.5	55.9	18.5	0.0	0.0	34.2	34.5
Incr Delay (d2), s/veh				0.4	0.4	66.2	70.5	0.7	0.0	0.0	21.0	36.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.8	6.8	33.6	6.1	10.0	0.0	0.0	27.8	31.1
LnGrp Delay(d), s/veh				26.0	25.4	101.7	126.3	19.2	0.0	0.0	55.2	71.1
LnGrp LOS				C	C	F	F	B			E	F
Approach Vol, veh/h					1334			1490			2166	
Approach Delay, s/veh					66.7			27.5			60.5	
Approach LOS					E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			12.0	55.0		53.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			8.0	51.0		49.0
Max Q Clear Time (g_c+I1), s		22.8			9.7	53.0		51.0
Green Ext Time (p_c), s		12.6			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	420	70	0	0	0	0	1240	400	780	1140	0
Future Volume (veh/h)	320	420	70	0	0	0	0	1240	400	780	1140	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	330	433	72				0	1278	412	804	1175	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	444	442	396				0	1507	484	868	2418	0
Arrive On Green	0.25	0.25	0.25				0.00	0.40	0.40	0.25	0.68	0.00
Sat Flow, veh/h	1774	1770	1583				0	3958	1218	3442	3632	0
Grp Volume(v), veh/h	330	433	72				0	1143	547	804	1175	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583				0	1695	1618	1721	1770	0
Q Serve(g_s), s	20.6	29.2	4.3				0.0	36.8	36.9	27.3	18.9	0.0
Cycle Q Clear(g_c), s	20.6	29.2	4.3				0.0	36.8	36.9	27.3	18.9	0.0
Prop In Lane	1.00		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	444	442	396				0	1348	644	868	2418	0
V/C Ratio(X)	0.74	0.98	0.18				0.00	0.85	0.85	0.93	0.49	0.00
Avail Cap(c_a), veh/h	444	442	396				0	1348	644	918	2418	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.5	44.7	35.4				0.0	32.8	32.9	43.8	9.0	0.0
Incr Delay (d2), s/veh	6.7	37.1	0.2				0.0	6.8	13.3	14.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	18.8	1.9				0.0	18.4	18.8	14.7	9.4	0.0
LnGrp Delay(d), s/veh	48.1	81.8	35.6				0.0	39.6	46.2	58.3	9.7	0.0
LnGrp LOS	D	F	D					D	D	E	A	
Approach Vol, veh/h		835						1690			1979	
Approach Delay, s/veh		64.5						41.7			29.4	
Approach LOS		E						D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	34.3	51.7		34.0		86.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	32.0	46.0		30.0		82.0		
Max Q Clear Time (g_c+I1), s	29.3	38.9		31.2		20.9		
Green Ext Time (p_c), s	0.9	5.3		0.0		11.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1360	110	200	2560	140	120	120	130	110	120	70
Future Volume (veh/h)	60	1360	110	200	2560	140	120	120	130	110	120	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.97		0.93	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	62	1417	115	208	2667	146	125	125	135	115	125	73
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	2165	175	295	2327	126	210	254	201	201	296	158
Arrive On Green	0.03	0.64	0.64	0.06	0.67	0.67	0.03	0.13	0.13	0.03	0.13	0.13
Sat Flow, veh/h	1810	3377	273	1810	3476	188	1810	1900	1502	1810	2209	1179
Grp Volume(v), veh/h	62	754	778	208	1370	1443	125	125	135	115	100	98
Grp Sat Flow(s),veh/h/ln	1810	1805	1845	1810	1805	1859	1810	1900	1502	1810	1805	1583
Q Serve(g_s), s	1.4	30.8	31.3	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Cycle Q Clear(g_c), s	1.4	30.8	31.3	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Prop In Lane	1.00		0.15	1.00		0.10	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	113	1157	1183	295	1208	1244	210	254	201	201	242	212
V/C Ratio(X)	0.55	0.65	0.66	0.70	1.13	1.16	0.60	0.49	0.67	0.57	0.41	0.46
Avail Cap(c_a), veh/h	121	1157	1183	464	1208	1244	210	254	201	201	242	212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	13.2	13.3	16.9	19.7	19.7	48.0	48.0	49.2	47.6	47.4	47.8
Incr Delay (d2), s/veh	4.5	1.3	1.3	3.1	71.0	81.0	4.5	6.6	16.4	3.8	5.2	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	15.5	16.2	4.8	63.1	68.4	3.8	4.3	5.2	3.5	3.4	3.4
LnGrp Delay(d), s/veh	35.7	14.5	14.7	19.9	90.8	100.7	52.5	54.6	65.7	51.4	52.6	54.9
LnGrp LOS	D	B	B	B	F	F	D	D	E	D	D	D
Approach Vol, veh/h		1594			3021			385			313	
Approach Delay, s/veh		15.4			90.6			57.8			52.9	
Approach LOS		B			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	20.0	10.9	80.6	8.0	20.0	7.5	84.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	16.0	18.0	66.0	4.0	16.0	4.0	80.0
Max Q Clear Time (g_c+I1), s	6.0	12.2	6.5	33.3	6.0	8.8	3.4	82.0
Green Ext Time (p_c), s	0.0	0.4	0.4	13.5	0.0	0.6	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		63.5
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Future Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	224	816	133	31	1184	51	143	102	20	92	102	245
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	295	1480	241	293	1436	62	337	832	159	493	454	397
Arrive On Green	0.09	0.48	0.48	0.02	0.41	0.41	0.08	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1810	3100	505	1810	3526	152	1810	3015	575	1810	1805	1581
Grp Volume(v), veh/h	224	475	474	31	606	629	143	60	62	92	102	245
Grp Sat Flow(s),veh/h/ln	1810	1805	1800	1810	1805	1872	1810	1805	1784	1810	1805	1581
Q Serve(g_s), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Cycle Q Clear(g_c), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Prop In Lane	1.00		0.28	1.00		0.08	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	295	861	859	293	735	763	337	498	492	493	454	397
V/C Ratio(X)	0.76	0.55	0.55	0.11	0.82	0.83	0.42	0.12	0.13	0.19	0.22	0.62
Avail Cap(c_a), veh/h	529	1303	1300	328	977	1014	426	498	492	512	454	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	17.5	17.5	16.2	24.9	24.9	23.8	25.5	25.6	24.0	28.0	31.2
Incr Delay (d2), s/veh	4.0	0.6	0.6	0.2	4.4	4.3	0.8	0.5	0.5	0.2	1.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	8.8	8.8	0.5	14.9	15.4	2.7	1.2	1.3	1.8	2.2	6.4
LnGrp Delay(d), s/veh	23.8	18.0	18.0	16.4	29.3	29.2	24.7	26.0	26.1	24.2	29.1	38.3
LnGrp LOS	C	B	B	B	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1173			1266			265			439	
Approach Delay, s/veh		19.1			28.9			25.3			33.2	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	30.0	6.2	49.0	11.3	27.7	12.8	42.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	26.0	4.0	68.0	12.0	20.0	21.0	51.0
Max Q Clear Time (g_c+I1), s	5.5	4.5	2.9	19.6	7.4	14.9	8.4	30.3
Green Ext Time (p_c), s	0.0	0.6	0.0	6.9	0.1	0.9	0.5	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	700	250	380	1100	130	280	290	220	90	280	180
Future Volume (veh/h)	140	700	250	380	1100	130	280	290	220	90	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	147	737	263	400	1158	137	295	305	232	95	295	189
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	1019	359	482	1451	172	511	712	526	376	1016	444
Arrive On Green	0.10	0.28	0.28	0.14	0.32	0.32	0.14	0.37	0.37	0.05	0.29	0.29
Sat Flow, veh/h	1757	3649	1285	3408	4552	538	1757	1907	1409	1757	3505	1532
Grp Volume(v), veh/h	147	677	323	400	854	441	295	280	257	95	295	189
Grp Sat Flow(s),veh/h/ln	1757	1679	1577	1704	1679	1733	1757	1752	1564	1757	1752	1532
Q Serve(g_s), s	8.6	19.0	19.4	11.9	24.3	24.3	11.7	12.4	12.9	3.9	6.8	10.4
Cycle Q Clear(g_c), s	8.6	19.0	19.4	11.9	24.3	24.3	11.7	12.4	12.9	3.9	6.8	10.4
Prop In Lane	1.00		0.81	1.00		0.31	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	179	937	440	482	1070	552	511	654	584	376	1016	444
V/C Ratio(X)	0.82	0.72	0.73	0.83	0.80	0.80	0.58	0.43	0.44	0.25	0.29	0.43
Avail Cap(c_a), veh/h	303	1221	574	685	1318	680	657	654	584	383	1016	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	34.0	34.1	43.6	32.5	32.5	19.8	24.4	24.6	23.9	28.8	30.1
Incr Delay (d2), s/veh	9.1	1.5	3.4	5.9	2.9	5.5	1.0	2.0	2.4	0.4	0.7	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	9.0	8.8	6.0	11.7	12.5	5.7	6.4	6.0	1.9	3.4	4.8
LnGrp Delay(d), s/veh	55.1	35.5	37.6	49.6	35.4	38.0	20.9	26.4	27.0	24.3	29.5	33.0
LnGrp LOS	E	D	D	D	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1147			1695			832			579	
Approach Delay, s/veh		38.6			39.4			24.6			29.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	43.0	18.8	33.2	18.3	34.3	14.6	37.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	39.0	21.0	38.0	23.0	22.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	5.9	14.9	13.9	21.4	13.7	12.4	10.6	26.3
Green Ext Time (p_c), s	0.0	3.2	0.8	6.0	0.6	1.7	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1460	70	190	1990	170	110	360	100	250	490	510
Future Volume (veh/h)	520	1460	70	190	1990	170	110	360	100	250	490	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	553	1553	74	202	2117	181	117	383	106	266	521	543
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	463	1865	809	229	1847	801	90	566	231	203	596	458
Arrive On Green	0.13	0.52	0.52	0.13	0.52	0.52	0.05	0.16	0.16	0.06	0.17	0.17
Sat Flow, veh/h	3476	3574	1551	1792	3574	1551	1792	3574	1459	3476	3574	1471
Grp Volume(v), veh/h	553	1553	74	202	2117	181	117	383	106	266	521	543
Grp Sat Flow(s),veh/h/ln	1738	1787	1551	1792	1787	1551	1792	1787	1459	1738	1787	1471
Q Serve(g_s), s	16.0	44.1	2.9	13.3	62.0	7.7	6.0	12.1	7.9	7.0	17.1	20.0
Cycle Q Clear(g_c), s	16.0	44.1	2.9	13.3	62.0	7.7	6.0	12.1	7.9	7.0	17.1	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	1865	809	229	1847	801	90	566	231	203	596	458
V/C Ratio(X)	1.19	0.83	0.09	0.88	1.15	0.23	1.31	0.68	0.46	1.31	0.87	1.18
Avail Cap(c_a), veh/h	463	1865	809	254	1847	801	90	566	231	203	596	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	24.3	14.4	51.4	29.0	15.9	57.0	47.6	45.8	56.5	48.8	42.4
Incr Delay (d2), s/veh	106.5	3.4	0.0	26.3	72.8	0.1	197.5	6.4	6.4	171.0	16.3	103.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	22.4	1.2	8.2	48.9	3.3	7.9	6.5	3.6	8.2	9.7	28.3
LnGrp Delay(d), s/veh	158.5	27.6	14.4	77.8	101.8	16.0	254.5	54.0	52.3	227.5	65.1	145.8
LnGrp LOS	F	C	B	E	F	B	F	D	D	F	E	F
Approach Vol, veh/h		2180			2500			606			1330	
Approach Delay, s/veh		60.4			93.6			92.4			130.5	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	23.0	19.4	66.6	10.0	24.0	20.0	66.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	19.0	17.0	61.0	6.0	20.0	16.0	62.0
Max Q Clear Time (g_c+I1), s	9.0	14.1	15.3	46.1	8.0	22.0	18.0	64.0
Green Ext Time (p_c), s	0.0	1.2	0.1	9.6	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	90.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Future Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	215	344	269	151	280	32	527	1118	151	43	871	247
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	248	285	218	165	431	49	463	2002	270	295	815	677
Arrive On Green	0.08	0.15	0.15	0.06	0.13	0.13	0.22	0.63	0.63	0.03	0.43	0.43
Sat Flow, veh/h	1792	1903	1456	1792	3232	366	1792	3163	426	1792	1881	1562
Grp Volume(v), veh/h	215	323	290	151	154	158	527	631	638	43	871	247
Grp Sat Flow(s),veh/h/ln	1792	1787	1572	1792	1787	1811	1792	1787	1803	1792	1881	1562
Q Serve(g_s), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Cycle Q Clear(g_c), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Prop In Lane	1.00		0.93	1.00		0.20	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	248	268	236	165	238	241	463	1131	1141	295	815	677
V/C Ratio(X)	0.87	1.20	1.23	0.92	0.64	0.66	1.14	0.56	0.56	0.15	1.07	0.36
Avail Cap(c_a), veh/h	248	268	236	165	238	241	463	1131	1141	309	815	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	51.0	51.0	46.5	49.3	49.4	39.7	12.5	12.5	18.0	34.0	22.9
Incr Delay (d2), s/veh	26.1	121.6	135.4	46.9	5.9	6.3	85.4	2.0	2.0	0.2	51.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	17.9	16.7	6.4	5.2	5.4	26.3	12.4	12.5	0.8	38.6	5.8
LnGrp Delay(d), s/veh	72.5	172.6	186.4	93.4	55.2	55.7	125.1	14.5	14.5	18.2	85.4	24.4
LnGrp LOS	E	F	F	F	E	E	F	B	B	B	F	C
Approach Vol, veh/h		828			463			1796			1161	
Approach Delay, s/veh		151.4			67.8			46.9			70.0	
Approach LOS		F			E			D			E	

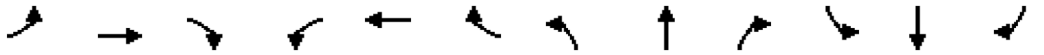
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	80.0	11.0	22.0	31.0	56.0	13.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	75.0	7.0	18.0	27.0	52.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	26.2	9.0	20.0	29.0	54.0	11.0	12.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	960	350	480	1120	60	390	270	300	130	280	60
Future Volume (veh/h)	60	960	350	480	1120	60	390	270	300	130	280	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	64	1021	372	511	1191	64	415	287	319	138	298	64
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	246	991	361	528	2463	132	454	852	372	317	590	121
Arrive On Green	0.04	0.28	0.28	0.27	0.50	0.50	0.18	0.24	0.24	0.08	0.14	0.14
Sat Flow, veh/h	1757	3605	1313	1757	4886	262	1757	3505	1531	1757	4165	854
Grp Volume(v), veh/h	64	951	442	511	818	437	415	287	319	138	237	125
Grp Sat Flow(s),veh/h/ln	1757	1679	1561	1757	1679	1791	1757	1752	1531	1757	1679	1661
Q Serve(g_s), s	3.1	33.0	33.0	30.3	19.2	19.2	22.0	8.1	23.9	7.9	7.8	8.3
Cycle Q Clear(g_c), s	3.1	33.0	33.0	30.3	19.2	19.2	22.0	8.1	23.9	7.9	7.8	8.3
Prop In Lane	1.00		0.84	1.00		0.15	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	246	923	429	528	1692	903	454	852	372	317	476	235
V/C Ratio(X)	0.26	1.03	1.03	0.97	0.48	0.48	0.91	0.34	0.86	0.44	0.50	0.53
Avail Cap(c_a), veh/h	267	923	429	528	1692	903	454	852	372	319	476	235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	43.5	43.5	35.4	19.5	19.5	36.0	37.5	43.4	39.2	47.6	47.8
Incr Delay (d2), s/veh	0.6	37.5	51.4	30.8	0.2	0.4	22.8	1.1	21.7	0.9	3.7	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	20.1	20.3	21.1	8.9	9.6	6.0	4.0	12.3	3.9	3.9	4.4
LnGrp Delay(d), s/veh	30.0	81.0	94.9	66.2	19.7	19.9	58.8	38.5	65.2	40.2	51.3	56.1
LnGrp LOS	C	F	F	E	B	B	E	D	E	D	D	E
Approach Vol, veh/h		1457			1766			1021			500	
Approach Delay, s/veh		83.0			33.2			55.1			49.4	
Approach LOS		F			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	33.2	36.0	37.0	26.0	21.0	8.5	64.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	29.0	32.0	33.0	22.0	17.0	6.0	59.0
Max Q Clear Time (g_c+I1), s	9.9	25.9	32.3	35.0	24.0	10.3	5.1	21.2
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.0	1.1	0.0	9.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1830	30	320	2140	120	30	170	190	100	200	180
Future Volume (veh/h)	120	1830	30	320	2140	120	30	170	190	100	200	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.98		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	124	1887	31	330	2206	124	31	175	196	103	206	186
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	151	1946	32	352	2351	1026	160	358	286	134	377	286
Arrive On Green	0.04	0.54	0.54	0.16	0.66	0.66	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1792	3597	59	1792	3574	1560	981	1787	1427	1013	1881	1428
Grp Volume(v), veh/h	124	935	983	330	2206	124	31	175	196	103	206	186
Grp Sat Flow(s),veh/h/ln	1792	1787	1869	1792	1787	1560	981	1787	1427	1013	1881	1428
Q Serve(g_s), s	3.7	60.3	61.1	17.2	66.1	3.5	3.5	10.4	15.3	8.7	11.8	14.3
Cycle Q Clear(g_c), s	3.7	60.3	61.1	17.2	66.1	3.5	15.3	10.4	15.3	24.0	11.8	14.3
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	967	1011	352	2351	1026	160	358	286	134	377	286
V/C Ratio(X)	0.82	0.97	0.97	0.94	0.94	0.12	0.19	0.49	0.69	0.77	0.55	0.65
Avail Cap(c_a), veh/h	151	970	1014	352	2357	1029	160	358	286	134	377	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	26.5	26.6	40.9	18.3	7.6	49.9	42.5	44.4	56.8	43.0	44.0
Incr Delay (d2), s/veh	28.5	21.2	21.8	32.5	8.1	0.1	2.7	4.7	12.6	33.6	5.6	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	35.3	37.3	13.9	34.8	1.5	1.1	5.6	7.0	4.6	6.7	6.5
LnGrp Delay(d), s/veh	56.4	47.6	48.5	73.5	26.4	7.7	52.6	47.2	57.0	90.4	48.6	55.0
LnGrp LOS	E	D	D	E	C	A	D	D	E	F	D	D
Approach Vol, veh/h		2042			2660			402			495	
Approach Delay, s/veh		48.6			31.4			52.4			59.7	
Approach LOS		D			C			D			E	

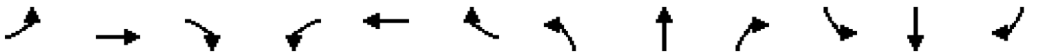
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	23.0	68.8		28.0	9.0	82.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	19.0	65.0		24.0	5.0	79.0
Max Q Clear Time (g_c+I1), s		17.3	19.2	63.1		26.0	5.7	68.1
Green Ext Time (p_c), s		1.3	0.0	1.7		0.0	0.0	9.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1110	610	250	2060	0	0	0	0	170	110	210
Future Volume (veh/h)	0	1110	610	250	2060	0	0	0	0	170	110	210
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	1144	629	258	2124	0				175	113	216
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1622	739	292	2403	0				285	184	411
Arrive On Green	0.00	0.47	0.47	0.16	0.67	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3593	1560	1792	3668	0				1109	716	1599
Grp Volume(v), veh/h	0	1144	629	258	2124	0				288	0	216
Grp Sat Flow(s),veh/h/ln	0	1712	1560	1792	1787	0				1826	0	1599
Q Serve(g_s), s	0.0	29.8	40.2	15.9	54.2	0.0				15.7	0.0	13.1
Cycle Q Clear(g_c), s	0.0	29.8	40.2	15.9	54.2	0.0				15.7	0.0	13.1
Prop In Lane	0.00		1.00	1.00		0.00				0.61		1.00
Lane Grp Cap(c), veh/h	0	1622	739	292	2403	0				469	0	411
V/C Ratio(X)	0.00	0.71	0.85	0.88	0.88	0.00				0.61	0.00	0.53
Avail Cap(c_a), veh/h	0	1622	739	444	2628	0				469	0	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.5	26.2	46.2	14.9	0.0				37.0	0.0	36.0
Incr Delay (d2), s/veh	0.0	1.4	9.4	12.8	3.7	0.0				5.9	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.3	19.2	8.9	27.5	0.0				8.7	0.0	6.3
LnGrp Delay(d), s/veh	0.0	24.9	35.6	59.0	18.7	0.0				42.9	0.0	40.8
LnGrp LOS		C	D	E	B					D		D
Approach Vol, veh/h		1773			2382						504	
Approach Delay, s/veh		28.7			23.0						42.0	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.4	57.5		33.0		79.9
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			28.0	51.0		29.0		83.0
Max Q Clear Time (g_c+I1), s			17.9	42.2		17.7		56.2
Green Ext Time (p_c), s			0.5	6.7		1.7		19.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	850	0	0	1110	270	1000	0	880	0	0	0
Future Volume (vph)	160	850	0	0	1110	270	1000	0	880	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	0.93	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	1805	3610			3479		1715	1570	1534			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	1805	3610			3479		1715	1570	1534			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	165	876	0	0	1144	278	1031	0	907	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	27	67	0	0	0
Lane Group Flow (vph)	165	876	0	0	1404	0	670	624	550	0	0	0
Confl. Peds. (#/hr)	3		10	10		3						
Confl. Bikes (#/hr)			11			6						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Effective Green, g (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Actuated g/C Ratio	0.10	0.53			0.39		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	180	1895			1362		700	641	626			
v/s Ratio Prot	c0.09	0.24			c0.40		0.39	c0.40	0.36			
v/s Ratio Perm												
v/c Ratio	0.92	0.46			1.03		0.96	0.97	0.88			
Uniform Delay, d1	53.5	17.9			36.5		34.5	34.9	32.7			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	43.6	0.2			32.7		25.0	29.7	16.0			
Delay (s)	97.1	18.1			69.2		59.5	64.6	48.7			
Level of Service	F	B			E		E	E	D			
Approach Delay (s/veh)		30.6			69.2			57.8			0.0	
Approach LOS		C			E			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	129.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1320	180	120	870	190	500	670	160	330	440	210
Future Volume (veh/h)	270	1320	180	120	870	190	500	670	160	330	440	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	284	1389	189	126	916	200	526	705	168	347	463	221
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	342	1324	837	121	1213	521	584	716	170	332	627	297
Arrive On Green	0.10	0.37	0.37	0.07	0.34	0.34	0.17	0.25	0.25	0.18	0.27	0.27
Sat Flow, veh/h	3510	3610	1551	1810	3610	1550	3510	2863	682	1810	2347	1110
Grp Volume(v), veh/h	284	1389	189	126	916	200	526	444	429	347	355	329
Grp Sat Flow(s),veh/h/ln	1755	1805	1551	1810	1805	1550	1755	1805	1740	1810	1805	1652
Q Serve(g_s), s	9.5	44.0	7.8	8.0	27.1	11.8	17.6	29.4	29.4	22.0	21.5	21.9
Cycle Q Clear(g_c), s	9.5	44.0	7.8	8.0	27.1	11.8	17.6	29.4	29.4	22.0	21.5	21.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.67
Lane Grp Cap(c), veh/h	342	1324	837	121	1213	521	584	451	435	332	482	441
V/C Ratio(X)	0.83	1.05	0.23	1.04	0.76	0.38	0.90	0.98	0.99	1.05	0.74	0.75
Avail Cap(c_a), veh/h	380	1324	837	121	1213	521	614	451	435	332	482	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	38.0	14.9	56.0	35.5	30.4	49.1	44.8	44.8	49.0	40.1	40.2
Incr Delay (d2), s/veh	13.3	38.8	0.1	94.3	2.8	0.5	16.0	38.7	39.7	61.9	9.7	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	29.0	3.3	7.1	13.9	5.1	9.8	19.5	19.0	16.7	12.0	11.3
LnGrp Delay(d), s/veh	66.5	76.8	15.0	150.8	38.2	30.8	65.1	83.5	84.5	110.9	49.8	51.1
LnGrp LOS	E	F	B	F	D	C	E	F	F	F	D	D
Approach Vol, veh/h		1862			1242			1399			1031	
Approach Delay, s/veh		68.9			48.4			76.9			70.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	34.0	12.0	48.0	24.0	36.0	15.7	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	30.0	8.0	44.0	21.0	31.0	13.0	39.0
Max Q Clear Time (g_c+I1), s	24.0	31.4	10.0	46.0	19.6	23.9	11.5	29.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.3	2.3	0.2	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Future Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.95	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	495	309	247	186	258	113	103	1371	82	103	1082	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	520	558	458	372	286	231	211	1510	90	146	1381	158
Arrive On Green	0.24	0.29	0.29	0.10	0.15	0.15	0.05	0.44	0.44	0.03	0.42	0.42
Sat Flow, veh/h	1810	1900	1559	1810	1900	1537	1810	3455	206	1810	3262	373
Grp Volume(v), veh/h	495	309	247	186	258	113	103	714	739	103	598	608
Grp Sat Flow(s),veh/h/ln	1810	1900	1559	1810	1900	1537	1810	1805	1856	1810	1805	1830
Q Serve(g_s), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Cycle Q Clear(g_c), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	520	558	458	372	286	231	211	789	811	146	764	775
V/C Ratio(X)	0.95	0.55	0.54	0.50	0.90	0.49	0.49	0.91	0.91	0.71	0.78	0.78
Avail Cap(c_a), veh/h	534	575	472	372	288	233	231	789	811	146	764	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	35.4	35.2	37.1	49.7	46.3	23.9	31.2	31.3	28.3	29.6	29.6
Incr Delay (d2), s/veh	27.0	1.1	1.2	1.0	29.3	1.6	1.8	15.9	16.1	14.6	7.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	8.8	6.9	5.2	10.6	3.5	2.0	25.3	26.2	2.5	18.6	18.9
LnGrp Delay(d), s/veh	58.0	36.5	36.4	38.2	78.9	47.9	25.7	47.1	47.4	42.9	37.4	37.4
LnGrp LOS	E	D	D	D	E	D	C	D	D	D	D	D
Approach Vol, veh/h		1051			557			1556			1309	
Approach Delay, s/veh		46.6			59.0			45.8			37.8	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	56.0	16.0	38.9	9.6	54.4	33.0	21.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	52.0	12.0	36.0	7.0	49.0	30.0	18.0
Max Q Clear Time (g_c+I1), s	5.9	46.3	12.2	18.3	5.8	36.1	28.8	17.9
Green Ext Time (p_c), s	0.0	4.1	0.0	2.5	0.0	6.4	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Future Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	106	21	21	11	32	53	11	447	11	43	574	106
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	203	127	127	240	94	155	594	1478	1217	740	1478	1213
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1327	870	870	1378	641	1062	771	1900	1564	946	1900	1559
Grp Volume(v), veh/h	106	0	42	11	0	85	11	447	11	43	574	106
Grp Sat Flow(s),veh/h/ln	1327	0	1739	1378	0	1704	771	1900	1564	946	1900	1559
Q Serve(g_s), s	8.2	0.0	2.2	0.7	0.0	4.7	0.5	7.2	0.2	1.5	10.1	1.7
Cycle Q Clear(g_c), s	13.0	0.0	2.2	3.0	0.0	4.7	10.6	7.2	0.2	8.7	10.1	1.7
Prop In Lane	1.00		0.50	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	0	254	240	0	249	594	1478	1217	740	1478	1213
V/C Ratio(X)	0.52	0.00	0.17	0.05	0.00	0.34	0.02	0.30	0.01	0.06	0.39	0.09
Avail Cap(c_a), veh/h	386	0	495	431	0	485	594	1478	1217	740	1478	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	39.4	40.7	0.0	40.4	5.4	3.4	2.6	4.6	3.7	2.8
Incr Delay (d2), s/veh	2.1	0.0	0.3	0.1	0.0	0.8	0.1	0.5	0.0	0.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.1	0.3	0.0	2.3	0.1	3.9	0.1	0.4	5.6	0.8
LnGrp Delay(d), s/veh	48.4	0.0	39.7	40.8	0.0	41.3	5.5	3.9	2.6	4.8	4.5	2.9
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		148			96			469			723	
Approach Delay, s/veh		45.9			41.2			3.9			4.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.0		19.4		86.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		82.0		30.0		82.0		30.0
Max Q Clear Time (g_c+I1), s		12.6		15.0		12.1		6.7
Green Ext Time (p_c), s		3.3		0.4		5.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.9
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	10.5
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	20	10	20	40	150	30	140	40	120	20	20
Future Vol, veh/h	20	20	10	20	40	150	30	140	40	120	20	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	23	12	23	47	174	35	163	47	140	23	23
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	9.3	9.5	11.7	10.6
HCM LOS	A	A	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	14%	50%	0%	33%	0%	86%	0%
Vol Thru, %	67%	50%	0%	67%	0%	14%	0%
Vol Right, %	19%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	210	40	10	60	150	140	20
LT Vol	30	20	0	20	0	120	0
Through Vol	140	20	0	40	0	20	0
RT Vol	40	0	10	0	150	0	20
Lane Flow Rate	244	47	12	70	174	163	23
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.368	0.082	0.017	0.114	0.244	0.274	0.032
Departure Headway (Hd)	5.432	6.343	5.378	5.908	5.031	6.065	4.93
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	654	567	668	601	705	596	730
Service Time	3.532	4.052	3.087	3.706	2.829	3.769	2.63
HCM Lane V/C Ratio	0.373	0.083	0.018	0.116	0.247	0.273	0.032
HCM Control Delay, s/veh	11.7	9.6	8.2	9.5	9.5	11	7.8
HCM Lane LOS	B	A	A	A	A	B	A
HCM 95th-tile Q	1.7	0.3	0.1	0.4	1	1.1	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	10	10	20	20	10
Future Vol, veh/h	10	10	10	20	20	10
Conflicting Peds, #/hr	0	10	10	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	17	17	34	34	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	44	0	105	37
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1577	-	898	1041
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1564	-	880	1031
Mov Cap-2 Maneuver	-	-	-	-	880	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	947	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.4	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	880	1031	-	-	1564	-
HCM Lane V/C Ratio	0.039	0.016	-	-	0.011	-
HCM Control Delay (s/veh)	9.3	8.6	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Future Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Conflicting Peds, #/hr	6	0	4	4	0	6	3	0	3	3	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	183	32	32	237	11	11	11	32	11	11	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	254	0	0	219	0	0	546	543	206	559	554	252
Stage 1	-	-	-	-	-	-	225	225	-	313	313	-
Stage 2	-	-	-	-	-	-	321	318	-	246	241	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1323	-	-	1362	-	-	452	450	840	443	443	792
Stage 1	-	-	-	-	-	-	782	721	-	702	661	-
Stage 2	-	-	-	-	-	-	695	657	-	762	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1316	-	-	1357	-	-	423	430	835	403	424	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	423	430	-	403	424	-
Stage 1	-	-	-	-	-	-	772	712	-	691	640	-
Stage 2	-	-	-	-	-	-	654	636	-	712	701	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.9	11.5	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	604	1316	-	-	1357	-	-	491
HCM Lane V/C Ratio	0.089	0.008	-	-	0.024	-	-	0.066
HCM Control Delay (s/veh)	11.5	7.8	0	-	7.7	0	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	130	80	80	150	20	90	1360	60	40	1460	70
Future Volume (veh/h)	50	130	80	80	150	20	90	1360	60	40	1460	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	51	133	82	82	153	20	92	1388	61	41	1490	71
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	209	306	123	323	42	236	2554	112	266	2544	121
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	261	1043	1528	1173	1613	211	332	3483	153	370	3469	165
Grp Volume(v), veh/h	184	0	82	82	0	173	92	711	738	41	765	796
Grp Sat Flow(s),veh/h/ln	1304	0	1528	1173	0	1824	332	1787	1849	370	1787	1846
Q Serve(g_s), s	7.5	0.0	5.4	6.4	0.0	10.1	21.6	21.1	21.3	6.6	24.0	24.2
Cycle Q Clear(g_c), s	17.6	0.0	5.4	24.0	0.0	10.1	45.8	21.1	21.3	27.9	24.0	24.2
Prop In Lane	0.28		1.00	1.00		0.12	1.00		0.08	1.00		0.09
Lane Grp Cap(c), veh/h	299	0	306	123	0	365	236	1311	1356	266	1311	1354
V/C Ratio(X)	0.62	0.00	0.27	0.67	0.00	0.47	0.39	0.54	0.54	0.15	0.58	0.59
Avail Cap(c_a), veh/h	299	0	306	123	0	365	236	1311	1356	266	1311	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	40.6	57.6	0.0	42.4	18.2	7.1	7.1	13.3	7.5	7.5
Incr Delay (d2), s/veh	3.7	0.0	0.5	13.1	0.0	1.0	4.8	1.6	1.6	1.2	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	2.3	3.2	0.0	5.1	2.3	10.9	11.3	0.8	12.4	12.9
LnGrp Delay(d), s/veh	49.4	0.0	41.0	70.7	0.0	43.4	23.0	8.7	8.7	14.5	9.4	9.4
LnGrp LOS	D		D	E		D	C	A	A	B	A	A
Approach Vol, veh/h		266			255			1541			1602	
Approach Delay, s/veh		46.8			52.2			9.5			9.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		28.0		92.0		28.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		24.0		88.0		24.0
Max Q Clear Time (g_c+I1), s		47.8		19.6		29.9		26.0
Green Ext Time (p_c), s		16.5		0.5		19.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	18

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	60	60	2030	2060	30
Future Vol, veh/h	20	60	60	2030	2060	30
Conflicting Peds, #/hr	2	2	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	65	65	2183	2215	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3448	1119	2256	0	-	0
Stage 1	2224	-	-	-	-	-
Stage 2	1224	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	~ 5	203	228	-	-	-
Stage 1	69	-	-	-	-	-
Stage 2	243	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 4	201	226	-	-	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	49	-	-	-	-	-
Stage 2	241	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 939.3	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	226	-	4	201	-	-
HCM Lane V/C Ratio	0.285	-	5.376	0.321	-	-
HCM Control Delay (s/veh)	27.2	-	$ 3663.7	31.2	-	-
HCM Lane LOS	D	-	F	D	-	-
HCM 95th %tile Q(veh)	1.1	-	4.1	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	50	70	90	50	70	110	1790	50	100	1880	120
Future Volume (veh/h)	150	50	70	90	50	70	110	1790	50	100	1880	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	155	52	72	93	52	72	113	1845	52	103	1938	124
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	270	49	14	264	148	2690	75	178	2583	163
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	0	0	1542	0	79	1510	204	3547	99	240	3407	215
Grp Volume(v), veh/h	207	0	72	145	0	72	113	925	972	103	1005	1057
Grp Sat Flow(s),veh/h/ln	0	0	1542	79	0	1510	204	1787	1860	240	1787	1835
Q Serve(g_s), s	0.0	0.0	4.8	0.0	0.0	5.0	51.6	31.1	31.8	45.9	37.2	39.4
Cycle Q Clear(g_c), s	21.0	0.0	4.8	21.0	0.0	5.0	91.0	31.1	31.8	77.6	37.2	39.4
Prop In Lane	0.75		1.00	0.64		1.00	1.00		0.05	1.00		0.12
Lane Grp Cap(c), veh/h	52	0	270	63	0	264	148	1355	1410	178	1355	1391
V/C Ratio(X)	3.95	0.00	0.27	2.30	0.00	0.27	0.77	0.68	0.69	0.58	0.74	0.76
Avail Cap(c_a), veh/h	52	0	270	63	0	264	148	1355	1410	178	1355	1391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	42.8	55.5	0.0	42.9	40.0	7.3	7.3	27.0	8.0	8.3
Incr Delay (d2), s/veh	1370.0	0.0	0.5	630.6	0.0	0.6	30.9	2.8	2.8	13.0	3.7	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.7	0.0	2.1	13.1	0.0	2.1	5.0	16.2	17.0	3.6	19.2	21.2
LnGrp Delay(d), s/veh	1430.0	0.0	43.4	686.1	0.0	43.4	70.9	10.1	10.1	40.0	11.7	12.2
LnGrp LOS	F		D	F		D	E	B	B	D	B	B
Approach Vol, veh/h		279			217			2010			2165	
Approach Delay, s/veh		1072.1			472.9			13.5			13.3	
Approach LOS		F			F			B			B	

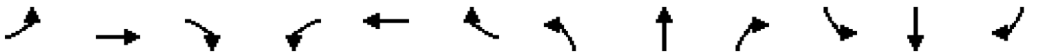
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		25.0		95.0		25.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		21.0		91.0		21.0
Max Q Clear Time (g_c+I1), s		93.0		23.0		79.6		23.0
Green Ext Time (p_c), s		0.0		0.0		10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	98.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	800	70	150	1080	110	60	360	90	240	400	460
Future Volume (veh/h)	330	800	70	150	1080	110	60	360	90	240	400	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	347	842	74	158	1137	0	63	379	95	253	421	484
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	1762	154	189	1334	415	81	1001	431	321	585	506
Arrive On Green	0.21	0.37	0.37	0.11	0.26	0.00	0.05	0.28	0.28	0.09	0.33	0.33
Sat Flow, veh/h	1774	4755	416	1774	5085	1583	1774	3539	1525	3442	1770	1531
Grp Volume(v), veh/h	347	599	317	158	1137	0	63	379	95	253	421	484
Grp Sat Flow(s),veh/h/ln	1774	1695	1781	1774	1695	1583	1774	1770	1525	1721	1770	1531
Q Serve(g_s), s	20.8	14.7	14.8	9.5	23.2	0.0	3.8	9.4	5.2	7.8	22.8	33.7
Cycle Q Clear(g_c), s	20.8	14.7	14.8	9.5	23.2	0.0	3.8	9.4	5.2	7.8	22.8	33.7
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	1256	660	189	1334	415	81	1001	431	321	585	506
V/C Ratio(X)	0.91	0.48	0.48	0.84	0.85	0.00	0.78	0.38	0.22	0.79	0.72	0.96
Avail Cap(c_a), veh/h	488	1338	703	293	1447	450	114	1001	431	442	585	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	26.2	26.3	47.7	38.2	0.0	51.5	31.4	29.9	48.4	32.1	35.7
Incr Delay (d2), s/veh	18.1	0.3	0.5	11.6	4.8	0.0	19.5	1.1	1.2	6.5	7.5	30.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	7.0	7.4	5.3	11.4	0.0	2.3	4.7	2.3	4.0	12.3	18.6
LnGrp Delay(d), s/veh	59.8	26.5	26.8	59.3	43.0	0.0	71.0	32.5	31.1	54.8	39.5	66.3
LnGrp LOS	E	C	C	E	D		E	C	C	D	D	E
Approach Vol, veh/h		1263			1295			537			1158	
Approach Delay, s/veh		35.7			45.0			36.7			54.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	34.8	15.6	44.4	9.0	40.0	27.4	32.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	18.0	43.0	7.0	36.0	30.0	31.0
Max Q Clear Time (g_c+I1), s	9.8	11.4	11.5	16.8	5.8	35.7	22.8	25.2
Green Ext Time (p_c), s	0.3	2.4	0.2	5.9	0.0	0.2	0.6	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D

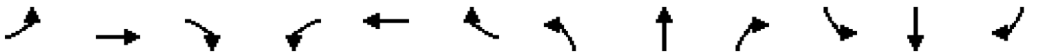


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	840	1140	160	1280	0	0	0	0	150	240	620
Future Volume (vph)	0	840	1140	160	1280	0	0	0	0	150	240	620
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.97	0.93	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.94	0.85	1.00	1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3175	1372	3502	3610					1715	1613	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3175	1372	3502	3610					1715	1613	1534
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	966	1310	184	1471	0	0	0	0	172	276	713
RTOR Reduction (vph)	0	70	180	0	0	0	0	0	0	0	9	29
Lane Group Flow (vph)	0	1499	527	184	1471	0	0	0	0	155	512	456
Confl. Peds. (#/hr)	174		24	24		174						
Confl. Bikes (#/hr)			4			31						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		58.0	58.0	7.0	69.0					43.0	43.0	43.0
Effective Green, g (s)		58.0	58.0	7.0	69.0					43.0	43.0	43.0
Actuated g/C Ratio		0.48	0.48	0.06	0.57					0.36	0.36	0.36
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1534	663	204	2075					614	577	549
v/s Ratio Prot		c0.47		c0.05	0.41					0.09	c0.32	0.30
v/s Ratio Perm			0.38									
v/c Ratio		0.98	0.79	0.90	0.71					0.25	0.89	0.83
Uniform Delay, d1		30.4	26.0	56.2	18.3					27.2	36.2	35.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		17.6	6.5	37.1	1.1					1.0	18.1	13.7
Delay (s)		48.0	32.5	93.2	19.4					28.1	54.3	48.8
Level of Service		D	C	F	B					C	D	D
Approach Delay (s/veh)		43.2			27.6			0.0			48.5	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

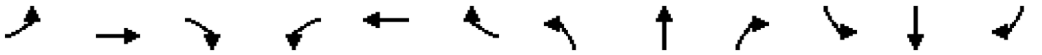
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	800	0	20	950	360	10	10	10	170	10	260
Future Volume (vph)	280	800	0	20	950	360	10	10	10	170	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	298	851	0	21	1011	383	11	11	11	181	11	277
RTOR Reduction (vph)	0	0	0	0	0	212	0	0	9	0	233	0
Lane Group Flow (vph)	298	851	0	21	1011	171	0	22	2	163	73	0
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			4			2						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	13.9	44.5		1.7	32.3	32.3		19.5	19.5	15.6	15.6	
Effective Green, g (s)	13.9	44.5		1.7	32.3	32.3		19.5	19.5	15.6	15.6	
Actuated g/C Ratio	0.14	0.46		0.02	0.33	0.33		0.20	0.20	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	485	2303		30	1671	512		360	314	266	242	
v/s Ratio Prot	c0.09	0.17		0.01	c0.20			c0.01		c0.10	0.05	
v/s Ratio Perm						0.11			0.00			
v/c Ratio	0.61	0.37		0.70	0.61	0.33		0.06	0.01	0.61	0.30	
Uniform Delay, d1	39.2	17.2		47.5	27.2	24.4		31.5	31.1	38.0	36.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.3	0.1		54.0	0.6	0.4		0.3	0.0	4.1	0.7	
Delay (s)	41.5	17.3		101.5	27.8	24.8		31.8	31.2	42.2	36.8	
Level of Service	D	B		F	C	C		C	C	D	D	
Approach Delay (s/veh)		23.6			28.1			31.6			38.6	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	97.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	560	0	0	650	80	750	280	250	0	0	0
Future Volume (vph)	260	560	0	0	650	80	750	280	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.96		1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3422		1643	3161	1442			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3422		1643	3161	1442			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	292	629	0	0	730	90	843	315	281	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	2	104	0	0	0
Lane Group Flow (vph)	292	629	0	0	820	0	421	763	149	0	0	0
Confl. Peds. (#/hr)	162		26	26		162			3	3		
Confl. Bikes (#/hr)			9			51			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	14.0	50.7			32.7		50.4	50.4	50.4			
Effective Green, g (s)	14.0	50.7			32.7		50.4	50.4	50.4			
Actuated g/C Ratio	0.13	0.46			0.30		0.46	0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	449	1677			1025		759	1460	666			
v/s Ratio Prot	c0.08	0.17			c0.24		c0.26	0.24				
v/s Ratio Perm									0.10			
v/c Ratio	0.65	0.38			0.80		0.55	0.52	0.22			
Uniform Delay, d1	45.2	18.9			35.2		21.2	20.8	17.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	3.4	0.1			4.5		2.9	1.3	0.8			
Delay (s)	48.6	19.1			39.7		24.1	22.2	18.4			
Level of Service	D	B			D		C	C	B			
Approach Delay (s/veh)		28.4			39.7			22.1			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	109.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	760	0	0	1090	550	270	0	360	0	0	0
Future Volume (veh/h)	230	760	0	0	1090	550	270	0	360	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1900	1845	0	1845			
Adj Flow Rate, veh/h	247	817	0	0	1172	591	290	0	387			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	311	2856	0	0	1479	675	1235	0	568			
Arrive On Green	0.09	0.57	0.00	0.00	0.44	0.44	0.36	0.00	0.36			
Sat Flow, veh/h	3408	5202	0	0	3523	1532	3408	0	1568			
Grp Volume(v), veh/h	247	817	0	0	1172	591	290	0	387			
Grp Sat Flow(s),veh/h/ln	1704	1679	0	0	1679	1532	1704	0	1568			
Q Serve(g_s), s	8.0	9.5	0.0	0.0	34.0	39.8	6.7	0.0	23.7			
Cycle Q Clear(g_c), s	8.0	9.5	0.0	0.0	34.0	39.8	6.7	0.0	23.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	311	2856	0	0	1479	675	1235	0	568			
V/C Ratio(X)	0.79	0.29	0.00	0.00	0.79	0.88	0.23	0.00	0.68			
Avail Cap(c_a), veh/h	422	3159	0	0	1572	718	1235	0	568			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.4	12.7	0.0	0.0	27.2	28.8	25.2	0.0	30.6			
Incr Delay (d2), s/veh	7.3	0.1	0.0	0.0	2.7	11.3	0.4	0.0	6.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.1	4.4	0.0	0.0	16.2	18.9	3.2	0.0	11.2			
LnGrp Delay(d), s/veh	57.7	12.7	0.0	0.0	29.9	40.1	25.6	0.0	37.0			
LnGrp LOS	E	B			C	D	C		D			
Approach Vol, veh/h		1064			1763			677				
Approach Delay, s/veh		23.1			33.4			32.1				
Approach LOS		C			C			C				

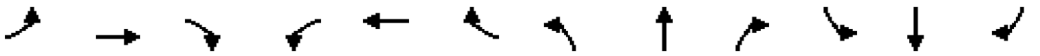
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		45.0		68.2			14.3	53.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		41.0		71.0			14.0	53.0
Max Q Clear Time (g_c+I1), s		25.7		11.5			10.0	41.8
Green Ext Time (p_c), s		2.3		6.4			0.3	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1480	440	340	1660	190	420	870	230	210	690	230
Future Volume (veh/h)	230	1480	440	340	1660	190	420	870	230	210	690	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	258	1663	494	382	1865	213	472	978	258	236	775	258
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	290	1792	543	406	1964	596	493	1620	490	296	925	401
Arrive On Green	0.08	0.35	0.35	0.12	0.38	0.38	0.14	0.32	0.32	0.09	0.26	0.26
Sat Flow, veh/h	3476	5136	1556	3476	5136	1558	3476	5136	1553	3476	3574	1548
Grp Volume(v), veh/h	258	1663	494	382	1865	213	472	978	258	236	775	258
Grp Sat Flow(s),veh/h/ln	1738	1712	1556	1738	1712	1558	1738	1712	1553	1738	1787	1548
Q Serve(g_s), s	8.8	37.4	36.3	13.1	42.2	11.7	16.2	19.3	16.3	8.0	24.6	17.8
Cycle Q Clear(g_c), s	8.8	37.4	36.3	13.1	42.2	11.7	16.2	19.3	16.3	8.0	24.6	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	1792	543	406	1964	596	493	1620	490	296	925	401
V/C Ratio(X)	0.89	0.93	0.91	0.94	0.95	0.36	0.96	0.60	0.53	0.80	0.84	0.64
Avail Cap(c_a), veh/h	290	1800	545	406	1972	598	493	1620	490	377	925	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	37.5	37.2	52.5	35.9	26.5	51.0	34.7	33.7	53.8	42.0	39.5
Incr Delay (d2), s/veh	26.8	8.9	19.3	30.0	10.7	0.4	29.8	1.7	4.0	9.0	9.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	19.0	18.4	8.0	21.8	5.1	9.8	9.4	7.6	4.2	13.3	8.4
LnGrp Delay(d), s/veh	81.2	46.5	56.5	82.5	46.6	26.8	80.9	36.4	37.7	62.8	51.0	47.3
LnGrp LOS	F	D	E	F	D	C	F	D	D	E	D	D
Approach Vol, veh/h		2415			2460			1708			1269	
Approach Delay, s/veh		52.2			50.5			48.9			52.4	
Approach LOS		D			D			D			D	

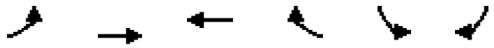
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	41.8	18.0	45.8	21.0	35.0	14.0	49.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	14.0	42.0	17.0	31.0	10.0	46.0
Max Q Clear Time (g_c+I1), s	10.0	21.3	15.1	39.4	18.2	26.6	10.8	44.2
Green Ext Time (p_c), s	0.2	6.0	0.0	2.4	0.0	2.4	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	200	40	740	270	330	50	870	710	220	540	100
Future Volume (vph)	110	200	40	740	270	330	50	870	710	220	540	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.98		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4981		3285	1704	1594	1805	3610	1579	3502	5046	
Flt Permitted		0.75		0.95	0.78	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3799		3285	1350	1594	1805	3610	1579	3502	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	217	43	804	293	359	54	946	772	239	587	109
RTOR Reduction (vph)	0	14	0	0	0	119	0	0	22	0	22	0
Lane Group Flow (vph)	0	366	0	724	373	240	54	946	750	239	674	0
Confl. Peds. (#/hr)			25	25			1		11	11		1
Confl. Bikes (#/hr)			1			2			2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.2		30.8	52.0	52.0	6.9	45.8	76.6	10.8	49.7	
Effective Green, g (s)		17.2		30.8	52.0	52.0	6.9	45.8	76.6	10.8	49.7	
Actuated g/C Ratio		0.14		0.26	0.43	0.43	0.06	0.38	0.64	0.09	0.41	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		541		838	672	687	103	1370	1055	313	2079	
v/s Ratio Prot				c0.22	0.14		0.03	0.26	c0.18	c0.07	c0.13	
v/s Ratio Perm		c0.10			0.10	0.15			0.29			
v/c Ratio		0.68		0.86	0.56	0.35	0.52	0.69	0.71	0.76	0.32	
Uniform Delay, d1		49.1		42.9	25.6	23.0	55.3	31.4	14.6	53.7	24.1	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.4		9.2	1.0	0.3	4.7	2.9	2.3	10.5	0.4	
Delay (s)		52.4		52.1	26.6	23.3	60.0	34.3	16.9	64.2	24.5	
Level of Service		D		D	C	C	E	C	B	E	C	
Approach Delay (s/veh)		52.4			38.5			27.5			34.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	1020	1380	0	410	240
Future Volume (veh/h)	0	1020	1380	0	410	240
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	1109	1500	0	446	261
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2011	2011	0	970	865
Arrive On Green	0.00	0.39	0.39	0.00	0.54	0.54
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	1109	1500	0	446	261
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	17.4	26.0	0.0	15.9	9.4
Cycle Q Clear(g_c), s	0.0	17.4	26.0	0.0	15.9	9.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2011	2011	0	970	865
V/C Ratio(X)	0.00	0.55	0.75	0.00	0.46	0.30
Avail Cap(c_a), veh/h	0	2779	2779	0	970	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	27.6	0.0	14.9	13.4
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	1.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	12.5	0.0	8.4	4.3
LnGrp Delay(d), s/veh	0.0	25.2	28.3	0.0	16.5	14.3
LnGrp LOS		C	C		B	B
Approach Vol, veh/h		1109	1500		707	
Approach Delay, s/veh		25.2	28.3		15.7	
Approach LOS		C	C		B	

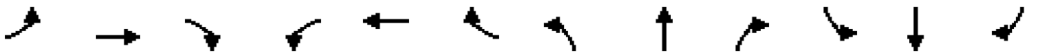
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.5		60.0		44.5
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s				19.4		17.9		28.0
Green Ext Time (p_c), s				9.1		2.5		12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1270	0	0	1270	550	1170
Future Volume (vph)	1270	0	0	1270	550	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.94	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5187			5187	1738	1534
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5187			5187	1738	1534
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1337	0	0	1337	579	1232
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1337	0	0	1337	936	875
Confl. Peds. (#/hr)		7	7		5	
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	33.9			33.9	78.0	78.0
Effective Green, g (s)	33.9			33.9	78.0	78.0
Actuated g/C Ratio	0.28			0.28	0.65	0.65
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1466			1466	1130	997
v/s Ratio Prot	c0.26			0.26	0.54	
v/s Ratio Perm						c0.57
v/c Ratio	0.91			0.91	0.83	0.88
Uniform Delay, d1	41.6			41.6	15.9	17.1
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	8.9			8.9	7.0	10.8
Delay (s)	50.5			50.5	22.9	27.8
Level of Service	D			D	C	C
Approach Delay (s/veh)	50.5			50.5	25.3	
Approach LOS	D			D	C	

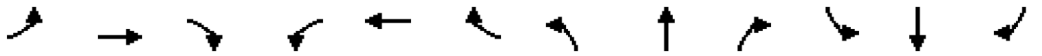
Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	119.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Future Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.86						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1512						5085	1564	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.38	1.00	
Satd. Flow (perm)	1681	1512						5085	1564	711	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	284	0	621	0	0	0	0	653	474	337	505	0
RTOR Reduction (vph)	0	273	0	0	0	0	0	0	163	0	0	0
Lane Group Flow (vph)	256	376	0	0	0	0	0	653	311	337	505	0
Confl. Peds. (#/hr)							5					5
Confl. Bikes (#/hr)									1			10
Turn Type	Perm	NA						NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4								2	6		
Actuated Green, G (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Effective Green, g (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Actuated g/C Ratio	0.28	0.28						0.66	0.66	0.66	0.66	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	462	415						3332	1024	465	2319	
v/s Ratio Prot								0.13			0.14	
v/s Ratio Perm	0.15	0.25							0.20	c0.47		
v/c Ratio	0.55	0.91						0.20	0.30	0.72	0.22	
Uniform Delay, d1	35.6	40.2						7.8	8.5	13.0	8.0	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	22.9						0.1	0.8	9.5	0.2	
Delay (s)	37.1	63.2						8.0	9.3	22.5	8.2	
Level of Service	D	E						A	A	C	A	
Approach Delay (s/veh)		55.8			0.0			8.5			13.9	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



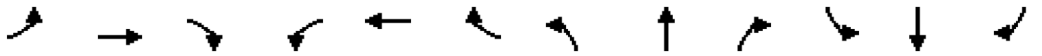
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Future Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.95
Flpb, ped/bikes				1.00		1.00	0.99	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1736		1553	1720	3471			4988	1479
Flt Permitted				0.95		1.00	0.38	1.00			1.00	1.00
Satd. Flow (perm)				1736		1553	696	3471			4988	1479
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	234	0	181	383	574	0	0	670	585
RTOR Reduction (vph)	0	0	0	0	0	152	0	0	0	0	0	134
Lane Group Flow (vph)	0	0	0	234	0	29	383	574	0	0	670	451
Confl. Peds. (#/hr)							6		2	2		6
Confl. Bikes (#/hr)									1			12
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				19.2		19.2	91.5	91.5			91.5	91.5
Effective Green, g (s)				19.2		19.2	91.5	91.5			91.5	91.5
Actuated g/C Ratio				0.16		0.16	0.77	0.77			0.77	0.77
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				280		251	536	2675			3845	1140
v/s Ratio Prot								0.17			0.13	
v/s Ratio Perm				c0.13		0.02	c0.55					0.30
v/c Ratio				0.84		0.12	0.71	0.21			0.17	0.40
Uniform Delay, d1				48.2		42.5	6.9	3.7			3.6	4.5
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				18.9		0.2	7.9	0.2			0.1	1.0
Delay (s)				67.2		42.7	14.9	3.9			3.7	5.5
Level of Service				E		D	B	A			A	A
Approach Delay (s/veh)		0.0			56.5			8.3			4.5	
Approach LOS		A			E			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	118.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Future Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				484	0	358	200	1684	0	0	1337	347
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				541	0	850	266	2232	0	0	2625	794
Arrive On Green				0.30	0.00	0.30	0.08	0.62	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1552
Grp Volume(v), veh/h				484	0	358	200	1684	0	0	1337	347
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1552
Q Serve(g_s), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Cycle Q Clear(g_c), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				541	0	850	266	2232	0	0	2625	794
V/C Ratio(X)				0.89	0.00	0.42	0.75	0.75	0.00	0.00	0.51	0.44
Avail Cap(c_a), veh/h				724	0	1137	383	2232	0	0	2625	794
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.3	0.0	30.4	49.3	14.5	0.0	0.0	17.6	16.7
Incr Delay (d2), s/veh				11.0	0.0	0.3	4.9	2.4	0.0	0.0	0.7	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.5	0.0	4.3	3.1	18.5	0.0	0.0	9.0	6.9
LnGrp Delay(d), s/veh				47.3	0.0	30.7	54.2	16.9	0.0	0.0	18.3	18.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					842			1884			1684	
Approach Delay, s/veh					40.3			20.9			18.3	
Approach LOS					D			C			B	

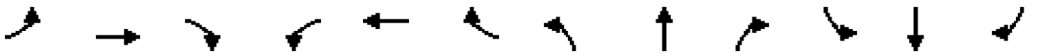
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		72.0			12.3	59.7		36.9
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		68.0			12.0	52.0		44.0
Max Q Clear Time (g_c+I1), s		38.4			8.1	20.7		30.1
Green Ext Time (p_c), s		16.4			0.2	13.7		2.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Future Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.99	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1617	1519					5136	1533	3467	3574	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1617	1519					5136	1533	3467	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	520	0	214	0	0	0	0	1388	582	367	1439	0
RTOR Reduction (vph)	0	32	39	0	0	0	0	0	308	0	0	0
Lane Group Flow (vph)	270	239	154	0	0	0	0	1388	274	367	1439	0
Confl. Peds. (#/hr)							6		12	12		6
Confl. Bikes (#/hr)									6			6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Effective Green, g (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Actuated g/C Ratio	0.28	0.28	0.28					0.47	0.47	0.15	0.65	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	481	458	430					2413	720	508	2323	
v/s Ratio Prot	c0.16	0.15						0.27		c0.11	c0.40	
v/s Ratio Perm			0.10						0.18			
v/c Ratio	0.56	0.52	0.36					0.58	0.38	0.72	0.62	
Uniform Delay, d1	36.6	36.2	34.3					23.1	20.5	48.9	12.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.5	1.1	0.5					1.0	1.5	5.0	1.3	
Delay (s)	38.1	37.2	34.8					24.1	22.0	53.9	13.6	
Level of Service	D	D	C					C	C	D	B	
Approach Delay (s/veh)		36.9			0.0			23.5			21.8	
Approach LOS		D			A			C			C	

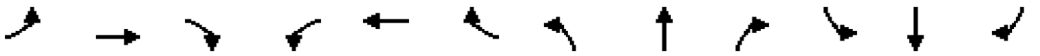
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Future Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.87	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1461	1504					4868		3433	5085	
Flt Permitted	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1461	1504					4868		3433	5085	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	187	0	330	0	0	0	0	956	286	418	615	0
RTOR Reduction (vph)	0	126	143	0	0	0	0	36	0	0	0	0
Lane Group Flow (vph)	168	48	32	0	0	0	0	1206	0	418	615	0
Confl. Peds. (#/hr)							1		11	11		1
Confl. Bikes (#/hr)									4			3
Turn Type	Prot	NA	Perm					NA		Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Effective Green, g (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Actuated g/C Ratio	0.19	0.19	0.19					0.54		0.17	0.74	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	311	270	278					2635		575	3784	
v/s Ratio Prot	c0.10	0.03						c0.25		c0.12	0.12	
v/s Ratio Perm			0.02									
v/c Ratio	0.54	0.18	0.12					0.46		0.73	0.16	
Uniform Delay, d1	41.8	38.9	38.5					15.9		44.7	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.3	0.2					0.6		4.6	0.1	
Delay (s)	43.7	39.2	38.7					16.4		49.3	4.3	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.5			0.0			16.4			22.5	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Future Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.90	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1665	1489	1490	3400	5036			4718	
Flt Permitted				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1665	1489	1490	3400	5036			4718	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	204	0	237	355	742	0	0	817	591
RTOR Reduction (vph)	0	0	0	0	58	116	0	0	0	0	92	0
Lane Group Flow (vph)	0	0	0	153	88	26	355	742	0	0	1316	0
Confl. Peds. (#/hr)							2		12	12		2
Confl. Bikes (#/hr)									4			4
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	0%
Turn Type				Prot	NA	Perm	Prot	NA			NA	
Protected Phases				3	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Effective Green, g (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Actuated g/C Ratio				0.18	0.18	0.18	0.15	0.75			0.56	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				307	275	275	506	3760			2659	
v/s Ratio Prot				c0.09	0.06		c0.10	0.15			c0.28	
v/s Ratio Perm						0.02						
v/c Ratio				0.50	0.32	0.10	0.70	0.20			0.49	
Uniform Delay, d1				42.8	41.3	39.5	47.3	4.4			15.4	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.3	0.7	0.2	4.4	0.1			0.7	
Delay (s)				44.1	42.0	39.7	51.7	4.5			16.1	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			42.0			19.8			16.1	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	116.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Norwalk - 2040 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1200	270	10	1410	410	400	580	0	280	770	10
Future Volume (vph)	0	1200	270	10	1410	410	400	580	0	280	770	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.97		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (prot)		4931		1770	5085	1551	1522	4754		1522	4797	1560
Flt Permitted		1.00		0.10	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (perm)		4931		180	5085	1551	1522	4754		1522	4797	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1333	300	11	1567	456	444	644	0	311	856	11
RTOR Reduction (vph)	0	24	0	0	0	88	0	0	0	0	0	9
Lane Group Flow (vph)	0	1609	0	11	1567	368	266	822	0	280	887	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Effective Green, g (s)		87.0		87.0	87.0	87.0	29.0	29.0		22.0	22.0	22.0
Actuated g/C Ratio		0.58		0.58	0.58	0.58	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2859		104	2949	899	294	919		223	703	228
v/s Ratio Prot		c0.33			0.31		c0.17	0.17		0.18	c0.18	
v/s Ratio Perm				0.06		0.24						0.00
v/c Ratio		0.56		0.11	0.53	0.41	0.90	0.89		1.26	1.26	0.01
Uniform Delay, d1		19.6		14.1	19.1	17.4	59.1	59.0		64.0	64.0	54.7
Progression Factor		0.91		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		0.4	0.2	0.3	32.9	13.0		146.2	129.0	0.1
Delay (s)		17.8		14.5	19.3	17.7	92.1	72.0		210.2	193.0	54.7
Level of Service		B		B	B	B	F	E		F	F	D
Approach Delay (s/veh)		17.8			18.9			76.9			195.8	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	64.4	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Future Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.87	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
Arrive On Green	0.06	0.50	0.50	0.04	0.48	0.48	0.13	0.26	0.26	0.09	0.22	0.22
Sat Flow, veh/h	1757	3505	1523	1757	3505	1542	3408	3505	1367	1757	3505	1353
Grp Volume(v), veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1523	1757	1752	1542	1704	1752	1367	1757	1752	1353
Q Serve(g_s), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Cycle Q Clear(g_c), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
V/C Ratio(X)	0.87	0.61	0.24	0.39	0.90	0.19	0.88	0.73	0.43	0.65	0.65	0.37
Avail Cap(c_a), veh/h	240	1906	828	286	1806	795	488	903	352	273	766	296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	25.4	20.1	20.7	33.6	21.1	59.9	47.4	43.3	38.7	49.7	46.4
Incr Delay (d2), s/veh	22.5	0.5	0.2	1.0	6.4	0.1	16.1	5.1	3.8	5.0	4.2	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	14.9	4.1	2.0	28.0	3.1	8.3	12.2	5.2	5.4	9.1	3.8
LnGrp Delay(d), s/veh	54.5	25.9	20.3	21.8	40.0	21.2	76.0	52.4	47.1	43.7	53.8	49.8
LnGrp LOS	D	C	C	C	D	C	E	D	D	D	D	D
Approach Vol, veh/h		1409			1742			1194			775	
Approach Delay, s/veh		28.5			37.5			59.4			51.0	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	40.0	9.8	73.4	22.0	34.5	12.7	70.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	36.0	9.0	76.0	20.0	29.0	13.0	72.0
Max Q Clear Time (g_c+I1), s	12.5	25.9	5.9	32.7	17.6	20.0	8.6	57.1
Green Ext Time (p_c), s	0.0	3.4	0.1	10.1	0.4	2.4	0.2	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1100	120	140	1150	70	50	520	150	80	430	370
Future Volume (veh/h)	290	1100	120	140	1150	70	50	520	150	80	430	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	299	1134	124	144	1186	72	52	536	155	82	443	381
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	333	1964	599	173	1505	463	67	1227	545	130	1226	544
Arrive On Green	0.19	0.39	0.39	0.10	0.30	0.30	0.04	0.35	0.35	0.04	0.35	0.35
Sat Flow, veh/h	1774	5085	1550	1774	5085	1566	1774	3539	1571	3442	3539	1571
Grp Volume(v), veh/h	299	1134	124	144	1186	72	52	536	155	82	443	381
Grp Sat Flow(s),veh/h/ln	1774	1695	1550	1774	1695	1566	1774	1770	1571	1721	1770	1571
Q Serve(g_s), s	20.0	21.3	6.5	9.7	25.9	4.1	3.5	14.1	8.7	2.8	11.3	25.3
Cycle Q Clear(g_c), s	20.0	21.3	6.5	9.7	25.9	4.1	3.5	14.1	8.7	2.8	11.3	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	333	1964	599	173	1505	463	67	1227	545	130	1226	544
V/C Ratio(X)	0.90	0.58	0.21	0.83	0.79	0.16	0.77	0.44	0.28	0.63	0.36	0.70
Avail Cap(c_a), veh/h	571	2686	819	307	1931	594	146	1227	545	199	1226	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	29.4	24.8	53.7	39.2	31.5	57.8	30.5	28.7	57.5	29.6	34.1
Incr Delay (d2), s/veh	9.9	0.3	0.2	10.0	1.7	0.2	17.1	1.1	1.3	5.0	0.8	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	10.0	2.8	5.2	12.3	1.8	2.1	7.1	4.0	1.4	5.7	12.1
LnGrp Delay(d), s/veh	58.0	29.6	25.0	63.7	40.9	31.6	74.9	31.6	30.0	62.5	30.4	41.5
LnGrp LOS	E	C	C	E	D	C	E	C	C	E	C	D
Approach Vol, veh/h		1557			1402			743			906	
Approach Delay, s/veh		34.7			42.8			34.3			38.0	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	46.0	15.8	50.8	8.6	46.0	26.7	39.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	21.0	64.0	10.0	39.0	39.0	46.0
Max Q Clear Time (g_c+I1), s	4.8	16.1	11.7	23.3	5.5	27.3	22.0	27.9
Green Ext Time (p_c), s	0.0	4.0	0.2	10.2	0.0	3.3	0.8	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Future Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	1126	242	105	1505	126	221	653	105	74	547	179
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	258	2202	674	128	1718	144	247	1084	476	93	777	576
Arrive On Green	0.15	0.44	0.44	0.07	0.37	0.37	0.14	0.31	0.31	0.05	0.22	0.22
Sat Flow, veh/h	1740	4988	1526	1740	4683	392	1740	3471	1525	1740	3471	1545
Grp Volume(v), veh/h	232	1126	242	105	1068	563	221	653	105	74	547	179
Grp Sat Flow(s),veh/h/ln	1740	1663	1526	1740	1663	1750	1740	1736	1525	1740	1736	1545
Q Serve(g_s), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Cycle Q Clear(g_c), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	2202	674	128	1220	642	247	1084	476	93	777	576
V/C Ratio(X)	0.90	0.51	0.36	0.82	0.88	0.88	0.89	0.60	0.22	0.79	0.70	0.31
Avail Cap(c_a), veh/h	336	2335	715	207	1310	689	323	1084	476	168	777	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	27.1	24.9	61.4	39.7	39.7	56.7	39.2	34.2	62.9	48.1	30.0
Incr Delay (d2), s/veh	21.6	0.2	0.3	12.6	6.6	11.7	21.5	2.5	1.1	13.8	5.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.0	6.0	4.3	19.7	21.6	9.6	10.6	3.0	3.1	9.9	4.9
LnGrp Delay(d), s/veh	77.9	27.3	25.3	74.0	46.4	51.4	78.2	41.7	35.2	76.7	53.4	31.4
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	D	C
Approach Vol, veh/h		1600			1736			979			800	
Approach Delay, s/veh		34.3			49.7			49.2			50.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	46.0	13.9	63.4	23.1	34.1	24.0	53.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	42.0	16.0	63.0	25.0	30.0	26.0	53.0
Max Q Clear Time (g_c+I1), s	7.7	23.4	10.0	23.9	18.8	21.5	19.6	42.4
Green Ext Time (p_c), s	0.1	4.2	0.1	10.4	0.3	2.6	0.3	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Future Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
Arrive On Green	0.10	0.47	0.47	0.07	0.45	0.45	0.11	0.30	0.30	0.04	0.23	0.23
Sat Flow, veh/h	1740	3471	1525	1740	3471	1526	1740	3471	1547	1740	3471	1525
Grp Volume(v), veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Grp Sat Flow(s),veh/h/ln	1740	1736	1525	1740	1736	1526	1740	1736	1547	1740	1736	1525
Q Serve(g_s), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Cycle Q Clear(g_c), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
V/C Ratio(X)	0.90	0.58	0.30	0.60	0.92	0.10	0.76	0.65	0.29	0.38	0.73	0.42
Avail Cap(c_a), veh/h	290	1704	749	361	1631	717	335	1047	467	209	805	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	27.4	23.1	22.0	37.2	22.8	36.9	43.3	38.1	40.2	50.7	46.6
Incr Delay (d2), s/veh	25.9	0.5	0.2	2.0	9.0	0.1	8.9	3.1	1.6	1.1	5.9	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	13.8	5.3	4.0	28.4	1.6	7.3	12.1	4.3	2.4	11.4	5.3
LnGrp Delay(d), s/veh	66.3	27.8	23.3	24.0	46.2	22.9	45.9	46.4	39.7	41.3	56.5	50.2
LnGrp LOS	E	C	C	C	D	C	D	D	D	D	E	D
Approach Vol, veh/h		1387			1682			1045			819	
Approach Delay, s/veh		33.1			42.8			45.4			53.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	47.0	14.2	71.3	19.9	37.1	17.9	67.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	15.0	70.0	19.0	30.0	18.0	67.0
Max Q Clear Time (g_c+I1), s	7.0	26.3	10.0	30.5	15.7	24.5	13.7	57.4
Green Ext Time (p_c), s	0.0	4.5	0.2	8.8	0.2	2.0	0.2	6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1000	300	230	1330	60	390	1030	490	140	800	160
Future Volume (veh/h)	200	1000	300	230	1330	60	390	1030	490	140	800	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	1053	316	242	1400	63	411	1084	516	147	842	168
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	1433	433	265	1524	461	435	1255	785	169	1042	314
Arrive On Green	0.13	0.28	0.28	0.15	0.30	0.30	0.25	0.36	0.36	0.10	0.21	0.21
Sat Flow, veh/h	1757	5036	1520	1757	5036	1522	1757	3505	1531	1757	5036	1516
Grp Volume(v), veh/h	211	1053	316	242	1400	63	411	1084	516	147	842	168
Grp Sat Flow(s),veh/h/ln	1757	1679	1520	1757	1679	1522	1757	1752	1531	1757	1679	1516
Q Serve(g_s), s	17.2	27.5	27.3	19.7	39.0	4.4	33.4	41.8	36.3	12.0	23.1	14.4
Cycle Q Clear(g_c), s	17.2	27.5	27.3	19.7	39.0	4.4	33.4	41.8	36.3	12.0	23.1	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	1433	433	265	1524	461	435	1255	785	169	1042	314
V/C Ratio(X)	0.90	0.74	0.73	0.91	0.92	0.14	0.94	0.86	0.66	0.87	0.81	0.54
Avail Cap(c_a), veh/h	254	1433	433	302	1560	472	484	1255	785	194	1042	314
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.1	47.0	46.9	60.7	48.9	36.9	53.7	43.3	26.4	64.7	54.9	51.4
Incr Delay (d2), s/veh	31.1	2.0	6.2	28.4	9.0	0.1	26.3	8.0	4.3	29.1	6.8	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	13.0	12.2	11.6	19.4	1.9	19.4	21.6	16.2	7.2	11.4	6.6
LnGrp Delay(d), s/veh	93.1	49.0	53.1	89.1	57.9	37.0	79.9	51.4	30.7	93.8	61.6	57.8
LnGrp LOS	F	D	D	F	E	D	E	D	C	F	E	E
Approach Vol, veh/h		1580			1705			2011			1157	
Approach Delay, s/veh		55.7			61.6			51.9			65.2	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	56.0	25.9	45.3	40.0	34.0	23.3	47.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	52.0	25.0	41.0	40.0	28.0	21.0	45.0
Max Q Clear Time (g_c+I1), s	14.0	43.8	21.7	29.5	35.4	25.1	19.2	41.0
Green Ext Time (p_c), s	0.1	5.5	0.2	6.1	0.6	1.6	0.1	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Future Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
Arrive On Green	0.14	0.44	0.44	0.03	0.33	0.33	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1757	5036	1543	1757	5036	1541	584	3505	1546	739	3505	1545
Grp Volume(v), veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Grp Sat Flow(s),veh/h/ln	1757	1679	1543	1757	1679	1541	584	1752	1546	739	1752	1545
Q Serve(g_s), s	15.0	14.0	7.6	3.0	30.5	11.2	17.0	15.1	4.1	8.1	16.0	17.6
Cycle Q Clear(g_c), s	15.0	14.0	7.6	3.0	30.5	11.2	33.0	15.1	4.1	23.1	16.0	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
V/C Ratio(X)	0.88	0.37	0.22	0.78	0.80	0.35	0.40	0.40	0.12	0.21	0.42	0.45
Avail Cap(c_a), veh/h	414	2886	884	124	2056	629	240	1541	680	294	1541	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	24.2	22.4	61.3	38.9	32.4	35.8	24.2	21.2	32.1	24.5	24.9
Incr Delay (d2), s/veh	10.4	0.1	0.2	21.2	1.9	0.4	4.8	0.8	0.4	1.7	0.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	6.5	3.3	1.8	14.4	4.8	3.1	7.5	1.8	1.8	7.9	7.9
LnGrp Delay(d), s/veh	64.4	24.3	22.6	82.5	40.8	32.8	40.6	25.0	21.5	33.7	25.3	27.1
LnGrp LOS	E	C	C	F	D	C	D	C	C	C	C	C
Approach Vol, veh/h		1179			1547			790			1010	
Approach Delay, s/veh		31.3			41.0			26.5			26.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	7.9	59.5		60.0	21.4	46.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	9.0	73.0		56.0	30.0	52.0
Max Q Clear Time (g_c+I1), s		35.0	5.0	16.0		25.1	17.0	32.5
Green Ext Time (p_c), s		5.0	0.0	6.8		6.1	0.4	9.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Future Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
Arrive On Green	0.10	0.38	0.38	0.16	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1757	3505	1546	1757	3505	1547	706	3505	1545	665	3505	1544
Grp Volume(v), veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Grp Sat Flow(s),veh/h/ln	1757	1752	1546	1757	1752	1547	706	1752	1545	665	1752	1544
Q Serve(g_s), s	11.4	27.8	8.4	18.7	48.6	3.3	16.3	20.8	6.9	11.2	18.9	6.2
Cycle Q Clear(g_c), s	11.4	27.8	8.4	18.7	48.6	3.3	35.2	20.8	6.9	32.0	18.9	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
V/C Ratio(X)	0.86	0.65	0.24	0.90	0.89	0.10	0.43	0.52	0.20	0.31	0.48	0.18
Avail Cap(c_a), veh/h	244	1384	611	411	1717	758	224	1333	587	204	1333	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.7	35.2	29.2	56.7	35.8	22.9	45.4	32.7	28.4	45.1	32.1	28.2
Incr Delay (d2), s/veh	18.7	1.0	0.2	15.9	5.7	0.1	5.9	1.4	0.8	4.0	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	13.6	3.6	10.3	24.7	1.4	3.5	10.3	3.1	2.3	9.4	2.8
LnGrp Delay(d), s/veh	79.4	36.3	29.4	72.6	41.5	23.0	51.3	34.2	29.2	49.0	33.3	28.9
LnGrp LOS	E	D	C	E	D	C	D	C	C	D	C	C
Approach Vol, veh/h		1149			1660			904			808	
Approach Delay, s/veh		41.0			45.4			35.3			34.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	25.2	55.5		56.0	17.5	63.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	32.0	54.0		52.0	19.0	67.0
Max Q Clear Time (g_c+I1), s		37.2	20.7	29.8		34.0	13.4	50.6
Green Ext Time (p_c), s		4.8	0.5	6.3		4.6	0.2	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Future Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	872	1845	1547	1067	1845	1567	616	3505	1529	649	3505	1530
Grp Volume(v), veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Grp Sat Flow(s),veh/h/ln	872	1845	1547	1067	1845	1567	616	1752	1529	649	1752	1530
Q Serve(g_s), s	16.6	9.4	7.6	24.0	26.1	6.0	10.0	15.6	2.0	17.9	15.9	3.8
Cycle Q Clear(g_c), s	42.7	9.4	7.6	33.3	26.1	6.0	25.9	15.6	2.0	33.5	15.9	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
V/C Ratio(X)	0.60	0.28	0.23	0.61	0.66	0.18	0.22	0.37	0.06	0.36	0.38	0.11
Avail Cap(c_a), veh/h	278	831	697	460	831	706	350	2096	914	367	2096	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	32.3	31.7	44.4	37.8	31.2	20.8	14.1	11.3	22.7	14.1	11.7
Incr Delay (d2), s/veh	3.1	0.2	0.2	1.7	1.2	0.2	1.4	0.5	0.1	2.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.8	3.3	7.2	13.5	2.6	1.9	7.6	0.9	3.5	7.8	1.7
LnGrp Delay(d), s/veh	59.0	32.6	31.9	46.2	39.0	31.4	22.3	14.6	11.5	25.5	14.6	11.9
LnGrp LOS	E	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		407			726			912			1022	
Approach Delay, s/veh		39.5			40.0			15.0			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.0		50.4		85.0		50.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		81.0		61.0		81.0		61.0
Max Q Clear Time (g_c+I1), s		27.9		44.7		35.5		35.3
Green Ext Time (p_c), s		7.0		1.7		8.0		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1000	60	230	1510	110	90	790	300	80	450	190
Future Volume (veh/h)	140	1000	60	230	1510	110	90	790	300	80	450	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	157	1124	67	258	1697	124	101	888	337	90	506	213
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	1705	508	285	1900	139	123	1135	495	111	1110	490
Arrive On Green	0.10	0.34	0.34	0.16	0.40	0.40	0.07	0.32	0.32	0.06	0.32	0.32
Sat Flow, veh/h	1757	5036	1499	1757	4775	348	1757	3505	1530	1757	3505	1549
Grp Volume(v), veh/h	157	1124	67	258	1192	629	101	888	337	90	506	213
Grp Sat Flow(s),veh/h/ln	1757	1679	1499	1757	1679	1766	1757	1752	1530	1757	1752	1549
Q Serve(g_s), s	12.5	27.0	4.4	20.5	47.1	47.3	8.1	32.6	27.1	7.2	16.4	15.5
Cycle Q Clear(g_c), s	12.5	27.0	4.4	20.5	47.1	47.3	8.1	32.6	27.1	7.2	16.4	15.5
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	1705	508	285	1336	702	123	1135	495	111	1110	490
V/C Ratio(X)	0.87	0.66	0.13	0.91	0.89	0.90	0.82	0.78	0.68	0.81	0.46	0.43
Avail Cap(c_a), veh/h	223	1705	508	408	1394	733	198	1135	495	136	1110	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.8	40.0	32.5	58.5	39.9	40.0	65.2	43.5	41.7	65.7	38.8	38.5
Incr Delay (d2), s/veh	25.1	0.9	0.1	18.1	7.5	13.2	13.3	5.4	7.4	25.5	1.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	12.6	1.8	11.4	23.2	25.6	4.4	16.6	12.4	4.3	8.1	7.0
LnGrp Delay(d), s/veh	87.9	41.0	32.6	76.6	47.4	53.2	78.4	48.9	49.0	91.2	40.1	41.2
LnGrp LOS	F	D	C	E	D	D	E	D	D	F	D	D
Approach Vol, veh/h		1348			2079			1326			809	
Approach Delay, s/veh		46.0			52.8			51.2			46.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	50.0	27.0	52.1	14.0	49.0	18.6	60.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	46.0	33.0	44.0	16.0	41.0	18.0	59.0
Max Q Clear Time (g_c+I1), s	9.2	34.6	22.5	29.0	10.1	18.4	14.5	49.3
Green Ext Time (p_c), s	0.0	5.4	0.5	6.8	0.1	3.8	0.1	7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1200	210	130	1690	10	180	10	40	0	0	0
Future Volume (veh/h)	0	1200	210	130	1690	10	180	10	40	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	0	1333	233	144	1878	11	200	11	44	0	0	0
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	65	1771	309	227	2656	16	773	130	521	0	746	0
Arrive On Green	0.00	0.42	0.42	0.07	0.52	0.52	0.41	0.41	0.41	0.00	0.00	0.00
Sat Flow, veh/h	234	4238	741	1740	5115	30	1734	319	1277	0	1827	0
Grp Volume(v), veh/h	0	1046	520	144	1221	668	200	0	55	0	0	0
Grp Sat Flow(s),veh/h/ln	234	1663	1654	1740	1663	1820	1734	0	1596	0	1827	0
Q Serve(g_s), s	0.0	29.4	29.5	5.0	30.7	30.8	8.5	0.0	2.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	29.4	29.5	5.0	30.7	30.8	8.5	0.0	2.3	0.0	0.0	0.0
Prop In Lane	1.00		0.45	1.00		0.02	1.00		0.80	0.00		0.00
Lane Grp Cap(c), veh/h	65	1389	691	227	1726	945	773	0	652	0	746	0
V/C Ratio(X)	0.00	0.75	0.75	0.63	0.71	0.71	0.26	0.00	0.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	118	2142	1065	461	2926	1602	773	0	652	0	746	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	27.2	27.3	22.7	20.1	20.1	21.8	0.0	20.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	1.7	2.9	0.5	1.0	0.8	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.7	13.8	2.5	14.2	15.7	4.2	0.0	1.1	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	28.1	28.9	25.6	20.7	21.1	22.6	0.0	20.2	0.0	0.0	0.0
LnGrp LOS		C	C	C	C	C	C		C			
Approach Vol, veh/h		1566			2033			255			0	
Approach Delay, s/veh		28.4			21.2			22.1			0.0	
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		49.0	11.2	50.1		49.0		61.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0	22.0	71.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		10.5	7.0	31.5		0.0		32.8
Green Ext Time (p_c), s		0.9	0.3	14.6		0.0		22.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Future Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	129	710	161	86	1527	75	172	538	65	22	484	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	962	107
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	316	3539	1562	633	3539	1561	864	3539	1559	813	3206	356
Grp Volume(v), veh/h	129	710	161	86	1527	75	172	538	65	22	266	272
Grp Sat Flow(s),veh/h/ln	316	1770	1562	633	1770	1561	864	1770	1559	813	1770	1793
Q Serve(g_s), s	56.8	13.3	6.1	10.4	40.2	2.7	26.2	18.8	4.6	3.4	18.6	18.8
Cycle Q Clear(g_c), s	97.0	13.3	6.1	23.7	40.2	2.7	45.0	18.8	4.6	22.3	18.6	18.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
V/C Ratio(X)	0.77	0.31	0.16	0.21	0.67	0.07	0.86	0.51	0.14	0.12	0.50	0.51
Avail Cap(c_a), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	11.7	10.4	17.0	16.5	9.8	63.5	43.3	38.3	52.5	43.3	43.3
Incr Delay (d2), s/veh	19.4	0.1	0.1	0.3	0.8	0.0	36.1	1.7	0.6	1.2	3.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.5	2.6	1.8	19.8	1.2	9.1	9.4	2.0	0.8	9.6	9.8
LnGrp Delay(d), s/veh	68.0	11.8	10.5	17.2	17.2	9.9	99.6	45.1	39.0	53.8	46.6	46.7
LnGrp LOS	E	B	B	B	B	A	F	D	D	D	D	D
Approach Vol, veh/h		1000			1688			775			560	
Approach Delay, s/veh		18.8			16.9			56.7			46.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		101.0		49.0		101.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		97.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		47.0		99.0		24.3		42.2
Green Ext Time (p_c), s		0.0		0.0		3.1		18.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	970	130	30	1510	150	130	40	30	220	60	140
Future Volume (veh/h)	110	970	130	30	1510	150	130	40	30	220	60	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	115	1010	135	31	1573	156	135	42	31	229	62	146
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	142	2237	298	39	2042	202	443	397	330	525	474	394
Arrive On Green	0.08	0.50	0.50	0.02	0.44	0.44	0.08	0.22	0.22	0.12	0.26	0.26
Sat Flow, veh/h	1740	4443	592	1740	4600	456	1740	1827	1518	1740	1827	1521
Grp Volume(v), veh/h	115	755	390	31	1136	593	135	42	31	229	62	146
Grp Sat Flow(s),veh/h/ln	1740	1663	1710	1740	1663	1731	1740	1827	1518	1740	1827	1521
Q Serve(g_s), s	7.5	16.9	17.0	2.1	33.4	33.5	6.9	2.1	1.9	11.3	3.0	9.1
Cycle Q Clear(g_c), s	7.5	16.9	17.0	2.1	33.4	33.5	6.9	2.1	1.9	11.3	3.0	9.1
Prop In Lane	1.00		0.35	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	142	1674	861	39	1476	768	443	397	330	525	474	394
V/C Ratio(X)	0.81	0.45	0.45	0.80	0.77	0.77	0.30	0.11	0.09	0.44	0.13	0.37
Avail Cap(c_a), veh/h	301	2385	1227	105	2011	1047	520	397	330	649	474	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	18.5	18.5	56.3	27.2	27.2	31.2	36.3	36.2	27.9	32.9	35.1
Incr Delay (d2), s/veh	10.3	0.2	0.4	30.8	1.3	2.5	0.4	0.5	0.6	0.6	0.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	7.8	8.1	1.3	15.6	16.5	3.3	1.1	0.8	5.5	1.6	4.1
LnGrp Delay(d), s/veh	62.6	18.6	18.8	87.2	28.5	29.7	31.6	36.8	36.7	28.5	33.4	37.8
LnGrp LOS	E	B	B	F	C	C	C	D	D	C	C	D
Approach Vol, veh/h		1260			1760			208			437	
Approach Delay, s/veh		22.7			29.9			33.4			32.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	29.2	6.6	62.3	12.9	34.0	13.5	55.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	22.0	7.0	83.0	14.0	30.0	20.0	70.0
Max Q Clear Time (g_c+I1), s	13.3	4.1	4.1	19.0	8.9	11.1	9.5	35.5
Green Ext Time (p_c), s	0.4	0.2	0.0	9.5	0.1	0.7	0.2	15.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	960	120	50	1110	10	110	20	20	20	60	590
Future Volume (veh/h)	200	960	120	50	1110	10	110	20	20	20	60	590
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	206	990	124	52	1144	10	113	21	21	21	62	608
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	281	1563	195	67	1553	14	428	912	773	724	912	1360
Arrive On Green	0.08	0.35	0.35	0.04	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	3375	4474	559	1740	5099	45	749	1827	1548	1329	1827	2725
Grp Volume(v), veh/h	206	735	379	52	746	408	113	21	21	21	62	608
Grp Sat Flow(s),veh/h/ln	1688	1663	1708	1740	1663	1819	749	1827	1548	1329	1827	1362
Q Serve(g_s), s	6.3	19.6	19.7	3.1	21.4	21.4	9.8	0.6	0.7	0.9	1.9	15.3
Cycle Q Clear(g_c), s	6.3	19.6	19.7	3.1	21.4	21.4	11.7	0.6	0.7	1.5	1.9	15.3
Prop In Lane	1.00		0.33	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1162	597	67	1013	554	428	912	773	724	912	1360
V/C Ratio(X)	0.73	0.63	0.63	0.78	0.74	0.74	0.26	0.02	0.03	0.03	0.07	0.45
Avail Cap(c_a), veh/h	731	2161	1110	262	1941	1062	428	912	773	724	912	1360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	28.8	28.9	50.6	33.1	33.1	16.8	13.5	13.5	13.9	13.8	17.1
Incr Delay (d2), s/veh	3.7	0.6	1.1	17.4	1.1	1.9	1.5	0.0	0.1	0.1	0.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	9.1	9.4	1.8	9.9	11.0	2.2	0.3	0.3	0.3	1.0	5.9
LnGrp Delay(d), s/veh	51.2	29.4	30.0	68.0	34.2	35.0	18.3	13.5	13.6	13.9	13.9	18.2
LnGrp LOS	D	C	C	E	C	D	B	B	B	B	B	B
Approach Vol, veh/h		1320			1206			155			691	
Approach Delay, s/veh		33.0			35.9			17.0			17.7	
Approach LOS		C			D			B			B	

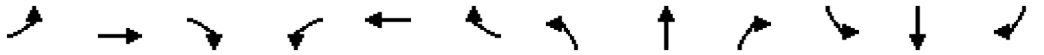
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	8.1	41.1		57.0	12.9	36.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	16.0	69.0		53.0	23.0	62.0
Max Q Clear Time (g_c+I1), s		13.7	5.1	21.7		17.3	8.3	23.4
Green Ext Time (p_c), s		1.1	0.1	9.0		3.1	0.5	9.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.2
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Future Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	583	21	198	677	125	104	573	104	83	1448	198
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1104	488	226	1021	446	127	1660	295	104	1669	228
Arrive On Green	0.15	0.31	0.31	0.13	0.29	0.29	0.07	0.38	0.38	0.06	0.37	0.37
Sat Flow, veh/h	1774	3539	1565	1774	3539	1544	1774	4325	770	1774	4501	615
Grp Volume(v), veh/h	240	583	21	198	677	125	104	447	230	83	1090	556
Grp Sat Flow(s),veh/h/ln	1774	1770	1565	1774	1770	1544	1774	1695	1704	1774	1695	1725
Q Serve(g_s), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Cycle Q Clear(g_c), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.36
Lane Grp Cap(c), veh/h	267	1104	488	226	1021	446	127	1301	654	104	1257	640
V/C Ratio(X)	0.90	0.53	0.04	0.88	0.66	0.28	0.82	0.34	0.35	0.80	0.87	0.87
Avail Cap(c_a), veh/h	354	1104	488	354	1021	446	184	1380	694	171	1355	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	38.3	32.4	57.9	42.3	37.2	61.9	29.6	29.7	62.8	39.4	39.5
Incr Delay (d2), s/veh	20.4	1.8	0.2	14.1	3.4	1.6	16.8	0.2	0.3	12.8	5.9	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	9.3	0.6	8.1	11.6	3.8	4.4	5.9	6.2	3.4	19.8	21.2
LnGrp Delay(d), s/veh	76.8	40.1	32.6	72.0	45.7	38.8	78.7	29.7	30.0	75.7	45.3	50.4
LnGrp LOS	E	D	C	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		844			1000			781			1729	
Approach Delay, s/veh		50.3			50.0			36.3			48.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	46.2	11.9	55.9	24.3	43.0	13.7	54.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	39.0	13.0	55.0	27.0	39.0	14.0	54.0
Max Q Clear Time (g_c+I1), s	16.8	20.3	8.2	15.0	20.0	24.7	9.8	42.4
Green Ext Time (p_c), s	0.4	3.7	0.1	4.6	0.4	4.2	0.1	7.7

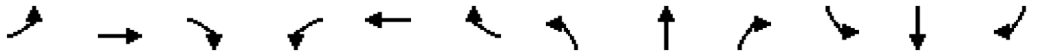
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Future Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
Arrive On Green	0.08	0.42	0.42	0.10	0.44	0.44	0.10	0.34	0.34	0.03	0.27	0.27
Sat Flow, veh/h	1774	3539	1553	1774	3539	1574	1774	3539	1550	1774	3539	1521
Grp Volume(v), veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1574	1774	1770	1550	1774	1770	1521
Q Serve(g_s), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Cycle Q Clear(g_c), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
V/C Ratio(X)	0.84	0.34	0.13	0.86	0.92	0.04	0.75	0.54	0.24	0.18	0.76	0.28
Avail Cap(c_a), veh/h	161	1499	658	261	1660	738	303	1214	532	246	960	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	27.7	25.1	63.6	37.4	22.7	35.2	37.8	33.5	36.7	47.8	41.0
Incr Delay (d2), s/veh	27.0	0.1	0.1	15.7	8.4	0.0	9.4	1.7	1.0	0.4	5.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.8	2.0	6.4	28.4	0.7	6.4	10.8	3.7	1.2	13.9	3.8
LnGrp Delay(d), s/veh	92.0	27.9	25.2	79.3	45.8	22.7	44.6	39.6	34.6	37.0	53.4	42.7
LnGrp LOS	F	C	C	E	D	C	D	D	C	D	D	D
Approach Vol, veh/h		708			1615			989			886	
Approach Delay, s/veh		38.0			48.4			40.0			51.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	53.0	17.7	64.5	17.8	42.8	15.1	67.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0	21.0	59.0	16.0	38.0	13.0	67.0
Max Q Clear Time (g_c+I1), s	4.4	23.3	13.6	15.9	13.7	29.0	11.1	56.5
Green Ext Time (p_c), s	0.0	5.1	0.2	3.8	0.1	3.5	0.0	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Future Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	756	3539	1562	1141	3539	1562	678	3539	1560	665	3539	1559
Grp Volume(v), veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Grp Sat Flow(s),veh/h/ln	756	1770	1562	1141	1770	1562	678	1770	1560	665	1770	1559
Q Serve(g_s), s	4.1	4.9	1.0	31.4	16.4	2.7	3.3	12.3	5.5	13.8	14.0	1.8
Cycle Q Clear(g_c), s	20.5	4.9	1.0	36.2	16.4	2.7	17.3	12.3	5.5	26.1	14.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
V/C Ratio(X)	0.14	0.16	0.04	0.73	0.48	0.09	0.09	0.34	0.17	0.32	0.37	0.06
Avail Cap(c_a), veh/h	421	2173	959	714	2173	959	364	1997	880	367	1997	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	25.5	24.3	37.7	29.1	24.8	19.3	14.1	12.7	21.1	14.5	11.8
Incr Delay (d2), s/veh	0.3	0.1	0.0	2.4	0.3	0.1	0.5	0.5	0.4	2.3	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.4	0.5	10.1	8.1	1.2	0.7	6.1	2.5	2.8	7.0	0.8
LnGrp Delay(d), s/veh	37.2	25.6	24.3	40.1	29.4	24.9	19.8	14.6	13.1	23.4	15.0	12.0
LnGrp LOS	D	C	C	D	C	C	B	B	B	C	B	B
Approach Vol, veh/h		266			1000			851			915	
Approach Delay, s/veh		26.9			32.6			14.5			15.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		48.5		72.0		48.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		74.0		68.0		74.0
Max Q Clear Time (g_c+I1), s		19.3		22.5		28.1		38.2
Green Ext Time (p_c), s		6.1		1.7		7.5		6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	160	150	990	50	190	670	70	90	870	40
Future Volume (veh/h)	80	780	160	150	990	50	190	670	70	90	870	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	848	174	163	1076	54	207	728	76	98	946	43
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	108	993	202	188	1390	70	335	1743	769	371	1624	716
Arrive On Green	0.06	0.24	0.24	0.11	0.28	0.28	0.08	0.50	0.50	0.04	0.46	0.46
Sat Flow, veh/h	1757	4180	852	1757	4911	246	1757	3505	1547	1757	3505	1546
Grp Volume(v), veh/h	87	680	342	163	735	395	207	728	76	98	946	43
Grp Sat Flow(s),veh/h/ln	1757	1679	1675	1757	1679	1800	1757	1752	1547	1757	1752	1546
Q Serve(g_s), s	6.8	26.9	27.1	12.7	27.9	27.9	8.3	18.3	3.6	4.1	27.5	2.1
Cycle Q Clear(g_c), s	6.8	26.9	27.1	12.7	27.9	27.9	8.3	18.3	3.6	4.1	27.5	2.1
Prop In Lane	1.00		0.51	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	798	398	188	950	509	335	1743	769	371	1624	716
V/C Ratio(X)	0.80	0.85	0.86	0.87	0.77	0.77	0.62	0.42	0.10	0.26	0.58	0.06
Avail Cap(c_a), veh/h	190	895	447	279	1065	571	466	1743	769	372	1624	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	50.6	50.7	61.0	45.7	45.7	20.6	22.1	18.4	18.7	27.4	20.6
Incr Delay (d2), s/veh	12.8	7.3	14.3	16.9	3.2	5.9	1.9	0.7	0.3	0.4	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.3	14.1	7.0	13.4	14.8	4.1	9.0	1.6	2.0	13.6	0.9
LnGrp Delay(d), s/veh	77.1	57.9	65.0	77.8	48.9	51.6	22.4	22.9	18.7	19.1	28.9	20.7
LnGrp LOS	E	E	E	E	D	D	C	C	B	B	C	C
Approach Vol, veh/h		1109			1293			1011			1087	
Approach Delay, s/veh		61.6			53.4			22.5			27.7	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	73.0	18.9	37.0	14.6	68.3	12.6	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	69.0	22.0	37.0	21.0	54.0	15.0	44.0
Max Q Clear Time (g_c+I1), s	6.1	20.3	14.7	29.1	10.3	29.5	8.8	29.9
Green Ext Time (p_c), s	0.0	5.5	0.2	3.8	0.4	7.3	0.1	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Future Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	32	484	179	158	1316	137	84	632	0	379	1211	53
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	116	1439	641	409	1460	151	105	967	0	408	1801	79
Arrive On Green	0.02	0.40	0.40	0.06	0.45	0.45	0.06	0.19	0.00	0.23	0.36	0.36
Sat Flow, veh/h	1792	3574	1592	1792	3268	339	1792	5305	0	1792	5043	221
Grp Volume(v), veh/h	32	484	179	158	717	736	84	632	0	379	822	442
Grp Sat Flow(s),veh/h/ln	1792	1787	1592	1792	1787	1820	1792	1712	0	1792	1712	1840
Q Serve(g_s), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Cycle Q Clear(g_c), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.00	1.00		0.12
Lane Grp Cap(c), veh/h	116	1439	641	409	799	813	105	967	0	408	1223	657
V/C Ratio(X)	0.28	0.34	0.28	0.39	0.90	0.90	0.80	0.65	0.00	0.93	0.67	0.67
Avail Cap(c_a), veh/h	131	1589	708	423	873	889	183	967	0	522	1223	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	28.3	27.6	21.2	35.1	35.2	63.8	51.5	0.0	51.9	37.3	37.3
Incr Delay (d2), s/veh	1.3	0.1	0.2	0.6	11.4	12.0	12.7	3.4	0.0	20.2	3.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.3	4.6	3.4	27.6	28.5	3.5	7.7	0.0	16.4	13.6	15.1
LnGrp Delay(d), s/veh	32.8	28.5	27.8	21.8	46.5	47.3	76.4	55.0	0.0	72.1	40.3	42.7
LnGrp LOS	C	C	C	C	D	D	E	D		E	D	D
Approach Vol, veh/h		695			1611			716			1643	
Approach Delay, s/veh		28.5			44.4			57.5			48.3	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	53.0	12.9	59.2	35.2	29.8	6.8	65.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	49.0	10.0	61.0	40.0	23.0	4.0	67.0
Max Q Clear Time (g_c+I1), s	8.4	29.9	8.9	14.8	30.4	17.6	3.4	53.5
Green Ext Time (p_c), s	0.1	7.7	0.0	4.0	0.8	1.8	0.0	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1370	120	50	1170	710	640	250	20	0	0	0
Future Volume (veh/h)	200	1370	120	50	1170	710	640	250	20	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	217	1489	130	54	1272	772	696	272	22			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	263	2552	223	69	2534	789	611	609	545			
Arrive On Green	0.08	0.54	0.54	0.04	0.50	0.50	0.34	0.34	0.34			
Sat Flow, veh/h	3442	4764	416	1774	5085	1583	1774	1770	1583			
Grp Volume(v), veh/h	217	1060	559	54	1272	772	696	272	22			
Grp Sat Flow(s),veh/h/ln	1721	1695	1789	1774	1695	1583	1774	1770	1583			
Q Serve(g_s), s	9.2	31.3	31.3	4.5	24.8	70.7	51.0	17.6	1.4			
Cycle Q Clear(g_c), s	9.2	31.3	31.3	4.5	24.8	70.7	51.0	17.6	1.4			
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	263	1816	959	69	2534	789	611	609	545			
V/C Ratio(X)	0.82	0.58	0.58	0.78	0.50	0.98	1.14	0.45	0.04			
Avail Cap(c_a), veh/h	302	1816	959	120	2540	791	611	609	545			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	67.4	23.2	23.2	70.6	24.9	36.4	48.6	37.6	32.3			
Incr Delay (d2), s/veh	15.1	1.4	2.6	16.9	0.2	26.6	81.5	0.5	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.0	14.9	16.1	2.5	11.6	36.7	38.8	8.7	0.6			
LnGrp Delay(d), s/veh	82.5	24.6	25.8	87.5	25.0	63.0	130.1	38.2	32.3			
LnGrp LOS	F	C	C	F	C	E	F	D	C			
Approach Vol, veh/h		1836			2098			990				
Approach Delay, s/veh		31.8			40.6			102.6				
Approach LOS		C			D			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.8	83.4			15.3	77.8		55.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	77.0			13.0	74.0		51.0
Max Q Clear Time (g_c+I1), s	6.5	33.3			11.2	72.7		53.0
Green Ext Time (p_c), s	0.0	15.5			0.1	1.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1040	170	180	1780	0	0	0	0	670	50	30
Future Volume (vph)	0	1040	170	180	1780	0	0	0	0	670	50	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3249	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3249	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1130	185	196	1935	0	0	0	0	728	54	33
RTOR Reduction (vph)	0	0	61	0	0	0	0	0	0	0	0	24
Lane Group Flow (vph)	0	1130	124	196	1935	0	0	0	0	364	418	9
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		68.1	68.1	12.4	84.5					35.7	35.7	35.7
Effective Green, g (s)		68.1	68.1	12.4	84.5					35.7	35.7	35.7
Actuated g/C Ratio		0.53	0.53	0.10	0.66					0.28	0.28	0.28
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2701	840	332	3351					448	904	440
v/s Ratio Prot		0.22		0.06	c0.38					c0.23	0.13	
v/s Ratio Perm			0.08									0.01
v/c Ratio		0.42	0.15	0.59	0.58					0.81	0.46	0.02
Uniform Delay, d1		18.1	15.3	55.5	12.0					43.1	38.3	33.6
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	2.8	0.7					10.7	0.4	0.0
Delay (s)		18.2	15.4	58.3	12.8					53.9	38.7	33.6
Level of Service		B	B	E	B					D	D	C
Approach Delay (s/veh)		17.8			16.9			0.0			45.3	
Approach LOS		B			B			A			D	

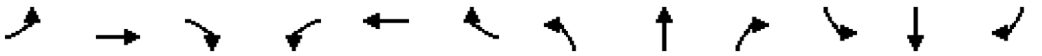
Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	128.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	50	60	870	650	210	610	0	0	950	20
Future Volume (veh/h)	40	0	50	60	870	650	210	610	0	0	950	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	54	65	946	707	228	663	0	0	1033	22
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	110	1687	786	284	2246	0	0	1682	36
Arrive On Green	0.00	0.00	0.00	0.50	0.50	0.50	0.08	0.44	0.00	0.00	0.33	0.33
Sat Flow, veh/h		0		222	3399	1583	3442	5253	0	0	5292	109
Grp Volume(v), veh/h		0.0		542	469	707	228	663	0	0	683	372
Grp Sat Flow(s),veh/h/ln				1852	1770	1583	1721	1695	0	0	1695	1843
Q Serve(g_s), s				26.9	23.5	52.4	8.4	10.8	0.0	0.0	21.9	21.9
Cycle Q Clear(g_c), s				26.9	23.5	52.4	8.4	10.8	0.0	0.0	21.9	21.9
Prop In Lane				0.12		1.00	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h				919	878	786	284	2246	0	0	1112	605
V/C Ratio(X)				0.59	0.53	0.90	0.80	0.30	0.00	0.00	0.61	0.61
Avail Cap(c_a), veh/h				1062	1015	908	373	2246	0	0	1112	605
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.1	22.3	29.6	58.2	23.1	0.0	0.0	36.5	36.5
Incr Delay (d2), s/veh				0.6	0.5	10.8	9.1	0.3	0.0	0.0	2.5	4.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.9	11.6	25.1	4.4	5.1	0.0	0.0	10.6	11.9
LnGrp Delay(d), s/veh				23.8	22.8	40.4	67.3	23.5	0.0	0.0	39.0	41.1
LnGrp LOS				C	C	D	E	C			D	D
Approach Vol, veh/h					1718			891			1055	
Approach Delay, s/veh					30.3			34.7			39.8	
Approach LOS					C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.0			14.6	46.4		68.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		57.0			14.0	39.0		74.0
Max Q Clear Time (g_c+I1), s		12.8			10.4	23.9		54.4
Green Ext Time (p_c), s		5.1			0.2	6.0		9.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	30	160	0	0	0	0	720	260	470	610	0
Future Volume (vph)	50	30	160	0	0	0	0	720	260	470	610	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.89	0.85					0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	3022	1441					4883		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	3022	1441					4883		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	33	174	0	0	0	0	783	283	511	663	0
RTOR Reduction (vph)	0	81	81	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	54	39	6	0	0	0	0	1039	0	511	663	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	9.5	9.5	9.5					88.6		25.5	118.1	
Effective Green, g (s)	9.5	9.5	9.5					88.6		25.5	118.1	
Actuated g/C Ratio	0.07	0.07	0.07					0.65		0.19	0.87	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	124	211	100					3190		645	4428	
v/s Ratio Prot	c0.03	0.01						c0.21		c0.15	0.13	
v/s Ratio Perm			0.00									
v/c Ratio	0.44	0.19	0.06					0.33		0.79	0.15	
Uniform Delay, d1	60.5	59.4	58.9					10.3		52.5	1.3	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	2.4	0.4	0.3					0.3		6.6	0.1	
Delay (s)	62.9	59.8	59.1					10.6		59.1	1.4	
Level of Service	E	E	E					B		E	A	
Approach Delay (s/veh)		60.2			0.0			10.6			26.5	
Approach LOS		E			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	135.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Future Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	115	646	458	365	1427	42	448	417	219	31	438	52
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1880	866	237	2814	83	305	859	446	238	1221	144
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	356	3357	1546	504	5026	148	894	2221	1153	781	3158	373
Grp Volume(v), veh/h	115	646	458	365	953	516	448	328	308	31	242	248
Grp Sat Flow(s),veh/h/ln	356	1679	1546	504	1679	1816	894	1752	1622	781	1752	1778
Q Serve(g_s), s	44.1	15.7	27.8	56.2	26.2	26.2	43.1	21.2	21.6	4.7	14.7	14.9
Cycle Q Clear(g_c), s	70.2	15.7	27.8	84.0	26.2	26.2	58.0	21.2	21.6	26.3	14.7	14.9
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.71	1.00		0.21
Lane Grp Cap(c), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
V/C Ratio(X)	0.62	0.34	0.53	1.54	0.51	0.51	1.47	0.48	0.49	0.13	0.36	0.36
Avail Cap(c_a), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	18.0	20.6	52.6	20.3	20.3	56.8	34.7	34.8	44.8	32.7	32.8
Incr Delay (d2), s/veh	6.3	0.1	0.6	263.9	0.2	0.4	228.4	2.5	2.7	1.1	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	7.3	12.0	27.1	12.1	13.2	32.0	10.7	10.1	1.1	7.4	7.6
LnGrp Delay(d), s/veh	48.1	18.1	21.2	316.5	20.5	20.7	285.3	37.2	37.6	45.9	34.2	34.3
LnGrp LOS	D	B	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1219			1834			1084			521	
Approach Delay, s/veh		22.1			79.5			139.8			34.9	
Approach LOS		C			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		88.0		62.0		88.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		60.0		72.2		28.3		86.0
Green Ext Time (p_c), s		0.0		6.8		3.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Future Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	140	86	43	204	65	269	22	602	151	172	398	118
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	151	69	254	72	289	472	1487	372	341	1892	831
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	522	373	170	535	179	713	878	2781	696	707	3539	1555
Grp Volume(v), veh/h	269	0	0	538	0	0	22	382	371	172	398	118
Grp Sat Flow(s),veh/h/ln	1066	0	0	1426	0	0	878	1770	1707	707	1770	1555
Q Serve(g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	1.8	17.0	17.1	25.4	7.8	5.1
Cycle Q Clear(g_c), s	26.8	0.0	0.0	48.1	0.0	0.0	9.6	17.0	17.1	42.5	7.8	5.1
Prop In Lane	0.52		0.16	0.38		0.50	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	473	0	0	615	0	0	472	946	912	341	1892	831
V/C Ratio(X)	0.57	0.00	0.00	0.87	0.00	0.00	0.05	0.40	0.41	0.50	0.21	0.14
Avail Cap(c_a), veh/h	640	0	0	804	0	0	472	946	912	341	1892	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	0.0	38.0	0.0	0.0	18.7	18.4	18.4	31.0	16.2	15.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	8.5	0.0	0.0	0.2	1.3	1.3	5.2	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	0.0	20.3	0.0	0.0	0.5	8.6	8.4	5.5	3.9	2.2
LnGrp Delay(d), s/veh	32.0	0.0	0.0	46.5	0.0	0.0	18.9	19.6	19.7	36.3	16.5	15.9
LnGrp LOS	C			D			B	B	B	D	B	B
Approach Vol, veh/h		269			538			775			688	
Approach Delay, s/veh		32.0			46.5			19.7			21.3	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		57.8		75.0		57.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		71.0		71.0		71.0
Max Q Clear Time (g_c+I1), s		19.1		28.8		44.5		50.1
Green Ext Time (p_c), s		5.3		2.2		4.5		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Future Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	196	22	87	304	141	152	1022	174	98	1043	174
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	58	236	24	164	475	401	301	2405	1050	308	2405	1051
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	111	917	95	1147	1845	1561	452	3505	1530	462	3505	1531
Grp Volume(v), veh/h	261	0	0	87	304	141	152	1022	174	98	1043	174
Grp Sat Flow(s),veh/h/ln	1123	0	0	1147	1845	1561	452	1752	1530	462	1752	1531
Q Serve(g_s), s	12.6	0.0	0.0	0.0	20.7	10.4	32.0	18.3	5.7	16.9	18.8	5.7
Cycle Q Clear(g_c), s	33.3	0.0	0.0	31.8	20.7	10.4	50.8	18.3	5.7	35.1	18.8	5.7
Prop In Lane	0.16		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	0	0	164	475	401	301	2405	1050	308	2405	1051
V/C Ratio(X)	0.82	0.00	0.00	0.53	0.64	0.35	0.50	0.42	0.17	0.32	0.43	0.17
Avail Cap(c_a), veh/h	414	0	0	234	587	497	301	2405	1050	308	2405	1051
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	0.0	50.8	46.7	42.9	21.3	9.8	7.9	17.6	9.9	7.9
Incr Delay (d2), s/veh	9.6	0.0	0.0	2.7	1.6	0.5	5.9	0.6	0.3	2.7	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	0.0	3.4	10.8	4.6	4.5	9.0	2.5	2.4	9.2	2.5
LnGrp Delay(d), s/veh	61.2	0.0	0.0	53.4	48.3	43.4	27.2	10.4	8.2	20.3	10.5	8.2
LnGrp LOS	E			D	D	D	C	B	A	C	B	A
Approach Vol, veh/h		261			532			1348			1315	
Approach Delay, s/veh		61.2			47.9			12.0			10.9	
Approach LOS		E			D			B			B	

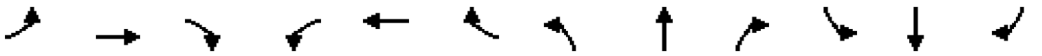
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		101.0		40.4		101.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		97.0		45.0		97.0		45.0
Max Q Clear Time (g_c+I1), s		52.8		35.3		37.1		33.8
Green Ext Time (p_c), s		13.4		1.0		12.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Future Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1130	359	1098	1239	0	0	0	0	272	0	554
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1071	340	1101	2218	0	0	596	0	1197	0	507
Arrive On Green	0.00	0.28	0.28	0.32	0.63	0.00	0.00	0.00	0.00	0.32	0.00	0.32
Sat Flow, veh/h	0	3991	1215	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1002	487	1098	1239	0	0	0	0	272	0	554
Grp Sat Flow(s),veh/h/ln	0	1695	1648	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Cycle Q Clear(g_c), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Prop In Lane	0.00		0.74	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
V/C Ratio(X)	0.00	1.06	1.06	1.00	0.56	0.00	0.00	0.00	0.00	0.23	0.00	1.09
Avail Cap(c_a), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	54.0	54.0	50.9	16.1	0.0	0.0	0.0	0.0	37.7	0.0	51.0
Incr Delay (d2), s/veh	0.0	45.0	57.3	26.3	0.3	0.0	0.0	0.0	0.0	0.4	0.0	67.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	25.6	26.4	26.8	14.7	0.0	0.0	0.0	0.0	4.2	0.0	30.5
LnGrp Delay(d), s/veh	0.0	99.0	111.3	77.3	16.4	0.0	0.0	0.0	0.0	38.1	0.0	118.8
LnGrp LOS		F	F	E	B					D		F
Approach Vol, veh/h		1489			2337			0			826	
Approach Delay, s/veh		103.0			45.0			0.0			92.2	
Approach LOS		F			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		52.0	52.0	46.0		52.0		98.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		48.0	48.0	42.0		48.0		94.0
Max Q Clear Time (g_c+I1), s		0.0	49.8	44.0		50.0		32.2
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0		12.0

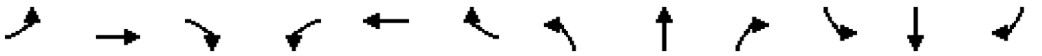
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Future Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3378	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.61	1.00	0.65	1.00	
Satd. Flow (perm)	1770	3378	1441	3433	3536		1681	1074	2787	1210	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1022	261	239	1978	11	315	11	228	11	11	11
RTOR Reduction (vph)	0	1	114	0	0	0	0	0	160	0	9	0
Lane Group Flow (vph)	11	1047	121	239	1989	0	164	162	68	11	13	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Effective Green, g (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Actuated g/C Ratio	0.01	0.51	0.51	0.10	0.60		0.13	0.30	0.30	0.15	0.15	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1738	741	343	2135		211	399	836	176	251	
v/s Ratio Prot	0.01	0.31		c0.07	c0.56		c0.10	0.05			0.01	
v/s Ratio Perm			0.08					c0.07	0.02	0.01		
v/c Ratio	0.61	0.60	0.16	0.70	0.93		0.78	0.41	0.08	0.06	0.05	
Uniform Delay, d1	69.4	24.1	18.1	61.3	25.3		59.7	39.3	35.4	51.8	51.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	0.6	0.1	6.1	8.1		16.3	0.7	0.2	0.7	0.4	
Delay (s)	118.1	24.7	18.2	67.4	33.3		76.0	40.0	35.6	52.5	52.1	
Level of Service	F	C	B	E	C		E	D	D	D	D	
Approach Delay (s/veh)		24.3			37.0			48.8			52.2	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Future Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.97			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1668			1745		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.87			0.95		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1496			1669		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	11	11	11	22	22	641	413	11	22	250	359
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	4	0	0	253
Lane Group Flow (vph)	61	54	0	0	41	0	641	413	7	22	250	106
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Effective Green, g (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Actuated g/C Ratio	0.06	0.22			0.13		0.40	0.67	0.67	0.02	0.29	0.29
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	106	341			216		710	2374	1062	43	1040	465
v/s Ratio Prot	c0.04	0.01					c0.36	0.12		0.01	c0.07	
v/s Ratio Perm		0.03			c0.02				0.00			0.07
v/c Ratio	0.58	0.16			0.19		0.90	0.17	0.01	0.51	0.24	0.23
Uniform Delay, d1	65.3	45.1			55.7		40.3	8.8	7.8	69.2	38.5	38.3
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.4	0.2			0.4		14.8	0.2	0.0	9.9	0.5	1.1
Delay (s)	72.7	45.4			56.2		55.1	8.9	7.8	79.1	39.0	39.4
Level of Service	E	D			E		E	A	A	E	D	D
Approach Delay (s/veh)		59.2			56.2			36.7			40.7	
Approach LOS		E			E			D			D	

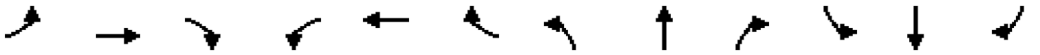
Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	143.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Future Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	152	1163	76	174	1913	185	207	22	272			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	199	2080	136	199	2374	1062	303	32	298			
Arrive On Green	0.06	0.62	0.62	0.11	0.67	0.67	0.19	0.19	0.19			
Sat Flow, veh/h	3442	3373	220	1774	3539	1583	1611	171	1583			
Grp Volume(v), veh/h	152	610	629	174	1913	185	229	0	272			
Grp Sat Flow(s),veh/h/ln	1721	1770	1824	1774	1770	1583	1782	0	1583			
Q Serve(g_s), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Cycle Q Clear(g_c), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Prop In Lane	1.00		0.12	1.00		1.00	0.90		1.00			
Lane Grp Cap(c), veh/h	199	1091	1125	199	2374	1062	336	0	298			
V/C Ratio(X)	0.76	0.56	0.56	0.87	0.81	0.17	0.68	0.00	0.91			
Avail Cap(c_a), veh/h	262	1091	1125	294	2374	1062	370	0	328			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	67.1	16.2	16.2	63.2	17.1	8.9	54.7	0.0	57.5			
Incr Delay (d2), s/veh	9.1	2.1	2.0	17.4	3.0	0.4	4.5	0.0	27.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.3	14.9	15.3	7.8	28.1	2.8	8.9	0.0	12.9			
LnGrp Delay(d), s/veh	76.2	18.3	18.2	80.6	20.1	9.2	59.2	0.0	84.7			
LnGrp LOS	E	B	B	F	C	A	E		F			
Approach Vol, veh/h		1391			2272			501				
Approach Delay, s/veh		24.6			23.8			73.0				
Approach LOS		C			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	20.2	93.2			12.4	101.0		31.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	84.0			11.0	97.0		30.0
Max Q Clear Time (g_c+I1), s	16.0	31.2			8.3	58.0		26.3
Green Ext Time (p_c), s	0.3	10.5			0.1	23.3		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Future Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	11	1446	0	0	2000	783	304	11	250			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	35	3793	0	0	3591	1118	345	362	308			
Arrive On Green	0.01	0.75	0.00	0.00	0.71	0.71	0.19	0.19	0.19			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	11	1446	0	0	2000	783	304	11	250			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Cycle Q Clear(g_c), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	35	3793	0	0	3591	1118	345	362	308			
V/C Ratio(X)	0.32	0.38	0.00	0.00	0.56	0.70	0.88	0.03	0.81			
Avail Cap(c_a), veh/h	103	3793	0	0	3591	1118	556	584	496			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	65.9	6.0	0.0	0.0	9.5	11.5	52.5	43.8	51.7			
Incr Delay (d2), s/veh	5.2	0.3	0.0	0.0	0.6	3.7	9.5	0.0	5.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	6.4	0.0	0.0	12.1	17.9	11.9	0.3	9.3			
LnGrp Delay(d), s/veh	71.1	6.3	0.0	0.0	10.2	15.1	62.0	43.8	57.0			
LnGrp LOS	E	A			B	B	E	D	E			
Approach Vol, veh/h		1457			2783			565				
Approach Delay, s/veh		6.8			11.6			59.4				
Approach LOS		A			B			E				

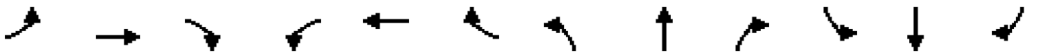
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		104.0			5.3	98.7		30.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		100.0			4.0	92.0		42.0
Max Q Clear Time (g_c+I1), s		15.5			2.4	40.5		24.3
Green Ext Time (p_c), s		15.2			0.0	33.5		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Future Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	1402	109	11	2565	228	33	11	326	11	11	391
RTOR Reduction (vph)	0	4	0	0	6	0	0	0	200	0	0	191
Lane Group Flow (vph)	370	1507	0	11	2787	0	33	11	126	11	11	200
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Effective Green, g (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Actuated g/C Ratio	0.12	0.74		0.01	0.63		0.10	0.10	0.10	0.03	0.03	0.15
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	420	3735		19	3168		179	189	160	51	54	422
v/s Ratio Prot	c0.11	0.30		0.01	c0.55		0.02	0.01		0.01	0.01	c0.06
v/s Ratio Perm									c0.08			0.01
v/c Ratio	0.88	0.40		0.58	0.88		0.18	0.06	0.79	0.22	0.20	0.47
Uniform Delay, d1	59.5	6.5		67.9	21.1		56.7	56.0	60.5	65.4	65.4	53.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.9	0.3		36.3	3.9		0.5	0.1	21.9	2.1	1.9	0.8
Delay (s)	78.4	6.8		104.2	25.0		57.2	56.1	82.4	67.5	67.3	54.3
Level of Service	E	A		F	C		E	E	F	E	E	D
Approach Delay (s/veh)		20.9			25.3			79.3			55.0	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	137.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1190	0	10	1360	630	10	20	10	70	10	260
Future Volume (vph)	210	1190	0	10	1360	630	10	20	10	70	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.98	0.85		0.97			0.92	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1764	4708	1332		1780			1594	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1764	4708	1332		1780			1594	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	219	1240	0	10	1417	656	10	21	10	73	10	271
RTOR Reduction (vph)	0	0	0	0	10	192	0	7	0	0	29	149
Lane Group Flow (vph)	219	1240	0	10	1597	274	0	34	0	0	152	24
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	21.2	80.9		0.7	60.4	60.4		12.4			17.3	17.3
Effective Green, g (s)	21.2	80.9		0.7	60.4	60.4		12.4			17.3	17.3
Actuated g/C Ratio	0.17	0.64		0.01	0.47	0.47		0.10			0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	294	3231		9	2233	631		173			216	204
v/s Ratio Prot	c0.12	0.24		0.01	c0.34			c0.02			c0.10	
v/s Ratio Perm						0.21						0.02
v/c Ratio	0.74	0.38		1.11	0.72	0.43		0.20			0.70	0.12
Uniform Delay, d1	50.5	11.2		63.3	26.6	22.1		52.9			52.5	48.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	9.8	0.1		342.2	1.1	0.5		2.5			9.9	0.3
Delay (s)	60.3	11.3		405.5	27.7	22.6		55.4			62.4	48.5
Level of Service	E	B		F	C	C		E			E	D
Approach Delay (s/veh)		18.6			28.4			55.4			55.6	
Approach LOS		B			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	127.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1000	230	330	1710	40	310	140	320	20	30	40
Future Volume (vph)	90	1000	230	330	1710	40	310	140	320	20	30	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00		1.00	0.96	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	4877		1752	5015		1665	1562	1404	1665	1747	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	4877		1752	5015		1665	1562	1404	1665	1747	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1053	242	347	1800	42	326	147	337	21	32	42
RTOR Reduction (vph)	0	25	0	0	2	0	0	10	180	0	0	40
Lane Group Flow (vph)	95	1270	0	347	1840	0	277	270	73	19	34	2
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.2	43.0		32.3	63.1		40.3	40.3	40.3	8.1	8.1	8.1
Effective Green, g (s)	12.2	43.0		32.3	63.1		40.3	40.3	40.3	8.1	8.1	8.1
Actuated g/C Ratio	0.09	0.31		0.23	0.45		0.29	0.29	0.29	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	153	1501		405	2265		480	450	405	96	101	90
v/s Ratio Prot	0.05	0.26		c0.20	c0.37		0.17	c0.17		0.01	c0.02	
v/s Ratio Perm									0.05			0.00
v/c Ratio	0.62	0.85		0.86	0.81		0.58	0.60	0.18	0.20	0.34	0.03
Uniform Delay, d1	61.5	45.3		51.5	33.2		42.4	42.8	37.3	62.7	63.2	62.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	4.6		16.2	2.3		5.0	5.8	1.0	4.6	8.8	0.6
Delay (s)	69.1	49.9		67.6	35.5		47.4	48.6	38.3	67.3	72.0	62.6
Level of Service	E	D		E	D		D	D	D	E	E	E
Approach Delay (s/veh)		51.2			40.6			45.0			66.9	
Approach LOS		D			D			D			E	

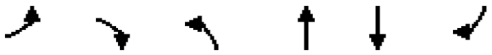
Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	139.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	390	210	150	450	440
Future Volume (veh/h)	390	390	210	150	450	440
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	443	0	239	170	511	500
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	535	246	272	2719	2057	901
Arrive On Green	0.16	0.00	0.16	0.78	0.59	0.59
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	443	0	239	170	511	500
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	14.9	0.0	15.8	1.4	8.4	23.7
Cycle Q Clear(g_c), s	14.9	0.0	15.8	1.4	8.4	23.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	535	246	272	2719	2057	901
V/C Ratio(X)	0.83	0.00	0.88	0.06	0.25	0.56
Avail Cap(c_a), veh/h	1437	661	533	2719	2057	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	0.0	49.0	3.1	11.8	15.0
Incr Delay (d2), s/veh	3.4	0.0	8.8	0.0	0.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	8.3	0.7	4.1	10.6
LnGrp Delay(d), s/veh	51.8	0.0	57.8	3.2	12.1	17.5
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	443			409	1011	
Approach Delay, s/veh	51.8			35.1	14.8	
Approach LOS	D			D	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		96.0		22.6	22.4	73.6		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		92.0		50.0	36.0	52.0		
Max Q Clear Time (g_c+I1), s		3.4		16.9	17.8	25.7		
Green Ext Time (p_c), s		1.1		1.7	0.6	5.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.0
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	840	570	310	840	470	410
Future Volume (veh/h)	840	570	310	840	470	410
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	923	0	341	923	516	451
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1006	463	368	2340	1506	653
Arrive On Green	0.29	0.00	0.21	0.65	0.42	0.42
Sat Flow, veh/h	3476	1599	1792	3668	3668	1549
Grp Volume(v), veh/h	923	0	341	923	516	451
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1549
Q Serve(g_s), s	36.9	0.0	26.8	17.3	14.0	34.1
Cycle Q Clear(g_c), s	36.9	0.0	26.8	17.3	14.0	34.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1006	463	368	2340	1506	653
V/C Ratio(X)	0.92	0.00	0.93	0.39	0.34	0.69
Avail Cap(c_a), veh/h	1162	535	474	2340	1506	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	0.0	56.0	11.5	28.1	33.9
Incr Delay (d2), s/veh	10.5	0.0	21.0	0.5	0.6	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	0.0	15.4	8.6	7.0	15.6
LnGrp Delay(d), s/veh	59.8	0.0	76.9	12.0	28.7	39.8
LnGrp LOS	E		E	B	C	D
Approach Vol, veh/h	923			1264	967	
Approach Delay, s/veh	59.8			29.5	33.9	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		98.0		45.6	33.5	64.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		94.0		48.0	38.0	52.0		
Max Q Clear Time (g_c+I1), s		19.3		38.9	28.8	36.1		
Green Ext Time (p_c), s		7.6		2.7	0.7	4.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	920	240	240	1580	30	240	810	640	60	300	250
Future Volume (veh/h)	160	920	240	240	1580	30	240	810	640	60	300	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	182	1045	273	273	1795	34	273	920	727	68	341	284
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1511	444	301	1839	35	301	1268	551	74	816	351
Arrive On Green	0.11	0.30	0.30	0.17	0.36	0.36	0.17	0.36	0.36	0.04	0.23	0.23
Sat Flow, veh/h	1774	5085	1496	1774	5133	97	1774	3539	1539	1774	3539	1522
Grp Volume(v), veh/h	182	1045	273	273	1185	644	273	920	727	68	341	284
Grp Sat Flow(s),veh/h/ln	1774	1695	1496	1774	1695	1840	1774	1770	1539	1774	1770	1522
Q Serve(g_s), s	12.2	21.8	18.8	18.1	41.4	41.4	18.1	27.0	43.0	4.6	9.8	21.2
Cycle Q Clear(g_c), s	12.2	21.8	18.8	18.1	41.4	41.4	18.1	27.0	43.0	4.6	9.8	21.2
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	1511	444	301	1215	659	301	1268	551	74	816	351
V/C Ratio(X)	0.95	0.69	0.61	0.91	0.98	0.98	0.91	0.73	1.32	0.92	0.42	0.81
Avail Cap(c_a), veh/h	192	1511	444	340	1215	659	340	1268	551	74	816	351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	37.3	36.3	48.9	38.0	38.0	48.9	33.4	38.5	57.3	39.3	43.7
Incr Delay (d2), s/veh	49.7	1.4	2.5	25.2	20.1	29.1	25.2	3.6	155.7	77.6	1.6	18.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	10.4	8.1	11.0	22.7	26.3	11.0	13.8	42.1	3.8	5.0	10.6
LnGrp Delay(d), s/veh	102.9	38.7	38.8	74.1	58.1	67.1	74.1	37.0	194.2	134.9	40.9	61.7
LnGrp LOS	F	D	D	E	E	E	E	D	F	F	D	E
Approach Vol, veh/h		1500			2102			1920			693	
Approach Delay, s/veh		46.5			62.9			101.8			58.7	
Approach LOS		D			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	47.0	24.3	39.7	24.3	31.7	17.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	43.0	23.0	33.0	23.0	25.0	13.0	43.0
Max Q Clear Time (g_c+I1), s	6.6	45.0	20.1	23.8	20.1	23.2	14.2	43.4
Green Ext Time (p_c), s	0.0	0.0	0.2	5.1	0.2	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	70.5
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	30	1370	0	0	580
Future Volume (veh/h)	30	30	1370	0	0	580
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	33	33	1489	0	0	630
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	48	3128	0	1	3128
Arrive On Green	0.06	0.06	0.88	0.00	0.00	0.88
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	33	33	1489	0	0	630
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	2.5	6.9	11.8	0.0	0.0	3.5
Cycle Q Clear(g_c), s	2.5	6.9	11.8	0.0	0.0	3.5
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	105	48	3128	0	1	3128
V/C Ratio(X)	0.32	0.68	0.48	0.00	0.00	0.20
Avail Cap(c_a), veh/h	228	158	3128	0	51	3128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	63.3	256.1	1.6	0.0	0.0	1.1
Incr Delay (d2), s/veh	1.7	15.6	0.5	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	5.8	0.0	0.0	1.7
LnGrp Delay(d), s/veh	65.0	271.7	2.2	0.0	0.0	1.3
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	66		1489			630
Approach Delay, s/veh	168.3		2.2			1.3
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	128.0				128.0		12.3
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	116.0				124.0		18.0
Max Q Clear Time (g_c+I1), s	0.0	13.8				5.5		8.9
Green Ext Time (p_c), s	0.0	17.6				4.6		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.9
HCM 2010 LOS	A



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	390	400	660	480	130
Future Volume (veh/h)	120	390	400	660	480	130
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	424	435	717	522	141
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	284	253	615	2784	2171	584
Arrive On Green	0.16	0.16	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1774	1583	769	3632	2853	742
Grp Volume(v), veh/h	130	424	435	717	334	329
Grp Sat Flow(s),veh/h/ln	1774	1583	769	1770	1770	1732
Q Serve(g_s), s	10.0	24.0	51.4	8.1	7.4	7.5
Cycle Q Clear(g_c), s	10.0	24.0	58.9	8.1	7.4	7.5
Prop In Lane	1.00	1.00	1.00			0.43
Lane Grp Cap(c), veh/h	284	253	615	2784	1392	1362
V/C Ratio(X)	0.46	1.67	0.71	0.26	0.24	0.24
Avail Cap(c_a), veh/h	284	253	615	2784	1392	1362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	63.0	12.0	4.3	4.2	4.2
Incr Delay (d2), s/veh	1.2	319.9	6.8	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	33.0	11.9	4.0	3.8	3.7
LnGrp Delay(d), s/veh	58.3	382.9	18.7	4.5	4.6	4.6
LnGrp LOS	E	F	B	A	A	A
Approach Vol, veh/h	554			1152	663	
Approach Delay, s/veh	306.7			9.9	4.6	
Approach LOS	F			A	A	

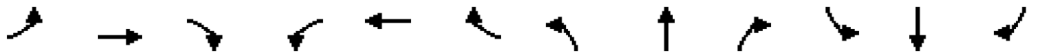
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		122.0		28.0		122.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		118.0		24.0		118.0		
Max Q Clear Time (g_c+I1), s		60.9		26.0		9.5		
Green Ext Time (p_c), s		10.8		0.0		4.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	77.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	750	130	670	810	240	190	310	430	490	290	90
Future Volume (veh/h)	90	750	130	670	810	240	190	310	430	490	290	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	815	141	728	880	261	207	337	467	533	315	98
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	1199	536	807	1788	1893	234	485	588	600	636	284
Arrive On Green	0.07	0.34	0.34	0.23	0.51	0.51	0.13	0.14	0.14	0.17	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	98	815	141	728	880	261	207	337	467	533	315	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.6	27.4	9.0	28.5	22.7	4.6	15.9	12.6	19.0	21.0	11.1	7.5
Cycle Q Clear(g_c), s	7.6	27.4	9.0	28.5	22.7	4.6	15.9	12.6	19.0	21.0	11.1	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	1199	536	807	1788	1893	234	485	588	600	636	284
V/C Ratio(X)	0.81	0.68	0.26	0.90	0.49	0.14	0.88	0.69	0.79	0.89	0.50	0.34
Avail Cap(c_a), veh/h	192	1199	536	993	1788	1893	358	485	588	745	636	284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.7	39.4	33.3	51.5	22.6	7.9	59.1	57.0	38.8	55.9	51.2	49.7
Incr Delay (d2), s/veh	13.1	3.1	1.2	9.8	1.0	0.2	15.4	8.0	10.6	10.9	2.7	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	13.9	4.1	14.6	11.2	1.8	8.8	6.7	17.7	10.9	5.7	3.5
LnGrp Delay(d), s/veh	76.8	42.5	34.5	61.3	23.6	8.0	74.5	65.0	49.4	66.8	53.9	53.0
LnGrp LOS	E	D	C	E	C	A	E	E	D	E	D	D
Approach Vol, veh/h		1054			1869			1011			946	
Approach Delay, s/veh		44.6			36.1			59.7			61.1	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.5	50.9	22.3	28.9	13.4	74.0	28.2	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	40.0	45.0	28.0	21.0	15.0	70.0	30.0	19.0
Max Q Clear Time (g_c+I1), s	30.5	29.4	17.9	13.1	9.6	24.7	23.0	21.0
Green Ext Time (p_c), s	2.0	5.2	0.4	1.3	0.1	8.5	1.2	0.0

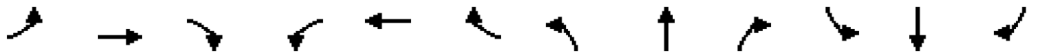
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1140	0	0	1310	110	350	30	70	0	0	0
Future Volume (vph)	110	1140	0	0	1310	110	350	30	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1698	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1698	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1239	0	0	1424	120	380	33	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	63	0	0	0
Lane Group Flow (vph)	120	1239	0	0	1424	120	205	208	13	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.1	101.2			83.1	83.1	21.8	21.8	21.8			
Effective Green, g (s)	14.1	101.2			83.1	83.1	21.8	21.8	21.8			
Actuated g/C Ratio	0.11	0.77			0.63	0.63	0.17	0.17	0.17			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	190	2733			3225	1004	279	282	263			
v/s Ratio Prot	c0.07	c0.35			0.28		0.12	c0.12				
v/s Ratio Perm						0.08			0.01			
v/c Ratio	0.63	0.45			0.44	0.12	0.73	0.74	0.05			
Uniform Delay, d1	56.0	5.2			12.2	9.5	51.9	51.9	45.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.7	0.5			0.4	0.2	9.6	9.7	0.1			
Delay (s)	62.6	5.8			12.6	9.7	61.5	61.5	46.0			
Level of Service	E	A			B	A	E	E	D			
Approach Delay (s/veh)		10.8			12.4			59.1			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	131.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1150	520	140	1630	0	0	0	0	110	20	80
Future Volume (vph)	0	1150	520	140	1630	0	0	0	0	110	20	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1711	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1711	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1250	565	152	1772	0	0	0	0	120	22	87
RTOR Reduction (vph)	0	0	268	0	0	0	0	0	0	0	0	43
Lane Group Flow (vph)	0	1250	297	152	1772	0	0	0	0	71	71	44
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		49.9	49.9	14.4	68.3					22.7	22.7	22.7
Effective Green, g (s)		49.9	49.9	14.4	68.3					22.7	22.7	22.7
Actuated g/C Ratio		0.50	0.50	0.15	0.69					0.23	0.23	0.23
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1783	797	257	3508					385	392	362
v/s Ratio Prot		c0.35		c0.09	0.35					c0.04	0.04	0.03
v/s Ratio Perm			0.19									
v/c Ratio		0.70	0.37	0.59	0.51					0.18	0.18	0.12
Uniform Delay, d1		18.8	15.0	39.5	7.3					30.7	30.7	30.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.3	0.3	3.6	0.1					1.1	1.0	0.7
Delay (s)		20.1	15.3	43.2	7.4					31.8	31.7	30.9
Level of Service		C	B	D	A					C	C	C
Approach Delay (s/veh)		18.6			10.2			0.0			31.4	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Future Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.90	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	255	1000	160	234	1191	138	138	372	170	160	362	160
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	287	1183	500	265	1480	171	166	619	276	189	659	284
Arrive On Green	0.16	0.34	0.34	0.15	0.33	0.33	0.09	0.27	0.27	0.11	0.29	0.29
Sat Flow, veh/h	1757	3505	1483	1757	4551	527	1757	2275	1014	1757	2309	994
Grp Volume(v), veh/h	255	1000	160	234	878	451	138	284	258	160	272	250
Grp Sat Flow(s),veh/h/ln	1757	1752	1483	1757	1679	1721	1757	1752	1536	1757	1752	1551
Q Serve(g_s), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Cycle Q Clear(g_c), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.66	1.00		0.64
Lane Grp Cap(c), veh/h	287	1183	500	265	1092	560	166	477	418	189	500	442
V/C Ratio(X)	0.89	0.85	0.32	0.88	0.80	0.81	0.83	0.60	0.62	0.85	0.54	0.56
Avail Cap(c_a), veh/h	449	1475	624	420	1357	696	290	477	418	304	500	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	37.2	29.8	50.4	37.4	37.4	53.9	38.3	38.6	53.1	36.7	36.9
Incr Delay (d2), s/veh	13.0	3.9	0.4	12.6	2.9	5.6	10.2	5.4	6.7	11.6	4.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	16.2	4.0	8.6	13.9	14.6	5.0	9.0	8.3	5.9	8.3	7.8
LnGrp Delay(d), s/veh	62.6	41.1	30.2	63.0	40.3	43.0	64.1	43.7	45.2	64.7	40.9	42.0
LnGrp LOS	E	D	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1415			1563			680			682	
Approach Delay, s/veh		43.8			44.5			48.4			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	37.0	22.3	44.9	15.4	38.6	23.8	43.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	33.0	29.0	51.0	20.0	34.0	31.0	49.0
Max Q Clear Time (g_c+I1), s	12.8	19.8	17.8	34.1	11.4	18.6	19.2	31.0
Green Ext Time (p_c), s	0.2	2.7	0.5	6.8	0.2	2.9	0.5	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	160	190	140	230	110
Future Vol, veh/h	140	160	190	140	230	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	152	174	207	152	250	120

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	816	250	370	0	-	0
Stage 1	250	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	347	789	1189	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	287	789	1189	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	20.2	5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1189	-	287	789	-	-
HCM Lane V/C Ratio	0.174	-	0.53	0.22	-	-
HCM Control Delay (s/veh)	8.7	-	30.9	10.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	2.9	0.8	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	250	60	20	250	40	10
Future Vol, veh/h	250	60	20	250	40	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	272	65	22	272	43	11

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	119	22	0	0	294	0
Stage 1	22	-	-	-	-	-
Stage 2	97	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	877	1055	-	-	1268	-
Stage 1	1001	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	847	1055	-	-	1268	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10.7	0	6.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	847	1055	1268	-	-	-
HCM Lane V/C Ratio	0.321	0.062	0.034	-	-	-
HCM Control Delay (s/veh)	11.2	8.6	7.9	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	1.4	0.2	0.1	-	-	-

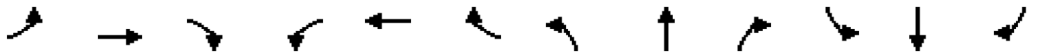
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	840	70	60	890	100	110	750	60	190	700	450
Future Volume (veh/h)	360	840	70	60	890	100	110	750	60	190	700	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	387	903	75	65	957	108	118	806	65	204	753	484
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	449	1086	90	83	1133	127	142	1263	564	231	1439	842
Arrive On Green	0.13	0.34	0.34	0.05	0.25	0.25	0.08	0.36	0.36	0.13	0.41	0.41
Sat Flow, veh/h	3375	3238	269	1740	4534	510	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	387	484	494	65	701	364	118	806	65	204	753	484
Grp Sat Flow(s),veh/h/ln	1688	1736	1771	1740	1663	1719	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	25.5	3.7	15.3	21.5	27.7
Cycle Q Clear(g_c), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	25.5	3.7	15.3	21.5	27.7
Prop In Lane	1.00		0.15	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	449	582	594	83	831	430	142	1263	564	231	1439	842
V/C Ratio(X)	0.86	0.83	0.83	0.79	0.84	0.85	0.83	0.64	0.12	0.88	0.52	0.57
Avail Cap(c_a), veh/h	585	667	681	131	953	492	236	1263	564	341	1439	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	40.6	40.6	62.5	47.3	47.3	60.0	35.0	28.0	56.5	29.0	19.8
Incr Delay (d2), s/veh	10.1	7.9	7.7	15.0	6.3	11.7	11.5	2.5	0.4	16.6	1.4	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	17.5	17.9	2.7	12.9	14.0	4.7	12.6	1.6	8.4	10.5	12.4
LnGrp Delay(d), s/veh	66.5	48.5	48.4	77.5	53.6	59.1	71.5	37.4	28.4	73.1	30.4	22.7
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		1365			1130			989			1441	
Approach Delay, s/veh		53.5			56.7			40.9			33.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	52.2	10.3	48.5	14.9	59.0	21.6	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	47.0	10.0	51.0	18.0	55.0	23.0	38.0
Max Q Clear Time (g_c+I1), s	17.3	27.5	6.9	36.1	10.9	29.7	16.9	28.7
Green Ext Time (p_c), s	0.3	5.2	0.0	5.3	0.1	7.2	0.7	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

Notes

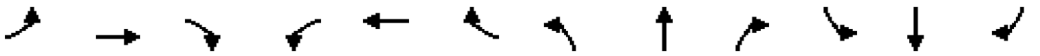
User approved changes to right turn type.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	120	90	510	0	0	640	220
Future Volume (vph)	0	0	0	160	0	120	90	510	0	0	640	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.36	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1302	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	130	98	554	0	0	696	239
RTOR Reduction (vph)	0	0	0	0	0	111	0	0	0	0	0	53
Lane Group Flow (vph)	0	0	0	174	0	19	98	554	0	0	696	186
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				15.7		15.7	83.6	83.6			83.6	83.6
Effective Green, g (s)				15.7		15.7	83.6	83.6			83.6	83.6
Actuated g/C Ratio				0.15		0.15	0.78	0.78			0.78	0.78
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				258		231	1014	3961			4992	1233
v/s Ratio Prot								0.11			0.11	
v/s Ratio Perm				c0.10		0.01	0.08					c0.12
v/c Ratio				0.67		0.08	0.10	0.14			0.14	0.15
Uniform Delay, d1				43.4		39.6	2.8	2.9			2.9	3.0
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				6.8		0.2	0.2	0.1			0.1	0.3
Delay (s)				50.2		39.7	3.0	3.0			3.0	3.2
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			45.7			3.0			3.1	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.9	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	107.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	90	0	0	0	0	480	90	280	850	0
Future Volume (vph)	150	0	90	0	0	0	0	480	90	280	850	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.43	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1572	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	98	0	0	0	0	522	98	304	924	0
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	163	0	13	0	0	0	0	522	78	304	924	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	16.2		16.2					95.2	95.2	95.2	95.2	
Effective Green, g (s)	16.2		16.2					95.2	95.2	95.2	95.2	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	240		378					5109	1262	1253	4054	
v/s Ratio Prot								0.08			0.18	
v/s Ratio Perm	c0.09		0.00						0.05	c0.19		
v/c Ratio	0.68		0.04					0.10	0.06	0.24	0.23	
Uniform Delay, d1	49.1		44.8					2.7	2.6	3.0	3.0	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.4		0.0					0.0	0.1	0.5	0.1	
Delay (s)	56.6		44.9					2.7	2.7	3.5	3.1	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		52.2			0.0			2.7			3.2	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	119.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	460	10	90	0	970	580	150	980	0
Future Volume (vph)	10	10	10	460	10	90	0	970	580	150	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1718		1665	1672	1473		5036	1519	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1672	1473		5036	1519	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	511	11	100	0	1078	644	167	1089	0
RTOR Reduction (vph)	0	10	0	0	0	76	0	0	182	0	0	0
Lane Group Flow (vph)	0	23	0	261	261	24	0	1078	462	167	1089	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		32.0	32.0	32.0		58.0	90.0	17.6	79.6	
Effective Green, g (s)		7.5		32.0	32.0	32.0		58.0	90.0	17.6	79.6	
Actuated g/C Ratio		0.06		0.24	0.24	0.24		0.44	0.69	0.13	0.61	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		406	408	359		2227	1042	235	3057	
v/s Ratio Prot				c0.16	0.16			c0.21	0.11	c0.10	0.22	
v/s Ratio Perm		c0.04				0.02			0.20			
v/c Ratio		0.65		0.64	0.64	0.07		0.48	0.44	0.71	0.36	
Uniform Delay, d1		60.5		44.4	44.4	38.1		25.9	9.3	54.3	12.9	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.4		3.5	3.3	0.1		0.8	0.3	9.7	0.3	
Delay (s)		94.9		47.9	47.7	38.2		26.7	9.6	64.0	13.2	
Level of Service		F		D	D	D		C	A	E	B	
Approach Delay (s/veh)		94.9			46.2			20.3			20.0	
Approach LOS		F			D			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	20	120	30	60	20	190	800	10	20	360	310
Future Volume (veh/h)	320	20	120	30	60	20	190	800	10	20	360	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	381	24	143	36	71	24	226	952	12	24	429	369
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	491	27	574	0	687	575	297	1791	23	34	1534	673
Arrive On Green	0.37	0.37	0.37	0.00	0.37	0.37	0.09	0.50	0.50	0.02	0.43	0.43
Sat Flow, veh/h	1155	73	1557	0	1863	1559	3442	3578	45	1774	3539	1553
Grp Volume(v), veh/h	405	0	143	0	71	24	226	471	493	24	429	369
Grp Sat Flow(s),veh/h/ln	1228	0	1557	0	1863	1559	1721	1770	1853	1774	1770	1553
Q Serve(g_s), s	31.4	0.0	6.9	0.0	2.7	1.1	6.9	19.5	19.5	1.5	8.4	19.0
Cycle Q Clear(g_c), s	34.1	0.0	6.9	0.0	2.7	1.1	6.9	19.5	19.5	1.5	8.4	19.0
Prop In Lane	0.94		1.00	0.00		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	518	0	574	0	687	575	297	886	928	34	1534	673
V/C Ratio(X)	0.78	0.00	0.25	0.00	0.10	0.04	0.76	0.53	0.53	0.71	0.28	0.55
Avail Cap(c_a), veh/h	887	0	1010	0	1347	1127	511	886	928	99	1534	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	23.6	0.0	22.3	21.8	48.2	18.3	18.3	52.6	19.7	22.7
Incr Delay (d2), s/veh	2.6	0.0	0.2	0.0	0.1	0.0	4.0	2.3	2.2	24.0	0.5	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	0.0	3.0	0.0	1.4	0.5	3.5	10.1	10.6	0.9	4.2	8.7
LnGrp Delay(d), s/veh	36.1	0.0	23.9	0.0	22.4	21.8	52.2	20.6	20.5	76.6	20.2	25.9
LnGrp LOS	D		C		C	C	D	C	C	E	C	C
Approach Vol, veh/h		548			95			1190			822	
Approach Delay, s/veh		32.9			22.2			26.5			24.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	58.0	0.0	43.8	13.3	50.7		43.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	54.0	4.0	70.0	16.0	44.0		78.0
Max Q Clear Time (g_c+I1), s	3.5	21.5	0.0	36.1	8.9	21.0		4.7
Green Ext Time (p_c), s	0.0	6.6	0.0	3.7	0.4	4.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	80	40	60	70	240	20	670	20	180	280	20
Future Volume (veh/h)	30	80	40	60	70	240	20	670	20	180	280	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.87	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	36	96	48	72	84	289	24	807	24	217	337	24
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	124	53	118	126	338	735	2515	1109	458	2515	1086
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	89	510	218	342	521	1391	1021	3574	1576	664	3574	1544
Grp Volume(v), veh/h	180	0	0	156	0	289	24	807	24	217	337	24
Grp Sat Flow(s),veh/h/ln	816	0	0	863	0	1391	1021	1787	1576	664	1787	1544
Q Serve(g_s), s	8.7	0.0	0.0	0.0	0.0	29.6	1.2	12.9	0.7	27.8	4.6	0.7
Cycle Q Clear(g_c), s	34.2	0.0	0.0	25.4	0.0	29.6	5.8	12.9	0.7	40.7	4.6	0.7
Prop In Lane	0.20		0.27	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	0	245	0	338	735	2515	1109	458	2515	1086
V/C Ratio(X)	0.79	0.00	0.00	0.64	0.00	0.86	0.03	0.32	0.02	0.47	0.13	0.02
Avail Cap(c_a), veh/h	235	0	0	253	0	345	735	2515	1109	458	2515	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	0.0	0.0	51.1	0.0	54.0	8.2	8.5	6.7	16.3	7.2	6.7
Incr Delay (d2), s/veh	16.3	0.0	0.0	5.0	0.0	18.4	0.1	0.3	0.0	3.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	0.0	6.3	0.0	13.1	0.4	6.4	0.3	5.5	2.3	0.3
LnGrp Delay(d), s/veh	71.6	0.0	0.0	56.1	0.0	72.4	8.3	8.8	6.7	19.7	7.3	6.7
LnGrp LOS	E			E		E	A	A	A	B	A	A
Approach Vol, veh/h		180			445			855			578	
Approach Delay, s/veh		71.6			66.7			8.7			12.0	
Approach LOS		E			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		109.0		40.2		109.0		40.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		105.0		37.0		105.0		37.0
Max Q Clear Time (g_c+I1), s		14.9		36.2		42.7		31.6
Green Ext Time (p_c), s		6.6		0.1		4.8		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.7
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	17.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Future Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	306	42	69	0	42	14	97	83	14	14	69	319
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	20.5	10.3	13.2	16.9
HCM LOS	C	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	54%	0%	73%	0%	3%
Vol Thru, %	46%	0%	10%	75%	17%
Vol Right, %	0%	100%	17%	25%	79%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	10	300	40	290
LT Vol	70	0	220	0	10
Through Vol	60	0	30	30	50
RT Vol	0	10	50	10	230
Lane Flow Rate	181	14	417	56	403
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.348	0.023	0.678	0.102	0.612
Departure Headway (Hd)	6.941	5.952	5.856	6.585	5.469
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	515	595	613	548	657
Service Time	4.74	3.75	3.929	4.585	3.551
HCM Lane V/C Ratio	0.351	0.024	0.68	0.102	0.613
HCM Control Delay, s/veh	13.5	8.9	20.5	10.3	16.9
HCM Lane LOS	B	A	C	B	C
HCM 95th-tile Q	1.5	0.1	5.2	0.3	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	100	20	10	20	150	930	100	40	1090	20
Future Volume (veh/h)	10	20	100	20	10	20	150	930	100	40	1090	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	11	22	111	22	11	22	167	1033	111	44	1211	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	69	115	135	116	50	110	195	2745	1200	56	2469	1090
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.11	0.79	0.79	0.03	0.71	0.71
Sat Flow, veh/h	375	1317	1553	798	577	1263	1740	3471	1518	1740	3471	1533
Grp Volume(v), veh/h	33	0	111	30	0	25	167	1033	111	44	1211	22
Grp Sat Flow(s),veh/h/ln	1692	0	1553	1198	0	1440	1740	1736	1518	1740	1736	1533
Q Serve(g_s), s	0.0	0.0	9.4	1.8	0.0	2.2	12.6	11.9	2.2	3.4	20.7	0.6
Cycle Q Clear(g_c), s	2.3	0.0	9.4	4.1	0.0	2.2	12.6	11.9	2.2	3.4	20.7	0.6
Prop In Lane	0.33		1.00	0.74		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	135	151	0	126	195	2745	1200	56	2469	1090
V/C Ratio(X)	0.18	0.00	0.82	0.20	0.00	0.20	0.86	0.38	0.09	0.78	0.49	0.02
Avail Cap(c_a), veh/h	285	0	232	234	0	215	415	2745	1200	156	2469	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	60.1	57.8	0.0	56.8	58.5	4.2	3.2	64.4	8.6	5.7
Incr Delay (d2), s/veh	0.5	0.0	11.4	0.6	0.0	0.8	10.3	0.4	0.2	20.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	4.5	1.1	0.0	0.9	6.6	5.7	1.0	1.9	10.0	0.2
LnGrp Delay(d), s/veh	57.3	0.0	71.6	58.5	0.0	57.6	68.8	4.6	3.3	84.7	9.3	5.7
LnGrp LOS	E		E	E		E	E	A	A	F	A	A
Approach Vol, veh/h		144			55			1311			1277	
Approach Delay, s/veh		68.3			58.1			12.6			11.8	
Approach LOS		E			E			B			B	

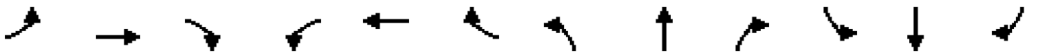
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	110.0		15.7	19.0	99.3		15.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	106.0		20.0	32.0	86.0		20.0
Max Q Clear Time (g_c+I1), s	5.4	13.9		11.4	14.6	22.7		6.1
Green Ext Time (p_c), s	0.0	10.9		0.3	0.4	12.4		0.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		16.0
HCM 2010 LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1340	70	580	1640	310	470
Future Volume (veh/h)	1340	70	580	1640	310	470
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1396	73	604	1708	323	490
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1566	1116	673	3391	488	436
Arrive On Green	0.44	0.44	0.20	0.67	0.28	0.28
Sat Flow, veh/h	3632	1537	3442	5253	1774	1583
Grp Volume(v), veh/h	1396	73	604	1708	323	490
Grp Sat Flow(s),veh/h/ln	1770	1537	1721	1695	1774	1583
Q Serve(g_s), s	50.1	1.9	23.7	23.3	22.3	38.0
Cycle Q Clear(g_c), s	50.1	1.9	23.7	23.3	22.3	38.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1566	1116	673	3391	488	436
V/C Ratio(X)	0.89	0.07	0.90	0.50	0.66	1.12
Avail Cap(c_a), veh/h	1743	1193	797	3830	488	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	5.8	54.2	11.5	44.4	50.0
Incr Delay (d2), s/veh	5.8	0.0	11.7	0.1	6.9	81.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.7	1.6	12.3	10.8	11.9	26.5
LnGrp Delay(d), s/veh	41.2	5.8	65.9	11.7	51.3	131.7
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1469			2312	813	
Approach Delay, s/veh	39.5			25.8	99.8	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		42.0	31.0	65.1				96.1
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		38.0	32.0	68.0				104.0
Max Q Clear Time (g_c+I1), s		40.0	25.7	52.1				25.3
Green Ext Time (p_c), s		0.0	1.3	9.0				23.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	860	480	70	1110	60	10	10	20	580	30	280
Future Volume (vph)	20	860	480	70	1110	60	10	10	20	580	30	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1545	1787	3574	1547		1715		1698	1620	1519
Flt Permitted	0.14	1.00	1.00	0.95	1.00	1.00		0.90		0.95	0.71	1.00
Satd. Flow (perm)	264	3574	1545	1787	3574	1547		1566		1698	1192	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	21	887	495	72	1144	62	10	10	21	598	31	289
RTOR Reduction (vph)	0	0	110	0	0	35	0	16	0	0	2	42
Lane Group Flow (vph)	21	887	385	72	1144	27	0	25	0	329	327	218
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	42.8	42.8	42.8	8.2	55.0	55.0		28.0		29.3	61.3	61.3
Effective Green, g (s)	42.8	42.8	42.8	8.2	55.0	55.0		28.0		29.3	61.3	61.3
Actuated g/C Ratio	0.34	0.34	0.34	0.07	0.44	0.44		0.23		0.24	0.49	0.49
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	90	1230	531	117	1581	684		352		400	688	749
v/s Ratio Prot		0.25		0.04	c0.32					c0.19	0.11	
v/s Ratio Perm	0.08		0.25			0.02		0.02			c0.12	0.14
v/c Ratio	0.23	0.72	0.72	0.62	0.72	0.04		0.07		0.82	0.48	0.29
Uniform Delay, d1	29.1	35.5	35.6	56.5	28.4	19.7		37.9		45.0	20.9	18.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	2.1	4.9	9.3	1.7	0.0		0.1		12.8	0.5	1.0
Delay (s)	30.4	37.7	40.5	65.8	30.1	19.7		38.0		57.8	21.4	19.6
Level of Service	C	D	D	E	C	B		D		E	C	B
Approach Delay (s/veh)		38.5			31.6			38.0			33.9	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	124.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	990	310	250	1280	220	320	710	180	170	500	260
Future Volume (veh/h)	170	990	310	250	1280	220	320	710	180	170	500	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	183	1065	333	269	1376	237	344	763	194	183	538	280
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	207	1156	503	293	1630	281	368	1023	439	207	700	300
Arrive On Green	0.12	0.32	0.32	0.16	0.37	0.37	0.21	0.29	0.29	0.12	0.20	0.20
Sat Flow, veh/h	1792	3574	1554	1792	4388	755	1792	3574	1535	1792	3574	1533
Grp Volume(v), veh/h	183	1065	333	269	1073	540	344	763	194	183	538	280
Grp Sat Flow(s),veh/h/ln	1792	1787	1554	1792	1712	1720	1792	1787	1535	1792	1787	1533
Q Serve(g_s), s	14.4	41.1	26.4	21.2	41.1	41.2	27.0	27.8	14.8	14.4	20.4	25.8
Cycle Q Clear(g_c), s	14.4	41.1	26.4	21.2	41.1	41.2	27.0	27.8	14.8	14.4	20.4	25.8
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	1156	503	293	1272	639	368	1023	439	207	700	300
V/C Ratio(X)	0.89	0.92	0.66	0.92	0.84	0.84	0.93	0.75	0.44	0.89	0.77	0.93
Avail Cap(c_a), veh/h	238	1197	521	325	1314	660	413	1023	439	238	700	300
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.4	46.7	41.7	59.0	41.2	41.2	56.0	46.4	41.8	62.4	54.5	56.7
Incr Delay (d2), s/veh	28.0	11.4	3.0	28.6	5.1	9.6	26.8	5.0	3.2	28.0	7.9	37.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	22.1	11.8	12.8	20.3	21.2	16.1	14.4	6.7	8.8	10.9	14.0
LnGrp Delay(d), s/veh	90.4	58.1	44.7	87.6	46.3	50.8	82.8	51.4	45.0	90.4	62.5	93.9
LnGrp LOS	F	E	D	F	D	D	F	D	D	F	E	F
Approach Vol, veh/h		1581			1882			1301			1001	
Approach Delay, s/veh		59.0			53.5			58.7			76.4	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	45.0	27.4	50.4	33.5	32.1	20.5	57.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	41.0	26.0	48.0	33.0	27.0	19.0	55.0
Max Q Clear Time (g_c+I1), s	16.4	29.8	23.2	43.1	29.0	27.8	16.4	43.2
Green Ext Time (p_c), s	0.1	4.3	0.2	3.2	0.4	0.0	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.2
HCM 2010 LOS	E



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	30	260	820	80	40	700	240	120	100	510	370	10
Future Volume (vph)	30	260	820	80	40	700	240	120	100	510	370	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.97	1.00	0.99			1.00	0.98	0.91	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.95			1.00	0.97	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	3539	1534	1770	4771			1770	3250	1310	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	3539	1534	1770	4771			1770	3250	1310	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	32	277	872	85	43	745	255	128	106	543	394	11
RTOR Reduction (vph)	0	0	0	58	0	10	0	0	0	0	122	0
Lane Group Flow (vph)	0	309	872	27	43	1118	0	0	106	657	169	0
Confl. Peds. (#/hr)		7		7	7		7		2		27	
Confl. Bikes (#/hr)							2				4	
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		23.0	48.2	48.2	5.6	30.8			13.1	31.0	31.0	
Effective Green, g (s)		23.0	48.2	48.2	5.6	30.8			13.1	31.0	31.0	
Actuated g/C Ratio		0.15	0.32	0.32	0.04	0.20			0.09	0.21	0.21	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		269	1131	490	65	974			153	668	269	
v/s Ratio Prot		c0.17	0.25		0.02	c0.23			0.06	c0.20		
v/s Ratio Perm				0.02							0.13	
v/c Ratio		1.15	0.77	0.06	0.66	1.15			0.69	0.98	0.63	
Uniform Delay, d1		63.9	46.3	35.5	71.7	60.0			66.9	59.6	54.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		101.1	3.3	0.0	22.5	78.5			12.7	31.0	10.7	
Delay (s)		165.0	49.6	35.6	94.1	138.5			79.6	90.7	65.4	
Level of Service		F	D	D	F	F			E	F	E	
Approach Delay (s/veh)			76.9			136.9				82.6		
Approach LOS			E			F				F		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	102.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	24.0
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBL2	SBL	SBT	SBR	SWL2	SWL	SWR	SWR2
Lane Configurations								
Traffic Volume (vph)	10	160	350	80	100	240	200	20
Future Volume (vph)	10	160	350	80	100	240	200	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00	0.95	
Frpb, ped/bikes		1.00	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.99	0.85	
Flt Protected		0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (prot)		1770	3539	1567	1770	1760	1504	
Flt Permitted		0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (perm)		1770	3539	1567	1770	1760	1504	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	170	372	85	106	255	213	21
RTOR Reduction (vph)	0	0	0	55	0	0	132	0
Lane Group Flow (vph)	0	181	372	30	106	276	81	0
Confl. Peds. (#/hr)		27		2				
Confl. Bikes (#/hr)								
Turn Type	Prot	Prot	NA	pm+ov	Prot	Prot	Perm	
Protected Phases	1	1	6	7	9	10		
Permitted Phases				6			10	
Actuated Green, G (s)		13.0	30.9	53.9	8.0	21.0	21.0	
Effective Green, g (s)		13.0	30.9	53.9	8.0	21.0	21.0	
Actuated g/C Ratio		0.09	0.20	0.36	0.05	0.14	0.14	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		152	725	601	93	245	209	
v/s Ratio Prot		c0.10	0.11	0.01	c0.06	c0.16		
v/s Ratio Perm				0.01			0.05	
v/c Ratio		1.19	0.51	0.05	1.14	1.13	0.39	
Uniform Delay, d1		68.9	53.3	31.7	71.4	64.9	59.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		133.4	0.6	0.0	135.9	95.8	1.2	
Delay (s)		202.3	53.9	31.7	207.3	160.7	60.3	
Level of Service		F	D	C	F	F	E	
Approach Delay (s/veh)			93.0			133.1		
Approach LOS			F			F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Future Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1015	1827	1541	1158	1827	1541	741	3471	1518	681	3471	1517
Grp Volume(v), veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Grp Sat Flow(s),veh/h/ln	1015	1827	1541	1158	1827	1541	741	1736	1518	681	1736	1517
Q Serve(g_s), s	7.9	6.7	7.2	9.0	18.1	7.2	31.0	9.5	1.4	2.4	7.3	2.6
Cycle Q Clear(g_c), s	25.9	6.7	7.2	15.7	18.1	7.2	38.4	9.5	1.4	11.9	7.3	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
V/C Ratio(X)	0.46	0.28	0.29	0.35	0.68	0.29	0.54	0.28	0.05	0.07	0.22	0.09
Avail Cap(c_a), veh/h	178	461	389	288	461	389	563	2581	1129	511	2581	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	48.3	48.4	54.9	52.8	48.4	11.5	5.9	4.9	7.8	5.6	5.0
Incr Delay (d2), s/veh	2.6	0.4	0.5	0.9	2.9	0.5	3.8	0.3	0.1	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.4	3.1	2.9	9.4	3.1	6.9	4.6	0.6	0.5	3.5	1.2
LnGrp Delay(d), s/veh	67.4	48.7	49.0	55.9	55.7	49.0	15.3	6.2	5.0	8.1	5.8	5.2
LnGrp LOS	E	D	D	E	E	D	B	A	A	A	A	A
Approach Vol, veh/h		250			421			1080			716	
Approach Delay, s/veh		53.1			54.3			8.7			5.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		110.0		32.5		110.0		32.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		106.0		36.0		106.0		36.0
Max Q Clear Time (g_c+I1), s		40.4		27.9		13.9		20.1
Green Ext Time (p_c), s		9.5		0.6		4.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Future Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	66	55	99	44	143	44	187	912	22	66	890	121
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	20	333	30	79	333	391	2523	1081	415	2523	1104
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	90	1468	0	349	1467	550	3505	1502	591	3505	1533
Grp Volume(v), veh/h	121	0	99	187	0	44	187	912	22	66	890	121
Grp Sat Flow(s),veh/h/ln	90	0	1468	349	0	1467	550	1752	1502	591	1752	1533
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	3.6	29.0	14.8	0.6	7.1	14.3	3.6
Cycle Q Clear(g_c), s	34.0	0.0	8.4	34.0	0.0	3.6	43.3	14.8	0.6	21.9	14.3	3.6
Prop In Lane	0.55		1.00	0.24		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
V/C Ratio(X)	2.10	0.00	0.30	1.72	0.00	0.13	0.48	0.36	0.02	0.16	0.35	0.11
Avail Cap(c_a), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	0.0	48.1	52.6	0.0	46.2	16.0	7.9	6.0	12.1	7.9	6.4
Incr Delay (d2), s/veh	549.3	0.0	0.5	359.4	0.0	0.2	4.1	0.4	0.0	0.8	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	3.5	15.4	0.0	1.5	4.8	7.2	0.3	1.2	6.9	1.6
LnGrp Delay(d), s/veh	612.5	0.0	48.6	412.1	0.0	46.4	20.1	8.4	6.0	12.9	8.3	6.6
LnGrp LOS	F		D	F		D	C	A	A	B	A	A
Approach Vol, veh/h		220			231			1121			1077	
Approach Delay, s/veh		358.7			342.4			10.3			8.4	
Approach LOS		F			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		45.3		36.0		23.9		36.0
Green Ext Time (p_c), s		11.9		0.0		9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.4
HCM 2010 LOS	E

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	110	55	4	110	55	4
Future Volume (veh/h)	110	55	4	110	55	4
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	120	60	4	120	60	4
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1623	1379	1109	1623	81	73
Arrive On Green	0.87	0.87	0.87	0.87	0.05	0.05
Sat Flow, veh/h	1863	1583	1199	1863	1774	1583
Grp Volume(v), veh/h	120	60	4	120	60	4
Grp Sat Flow(s),veh/h/ln	1863	1583	1199	1863	1774	1583
Q Serve(g_s), s	0.9	0.5	0.0	0.9	3.2	0.2
Cycle Q Clear(g_c), s	0.9	0.5	0.9	0.9	3.2	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1623	1379	1109	1623	81	73
V/C Ratio(X)	0.07	0.04	0.00	0.07	0.74	0.06
Avail Cap(c_a), veh/h	1623	1379	1109	1623	1067	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.9	0.8	0.9	0.9	45.4	44.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	12.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.0	0.5	1.9	0.1
LnGrp Delay(d), s/veh	0.9	0.9	0.9	0.9	57.6	44.3
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h	180			124	64	
Approach Delay, s/veh	0.9			0.9	56.8	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		88.0		8.4		88.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		84.0		58.0		84.0		
Max Q Clear Time (g_c+I1), s		2.9		5.2		2.9		
Green Ext Time (p_c), s		0.8		0.2		0.9		

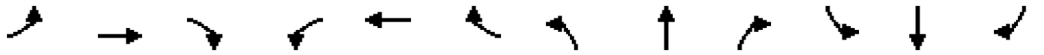
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.6
HCM 2010 LOS	B

Norwalk - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1210	380	20	1450	380	390	540	0	370	710	10
Future Volume (vph)	0	1210	380	20	1450	380	390	540	0	370	710	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)		4885		1770	5085	1551	1522	4751		1522	4775	1560
Flt Permitted		1.00		0.08	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)		4885		143	5085	1551	1522	4751		1522	4775	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1344	422	22	1611	422	433	600	0	411	789	11
RTOR Reduction (vph)	0	38	0	0	0	79	0	0	0	0	0	9
Lane Group Flow (vph)	0	1728	0	22	1611	343	251	782	0	292	908	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Effective Green, g (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Actuated g/C Ratio		0.57		0.57	0.57	0.57	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2800		81	2915	889	294	918		233	732	239
v/s Ratio Prot		c0.35			0.32		c0.16	0.16		c0.19	0.19	
v/s Ratio Perm				0.15		0.22						0.00
v/c Ratio		0.62		0.27	0.55	0.39	0.85	0.85		1.25	1.24	0.01
Uniform Delay, d1		21.1		16.2	20.0	17.5	58.5	58.4		63.5	63.5	53.8
Progression Factor		0.88		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		1.8	0.2	0.3	25.7	9.8		144.2	119.7	0.1
Delay (s)		18.6		18.0	20.2	17.8	84.2	68.3		207.7	183.2	53.9
Level of Service		B		B	C	B	F	E		F	F	D
Approach Delay (s/veh)		18.6			19.7			72.1			187.9	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Future Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.88	0.97		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
Arrive On Green	0.04	0.48	0.48	0.06	0.50	0.50	0.09	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1757	3505	1522	1757	3505	1544	3408	3505	1382	1757	3505	1379
Grp Volume(v), veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1522	1757	1752	1544	1704	1752	1382	1757	1752	1379
Q Serve(g_s), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Cycle Q Clear(g_c), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
V/C Ratio(X)	0.45	0.86	0.37	0.81	0.83	0.11	0.81	0.39	0.33	0.31	0.52	0.31
Avail Cap(c_a), veh/h	213	1997	867	309	2216	976	399	985	388	342	875	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	29.6	21.3	28.0	27.1	16.7	57.5	37.2	36.5	33.1	41.4	39.1
Incr Delay (d2), s/veh	1.9	3.4	0.3	8.6	2.3	0.1	8.5	1.2	2.3	0.6	2.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	23.0	6.1	3.3	22.7	1.6	4.5	5.7	3.9	2.6	7.2	3.4
LnGrp Delay(d), s/veh	27.1	33.0	21.6	36.6	29.5	16.7	65.9	38.4	38.8	33.6	43.6	41.5
LnGrp LOS	C	C	C	D	C	B	E	D	D	C	D	D
Approach Vol, veh/h		1774			1720			753			657	
Approach Delay, s/veh		31.0			29.5			47.1			41.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	40.0	12.0	65.1	15.0	36.0	8.5	68.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	36.0	16.0	73.0	15.0	30.0	8.0	81.0
Max Q Clear Time (g_c+I1), s	7.2	13.4	7.8	48.2	10.7	16.2	4.8	48.0
Green Ext Time (p_c), s	0.0	2.8	0.2	12.9	0.3	2.7	0.0	14.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1080	100	170	1290	80	70	590	120	100	510	280
Future Volume (veh/h)	310	1080	100	170	1290	80	70	590	120	100	510	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	320	1113	103	175	1330	82	72	608	124	103	526	289
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	2077	633	204	1651	509	92	1076	477	153	1050	465
Arrive On Green	0.20	0.41	0.41	0.12	0.32	0.32	0.05	0.30	0.30	0.04	0.30	0.30
Sat Flow, veh/h	1774	5085	1551	1774	5085	1567	1774	3539	1569	3442	3539	1569
Grp Volume(v), veh/h	320	1113	103	175	1330	82	72	608	124	103	526	289
Grp Sat Flow(s),veh/h/ln	1774	1695	1551	1774	1695	1567	1774	1770	1569	1721	1770	1569
Q Serve(g_s), s	22.0	20.7	5.3	12.1	29.9	4.7	5.0	18.0	7.5	3.7	15.3	19.9
Cycle Q Clear(g_c), s	22.0	20.7	5.3	12.1	29.9	4.7	5.0	18.0	7.5	3.7	15.3	19.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	353	2077	633	204	1651	509	92	1076	477	153	1050	465
V/C Ratio(X)	0.91	0.54	0.16	0.86	0.81	0.16	0.78	0.57	0.26	0.67	0.50	0.62
Avail Cap(c_a), veh/h	553	2603	794	341	1993	614	170	1076	477	220	1050	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	28.0	23.4	54.3	38.6	30.1	58.6	36.6	32.9	58.8	36.3	37.9
Incr Delay (d2), s/veh	12.9	0.2	0.1	10.8	2.1	0.1	13.4	2.2	1.3	5.0	1.7	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	9.7	2.3	6.5	14.4	2.0	2.8	9.1	3.4	1.9	7.8	9.4
LnGrp Delay(d), s/veh	61.9	28.2	23.5	65.1	40.7	30.2	72.0	38.7	34.2	63.8	38.0	44.0
LnGrp LOS	E	C	C	E	D	C	E	D	C	E	D	D
Approach Vol, veh/h		1536			1587			804			918	
Approach Delay, s/veh		34.9			42.9			41.0			42.8	
Approach LOS		C			D			D			D	

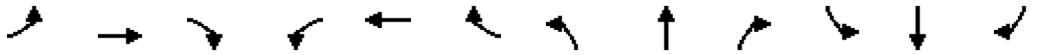
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	42.0	18.4	55.1	10.5	41.1	28.9	44.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	38.0	24.0	64.0	12.0	34.0	39.0	49.0
Max Q Clear Time (g_c+I1), s	5.7	20.0	14.1	22.7	7.0	21.9	24.0	31.9
Green Ext Time (p_c), s	0.1	4.0	0.3	9.9	0.0	3.5	0.8	8.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Future Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	105	1305	211	105	1189	105	179	526	95	147	758	242
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	129	1595	487	129	1490	132	207	1325	583	174	1259	676
Arrive On Green	0.07	0.32	0.32	0.07	0.32	0.32	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	1740	4988	1524	1740	4659	411	1740	3471	1527	1740	3471	1548
Grp Volume(v), veh/h	105	1305	211	105	848	446	179	526	95	147	758	242
Grp Sat Flow(s),veh/h/ln	1740	1663	1524	1740	1663	1745	1740	1736	1527	1740	1736	1548
Q Serve(g_s), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Cycle Q Clear(g_c), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	1595	487	129	1063	558	207	1325	583	174	1259	676
V/C Ratio(X)	0.81	0.82	0.43	0.81	0.80	0.80	0.87	0.40	0.16	0.85	0.60	0.36
Avail Cap(c_a), veh/h	217	1865	570	217	1243	653	339	1325	583	285	1259	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	40.2	34.5	58.6	39.9	39.9	55.5	28.9	26.2	56.8	33.3	24.1
Incr Delay (d2), s/veh	11.6	2.6	0.6	11.6	3.2	6.0	12.2	0.9	0.6	11.8	2.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	14.6	6.0	4.1	14.1	15.4	6.9	7.0	2.3	5.7	11.3	6.0
LnGrp Delay(d), s/veh	70.2	42.8	35.1	70.2	43.1	45.9	67.7	29.8	26.8	68.6	35.5	25.6
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	D	C
Approach Vol, veh/h		1621			1399			800			1147	
Approach Delay, s/veh		43.6			46.0			37.9			37.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	53.0	13.5	45.0	19.3	50.6	13.5	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	16.0	48.0	25.0	45.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	12.7	16.2	9.6	32.9	15.0	24.9	9.6	31.9
Green Ext Time (p_c), s	0.2	3.8	0.1	8.1	0.3	5.6	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Future Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
Arrive On Green	0.07	0.44	0.44	0.06	0.44	0.44	0.09	0.31	0.31	0.07	0.28	0.28
Sat Flow, veh/h	1740	3471	1524	1740	3471	1526	1740	3471	1547	1740	3471	1527
Grp Volume(v), veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Grp Sat Flow(s),veh/h/ln	1740	1736	1524	1740	1736	1526	1740	1736	1547	1740	1736	1527
Q Serve(g_s), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Cycle Q Clear(g_c), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
V/C Ratio(X)	0.70	0.91	0.22	0.86	0.76	0.07	0.76	0.53	0.29	0.46	0.79	0.39
Avail Cap(c_a), veh/h	308	1636	718	234	1587	698	294	1066	475	325	987	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	36.4	23.9	31.8	33.0	22.6	34.6	40.2	36.8	32.8	46.3	40.4
Incr Delay (d2), s/veh	5.1	8.0	0.2	21.8	2.2	0.0	9.4	1.9	1.5	1.1	6.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	27.1	3.6	4.4	19.5	1.0	5.8	9.4	4.2	3.8	14.9	5.6
LnGrp Delay(d), s/veh	32.9	44.3	24.1	53.6	35.2	22.6	44.0	42.1	38.4	33.9	52.9	43.0
LnGrp LOS	C	D	C	D	D	C	D	D	D	C	D	D
Approach Vol, veh/h		1727			1374			897			1090	
Approach Delay, s/veh		41.5			37.0			41.9			49.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	47.0	13.1	66.2	16.9	43.8	13.6	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	43.0	13.0	66.0	16.0	39.0	15.0	64.0
Max Q Clear Time (g_c+I1), s	9.7	21.0	9.0	55.1	12.7	31.2	9.4	41.8
Green Ext Time (p_c), s	0.1	4.1	0.1	7.1	0.2	3.3	0.2	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1070	560	680	1510	70	680	840	430	100	1130	150
Future Volume (veh/h)	160	1070	560	680	1510	70	680	840	430	100	1130	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	168	1126	589	716	1589	74	716	884	453	105	1189	158
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	176	940	281	445	1712	519	445	1337	981	126	1007	303
Arrive On Green	0.10	0.19	0.19	0.25	0.34	0.34	0.25	0.38	0.38	0.07	0.20	0.20
Sat Flow, veh/h	1757	5036	1506	1757	5036	1525	1757	3505	1532	1757	5036	1515
Grp Volume(v), veh/h	168	1126	589	716	1589	74	716	884	453	105	1189	158
Grp Sat Flow(s),veh/h/ln	1757	1679	1506	1757	1679	1525	1757	1752	1532	1757	1679	1515
Q Serve(g_s), s	14.3	28.0	28.0	38.0	45.6	5.0	38.0	31.3	23.0	8.8	30.0	14.0
Cycle Q Clear(g_c), s	14.3	28.0	28.0	38.0	45.6	5.0	38.0	31.3	23.0	8.8	30.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	176	940	281	445	1712	519	445	1337	981	126	1007	303
V/C Ratio(X)	0.96	1.20	2.10	1.61	0.93	0.14	1.61	0.66	0.46	0.83	1.18	0.52
Avail Cap(c_a), veh/h	176	940	281	445	1712	519	445	1337	981	187	1007	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.2	61.0	61.0	56.0	47.7	34.3	56.0	38.4	14.2	68.7	60.0	53.6
Incr Delay (d2), s/veh	55.0	99.4	505.1	284.2	9.3	0.1	284.2	2.6	1.6	17.6	91.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	21.6	51.1	53.6	22.7	2.1	53.6	15.6	10.1	4.9	22.4	6.4
LnGrp Delay(d), s/veh	122.2	160.4	566.1	340.2	57.1	34.5	340.2	41.0	15.8	86.3	151.6	59.9
LnGrp LOS	F	F	F	F	E	C	F	D	B	F	F	E
Approach Vol, veh/h		1883			2379			2053			1452	
Approach Delay, s/veh		283.9			141.6			139.8			136.9	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	61.2	42.0	32.0	42.0	34.0	19.0	55.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	52.0	38.0	28.0	38.0	30.0	15.0	51.0
Max Q Clear Time (g_c+I1), s	10.8	33.3	40.0	30.0	40.0	32.0	16.3	47.6
Green Ext Time (p_c), s	0.1	7.7	0.0	0.0	0.0	0.0	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	174.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Future Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
Arrive On Green	0.12	0.31	0.31	0.04	0.23	0.23	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1757	5036	1541	1757	5036	1538	613	3505	1547	725	3505	1546
Grp Volume(v), veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Grp Sat Flow(s),veh/h/ln	1757	1679	1541	1757	1679	1538	613	1752	1547	725	1752	1546
Q Serve(g_s), s	12.2	26.2	6.2	3.7	17.9	4.0	13.7	12.2	2.7	12.7	11.8	11.8
Cycle Q Clear(g_c), s	12.2	26.2	6.2	3.7	17.9	4.0	25.5	12.2	2.7	25.0	11.8	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
V/C Ratio(X)	0.85	0.77	0.22	0.78	0.70	0.18	0.31	0.33	0.09	0.30	0.32	0.32
Avail Cap(c_a), veh/h	444	2383	729	172	1602	489	340	1944	858	389	1944	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	38.4	31.5	58.4	43.4	38.1	21.7	14.9	12.8	21.7	14.8	14.8
Incr Delay (d2), s/veh	9.5	0.8	0.2	16.9	0.8	0.2	2.3	0.5	0.2	2.0	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	12.2	2.7	2.1	8.4	1.7	2.5	6.0	1.2	2.8	5.8	5.2
LnGrp Delay(d), s/veh	62.5	39.2	31.7	75.3	44.2	38.3	24.0	15.3	13.0	23.6	15.2	15.7
LnGrp LOS	E	D	C	E	D	D	C	B	B	C	B	B
Approach Vol, veh/h		1473			916			821			1011	
Approach Delay, s/veh		41.5			45.6			16.2			16.3	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		72.0	8.8	41.8		72.0	18.6	32.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	12.0	58.0		68.0	31.0	39.0
Max Q Clear Time (g_c+I1), s		27.5	5.7	28.2		27.0	14.2	19.9
Green Ext Time (p_c), s		6.0	0.0	9.6		6.6	0.4	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Future Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
Arrive On Green	0.07	0.44	0.44	0.08	0.45	0.45	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1757	3505	1547	1757	3505	1547	686	3505	1545	584	3505	1544
Grp Volume(v), veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Grp Sat Flow(s),veh/h/ln	1757	1752	1547	1757	1752	1547	686	1752	1545	584	1752	1544
Q Serve(g_s), s	7.4	49.5	4.5	9.0	31.4	2.2	18.7	21.0	15.8	17.8	18.6	8.2
Cycle Q Clear(g_c), s	7.4	49.5	4.5	9.0	31.4	2.2	37.3	21.0	15.8	38.8	18.6	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
V/C Ratio(X)	0.81	0.89	0.12	0.83	0.65	0.06	0.46	0.51	0.40	0.44	0.46	0.23
Avail Cap(c_a), veh/h	191	1757	775	191	1757	776	228	1375	606	192	1375	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	35.4	22.8	62.4	29.2	21.2	44.9	31.8	30.2	46.5	31.1	27.9
Incr Delay (d2), s/veh	12.5	5.5	0.1	19.9	0.7	0.0	6.6	1.4	2.0	7.2	1.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	25.0	1.9	5.2	15.4	0.9	4.0	10.4	7.1	3.3	9.3	3.7
LnGrp Delay(d), s/veh	75.9	40.9	22.9	82.3	29.9	21.2	51.6	33.1	32.2	53.7	32.2	28.8
LnGrp LOS	E	D	C	F	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1553			1192			1053			861	
Approach Delay, s/veh		42.0			34.7			34.8			33.8	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	15.0	64.7		58.0	13.3	66.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	15.0	69.0		54.0	15.0	69.0
Max Q Clear Time (g_c+I1), s		39.3	11.0	51.5		40.8	9.4	33.4
Green Ext Time (p_c), s		5.3	0.1	9.1		4.3	0.1	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Future Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	985	1845	1546	1005	1845	1566	669	3505	1529	604	3505	1530
Grp Volume(v), veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Grp Sat Flow(s),veh/h/ln	985	1845	1546	1005	1845	1566	669	1752	1529	604	1752	1530
Q Serve(g_s), s	11.5	20.1	2.8	11.1	20.9	3.5	16.8	13.7	2.7	11.4	11.4	2.7
Cycle Q Clear(g_c), s	32.4	20.1	2.8	31.2	20.9	3.5	28.2	13.7	2.7	25.2	11.4	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
V/C Ratio(X)	0.52	0.63	0.10	0.49	0.65	0.13	0.35	0.35	0.09	0.25	0.31	0.09
Avail Cap(c_a), veh/h	300	751	630	311	751	638	441	2326	1015	392	2326	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	42.0	35.8	55.7	42.3	36.0	15.4	9.8	8.0	15.3	9.4	8.0
Incr Delay (d2), s/veh	2.4	1.3	0.1	2.1	1.4	0.1	2.2	0.4	0.2	1.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	10.4	1.2	3.2	10.8	1.5	3.3	6.8	1.2	2.1	5.6	1.2
LnGrp Delay(d), s/veh	59.0	43.3	35.9	57.7	43.7	36.1	17.6	10.2	8.1	16.9	9.8	8.1
LnGrp LOS	E	D	D	E	D	D	B	B	A	B	A	A
Approach Vol, veh/h		451			473			1066			901	
Approach Delay, s/veh		45.6			45.4			11.1			10.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		40.6		92.0		40.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		54.0		88.0		54.0
Max Q Clear Time (g_c+I1), s		30.2		34.4		27.2		33.2
Green Ext Time (p_c), s		8.7		2.2		6.9		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1140	90	230	1310	100	120	560	440	160	680	180
Future Volume (veh/h)	90	1140	90	230	1310	100	120	560	440	160	680	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	101	1281	101	258	1472	112	135	629	494	180	764	202
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	1433	424	282	1786	136	159	1141	498	203	1230	544
Arrive On Green	0.07	0.28	0.28	0.16	0.38	0.38	0.09	0.33	0.33	0.12	0.35	0.35
Sat Flow, veh/h	1757	5036	1490	1757	4757	362	1757	3505	1530	1757	3505	1551
Grp Volume(v), veh/h	101	1281	101	258	1039	545	135	629	494	180	764	202
Grp Sat Flow(s),veh/h/ln	1757	1679	1490	1757	1679	1762	1757	1752	1530	1757	1752	1551
Q Serve(g_s), s	8.0	34.5	7.4	20.4	39.5	39.5	10.7	20.8	45.4	14.3	25.6	13.7
Cycle Q Clear(g_c), s	8.0	34.5	7.4	20.4	39.5	39.5	10.7	20.8	45.4	14.3	25.6	13.7
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	123	1433	424	282	1261	662	159	1141	498	203	1230	544
V/C Ratio(X)	0.82	0.89	0.24	0.91	0.82	0.82	0.85	0.55	0.99	0.88	0.62	0.37
Avail Cap(c_a), veh/h	149	1497	443	336	1355	711	224	1141	498	236	1230	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	48.5	38.8	58.3	39.9	39.9	63.3	39.2	47.4	61.5	38.0	34.2
Incr Delay (d2), s/veh	25.6	7.1	0.3	25.8	4.0	7.4	19.0	1.9	38.4	27.7	2.4	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	17.0	3.1	11.9	19.0	20.6	6.0	10.4	24.4	8.5	12.7	6.2
LnGrp Delay(d), s/veh	90.4	55.6	39.1	84.1	43.9	47.3	82.3	41.1	85.8	89.2	40.4	36.1
LnGrp LOS	F	E	D	F	D	D	F	D	F	F	D	D
Approach Vol, veh/h		1483			1842			1258			1146	
Approach Delay, s/veh		56.9			50.5			63.1			47.3	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	50.0	26.7	44.2	16.8	53.6	13.9	57.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	27.0	42.0	18.0	47.0	12.0	57.0
Max Q Clear Time (g_c+I1), s	16.3	47.4	22.4	36.5	12.7	27.6	10.0	41.5
Green Ext Time (p_c), s	0.1	0.0	0.3	3.7	0.1	5.4	0.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1580	160	40	1460	10	210	10	120	0	0	10
Future Volume (veh/h)	0	1580	160	40	1460	10	210	10	120	0	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	0	1756	178	44	1622	11	233	11	133	0	0	11
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	56	2233	225	136	2773	19	590	47	571	0	0	604
Arrive On Green	0.00	0.49	0.49	0.02	0.54	0.54	0.40	0.40	0.40	0.00	0.00	0.40
Sat Flow, veh/h	301	4584	463	1740	5110	35	1366	120	1446	0	0	1528
Grp Volume(v), veh/h	0	1272	662	44	1055	578	233	0	144	0	0	11
Grp Sat Flow(s),veh/h/ln	301	1663	1721	1740	1663	1819	1366	0	1565	0	0	1528
Q Serve(g_s), s	0.0	41.0	41.4	1.6	27.4	27.4	16.2	0.0	7.9	0.0	0.0	0.6
Cycle Q Clear(g_c), s	0.0	41.0	41.4	1.6	27.4	27.4	16.7	0.0	7.9	0.0	0.0	0.6
Prop In Lane	1.00		0.27	1.00		0.02	1.00		0.92	0.00		1.00
Lane Grp Cap(c), veh/h	56	1620	838	136	1805	988	590	0	619	0	0	604
V/C Ratio(X)	0.00	0.79	0.79	0.32	0.58	0.58	0.40	0.00	0.23	0.00	0.00	0.02
Avail Cap(c_a), veh/h	98	2087	1080	174	2345	1283	590	0	619	0	0	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.5	27.6	23.9	19.8	19.8	28.9	0.0	26.0	0.0	0.0	23.8
Incr Delay (d2), s/veh	0.0	1.5	3.1	1.4	0.3	0.6	2.0	0.0	0.9	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	19.1	20.2	0.8	12.5	13.8	6.4	0.0	3.6	0.0	0.0	0.2
LnGrp Delay(d), s/veh	0.0	29.0	30.7	25.2	20.1	20.3	30.8	0.0	26.9	0.0	0.0	23.8
LnGrp LOS		C	C	C	C	C	C		C			C
Approach Vol, veh/h		1934			1677			377			11	
Approach Delay, s/veh		29.6			20.3			29.3			23.8	
Approach LOS		C			C			C			C	

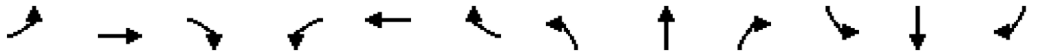
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		55.0	7.2	66.9		55.0		74.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		51.0	6.0	81.0		51.0		91.0
Max Q Clear Time (g_c+I1), s		18.7	3.6	43.4		2.6		29.4
Green Ext Time (p_c), s		1.7	0.0	19.5		0.0		16.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Future Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	1430	204	54	903	54	118	398	86	65	516	161
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1898	838	119	1898	837	250	1442	636	352	1080	335
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	584	3539	1562	306	3539	1561	759	3539	1560	907	2649	822
Grp Volume(v), veh/h	65	1430	204	54	903	54	118	398	86	65	344	333
Grp Sat Flow(s),veh/h/ln	584	1770	1562	306	1770	1561	759	1770	1560	907	1770	1702
Q Serve(g_s), s	11.1	44.7	9.9	23.7	22.6	2.4	19.3	10.7	4.9	7.3	20.3	20.5
Cycle Q Clear(g_c), s	33.7	44.7	9.9	68.5	22.6	2.4	39.8	10.7	4.9	18.0	20.3	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	271	1898	838	119	1898	837	250	1442	636	352	721	694
V/C Ratio(X)	0.24	0.75	0.24	0.46	0.48	0.06	0.47	0.28	0.14	0.18	0.48	0.48
Avail Cap(c_a), veh/h	303	2089	922	135	2089	921	250	1442	636	352	721	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	25.7	17.6	52.3	20.5	15.9	45.7	28.1	26.4	34.2	31.0	31.1
Incr Delay (d2), s/veh	0.5	1.4	0.1	2.7	0.2	0.0	6.2	0.5	0.4	1.2	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.2	4.3	2.1	11.1	1.0	4.5	5.3	2.2	2.0	10.4	10.1
LnGrp Delay(d), s/veh	31.5	27.1	17.8	55.0	20.7	15.9	52.0	28.6	26.9	35.3	33.3	33.4
LnGrp LOS	C	C	B	E	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1699			1011			602			742	
Approach Delay, s/veh		26.2			22.3			32.9			33.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		80.3		62.0		80.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		41.8		46.7		22.5		70.5
Green Ext Time (p_c), s		3.2		15.6		4.8		5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1450	120	40	1210	150	160	60	30	230	50	90
Future Volume (veh/h)	120	1450	120	40	1210	150	160	60	30	230	50	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	125	1510	125	42	1260	156	167	62	31	240	52	94
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	156	2067	171	53	1711	212	530	457	380	567	514	429
Arrive On Green	0.09	0.44	0.44	0.03	0.38	0.38	0.09	0.25	0.25	0.12	0.28	0.28
Sat Flow, veh/h	1740	4687	388	1740	4479	555	1740	1827	1520	1740	1827	1522
Grp Volume(v), veh/h	125	1071	564	42	935	481	167	62	31	240	52	94
Grp Sat Flow(s),veh/h/ln	1740	1663	1750	1740	1663	1709	1740	1827	1520	1740	1827	1522
Q Serve(g_s), s	7.3	27.3	27.4	2.5	24.9	24.9	7.2	2.7	1.6	10.1	2.2	4.9
Cycle Q Clear(g_c), s	7.3	27.3	27.4	2.5	24.9	24.9	7.2	2.7	1.6	10.1	2.2	4.9
Prop In Lane	1.00		0.22	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	1467	772	53	1270	653	530	457	380	567	514	429
V/C Ratio(X)	0.80	0.73	0.73	0.79	0.74	0.74	0.31	0.14	0.08	0.42	0.10	0.22
Avail Cap(c_a), veh/h	389	2422	1275	186	2034	1045	692	457	380	792	514	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	23.7	23.7	49.6	27.4	27.4	24.7	30.0	29.6	22.7	27.4	28.3
Incr Delay (d2), s/veh	9.2	0.7	1.4	22.4	0.8	1.6	0.3	0.6	0.4	0.5	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	12.6	13.5	1.5	11.6	12.0	3.5	1.4	0.7	4.9	1.2	2.2
LnGrp Delay(d), s/veh	55.1	24.4	25.1	72.0	28.2	29.0	25.0	30.6	30.0	23.2	27.7	29.5
LnGrp LOS	E	C	C	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1760			1458			260			386	
Approach Delay, s/veh		26.8			29.7			27.0			25.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	29.7	7.1	49.4	13.4	33.0	13.2	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	22.0	11.0	75.0	19.0	29.0	23.0	63.0
Max Q Clear Time (g_c+I1), s	12.1	4.7	4.5	29.4	9.2	6.9	9.3	26.9
Green Ext Time (p_c), s	0.5	0.3	0.0	16.0	0.3	0.5	0.2	12.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	540	1100	120	60	900	40	130	60	40	10	40	320
Future Volume (veh/h)	540	1100	120	60	900	40	130	60	40	10	40	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	557	1134	124	62	928	41	134	62	41	10	41	330
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	677	1911	209	80	1300	57	465	746	632	563	746	1112
Arrive On Green	0.20	0.42	0.42	0.05	0.27	0.27	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	3375	4550	497	1740	4896	216	986	1827	1547	1258	1827	2723
Grp Volume(v), veh/h	557	828	430	62	630	339	134	62	41	10	41	330
Grp Sat Flow(s),veh/h/ln	1688	1663	1722	1740	1663	1787	986	1827	1547	1258	1827	1362
Q Serve(g_s), s	15.1	18.4	18.4	3.4	16.4	16.4	9.1	2.0	1.5	0.5	1.3	7.8
Cycle Q Clear(g_c), s	15.1	18.4	18.4	3.4	16.4	16.4	10.4	2.0	1.5	2.5	1.3	7.8
Prop In Lane	1.00		0.29	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	677	1396	723	80	883	475	465	746	632	563	746	1112
V/C Ratio(X)	0.82	0.59	0.59	0.77	0.71	0.72	0.29	0.08	0.06	0.02	0.05	0.30
Avail Cap(c_a), veh/h	1697	2820	1461	328	1776	955	465	746	632	563	746	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	21.4	21.4	45.1	31.8	31.8	20.2	17.3	17.2	18.1	17.1	19.0
Incr Delay (d2), s/veh	2.6	0.4	0.8	14.6	1.1	2.0	1.6	0.2	0.2	0.1	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	8.5	8.9	1.9	7.7	8.4	2.7	1.0	0.7	0.2	0.7	3.0
LnGrp Delay(d), s/veh	39.1	21.8	22.2	59.6	32.9	33.8	21.8	17.5	17.4	18.1	17.2	19.7
LnGrp LOS	D	C	C	E	C	C	C	B	B	B	B	B
Approach Vol, veh/h		1815			1031			237			381	
Approach Delay, s/veh		27.2			34.8			19.9			19.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	8.4	44.1		43.0	23.1	29.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		39.0	18.0	81.0		39.0	48.0	51.0
Max Q Clear Time (g_c+I1), s		12.4	5.4	20.4		9.8	17.1	18.4
Green Ext Time (p_c), s		1.1	0.1	11.0		1.6	2.1	6.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Future Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	198	760	125	219	594	115	188	854	250	188	1010	135
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	1206	534	249	1248	545	217	1048	305	217	1219	162
Arrive On Green	0.13	0.34	0.34	0.14	0.35	0.35	0.12	0.27	0.27	0.12	0.27	0.27
Sat Flow, veh/h	1774	3539	1567	1774	3539	1548	1774	3879	1128	1774	4510	601
Grp Volume(v), veh/h	198	760	125	219	594	115	188	746	358	188	759	386
Grp Sat Flow(s),veh/h/ln	1774	1770	1567	1774	1770	1548	1774	1695	1616	1774	1695	1721
Q Serve(g_s), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Cycle Q Clear(g_c), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.70	1.00		0.35
Lane Grp Cap(c), veh/h	228	1206	534	249	1248	545	217	916	437	217	916	465
V/C Ratio(X)	0.87	0.63	0.23	0.88	0.48	0.21	0.87	0.81	0.82	0.87	0.83	0.83
Avail Cap(c_a), veh/h	379	1206	534	379	1248	545	337	1074	512	337	1074	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	34.9	29.8	53.2	31.8	28.6	54.4	43.1	43.2	54.4	43.3	43.3
Incr Delay (d2), s/veh	11.1	2.5	1.0	14.2	1.3	0.9	13.5	4.3	9.0	13.5	4.8	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	11.5	3.3	8.5	8.3	2.9	7.2	12.7	12.8	7.2	13.0	13.9
LnGrp Delay(d), s/veh	65.1	37.4	30.8	67.5	33.1	29.5	67.9	47.3	52.1	67.9	48.1	52.6
LnGrp LOS	E	D	C	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1083			928			1292			1333	
Approach Delay, s/veh		41.7			40.8			51.7			52.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	47.0	19.4	38.1	20.2	48.5	19.4	38.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	43.0	24.0	40.0	27.0	43.0	24.0	40.0
Max Q Clear Time (g_c+I1), s	17.3	24.8	15.1	28.2	15.8	18.5	15.1	28.7
Green Ext Time (p_c), s	0.4	5.3	0.3	5.4	0.4	4.5	0.3	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Future Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
Arrive On Green	0.13	0.40	0.40	0.10	0.37	0.37	0.05	0.34	0.34	0.05	0.33	0.33
Sat Flow, veh/h	1774	3539	1552	1774	3539	1572	1774	3539	1549	1774	3539	1529
Grp Volume(v), veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1572	1774	1770	1549	1774	1770	1529
Q Serve(g_s), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Cycle Q Clear(g_c), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
V/C Ratio(X)	0.88	0.87	0.22	0.85	0.49	0.07	0.39	0.70	0.44	0.45	0.57	0.25
Avail Cap(c_a), veh/h	344	1635	717	251	1451	644	306	1187	520	229	1172	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	37.1	26.4	59.7	32.6	27.4	29.0	38.8	34.8	30.6	37.0	32.7
Incr Delay (d2), s/veh	15.1	5.1	0.2	16.5	0.3	0.1	0.9	3.5	2.7	1.5	2.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	22.2	3.3	6.1	9.3	1.0	2.6	14.0	7.0	2.4	10.5	3.5
LnGrp Delay(d), s/veh	72.7	42.2	26.6	76.2	32.9	27.4	29.9	42.2	37.5	32.1	39.0	33.9
LnGrp LOS	E	D	C	E	C	C	C	D	D	C	D	C
Approach Vol, veh/h		1573			834			1166			886	
Approach Delay, s/veh		44.7			40.2			40.2			37.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	17.0	57.7	11.1	48.4	21.1	53.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	19.0	62.0	10.0	43.0	26.0	55.0
Max Q Clear Time (g_c+I1), s	6.7	29.5	12.9	45.4	7.2	22.8	16.7	20.9
Green Ext Time (p_c), s	0.0	5.8	0.2	8.3	0.1	4.8	0.3	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Future Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	957	3539	1562	852	3539	1562	699	3539	1560	371	3539	1558
Grp Volume(v), veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Grp Sat Flow(s),veh/h/ln	957	1770	1562	852	1770	1562	699	1770	1560	371	1770	1558
Q Serve(g_s), s	10.8	15.2	1.8	36.6	9.0	5.8	5.2	28.0	19.4	42.5	15.6	3.2
Cycle Q Clear(g_c), s	19.9	15.2	1.8	51.8	9.0	5.8	20.8	28.0	19.4	70.4	15.6	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
V/C Ratio(X)	0.26	0.38	0.05	0.76	0.24	0.16	0.12	0.55	0.42	0.64	0.35	0.09
Avail Cap(c_a), veh/h	402	1522	672	326	1522	672	363	1964	866	184	1964	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	31.5	27.4	50.0	29.6	28.6	23.5	20.5	18.6	43.0	17.7	15.0
Incr Delay (d2), s/veh	0.4	0.2	0.0	9.2	0.1	0.1	0.7	1.1	1.5	15.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.5	0.8	9.4	4.5	2.5	1.1	13.9	8.7	5.2	7.7	1.4
LnGrp Delay(d), s/veh	36.7	31.7	27.5	59.3	29.7	28.7	24.2	21.6	20.1	58.7	18.2	15.2
LnGrp LOS	D	C	C	E	C	C	C	C	C	E	B	B
Approach Vol, veh/h		649			649			1479			882	
Approach Delay, s/veh		32.2			39.7			21.3			23.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		84.0		60.2		84.0		60.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		80.0		62.0		80.0		62.0
Max Q Clear Time (g_c+I1), s		30.0		21.9		72.4		53.8
Green Ext Time (p_c), s		12.9		4.3		3.8		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	890	160	130	730	120	200	1150	110	110	730	70
Future Volume (veh/h)	130	890	160	130	730	120	200	1150	110	110	730	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	141	967	174	141	793	130	217	1250	120	120	793	76
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	166	1112	199	165	1131	184	375	1678	740	217	1575	695
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.26	0.08	0.48	0.48	0.05	0.45	0.45
Sat Flow, veh/h	1757	4281	768	1757	4362	710	1757	3505	1546	1757	3505	1546
Grp Volume(v), veh/h	141	758	383	141	609	314	217	1250	120	120	793	76
Grp Sat Flow(s),veh/h/ln	1757	1679	1692	1757	1679	1715	1757	1752	1546	1757	1752	1546
Q Serve(g_s), s	10.9	29.7	29.9	10.9	22.6	22.9	8.8	39.8	6.0	5.0	22.2	3.9
Cycle Q Clear(g_c), s	10.9	29.7	29.9	10.9	22.6	22.9	8.8	39.8	6.0	5.0	22.2	3.9
Prop In Lane	1.00		0.45	1.00		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	872	439	165	871	445	375	1678	740	217	1575	695
V/C Ratio(X)	0.85	0.87	0.87	0.85	0.70	0.71	0.58	0.74	0.16	0.55	0.50	0.11
Avail Cap(c_a), veh/h	268	950	479	229	877	448	450	1678	740	267	1575	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	48.8	48.8	61.5	46.2	46.3	19.6	29.1	20.3	25.1	27.0	22.0
Incr Delay (d2), s/veh	13.2	8.2	15.2	19.3	2.5	5.0	1.4	3.1	0.5	2.2	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	14.8	15.8	6.2	10.8	11.4	4.4	20.0	2.7	2.5	10.9	1.7
LnGrp Delay(d), s/veh	74.6	57.0	64.1	80.8	48.7	51.3	21.0	32.1	20.8	27.4	28.2	22.3
LnGrp LOS	E	E	E	F	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1282			1064			1587			989	
Approach Delay, s/veh		61.0			53.7			29.8			27.6	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	70.0	17.0	39.8	15.1	65.9	17.0	39.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	66.0	18.0	39.0	17.0	60.0	21.0	36.0
Max Q Clear Time (g_c+I1), s	7.0	41.8	12.9	31.9	10.8	24.2	12.9	24.9
Green Ext Time (p_c), s	0.1	9.8	0.1	3.9	0.3	6.5	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Future Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	1168	432	179	600	105	200	1200	0	263	1042	126
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	307	1300	579	205	1228	214	225	1466	0	288	1490	180
Arrive On Green	0.04	0.36	0.36	0.08	0.40	0.40	0.13	0.29	0.00	0.16	0.32	0.32
Sat Flow, veh/h	1792	3574	1591	1792	3041	531	1792	5305	0	1792	4640	560
Grp Volume(v), veh/h	74	1168	432	179	352	353	200	1200	0	263	768	400
Grp Sat Flow(s),veh/h/ln	1792	1787	1591	1792	1787	1785	1792	1712	0	1792	1712	1777
Q Serve(g_s), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Cycle Q Clear(g_c), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Prop In Lane	1.00		1.00	1.00		0.30	1.00		0.00	1.00		0.32
Lane Grp Cap(c), veh/h	307	1300	579	205	722	721	225	1466	0	288	1099	570
V/C Ratio(X)	0.24	0.90	0.75	0.87	0.49	0.49	0.89	0.82	0.00	0.91	0.70	0.70
Avail Cap(c_a), veh/h	307	1377	613	248	803	802	268	1466	0	345	1099	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	42.2	39.0	32.9	31.0	31.1	60.4	46.7	0.0	57.8	41.7	41.7
Incr Delay (d2), s/veh	0.4	8.0	4.7	24.2	0.5	0.5	25.7	5.2	0.0	25.0	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.9	15.3	5.5	10.2	10.2	9.2	15.2	0.0	12.0	13.6	14.7
LnGrp Delay(d), s/veh	27.7	50.1	43.7	57.0	31.5	31.6	86.1	51.9	0.0	82.8	45.4	48.7
LnGrp LOS	C	D	D	E	C	C	F	D		F	D	D
Approach Vol, veh/h		1674			884			1400			1431	
Approach Delay, s/veh		47.5			36.7			56.8			53.2	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	49.0	14.6	55.0	26.6	44.0	9.0	60.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	45.0	14.0	54.0	27.0	39.0	5.0	63.0
Max Q Clear Time (g_c+I1), s	17.4	29.6	10.5	45.3	22.2	32.5	5.6	22.6
Green Ext Time (p_c), s	0.2	6.4	0.1	5.7	0.3	3.8	0.0	4.6

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		49.6	
HCM 2010 LOS		D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	510	1660	70	20	1110	510	130	320	40	0	0	0
Future Volume (veh/h)	510	1660	70	20	1110	510	130	320	40	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	554	1804	76	22	1207	554	141	348	43			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	629	3648	154	29	2861	891	165	436	266			
Arrive On Green	0.18	0.73	0.73	0.02	0.56	0.56	0.17	0.17	0.17			
Sat Flow, veh/h	3442	5005	211	1774	5085	1583	985	2598	1583			
Grp Volume(v), veh/h	554	1221	659	22	1207	554	260	229	43			
Grp Sat Flow(s),veh/h/ln	1721	1695	1826	1774	1695	1583	1814	1770	1583			
Q Serve(g_s), s	21.7	21.1	21.2	1.7	18.9	32.6	19.3	17.2	3.2			
Cycle Q Clear(g_c), s	21.7	21.1	21.2	1.7	18.9	32.6	19.3	17.2	3.2			
Prop In Lane	1.00		0.12	1.00		1.00	0.54		1.00			
Lane Grp Cap(c), veh/h	629	2471	1331	29	2861	891	305	297	266			
V/C Ratio(X)	0.88	0.49	0.50	0.75	0.42	0.62	0.85	0.77	0.16			
Avail Cap(c_a), veh/h	869	2471	1331	77	2861	891	406	396	354			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	55.1	8.0	8.0	67.9	17.4	20.4	56.0	55.1	49.3			
Incr Delay (d2), s/veh	7.9	0.7	1.3	31.5	0.1	1.3	12.5	6.5	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	11.0	10.1	11.1	1.1	8.9	14.5	10.7	8.9	1.4			
LnGrp Delay(d), s/veh	63.1	8.7	9.3	99.3	17.5	21.7	68.5	61.6	49.6			
LnGrp LOS	E	A	A	F	B	C	E	E	D			
Approach Vol, veh/h		2434			1783			532				
Approach Delay, s/veh		21.2			19.8			64.0				
Approach LOS		C			B			E				

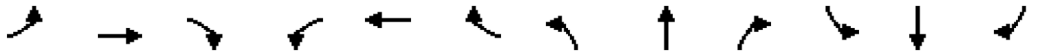
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.3	105.0			29.3	82.0		27.3
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	101.0			35.0	72.0		31.0
Max Q Clear Time (g_c+I1), s	3.7	23.2			23.7	34.6		21.3
Green Ext Time (p_c), s	0.0	23.3			1.6	14.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1300	360	350	1200	0	0	0	0	660	50	110
Future Volume (vph)	0	1300	360	350	1200	0	0	0	0	660	50	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3249	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3249	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1413	391	380	1304	0	0	0	0	717	54	120
RTOR Reduction (vph)	0	0	107	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	0	1413	284	380	1304	0	0	0	0	358	413	78
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		65.7	65.7	19.8	89.5					37.0	37.0	37.0
Effective Green, g (s)		65.7	65.7	19.8	89.5					37.0	37.0	37.0
Actuated g/C Ratio		0.49	0.49	0.15	0.67					0.28	0.28	0.28
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2483	773	505	3383					442	893	435
v/s Ratio Prot		c0.28		c0.11	0.26					c0.22	0.13	
v/s Ratio Perm			0.18									0.05
v/c Ratio		0.57	0.37	0.75	0.39					0.81	0.46	0.18
Uniform Delay, d1		24.4	21.4	55.0	10.1					45.5	40.5	37.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.3	0.3	6.3	0.3					10.5	0.4	0.2
Delay (s)		24.7	21.7	61.3	10.5					56.0	40.9	37.4
Level of Service		C	C	E	B					E	D	D
Approach Delay (s/veh)		24.0			21.9			0.0			46.5	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	134.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		

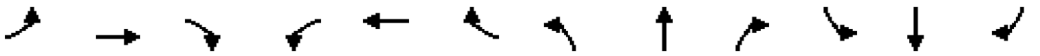
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	20	30	160	330	330	430	0	0	1220	70
Future Volume (veh/h)	60	0	20	30	160	330	330	430	0	0	1220	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	65	0	22	33	174	359	359	467	0	0	1326	76
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	135	750	388	429	3522	0	0	2642	151
Arrive On Green	0.00	0.00	0.00	0.25	0.25	0.25	0.12	0.69	0.00	0.00	0.54	0.54
Sat Flow, veh/h		0		549	3056	1583	3442	5253	0	0	5089	282
Grp Volume(v), veh/h		0.0		110	97	359	359	467	0	0	913	489
Grp Sat Flow(s),veh/h/ln				1835	1770	1583	1721	1695	0	0	1695	1813
Q Serve(g_s), s				6.2	5.6	28.4	13.1	4.0	0.0	0.0	22.0	22.0
Cycle Q Clear(g_c), s				6.2	5.6	28.4	13.1	4.0	0.0	0.0	22.0	22.0
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.16
Lane Grp Cap(c), veh/h				450	434	388	429	3522	0	0	1820	973
V/C Ratio(X)				0.25	0.22	0.92	0.84	0.13	0.00	0.00	0.50	0.50
Avail Cap(c_a), veh/h				500	482	431	669	3522	0	0	1820	973
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				38.9	38.7	47.3	55.0	6.7	0.0	0.0	18.9	18.9
Incr Delay (d2), s/veh				0.3	0.3	24.4	5.5	0.1	0.0	0.0	1.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.2	2.8	15.1	6.6	1.9	0.0	0.0	10.5	11.5
LnGrp Delay(d), s/veh				39.2	39.0	71.7	60.5	6.8	0.0	0.0	19.9	20.7
LnGrp LOS				D	D	E	E	A			B	C
Approach Vol, veh/h					566			826			1402	
Approach Delay, s/veh					59.8			30.1			20.2	
Approach LOS					E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		93.0			20.0	73.0		35.5
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		89.0			25.0	60.0		35.0
Max Q Clear Time (g_c+I1), s		6.0			15.1	24.0		30.4
Green Ext Time (p_c), s		3.5			0.9	12.3		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	40	380	0	0	0	0	700	140	590	820	0
Future Volume (vph)	60	40	380	0	0	0	0	700	140	590	820	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.88	0.85					0.98		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2969	1441					4958		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2969	1441					4958		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	43	413	0	0	0	0	761	152	641	891	0
RTOR Reduction (vph)	0	189	188	0	0	0	0	12	0	0	0	0
Lane Group Flow (vph)	65	61	18	0	0	0	0	901	0	641	891	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	10.9	10.9	10.9					74.6		28.5	107.1	
Effective Green, g (s)	10.9	10.9	10.9					74.6		28.5	107.1	
Actuated g/C Ratio	0.09	0.09	0.09					0.59		0.23	0.85	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	153	256	124					2935		776	4322	
v/s Ratio Prot	c0.04	0.02						c0.18		c0.19	0.18	
v/s Ratio Perm			0.01									
v/c Ratio	0.42	0.24	0.14					0.31		0.83	0.21	
Uniform Delay, d1	54.6	53.7	53.2					12.8		46.4	1.7	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.5	0.5					0.3		7.2	0.1	
Delay (s)	56.5	54.2	53.8					13.1		53.6	1.8	
Level of Service	E	D	D					B		D	A	
Approach Delay (s/veh)		54.3			0.0			13.1			23.5	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Future Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	104	1167	281	177	896	42	448	396	354	52	396	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	301	2155	519	173	2628	123	341	724	639	216	1223	224
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	589	4041	973	363	4927	230	911	1752	1546	702	2960	541
Grp Volume(v), veh/h	104	970	478	177	610	328	448	396	354	52	233	236
Grp Sat Flow(s),veh/h/ln	589	1679	1656	363	1679	1800	911	1752	1546	702	1752	1748
Q Serve(g_s), s	18.4	28.4	28.4	51.6	15.5	15.6	48.3	25.7	26.1	9.1	13.5	13.7
Cycle Q Clear(g_c), s	34.0	28.4	28.4	80.0	15.5	15.6	62.0	25.7	26.1	35.3	13.5	13.7
Prop In Lane	1.00		0.59	1.00		0.13	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
V/C Ratio(X)	0.35	0.54	0.54	1.02	0.34	0.34	1.31	0.55	0.55	0.24	0.32	0.33
Avail Cap(c_a), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	23.0	23.0	56.4	20.0	20.0	54.3	33.3	33.5	46.9	29.8	29.8
Incr Delay (d2), s/veh	0.7	0.3	0.7	75.1	0.1	0.2	160.1	3.0	3.4	2.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	13.3	13.2	10.8	7.2	7.8	29.3	13.0	11.7	1.9	6.8	6.9
LnGrp Delay(d), s/veh	30.3	23.3	23.6	131.7	20.1	20.2	214.4	36.3	36.9	49.5	30.9	31.0
LnGrp LOS	C	C	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1552			1115			1198			521	
Approach Delay, s/veh		23.9			37.8			103.1			32.8	
Approach LOS		C			D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		84.0		66.0		84.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		80.0		62.0		80.0
Max Q Clear Time (g_c+I1), s		64.0		36.0		37.3		82.0
Green Ext Time (p_c), s		0.0		15.4		3.1		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		50.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Future Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	86	65	43	226	97	237	22	269	97	183	538	86
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	187	112	290	110	260	397	1287	450	513	1791	786
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	487	443	265	580	260	616	795	2542	890	1006	3539	1554
Grp Volume(v), veh/h	194	0	0	560	0	0	22	185	181	183	538	86
Grp Sat Flow(s),veh/h/ln	1194	0	0	1456	0	0	795	1770	1662	1006	1770	1554
Q Serve(g_s), s	0.0	0.0	0.0	28.6	0.0	0.0	1.8	6.4	6.7	13.6	9.8	3.2
Cycle Q Clear(g_c), s	11.5	0.0	0.0	40.1	0.0	0.0	11.6	6.4	6.7	20.3	9.8	3.2
Prop In Lane	0.44		0.22	0.40		0.42	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	550	0	0	660	0	0	397	896	841	513	1791	786
V/C Ratio(X)	0.35	0.00	0.00	0.85	0.00	0.00	0.06	0.21	0.22	0.36	0.30	0.11
Avail Cap(c_a), veh/h	1027	0	0	1185	0	0	397	896	841	513	1791	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	0.0	30.3	0.0	0.0	19.3	15.1	15.1	20.8	15.9	14.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	3.2	0.0	0.0	0.3	0.5	0.6	1.9	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	16.6	0.0	0.0	0.4	3.2	3.2	4.0	4.9	1.4
LnGrp Delay(d), s/veh	21.9	0.0	0.0	33.5	0.0	0.0	19.6	15.6	15.7	22.7	16.3	14.6
LnGrp LOS	C			C			B	B	B	C	B	B
Approach Vol, veh/h		194			560			388			807	
Approach Delay, s/veh		21.9			33.5			15.9			17.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		50.6		60.0		50.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		86.0		56.0		86.0
Max Q Clear Time (g_c+I1), s		13.6		13.5		22.3		42.1
Green Ext Time (p_c), s		2.4		1.6		5.0		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Future Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	141	22	141	283	174	65	815	152	87	1217	87
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	73	223	32	227	488	413	263	2373	1036	384	2373	1037
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	156	842	119	1206	1845	1561	416	3505	1530	573	3505	1531
Grp Volume(v), veh/h	206	0	0	141	283	174	65	815	152	87	1217	87
Grp Sat Flow(s),veh/h/ln	1117	0	0	1206	1845	1561	416	1752	1530	573	1752	1531
Q Serve(g_s), s	8.6	0.0	0.0	5.2	18.3	12.7	12.6	13.4	4.9	10.3	23.6	2.7
Cycle Q Clear(g_c), s	26.8	0.0	0.0	32.0	18.3	12.7	36.2	13.4	4.9	23.8	23.6	2.7
Prop In Lane	0.21		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	0	0	227	488	413	263	2373	1036	384	2373	1037
V/C Ratio(X)	0.63	0.00	0.00	0.62	0.58	0.42	0.25	0.34	0.15	0.23	0.51	0.08
Avail Cap(c_a), veh/h	465	0	0	338	658	557	263	2373	1036	384	2373	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	0.0	0.0	51.5	43.9	41.8	19.9	9.3	8.0	14.3	11.0	7.6
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.8	1.1	0.7	2.2	0.4	0.3	1.4	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.0	5.3	9.5	5.5	1.6	6.6	2.2	1.8	11.6	1.2
LnGrp Delay(d), s/veh	48.5	0.0	0.0	54.3	45.0	42.5	22.2	9.7	8.3	15.7	11.8	7.8
LnGrp LOS	D			D	D	D	C	A	A	B	B	A
Approach Vol, veh/h		206			598			1032			1391	
Approach Delay, s/veh		48.5			46.4			10.3			11.8	
Approach LOS		D			D			B			B	

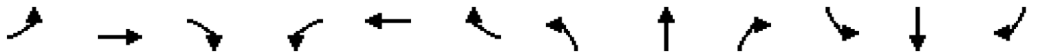
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		40.4		97.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		49.0		93.0		49.0
Max Q Clear Time (g_c+I1), s		38.2		28.8		25.8		34.0
Green Ext Time (p_c), s		8.7		1.1		14.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Future Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1185	446	826	1043	0	0	0	0	359	0	457
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1276	480	890	2252	0	0	575	0	1161	0	489
Arrive On Green	0.00	0.35	0.35	0.26	0.64	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Sat Flow, veh/h	0	3810	1369	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1103	528	826	1043	0	0	0	0	359	0	457
Grp Sat Flow(s),veh/h/ln	0	1695	1621	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Cycle Q Clear(g_c), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Prop In Lane	0.00		0.84	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1188	568	890	2252	0	0	575	0	1161	0	489
V/C Ratio(X)	0.00	0.93	0.93	0.93	0.46	0.00	0.00	0.00	0.00	0.31	0.00	0.93
Avail Cap(c_a), veh/h	0	1210	578	968	2356	0	0	575	0	1161	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	45.6	45.6	52.7	13.7	0.0	0.0	0.0	0.0	38.9	0.0	48.9
Incr Delay (d2), s/veh	0.0	12.2	21.6	14.1	0.1	0.0	0.0	0.0	0.0	0.7	0.0	27.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	23.3	23.8	17.9	10.8	0.0	0.0	0.0	0.0	5.7	0.0	21.6
LnGrp Delay(d), s/veh	0.0	57.8	67.2	66.8	13.8	0.0	0.0	0.0	0.0	39.6	0.0	76.3
LnGrp LOS		E	E	E	B					D		E
Approach Vol, veh/h		1631			1869			0			816	
Approach Delay, s/veh		60.9			37.2			0.0			60.1	
Approach LOS		E			D						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		49.0	41.7	55.1		49.0		96.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0	41.0	52.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		0.0	36.1	47.8		42.9		24.1
Green Ext Time (p_c), s		0.0	1.5	3.3		0.9		9.2

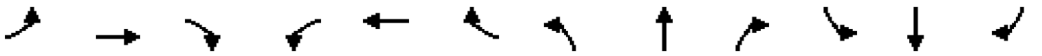
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Future Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3374	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.67	1.00	0.66	1.00	
Satd. Flow (perm)	1770	3374	1441	3433	3536		1681	1191	2787	1221	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1076	348	196	1576	11	293	11	1065	11	11	11
RTOR Reduction (vph)	0	2	152	0	1	0	0	0	184	0	8	0
Lane Group Flow (vph)	11	1109	161	196	1586	0	152	152	881	11	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Effective Green, g (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Actuated g/C Ratio	0.01	0.41	0.41	0.09	0.49		0.12	0.42	0.42	0.26	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1384	591	303	1725		205	556	1159	323	456	
v/s Ratio Prot	0.01	0.33		c0.06	c0.45		0.09	0.03			0.01	
v/s Ratio Perm			0.11					0.08	c0.32	0.01		
v/c Ratio	0.61	0.80	0.27	0.65	0.92		0.74	0.27	0.76	0.03	0.03	
Uniform Delay, d1	69.2	36.4	27.5	61.9	33.4		59.5	27.0	35.0	38.3	38.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	3.4	0.3	4.7	8.3		13.5	0.3	4.7	0.2	0.1	
Delay (s)	117.8	39.8	27.7	66.6	41.7		72.9	27.3	39.7	38.5	38.4	
Level of Service	F	D	C	E	D		E	C	D	D	D	
Approach Delay (s/veh)		37.8			44.4			42.0			38.4	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

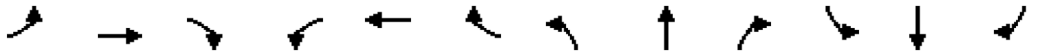
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Future Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.94			0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1646			1682		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.98			0.96		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1625			1629		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	11	11	11	43	76	1272	11	33	239	315
RTOR Reduction (vph)	0	9	0	0	37	0	0	0	4	0	0	114
Lane Group Flow (vph)	28	18	0	0	28	0	76	1272	7	33	239	201
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Effective Green, g (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Actuated g/C Ratio	0.04	0.21			0.14		0.07	0.67	0.67	0.04	0.64	0.64
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	62	335			227		121	2378	1064	63	2262	1011
v/s Ratio Prot	c0.02	0.00					c0.04	c0.36		0.02	0.07	
v/s Ratio Perm		0.01			c0.02				0.00			0.13
v/c Ratio	0.45	0.05			0.12		0.63	0.53	0.01	0.52	0.11	0.20
Uniform Delay, d1	65.7	44.5			52.5		63.2	11.7	7.5	66.0	9.7	10.4
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	0.1			0.2		9.8	0.9	0.0	7.6	0.1	0.4
Delay (s)	70.9	44.5			52.7		72.9	12.6	7.5	73.7	9.8	10.8
Level of Service	E	D			D		E	B	A	E	A	B
Approach Delay (s/veh)		57.9			52.7			15.9			14.0	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	139.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

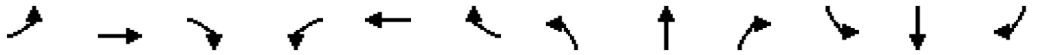
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Future Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	359	1826	261	33	1500	152	130	33	239			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	415	2276	318	42	2239	1002	236	60	261			
Arrive On Green	0.12	0.73	0.73	0.02	0.63	0.63	0.17	0.17	0.17			
Sat Flow, veh/h	3442	3120	436	1774	3539	1583	1429	363	1583			
Grp Volume(v), veh/h	359	1017	1070	33	1500	152	163	0	239			
Grp Sat Flow(s),veh/h/ln	1721	1770	1786	1774	1770	1583	1791	0	1583			
Q Serve(g_s), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Cycle Q Clear(g_c), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Prop In Lane	1.00		0.24	1.00		1.00	0.80		1.00			
Lane Grp Cap(c), veh/h	415	1291	1303	42	2239	1002	296	0	261			
V/C Ratio(X)	0.87	0.79	0.82	0.78	0.67	0.15	0.55	0.00	0.91			
Avail Cap(c_a), veh/h	540	1291	1303	60	2239	1002	317	0	281			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.3	12.6	13.4	71.2	17.2	10.9	56.3	0.0	60.2			
Incr Delay (d2), s/veh	11.2	4.9	5.9	33.1	1.6	0.3	1.8	0.0	31.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.8	27.5	31.0	1.7	19.7	2.6	6.2	0.0	11.8			
LnGrp Delay(d), s/veh	74.5	17.5	19.3	104.3	18.8	11.3	58.0	0.0	91.5			
LnGrp LOS	E	B	B	F	B	B	E		F			
Approach Vol, veh/h		2446			1685			402				
Approach Delay, s/veh		26.7			19.8			77.9				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	7.5	111.0			21.7	96.8		28.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	107.0			23.0	89.0		26.0
Max Q Clear Time (g_c+I1), s	4.7	61.4			17.0	41.6		23.8
Green Ext Time (p_c), s	0.0	27.7			0.7	17.1		0.4

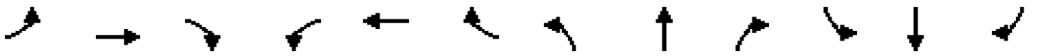
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Future Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	54	2076	0	0	1641	359	43	11	120			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	92	4305	0	0	4016	1250	165	173	147			
Arrive On Green	0.03	0.85	0.00	0.00	0.79	0.79	0.09	0.09	0.09			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	54	2076	0	0	1641	359	43	11	120			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Cycle Q Clear(g_c), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	92	4305	0	0	4016	1250	165	173	147			
V/C Ratio(X)	0.59	0.48	0.00	0.00	0.41	0.29	0.26	0.06	0.82			
Avail Cap(c_a), veh/h	234	4305	0	0	4016	1250	402	422	359			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	63.7	2.6	0.0	0.0	4.3	3.8	55.8	54.8	58.9			
Incr Delay (d2), s/veh	5.9	0.4	0.0	0.0	0.3	0.6	0.8	0.2	10.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	6.5	0.0	0.0	6.2	3.7	1.5	0.4	4.7			
LnGrp Delay(d), s/veh	69.5	3.0	0.0	0.0	4.6	4.4	56.6	54.9	69.3			
LnGrp LOS	E	A			A	A	E	D	E			
Approach Vol, veh/h		2130			2000			174				
Approach Delay, s/veh		4.7			4.6			65.3				
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		116.0			7.5	108.5		16.3
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		112.0			9.0	99.0		30.0
Max Q Clear Time (g_c+I1), s		16.0			4.1	15.3		11.8
Green Ext Time (p_c), s		33.2			0.0	23.6		0.5

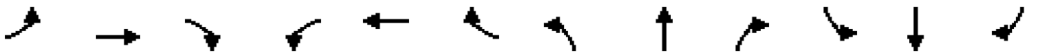
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.1
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Future Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1902	348	65	1978	98	109	11	163	130	11	283
RTOR Reduction (vph)	0	15	0	0	3	0	0	0	137	0	0	88
Lane Group Flow (vph)	98	2235	0	65	2073	0	109	11	26	130	11	195
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Effective Green, g (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Actuated g/C Ratio	0.06	0.63		0.06	0.63		0.09	0.09	0.09	0.11	0.11	0.17
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	214	3118		105	3156		167	176	149	187	197	468
v/s Ratio Prot	0.03	c0.45		c0.04	0.41		c0.06	0.01		c0.07	0.01	0.03
v/s Ratio Perm									0.02			0.04
v/c Ratio	0.46	0.72		0.62	0.66		0.65	0.06	0.18	0.70	0.06	0.42
Uniform Delay, d1	64.6	18.0		65.5	17.0		62.3	58.8	59.5	61.6	57.4	53.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	1.4		10.4	1.1		8.8	0.1	0.6	10.7	0.1	0.6
Delay (s)	66.1	19.4		75.9	18.1		71.2	59.0	60.0	72.3	57.5	53.7
Level of Service	E	B		E	B		E	E	E	E	E	D
Approach Delay (s/veh)		21.4			19.9			64.3			59.5	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	142.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	610	1660	0	40	1050	1080	20	20	30	90	20	280
Future Volume (vph)	610	1660	0	40	1050	1080	20	20	30	90	20	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	0.99	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.95	0.85		0.94			0.93	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1770	4524	1329		1731			1613	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1770	4524	1329		1731			1613	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	635	1729	0	42	1094	1125	21	21	31	94	21	292
RTOR Reduction (vph)	0	0	0	0	62	268	0	18	0	0	20	174
Lane Group Flow (vph)	635	1729	0	42	1595	294	0	55	0	0	191	22
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	54.0	99.9		6.9	52.8	52.8		11.0			17.0	17.0
Effective Green, g (s)	54.0	99.9		6.9	52.8	52.8		11.0			17.0	17.0
Actuated g/C Ratio	0.36	0.66		0.05	0.35	0.35		0.07			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	633	3368		80	1584	465		126			181	169
v/s Ratio Prot	c0.36	0.34		0.02	c0.35			c0.03			c0.12	
v/s Ratio Perm						0.22						0.01
v/c Ratio	1.00	0.51		0.53	1.01	0.63		0.44			1.05	0.13
Uniform Delay, d1	48.4	13.0		70.3	49.0	40.9		66.9			66.9	60.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	36.5	0.1		6.1	24.3	2.8		10.7			81.6	0.4
Delay (s)	84.9	13.2		76.4	73.3	43.7		77.7			148.5	60.6
Level of Service	F	B		E	E	D		E			F	E
Approach Delay (s/veh)		32.4			66.0			77.7			106.2	
Approach LOS		C			E			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1310	280	350	1440	120	500	240	500	90	60	120
Future Volume (vph)	190	1310	280	350	1440	120	500	240	500	90	60	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.96	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1752	4885		1752	4966		1665	1572	1400	1665	1734	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1752	4885		1752	4966		1665	1572	1400	1665	1734	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	200	1379	295	368	1516	126	526	253	526	95	63	126
RTOR Reduction (vph)	0	22	0	0	7	0	0	8	260	0	0	119
Lane Group Flow (vph)	200	1652	0	368	1635	0	447	445	145	78	80	7
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Effective Green, g (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Actuated g/C Ratio	0.13	0.33		0.21	0.41		0.30	0.30	0.30	0.05	0.05	0.05
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	231	1595		373	2026		499	471	420	88	92	83
v/s Ratio Prot	0.11	c0.34		c0.21	0.33		0.27	c0.28		c0.05	0.05	
v/s Ratio Perm									0.10			0.00
v/c Ratio	0.87	1.04		0.99	0.81		0.90	0.94	0.35	0.89	0.87	0.08
Uniform Delay, d1	63.8	50.5		58.8	39.2		50.3	51.3	41.0	70.5	70.5	67.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.0	32.3		42.6	2.5		21.3	29.6	2.2	68.3	62.9	1.9
Delay (s)	90.8	82.8		101.4	41.7		71.6	80.9	43.3	138.9	133.4	69.4
Level of Service	F	F		F	D		E	F	D	F	F	E
Approach Delay (s/veh)		83.7			52.6			66.0			106.5	
Approach LOS		F			D			E			F	

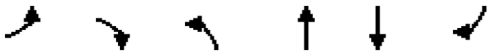
Intersection Summary			
HCM 2000 Control Delay (s/veh)	69.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	610	80	320	530	230	460
Future Volume (veh/h)	610	80	320	530	230	460
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	693	0	364	602	261	523
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	775	357	394	2507	1621	709
Arrive On Green	0.23	0.00	0.22	0.72	0.46	0.46
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	693	0	364	602	261	523
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	27.6	0.0	28.3	8.3	6.0	38.9
Cycle Q Clear(g_c), s	27.6	0.0	28.3	8.3	6.0	38.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	775	357	394	2507	1621	709
V/C Ratio(X)	0.89	0.00	0.92	0.24	0.16	0.74
Avail Cap(c_a), veh/h	1024	471	591	2507	1621	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	53.1	6.8	21.8	30.7
Incr Delay (d2), s/veh	8.2	0.0	15.3	0.2	0.2	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	0.0	15.4	4.0	3.0	17.7
LnGrp Delay(d), s/veh	60.6	0.0	68.4	7.1	22.0	37.4
LnGrp LOS	E		E	A	C	D
Approach Vol, veh/h	693			966	784	
Approach Delay, s/veh	60.6			30.2	32.3	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		104.0		35.8	35.3	68.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		100.0		42.0	47.0	49.0		
Max Q Clear Time (g_c+I1), s		10.3		29.6	30.3	40.9		
Green Ext Time (p_c), s		4.6		2.2	1.0	2.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.5
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	830	630	230	640	660	240
Future Volume (veh/h)	830	630	230	640	660	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	912	0	253	703	725	264
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1030	474	284	2289	1609	698
Arrive On Green	0.30	0.00	0.16	0.64	0.45	0.45
Sat Flow, veh/h	3476	1599	1792	3668	3668	1550
Grp Volume(v), veh/h	912	0	253	703	725	264
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1550
Q Serve(g_s), s	31.7	0.0	17.5	11.1	17.7	14.3
Cycle Q Clear(g_c), s	31.7	0.0	17.5	11.1	17.7	14.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1030	474	284	2289	1609	698
V/C Ratio(X)	0.89	0.00	0.89	0.31	0.45	0.38
Avail Cap(c_a), veh/h	1676	771	467	2289	1609	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	52.1	10.2	24.0	23.0
Incr Delay (d2), s/veh	3.6	0.0	11.6	0.3	0.9	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	0.0	9.6	5.6	9.0	6.4
LnGrp Delay(d), s/veh	46.1	0.0	63.7	10.5	24.9	24.6
LnGrp LOS	D		E	B	C	C
Approach Vol, veh/h	912			956	989	
Approach Delay, s/veh	46.1			24.6	24.8	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		85.0		41.5	24.1	60.9		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		81.0		61.0	33.0	44.0		
Max Q Clear Time (g_c+I1), s		13.1		33.7	19.5	19.7		
Green Ext Time (p_c), s		5.3		3.8	0.6	6.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1300	320	260	1230	50	530	730	500	80	390	160
Future Volume (veh/h)	190	1300	320	260	1230	50	530	730	500	80	390	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	216	1477	364	295	1398	57	602	830	568	91	443	182
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	1356	397	281	1500	61	547	1336	582	114	472	199
Arrive On Green	0.13	0.27	0.27	0.16	0.30	0.30	0.31	0.38	0.38	0.06	0.13	0.13
Sat Flow, veh/h	1774	5085	1488	1774	5000	204	1774	3539	1540	1774	3539	1492
Grp Volume(v), veh/h	216	1477	364	295	948	507	602	830	568	91	443	182
Grp Sat Flow(s),veh/h/ln	1774	1695	1488	1774	1695	1814	1774	1770	1540	1774	1770	1492
Q Serve(g_s), s	14.6	32.0	28.5	19.0	32.6	32.6	37.0	22.9	43.6	6.1	14.9	14.5
Cycle Q Clear(g_c), s	14.6	32.0	28.5	19.0	32.6	32.6	37.0	22.9	43.6	6.1	14.9	14.5
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	1356	397	281	1017	544	547	1336	582	114	472	199
V/C Ratio(X)	0.97	1.09	0.92	1.05	0.93	0.93	1.10	0.62	0.98	0.80	0.94	0.92
Avail Cap(c_a), veh/h	222	1356	397	281	1017	544	547	1336	582	133	472	199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	44.0	42.7	50.5	40.8	40.8	41.5	30.4	36.8	55.4	51.5	51.3
Incr Delay (d2), s/veh	52.9	52.5	25.8	67.5	14.6	23.1	68.9	2.2	32.0	24.9	28.7	44.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	21.5	14.6	14.6	17.3	19.8	28.6	11.6	23.7	3.8	9.1	8.4
LnGrp Delay(d), s/veh	105.2	96.5	68.5	118.0	55.5	63.9	110.4	32.6	68.9	80.3	80.2	96.2
LnGrp LOS	F	F	E	F	E	E	F	C	E	F	F	F
Approach Vol, veh/h		2057			1750			2000			716	
Approach Delay, s/veh		92.5			68.4			66.3			84.3	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	49.3	23.0	36.0	41.0	20.0	19.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	44.0	19.0	32.0	37.0	16.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	8.1	45.6	21.0	34.0	39.0	16.9	16.6	34.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	77.1
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	90	90	880	0	0	850
Future Volume (veh/h)	90	90	880	0	0	850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	98	98	957	0	0	924
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	194	126	2938	0	1	2938
Arrive On Green	0.11	0.11	0.83	0.00	0.00	0.83
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	98	98	957	0	0	924
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	6.9	12.0	8.3	0.0	0.0	8.0
Cycle Q Clear(g_c), s	6.9	12.0	8.3	0.0	0.0	8.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	194	126	2938	0	1	2938
V/C Ratio(X)	0.50	0.78	0.33	0.00	0.00	0.31
Avail Cap(c_a), veh/h	428	335	2938	0	54	2938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	55.6	120.3	2.6	0.0	0.0	2.6
Incr Delay (d2), s/veh	2.0	9.9	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.3	4.1	0.0	0.0	4.0
LnGrp Delay(d), s/veh	57.6	130.2	2.9	0.0	0.0	2.9
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	196		957			924
Approach Delay, s/veh	93.9		2.9			2.9
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	114.0				114.0		18.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	102.0				110.0		32.0
Max Q Clear Time (g_c+I1), s	0.0	10.3				10.0		14.0
Green Ext Time (p_c), s	0.0	8.1				7.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.5
HCM 2010 LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	340	450	590	620	240
Future Volume (veh/h)	80	340	450	590	620	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	370	489	641	674	261
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	189	169	514	2973	2096	812
Arrive On Green	0.11	0.11	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1774	1583	596	3632	2589	966
Grp Volume(v), veh/h	87	370	489	641	478	457
Grp Sat Flow(s),veh/h/ln	1774	1583	596	1770	1770	1692
Q Serve(g_s), s	6.9	16.0	117.1	5.3	8.9	8.9
Cycle Q Clear(g_c), s	6.9	16.0	126.0	5.3	8.9	8.9
Prop In Lane	1.00	1.00	1.00			0.57
Lane Grp Cap(c), veh/h	189	169	514	2973	1486	1421
V/C Ratio(X)	0.46	2.19	0.95	0.22	0.32	0.32
Avail Cap(c_a), veh/h	189	169	514	2973	1486	1421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	67.0	19.2	2.3	2.6	2.6
Incr Delay (d2), s/veh	1.7	554.8	29.4	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	33.0	24.4	2.7	4.5	4.3
LnGrp Delay(d), s/veh	64.7	621.8	48.6	2.5	3.2	3.2
LnGrp LOS	E	F	D	A	A	A
Approach Vol, veh/h	457			1130	935	
Approach Delay, s/veh	515.7			22.5	3.2	
Approach LOS	F			C	A	

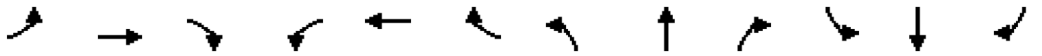
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		130.0		20.0		130.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		126.0		16.0		126.0		
Max Q Clear Time (g_c+I1), s		128.0		18.0		10.9		
Green Ext Time (p_c), s		0.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	110	270	660	260	320	540	450	450	370	140
Future Volume (veh/h)	80	780	110	270	660	260	320	540	450	450	370	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	87	848	120	293	717	283	348	587	489	489	402	152
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1392	623	357	1543	1661	376	809	526	551	626	280
Arrive On Green	0.06	0.39	0.39	0.10	0.44	0.44	0.21	0.23	0.23	0.16	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	87	848	120	293	717	283	348	587	489	489	402	152
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	6.8	26.8	7.0	11.7	20.1	6.4	26.9	21.5	32.0	19.5	14.8	12.2
Cycle Q Clear(g_c), s	6.8	26.8	7.0	11.7	20.1	6.4	26.9	21.5	32.0	19.5	14.8	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	1392	623	357	1543	1661	376	809	526	551	626	280
V/C Ratio(X)	0.80	0.61	0.19	0.82	0.46	0.17	0.93	0.73	0.93	0.89	0.64	0.54
Avail Cap(c_a), veh/h	177	1392	623	713	1543	1661	482	809	526	664	626	280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	33.9	27.9	61.4	27.9	12.7	54.1	49.9	45.1	57.5	53.5	52.4
Incr Delay (d2), s/veh	12.8	2.0	0.7	4.7	1.0	0.2	20.9	5.6	25.1	12.3	5.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.5	3.1	5.8	10.0	2.5	15.3	11.1	21.9	10.2	7.6	5.9
LnGrp Delay(d), s/veh	77.7	35.9	28.6	66.1	28.9	12.9	74.9	55.5	70.2	69.8	58.5	59.8
LnGrp LOS	E	D	C	E	C	B	E	E	E	E	E	E
Approach Vol, veh/h		1055			1293			1424			1043	
Approach Delay, s/veh		38.5			33.9			65.3			64.0	
Approach LOS		D			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	59.0	33.6	28.7	12.5	65.0	26.4	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	46.0	38.0	21.0	14.0	61.0	27.0	32.0
Max Q Clear Time (g_c+I1), s	13.7	28.8	28.9	16.8	8.8	22.1	21.5	34.0
Green Ext Time (p_c), s	0.8	5.6	0.7	1.2	0.1	6.7	0.9	0.0

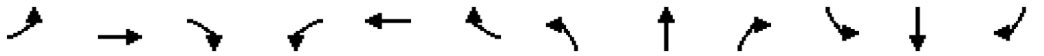
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1280	0	0	780	80	550	30	100	0	0	0
Future Volume (vph)	30	1280	0	0	780	80	550	30	100	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1694	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1694	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	1391	0	0	848	87	598	33	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	33	1391	0	0	848	87	317	314	71	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	4.9	93.1			84.2	84.2	31.2	31.2	31.2			
Effective Green, g (s)	4.9	93.1			84.2	84.2	31.2	31.2	31.2			
Actuated g/C Ratio	0.04	0.70			0.64	0.64	0.24	0.24	0.24			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	65	2490			3236	1007	396	399	373			
v/s Ratio Prot	0.02	c0.39			0.17		c0.19	0.19				
v/s Ratio Perm						0.05			0.04			
v/c Ratio	0.51	0.56			0.26	0.09	0.80	0.79	0.19			
Uniform Delay, d1	62.5	9.6			10.5	9.3	47.6	47.4	40.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.1	0.9			0.2	0.2	11.0	9.9	0.2			
Delay (s)	68.6	10.5			10.7	9.4	58.7	57.3	40.7			
Level of Service	E	B			B	A	E	E	D			
Approach Delay (s/veh)		11.8			10.6			55.4			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

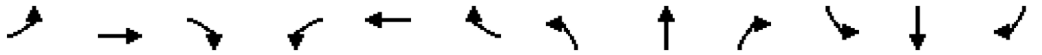
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1270	410	50	1270	0	0	0	0	90	10	80
Future Volume (vph)	0	1270	410	50	1270	0	0	0	0	90	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1702	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1702	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1380	446	54	1380	0	0	0	0	98	11	87
RTOR Reduction (vph)	0	0	208	0	0	0	0	0	0	0	0	64
Lane Group Flow (vph)	0	1380	238	54	1380	0	0	0	0	54	55	23
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Effective Green, g (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Actuated g/C Ratio		0.53	0.53	0.07	0.65					0.27	0.27	0.27
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1885	843	127	3291					450	456	424
v/s Ratio Prot		c0.39		0.03	c0.27					0.03	c0.03	0.01
v/s Ratio Perm			0.15									
v/c Ratio		0.73	0.28	0.43	0.42					0.12	0.12	0.05
Uniform Delay, d1		16.9	12.1	41.9	8.1					26.1	26.1	25.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.5	0.2	2.3	0.1					0.5	0.5	0.2
Delay (s)		18.4	12.3	44.2	8.1					26.7	26.7	25.9
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		16.9			9.5			0.0			26.3	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	94.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Future Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	138	1170	160	245	1223	96	202	287	287	181	309	96
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	1309	556	271	2063	162	227	418	333	206	583	175
Arrive On Green	0.09	0.37	0.37	0.15	0.43	0.43	0.13	0.24	0.24	0.12	0.23	0.23
Sat Flow, veh/h	1757	3505	1488	1757	4746	372	1757	1752	1395	1757	2571	774
Grp Volume(v), veh/h	138	1170	160	245	865	454	202	287	287	181	207	198
Grp Sat Flow(s),veh/h/ln	1757	1752	1488	1757	1679	1761	1757	1752	1395	1757	1752	1593
Q Serve(g_s), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Cycle Q Clear(g_c), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	163	1309	556	271	1460	765	227	418	333	206	397	361
V/C Ratio(X)	0.85	0.89	0.29	0.91	0.59	0.59	0.89	0.69	0.86	0.88	0.52	0.55
Avail Cap(c_a), veh/h	257	1434	609	334	1521	798	270	418	333	257	397	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	40.3	30.1	56.9	29.4	29.5	58.6	47.5	50.0	59.4	46.4	46.7
Incr Delay (d2), s/veh	13.9	7.2	0.3	23.8	0.6	1.1	25.8	8.9	24.4	23.8	4.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	22.1	4.3	10.9	12.5	13.2	9.1	10.9	12.7	8.1	7.4	7.2
LnGrp Delay(d), s/veh	75.1	47.5	30.4	80.7	30.0	30.6	84.5	56.4	74.4	83.2	51.3	52.6
LnGrp LOS	E	D	C	F	C	C	F	E	E	F	D	D
Approach Vol, veh/h		1468			1564			776			586	
Approach Delay, s/veh		48.2			38.1			70.3			61.6	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	36.6	25.1	55.1	21.7	35.0	16.7	63.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	26.0	56.0	21.0	31.0	20.0	62.0
Max Q Clear Time (g_c+I1), s	15.9	29.0	20.8	45.0	17.5	17.0	12.6	28.9
Green Ext Time (p_c), s	0.2	1.1	0.3	6.2	0.2	2.1	0.2	10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	52.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	200	190	360	150	180	140
Future Vol, veh/h	200	190	360	150	180	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	217	207	391	163	196	152

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	196	348	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	222	845	1211	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 150	845	1211	-	-	-
Mov Cap-2 Maneuver	~ 150	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	378	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	154.3	6.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1211	-	150	845	-	-
HCM Lane V/C Ratio	0.323	-	1.449	0.244	-	-
HCM Control Delay (s/veh)	9.4	-	290.9	10.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	1.4	-	14.2	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	8.5

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	300	80	10	130	70	30
Future Vol, veh/h	300	80	10	130	70	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	326	87	11	141	76	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	11	0	0	152	0
Stage 1	11	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	793	1070	-	-	1429	-
Stage 1	1012	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	750	1070	-	-	1429	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	12.4	0	5.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	750	1070	1429	-	-	-
HCM Lane V/C Ratio	0.435	0.081	0.053	-	-	-
HCM Control Delay (s/veh)	13.4	8.7	7.7	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	2.2	0.3	0.2	-	-	-

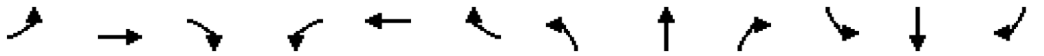
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	460	950	70	60	860	140	180	920	90	170	690	460
Future Volume (veh/h)	460	950	70	60	860	140	180	920	90	170	690	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	495	1022	75	65	925	151	194	989	97	183	742	495
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	548	1152	85	82	1018	166	218	1286	575	206	1263	810
Arrive On Green	0.16	0.35	0.35	0.05	0.24	0.24	0.13	0.37	0.37	0.12	0.36	0.36
Sat Flow, veh/h	3375	3273	240	1740	4304	699	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	495	542	555	65	714	362	194	989	97	183	742	495
Grp Sat Flow(s),veh/h/ln	1688	1736	1777	1740	1663	1678	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	35.9	6.0	14.8	24.7	32.3
Cycle Q Clear(g_c), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	35.9	6.0	14.8	24.7	32.3
Prop In Lane	1.00		0.14	1.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	611	625	82	787	397	218	1286	575	206	1263	810
V/C Ratio(X)	0.90	0.89	0.89	0.79	0.91	0.91	0.89	0.77	0.17	0.89	0.59	0.61
Avail Cap(c_a), veh/h	614	643	659	97	814	411	268	1286	575	243	1263	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	43.7	43.7	67.4	53.1	53.1	61.6	39.6	30.2	62.1	36.8	23.7
Incr Delay (d2), s/veh	15.6	13.7	13.5	30.3	13.6	23.9	25.4	4.5	0.6	27.4	2.0	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	22.5	23.0	3.2	15.2	16.5	9.1	18.0	2.7	8.7	12.2	14.3
LnGrp Delay(d), s/veh	74.4	57.4	57.2	97.7	66.7	77.1	87.0	44.1	30.9	89.5	38.8	27.1
LnGrp LOS	E	E	E	F	E	E	F	D	C	F	D	C
Approach Vol, veh/h		1592			1141			1280			1420	
Approach Delay, s/veh		62.6			71.8			49.6			41.3	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	57.0	10.7	54.3	21.9	56.1	27.2	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	53.0	8.0	53.0	22.0	51.0	26.0	35.0
Max Q Clear Time (g_c+I1), s	16.8	37.9	7.3	44.1	17.7	34.3	22.6	32.1
Green Ext Time (p_c), s	0.1	6.0	0.0	4.4	0.2	6.1	0.7	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.9
HCM 2010 LOS	E

Notes

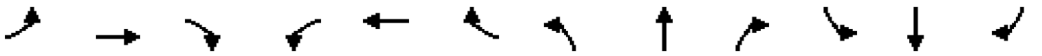
User approved changes to right turn type.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	230	270	520	0	0	500	290
Future Volume (vph)	0	0	0	160	0	230	270	520	0	0	500	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.43	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1537	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	250	293	565	0	0	543	315
RTOR Reduction (vph)	0	0	0	0	0	214	0	0	0	0	0	69
Lane Group Flow (vph)	0	0	0	174	0	36	293	565	0	0	543	246
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				16.0		16.0	86.2	86.2			86.2	86.2
Effective Green, g (s)				16.0		16.0	86.2	86.2			86.2	86.2
Actuated g/C Ratio				0.15		0.15	0.78	0.78			0.78	0.78
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				256		229	1202	3977			5012	1238
v/s Ratio Prot								0.11			0.08	
v/s Ratio Perm				c0.10		0.02	c0.19					0.16
v/c Ratio				0.68		0.16	0.24	0.14			0.11	0.20
Uniform Delay, d1				44.7		41.2	3.2	2.9			2.9	3.1
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				7.0		0.3	0.5	0.1			0.0	0.4
Delay (s)				51.7		41.5	3.7	3.0			2.9	3.5
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			45.7			3.3			3.1	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	110.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

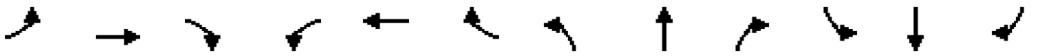
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	220	0	0	0	0	760	90	400	980	0
Future Volume (vph)	170	0	220	0	0	0	0	760	90	400	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1127	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	0	239	0	0	0	0	826	98	435	1065	0
RTOR Reduction (vph)	0	0	205	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	185	0	34	0	0	0	0	826	78	435	1065	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	19.5		19.5					110.1	110.1	110.1	110.1	
Effective Green, g (s)	19.5		19.5					110.1	110.1	110.1	110.1	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	250		394					5127	1266	901	4068	
v/s Ratio Prot								0.13			0.21	
v/s Ratio Perm	c0.10		0.01						0.05	c0.39		
v/c Ratio	0.74		0.09					0.16	0.06	0.48	0.26	
Uniform Delay, d1	56.6		51.3					3.2	2.9	4.5	3.5	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.2		0.1					0.1	0.1	1.9	0.2	
Delay (s)	67.8		51.4					3.2	3.0	6.3	3.6	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		58.5			0.0			3.2			4.4	
Approach LOS		E			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	137.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	500	0	210	0	800	500	200	1350	0
Future Volume (vph)	10	10	10	500	0	210	0	800	500	200	1350	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1719		1665	1665	1473		5036	1521	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1665	1473		5036	1521	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	556	0	233	0	889	556	222	1500	0
RTOR Reduction (vph)	0	10	0	0	0	174	0	0	183	0	0	0
Lane Group Flow (vph)	0	23	0	278	278	59	0	889	373	222	1500	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		33.2	33.2	33.2		53.7	86.9	21.8	79.5	
Effective Green, g (s)		7.5		33.2	33.2	33.2		53.7	86.9	21.8	79.5	
Actuated g/C Ratio		0.06		0.25	0.25	0.25		0.41	0.66	0.16	0.60	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		418	418	369		2045	999	288	3028	
v/s Ratio Prot				c0.17	0.17			0.18	0.09	c0.13	c0.30	
v/s Ratio Perm		c0.04				0.04			0.15			
v/c Ratio		0.65		0.67	0.67	0.16		0.43	0.37	0.77	0.50	
Uniform Delay, d1		61.1		44.5	44.5	38.6		28.3	10.3	52.8	15.0	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.3		4.0	4.0	0.2		0.7	0.2	12.0	0.6	
Delay (s)		95.4		48.5	48.5	38.8		29.0	10.5	64.8	15.5	
Level of Service		F		D	D	D		C	B	E	B	
Approach Delay (s/veh)		95.4			45.6			21.9			21.9	
Approach LOS		F			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	132.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	490	40	220	20	20	10	120	570	10	20	730	290
Future Volume (veh/h)	490	40	220	20	20	10	120	570	10	20	730	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	583	48	262	24	24	12	143	679	12	24	869	345
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	688	52	774	0	925	775	197	1373	24	32	1228	538
Arrive On Green	0.50	0.50	0.50	0.00	0.50	0.50	0.06	0.39	0.39	0.02	0.35	0.35
Sat Flow, veh/h	1270	105	1559	0	1863	1560	3442	3556	63	1774	3539	1550
Grp Volume(v), veh/h	631	0	262	0	24	12	143	338	353	24	869	345
Grp Sat Flow(s),veh/h/ln	1374	0	1559	0	1863	1560	1721	1770	1849	1774	1770	1550
Q Serve(g_s), s	51.1	0.0	12.3	0.0	0.8	0.5	4.9	17.5	17.5	1.6	25.7	22.6
Cycle Q Clear(g_c), s	51.9	0.0	12.3	0.0	0.8	0.5	4.9	17.5	17.5	1.6	25.7	22.6
Prop In Lane	0.92		1.00	0.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	740	0	774	0	925	775	197	683	714	32	1228	538
V/C Ratio(X)	0.85	0.00	0.34	0.00	0.03	0.02	0.73	0.49	0.49	0.74	0.71	0.64
Avail Cap(c_a), veh/h	969	0	1030	0	1355	1135	228	683	714	88	1228	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	18.4	0.0	15.5	15.5	56.1	28.2	28.2	59.1	34.2	33.2
Incr Delay (d2), s/veh	5.9	0.0	0.3	0.0	0.0	0.0	9.4	2.5	2.4	27.5	3.5	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	0.0	5.4	0.0	0.4	0.2	2.6	9.0	9.4	1.0	13.1	10.5
LnGrp Delay(d), s/veh	34.7	0.0	18.7	0.0	15.6	15.5	65.5	30.7	30.6	86.6	37.6	38.9
LnGrp LOS	C		B		B	B	E	C	C	F	D	D
Approach Vol, veh/h		893			36			834			1238	
Approach Delay, s/veh		30.0			15.5			36.7			39.0	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	50.7	0.0	64.1	10.9	46.0		64.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	44.0	4.0	80.0	8.0	42.0		88.0
Max Q Clear Time (g_c+I1), s	3.6	19.5	0.0	53.9	6.9	27.7		2.8
Green Ext Time (p_c), s	0.0	4.1	0.0	6.2	0.0	6.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	20	60	50	250	20	370	30	390	570	30
Future Volume (veh/h)	20	50	20	60	50	250	20	370	30	390	570	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.83	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	24	60	24	72	60	301	24	446	36	470	687	36
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	42	93	30	120	90	249	563	2716	1199	712	2716	1175
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	68	496	161	442	480	1334	733	3574	1578	915	3574	1546
Grp Volume(v), veh/h	108	0	0	132	0	301	24	446	36	470	687	36
Grp Sat Flow(s),veh/h/ln	725	0	0	922	0	1334	733	1787	1578	915	1787	1546
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	28.0	1.5	5.1	0.8	43.5	8.6	0.9
Cycle Q Clear(g_c), s	25.0	0.0	0.0	22.2	0.0	28.0	10.1	5.1	0.8	48.6	8.6	0.9
Prop In Lane	0.22		0.22	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	0	209	0	249	563	2716	1199	712	2716	1175
V/C Ratio(X)	0.66	0.00	0.00	0.63	0.00	1.21	0.04	0.16	0.03	0.66	0.25	0.03
Avail Cap(c_a), veh/h	165	0	0	209	0	249	563	2716	1199	712	2716	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	0.0	57.7	0.0	61.0	6.8	4.9	4.4	11.6	5.3	4.4
Incr Delay (d2), s/veh	9.0	0.0	0.0	6.0	0.0	125.3	0.1	0.1	0.0	4.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	5.6	0.0	19.0	0.3	2.5	0.4	11.8	4.3	0.4
LnGrp Delay(d), s/veh	65.1	0.0	0.0	63.7	0.0	186.3	7.0	5.1	4.5	16.4	5.6	4.5
LnGrp LOS	E			E		F	A	A	A	B	A	A
Approach Vol, veh/h		108			433			506			1193	
Approach Delay, s/veh		65.1			148.9			5.1			9.8	
Approach LOS		E			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		118.0		32.0		118.0		32.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		114.0		28.0		114.0		28.0
Max Q Clear Time (g_c+I1), s		12.1		27.0		50.6		30.0
Green Ext Time (p_c), s		3.4		0.0		9.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	20.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Future Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	403	42	69	0	42	42	83	42	0	28	28	292
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	28.3	10.3	12.6	15.3
HCM LOS	D	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	0%	78%	0%	8%
Vol Thru, %	33%	100%	8%	50%	8%
Vol Right, %	0%	0%	14%	50%	84%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	0	370	60	250
LT Vol	60	0	290	0	20
Through Vol	30	0	30	30	20
RT Vol	0	0	50	30	210
Lane Flow Rate	125	0	514	83	347
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.257	0	0.807	0.144	0.543
Departure Headway (Hd)	7.4	7.059	5.651	6.204	5.634
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	488	0	637	581	635
Service Time	5.106	4.764	3.724	4.213	3.724
HCM Lane V/C Ratio	0.256	0	0.807	0.143	0.546
HCM Control Delay, s/veh	12.6	9.8	28.3	10.3	15.3
HCM Lane LOS	B	N	D	B	C
HCM 95th-tile Q	1	0	8.2	0.5	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	200	70	30	70	80	1370	40	50	970	20
Future Volume (veh/h)	30	30	200	70	30	70	80	1370	40	50	970	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	33	33	222	78	33	78	89	1522	44	56	1078	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	119	107	268	138	74	189	110	2439	1066	72	2362	1043
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.06	0.70	0.70	0.04	0.68	0.68
Sat Flow, veh/h	470	617	1553	520	429	1094	1740	3471	1517	1740	3471	1533
Grp Volume(v), veh/h	66	0	222	84	0	105	89	1522	44	56	1078	22
Grp Sat Flow(s),veh/h/ln	1087	0	1553	573	0	1469	1740	1736	1517	1740	1736	1533
Q Serve(g_s), s	3.4	0.0	19.8	10.3	0.0	9.1	7.3	33.4	1.3	4.6	20.7	0.7
Cycle Q Clear(g_c), s	12.5	0.0	19.8	22.8	0.0	9.1	7.3	33.4	1.3	4.6	20.7	0.7
Prop In Lane	0.50		1.00	0.93		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	0	268	147	0	254	110	2439	1066	72	2362	1043
V/C Ratio(X)	0.29	0.00	0.83	0.57	0.00	0.41	0.81	0.62	0.04	0.78	0.46	0.02
Avail Cap(c_a), veh/h	227	0	270	149	0	256	230	2439	1066	145	2362	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	0.0	57.4	64.4	0.0	53.0	66.4	11.3	6.5	68.3	10.6	7.4
Incr Delay (d2), s/veh	0.7	0.0	18.7	5.1	0.0	1.1	12.9	1.2	0.1	16.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	9.9	3.5	0.0	3.8	3.9	16.3	0.6	2.5	10.1	0.3
LnGrp Delay(d), s/veh	55.5	0.0	76.1	69.5	0.0	54.0	79.3	12.5	6.6	85.0	11.3	7.5
LnGrp LOS	E		E	E		D	E	B	A	F	B	A
Approach Vol, veh/h		288			189			1655			1156	
Approach Delay, s/veh		71.4			60.9			16.0			14.8	
Approach LOS		E			E			B			B	

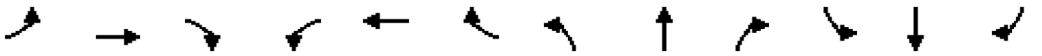
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	105.0		28.8	13.1	101.8		28.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	101.0		25.0	19.0	94.0		25.0
Max Q Clear Time (g_c+I1), s	6.6	35.4		21.8	9.3	22.7		24.8
Green Ext Time (p_c), s	0.0	20.3		0.3	0.1	10.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.0
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1240	100	470	1320	410	610
Future Volume (veh/h)	1240	100	470	1320	410	610
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1292	104	490	1375	427	635
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1399	1184	542	2950	647	578
Arrive On Green	0.40	0.40	0.16	0.58	0.36	0.36
Sat Flow, veh/h	3632	1535	3442	5253	1774	1583
Grp Volume(v), veh/h	1292	104	490	1375	427	635
Grp Sat Flow(s),veh/h/ln	1770	1535	1721	1695	1774	1583
Q Serve(g_s), s	50.5	2.5	20.3	22.6	29.2	53.0
Cycle Q Clear(g_c), s	50.5	2.5	20.3	22.6	29.2	53.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1399	1184	542	2950	647	578
V/C Ratio(X)	0.92	0.09	0.90	0.47	0.66	1.10
Avail Cap(c_a), veh/h	1462	1212	592	3116	647	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	4.5	60.1	17.6	38.6	46.1
Incr Delay (d2), s/veh	9.9	0.0	16.6	0.1	5.2	67.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.5	2.7	10.9	10.6	15.3	34.0
LnGrp Delay(d), s/veh	51.8	4.5	76.7	17.7	43.8	113.6
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1396			1865	1062	
Approach Delay, s/veh	48.2			33.2	85.5	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		57.0	26.9	61.4				88.3
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		53.0	25.0	60.0				89.0
Max Q Clear Time (g_c+I1), s		55.0	22.3	52.5				24.6
Green Ext Time (p_c), s		0.0	0.5	4.9				15.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	600	350	40	900	120	10	10	20	770	30	300
Future Volume (vph)	70	600	350	40	900	120	10	10	20	770	30	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1784	3574	1542	1787	3574	1547		1715		1698	1621	1519
Flt Permitted	0.17	1.00	1.00	0.95	1.00	1.00		0.89		0.95	0.70	1.00
Satd. Flow (perm)	315	3574	1542	1787	3574	1547		1544		1698	1191	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	72	619	361	41	928	124	10	10	21	794	31	309
RTOR Reduction (vph)	0	0	119	0	0	76	0	16	0	0	1	42
Lane Group Flow (vph)	72	619	242	41	928	48	0	25	0	429	426	236
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	34.1	34.1	34.1	6.0	44.1	44.1		32.0		35.3	71.3	71.3
Effective Green, g (s)	34.1	34.1	34.1	6.0	44.1	44.1		32.0		35.3	71.3	71.3
Actuated g/C Ratio	0.28	0.28	0.28	0.05	0.36	0.36		0.26		0.29	0.58	0.58
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	87	987	426	86	1277	552		400		485	811	877
v/s Ratio Prot		0.17		0.02	c0.26					c0.25	0.15	
v/s Ratio Perm	c0.23		0.16			0.03		0.02			c0.15	0.16
v/c Ratio	0.83	0.63	0.57	0.48	0.73	0.09		0.06		0.88	0.52	0.27
Uniform Delay, d1	41.9	39.1	38.3	57.2	34.4	26.3		34.4		42.1	15.8	13.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	44.8	1.3	1.7	4.1	2.1	0.1		0.1		17.2	0.6	0.8
Delay (s)	86.7	40.3	40.1	61.3	36.5	26.4		34.5		59.3	16.4	13.8
Level of Service	F	D	D	E	D	C		C		E	B	B
Approach Delay (s/veh)		43.4			36.3			34.5			32.0	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	123.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1060	390	330	1210	210	300	620	200	280	620	180
Future Volume (veh/h)	200	1060	390	330	1210	210	300	620	200	280	620	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	215	1140	419	355	1301	226	323	667	215	301	667	194
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	237	1120	487	346	1639	285	322	763	324	311	739	317
Arrive On Green	0.13	0.31	0.31	0.19	0.37	0.37	0.18	0.21	0.21	0.17	0.21	0.21
Sat Flow, veh/h	1792	3574	1553	1792	4381	761	1792	3574	1521	1792	3574	1535
Grp Volume(v), veh/h	215	1140	419	355	1017	510	323	667	215	301	667	194
Grp Sat Flow(s),veh/h/ln	1792	1787	1553	1792	1712	1719	1792	1787	1521	1792	1787	1535
Q Serve(g_s), s	17.7	47.0	38.1	29.0	39.6	39.7	27.0	27.1	19.4	25.0	27.3	17.2
Cycle Q Clear(g_c), s	17.7	47.0	38.1	29.0	39.6	39.7	27.0	27.1	19.4	25.0	27.3	17.2
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	1120	487	346	1281	643	322	763	324	311	739	317
V/C Ratio(X)	0.91	1.02	0.86	1.02	0.79	0.79	1.00	0.87	0.66	0.97	0.90	0.61
Avail Cap(c_a), veh/h	263	1120	487	346	1281	643	322	763	324	311	739	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.1	51.5	48.4	60.5	41.8	41.8	61.5	57.1	54.1	61.6	58.0	54.0
Incr Delay (d2), s/veh	30.4	31.5	14.5	54.9	3.5	6.8	50.5	13.3	10.2	42.6	16.5	8.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	28.1	18.3	19.6	19.4	20.1	17.9	14.8	9.1	16.1	15.2	8.1
LnGrp Delay(d), s/veh	94.5	83.0	63.0	115.4	45.3	48.6	112.0	70.4	64.3	104.2	74.5	62.5
LnGrp LOS	F	F	E	F	D	D	F	E	E	F	E	E
Approach Vol, veh/h		1774			1882			1205			1162	
Approach Delay, s/veh		79.6			59.4			80.5			80.2	
Approach LOS		E			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	36.0	33.0	51.0	31.0	35.0	23.9	60.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	32.0	29.0	47.0	27.0	31.0	22.0	54.0
Max Q Clear Time (g_c+I1), s	27.0	29.1	31.0	49.0	29.0	29.3	19.7	41.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.9	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2	SBL2
Lane Configurations												
Traffic Volume (vph)	160	600	90	60	720	120	20	120	520	220	20	10
Future Volume (vph)	160	600	90	60	720	120	20	120	520	220	20	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91		
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99			1.00	1.00	0.91		
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Frt	1.00	1.00	0.85	1.00	0.98			1.00	0.99	0.85		
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		
Satd. Flow (prot)	1770	3539	1534	1770	4934			1770	3358	1310		
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		
Satd. Flow (perm)	1770	3539	1534	1770	4934			1770	3358	1310		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	170	638	96	64	766	128	21	128	553	234	21	11
RTOR Reduction (vph)	0	0	74	0	2	0	0	0	0	125	0	0
Lane Group Flow (vph)	170	638	22	64	913	0	0	128	576	107	0	0
Confl. Peds. (#/hr)	7		7	7		7		2		27		
Confl. Bikes (#/hr)						2				4		
Turn Type	Prot	NA	Perm	Prot	NA			Prot	NA	Perm		Prot
Protected Phases	7	4		3	8			5	2			1
Permitted Phases			4							2		
Actuated Green, G (s)	15.0	35.0	35.0	7.0	27.0			11.0	27.0	27.0		
Effective Green, g (s)	15.0	35.0	35.0	7.0	27.0			11.0	27.0	27.0		
Actuated g/C Ratio	0.10	0.23	0.23	0.05	0.18			0.07	0.18	0.18		
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		
Lane Grp Cap (vph)	177	825	357	82	888			129	604	235		
v/s Ratio Prot	c0.10	0.18		0.04	c0.19			0.07	c0.17			
v/s Ratio Perm			0.01							0.08		
v/c Ratio	0.96	0.77	0.06	0.78	1.03			0.99	0.95	0.45		
Uniform Delay, d1	67.2	53.8	44.7	70.7	61.5			69.5	60.9	54.9		
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Incremental Delay, d2	55.9	4.5	0.1	37.0	37.7			76.6	26.8	6.2		
Delay (s)	123.1	58.3	44.8	107.8	99.2			146.0	87.7	61.1		
Level of Service	F	E	D	F	F			F	F	E		
Approach Delay (s/veh)		69.1			99.8				89.1			
Approach LOS		E			F				F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	86.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	24.0
Intersection Capacity Utilization	94.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBL	SBT	SBR	SWL2	SWL	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	150	560	120	110	340	320	20
Future Volume (vph)	150	560	120	110	340	320	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99	0.85	
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (prot)	1770	3539	1565	1770	1758	1504	
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (perm)	1770	3539	1565	1770	1758	1504	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	160	596	128	117	362	340	21
RTOR Reduction (vph)	0	0	67	0	0	119	0
Lane Group Flow (vph)	171	596	62	117	396	208	0
Confl. Peds. (#/hr)	27		2				
Confl. Bikes (#/hr)							
Turn Type	Prot	NA	pm+ov	Prot	Prot	Perm	
Protected Phases	1	6	7	9	10		
Permitted Phases			6			10	
Actuated Green, G (s)	14.0	30.0	45.0	10.0	33.0	33.0	
Effective Green, g (s)	14.0	30.0	45.0	10.0	33.0	33.0	
Actuated g/C Ratio	0.09	0.20	0.30	0.07	0.22	0.22	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	165	707	511	118	386	330	
v/s Ratio Prot	c0.10	c0.17	0.01	c0.07	c0.23		
v/s Ratio Perm			0.03			0.14	
v/c Ratio	1.04	0.84	0.12	0.99	1.03	0.63	
Uniform Delay, d1	68.0	57.7	38.1	70.0	58.5	53.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	80.0	9.0	0.1	80.0	52.6	3.7	
Delay (s)	148.0	66.8	38.2	149.9	111.1	56.7	
Level of Service	F	E	D	F	F	E	
Approach Delay (s/veh)		78.2			95.3		
Approach LOS		E			F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Future Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1125	1827	1542	859	1827	1542	659	3471	1518	840	3471	1517
Grp Volume(v), veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Grp Sat Flow(s),veh/h/ln	1125	1827	1542	859	1827	1542	659	1736	1518	840	1736	1517
Q Serve(g_s), s	12.3	17.4	19.2	4.8	10.2	3.8	11.6	6.3	0.5	3.7	9.2	2.3
Cycle Q Clear(g_c), s	22.5	17.4	19.2	22.2	10.2	3.8	20.8	6.3	0.5	9.9	9.2	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
V/C Ratio(X)	0.54	0.69	0.75	0.27	0.43	0.17	0.28	0.21	0.02	0.11	0.29	0.08
Avail Cap(c_a), veh/h	421	737	622	285	737	622	484	2500	1093	621	2500	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	45.6	46.3	55.8	42.8	40.3	9.9	5.8	5.0	7.5	6.2	5.3
Incr Delay (d2), s/veh	2.2	2.2	3.4	1.2	0.7	0.2	1.4	0.2	0.0	0.4	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	9.0	8.4	1.2	5.2	1.6	2.3	3.0	0.2	0.9	4.5	1.0
LnGrp Delay(d), s/veh	54.7	47.8	49.7	57.0	43.5	40.5	11.3	6.0	5.1	7.8	6.5	5.4
LnGrp LOS	D	D	D	E	D	D	B	A	A	A	A	A
Approach Vol, veh/h		637			261			682			875	
Approach Delay, s/veh		49.7			44.6			7.0			6.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		31.3		95.0		31.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		51.0		91.0		51.0
Max Q Clear Time (g_c+I1), s		22.8		24.5		11.9		24.2
Green Ext Time (p_c), s		5.4		2.9		6.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Future Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	121	99	198	22	44	44	99	1143	33	66	912	55
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	12	498	32	49	498	322	2150	917	248	2150	937
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	0	37	1494	0	148	1493	573	3505	1496	470	3505	1527
Grp Volume(v), veh/h	220	0	198	66	0	44	99	1143	33	66	912	55
Grp Sat Flow(s),veh/h/ln	37	0	1494	148	0	1493	573	1752	1496	470	1752	1527
Q Serve(g_s), s	0.0	0.0	15.3	0.0	0.0	3.0	16.4	28.1	1.3	14.0	20.4	2.2
Cycle Q Clear(g_c), s	50.0	0.0	15.3	50.0	0.0	3.0	36.8	28.1	1.3	42.1	20.4	2.2
Prop In Lane	0.55		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
V/C Ratio(X)	4.44	0.00	0.40	0.81	0.00	0.09	0.31	0.53	0.04	0.27	0.42	0.06
Avail Cap(c_a), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	0.0	38.4	41.6	0.0	34.3	24.8	16.6	11.5	28.7	15.2	11.6
Incr Delay (d2), s/veh	1595.5	0.0	0.5	44.5	0.0	0.1	2.5	0.9	0.1	2.6	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.0	0.0	6.4	2.9	0.0	1.3	2.8	13.8	0.6	2.0	10.1	0.9
LnGrp Delay(d), s/veh	1658.2	0.0	38.9	86.1	0.0	34.4	27.2	17.6	11.5	31.3	15.8	11.8
LnGrp LOS	F		D	F		C	C	B	B	C	B	B
Approach Vol, veh/h		418			110			1275			1033	
Approach Delay, s/veh		891.2			65.5			18.2			16.6	
Approach LOS		F			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		54.0		96.0		54.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		38.8		52.0		44.1		52.0
Green Ext Time (p_c), s		13.2		0.0		9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	148.1
HCM 2010 LOS	F

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	170	65	4	130	65	4
Future Volume (veh/h)	170	65	4	130	65	4
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	185	71	4	141	71	4
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1620	1377	1026	1620	95	85
Arrive On Green	0.87	0.87	0.87	0.87	0.05	0.05
Sat Flow, veh/h	1863	1583	1119	1863	1774	1583
Grp Volume(v), veh/h	185	71	4	141	71	4
Grp Sat Flow(s),veh/h/ln	1863	1583	1119	1863	1774	1583
Q Serve(g_s), s	1.5	0.6	0.1	1.1	4.1	0.3
Cycle Q Clear(g_c), s	1.5	0.6	1.6	1.1	4.1	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1620	1377	1026	1620	95	85
V/C Ratio(X)	0.11	0.05	0.00	0.09	0.75	0.05
Avail Cap(c_a), veh/h	1620	1377	1026	1620	865	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.0	0.9	1.1	1.0	48.8	47.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	10.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	0.0	0.6	2.3	0.1
LnGrp Delay(d), s/veh	1.1	1.0	1.1	1.1	59.7	47.2
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h	256			145	75	
Approach Delay, s/veh	1.1			1.1	59.1	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		95.0		9.6		95.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		91.0		51.0		91.0		
Max Q Clear Time (g_c+I1), s		3.6		6.1		3.5		
Green Ext Time (p_c), s		0.9		0.2		1.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.2
HCM 2010 LOS	B

Shared Passenger Track Alternatives A/B with Fullerton HSR Station Option

ALIGNMENT - 2040 PLUS PROJECT AM

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Future Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.95	1.00	1.00		1.00		0.95		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.97	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3276	1372	1770	3528		3433		1504		
Flt Permitted			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3276	1372	1770	3528		3433		1504		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	819	606	160	713	11	500	0	138	0	0
RTOR Reduction (vph)	0	0	14	278	0	1	0	0	0	82	0	0
Lane Group Flow (vph)	0	0	975	158	160	723	0	500	0	56	0	0
Confl. Peds. (#/hr)		9		16	16		9			18	18	
Confl. Bikes (#/hr)				5			2			2		
Turn Type	Prot		NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases				4						2		
Actuated Green, G (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Effective Green, g (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Actuated g/C Ratio			0.36	0.36	0.13	0.53		0.18		0.40		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1184	495	229	1857		631		605		
v/s Ratio Prot			c0.30		c0.09	0.20		c0.15				
v/s Ratio Perm				0.11						c0.04		
v/c Ratio			0.82	0.32	0.70	0.39		0.79		0.09		
Uniform Delay, d1			32.7	25.9	46.9	15.9		43.9		20.9		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			4.8	0.4	9.0	0.1		6.8		0.3		
Delay (s)			37.4	26.3	55.9	16.0		50.7		21.2		
Level of Service			D	C	E	B		D		C		
Approach Delay (s/veh)			34.0			23.2			44.3			37.7
Approach LOS			C			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1611
Flt Permitted	1.00
Satd. Flow (perm)	1611
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	20.6
Effective Green, g (s)	20.6
Actuated g/C Ratio	0.18
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	294
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	37.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	37.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	100	10	10	30	0	660	40	20	790
Future Volume (vph)	0	0	60	100	10	10	30	0	660	40	20	790
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.82	1.00	0.90		1.00		1.00	0.92	1.00	1.00
Flpb, ped/bikes			1.00	0.84	1.00		1.00		1.00	1.00	0.98	1.00
Frt			0.87	1.00	0.93		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1326	1481	1555		1770		3539	1461	1733	3539
Flt Permitted			1.00	0.95	1.00		0.32		1.00	1.00	0.38	1.00
Satd. Flow (perm)			1326	1481	1555		604		3539	1461	690	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	106	11	11	32	0	702	43	21	840
RTOR Reduction (vph)	0	0	56	0	10	0	0	0	0	9	0	0
Lane Group Flow (vph)	0	0	8	106	12	0	32	0	702	34	21	840
Confl. Peds. (#/hr)	93		85	85		93		2		18	18	
Confl. Bikes (#/hr)			4			6				2		
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			12.8	12.8	12.8		81.7		81.7	81.7	81.7	81.7
Effective Green, g (s)			12.8	12.8	12.8		81.7		81.7	81.7	81.7	81.7
Actuated g/C Ratio			0.12	0.12	0.12		0.80		0.80	0.80	0.80	0.80
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			165	184	194		481		2820	1164	549	2820
v/s Ratio Prot					0.01				0.20			c0.24
v/s Ratio Perm			0.01	c0.07			0.05			0.02	0.03	
v/c Ratio			0.05	0.58	0.06		0.07		0.25	0.03	0.04	0.30
Uniform Delay, d1			39.5	42.3	39.6		2.2		2.6	2.2	2.2	2.8
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	4.3	0.1		0.3		0.2	0.0	0.1	0.3
Delay (s)			39.6	46.6	39.7		2.5		2.8	2.2	2.3	3.0
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		39.6			45.4				2.8			3.0
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.34		
Actuated Cycle Length (s)	102.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	30
Future Volume (vph)	30
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	0.97
Flpb, ped/bikes	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1542
Flt Permitted	1.00
Satd. Flow (perm)	1542
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	32
RTOR Reduction (vph)	2
Lane Group Flow (vph)	30
Confl. Peds. (#/hr)	2
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	81.7
Effective Green, g (s)	81.7
Actuated g/C Ratio	0.80
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1229
v/s Ratio Prot	
v/s Ratio Perm	0.02
v/c Ratio	0.02
Uniform Delay, d1	2.2
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	2.2
Level of Service	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	900	130	340	1140	300	70	410	160	220	510	130
Future Volume (veh/h)	120	900	130	340	1140	300	70	410	160	220	510	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	947	137	358	1200	316	74	432	168	232	537	137
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1142	165	396	1553	409	301	900	391	393	1147	639
Arrive On Green	0.09	0.26	0.26	0.22	0.39	0.39	0.04	0.25	0.25	0.11	0.32	0.32
Sat Flow, veh/h	1774	4460	643	1774	3965	1044	1774	3539	1536	1774	3539	1542
Grp Volume(v), veh/h	126	719	365	358	1026	490	74	432	168	232	537	137
Grp Sat Flow(s),veh/h/ln	1774	1695	1712	1774	1695	1619	1774	1770	1536	1774	1770	1542
Q Serve(g_s), s	7.3	21.0	21.2	20.6	27.7	27.7	3.2	10.9	9.6	9.7	12.7	6.0
Cycle Q Clear(g_c), s	7.3	21.0	21.2	20.6	27.7	27.7	3.2	10.9	9.6	9.7	12.7	6.0
Prop In Lane	1.00		0.38	1.00		0.64	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	868	438	396	1328	634	301	900	391	393	1147	639
V/C Ratio(X)	0.81	0.83	0.83	0.90	0.77	0.77	0.25	0.48	0.43	0.59	0.47	0.21
Avail Cap(c_a), veh/h	271	969	490	575	1551	741	324	900	391	462	1147	639
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	36.9	36.9	39.6	27.8	27.8	27.1	33.2	32.8	23.8	28.3	19.9
Incr Delay (d2), s/veh	9.5	5.5	10.7	13.2	2.1	4.4	0.4	1.8	3.4	1.4	1.4	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	10.5	11.2	11.5	13.4	13.2	1.6	5.6	4.4	4.9	6.4	2.7
LnGrp Delay(d), s/veh	56.4	42.4	47.7	52.9	30.0	32.2	27.5	35.1	36.2	25.2	29.6	20.7
LnGrp LOS	E	D	D	D	C	C	C	D	D	C	C	C
Approach Vol, veh/h		1210			1874			674			906	
Approach Delay, s/veh		45.4			34.9			34.5			27.2	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	30.7	27.5	30.9	8.6	38.0	13.2	45.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	24.0	34.0	30.0	6.0	34.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	11.7	12.9	22.6	23.2	5.2	14.7	9.3	29.7
Green Ext Time (p_c), s	0.3	2.5	0.9	3.7	0.0	3.8	0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	240	100	360	170	100	40	490	190	120	990	40
Future Volume (veh/h)	40	240	100	360	170	100	40	490	190	120	990	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	43	261	109	391	185	109	43	533	207	130	1076	43
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	529	657	274	469	578	340	122	1396	602	267	1366	55
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	1070	1230	514	998	1082	637	497	3505	1511	708	3430	137
Grp Volume(v), veh/h	43	0	370	391	0	294	43	533	207	130	550	569
Grp Sat Flow(s),veh/h/ln	1070	0	1743	998	0	1719	497	1752	1511	708	1752	1814
Q Serve(g_s), s	2.8	0.0	14.8	45.0	0.0	11.3	9.8	12.7	11.3	18.8	32.4	32.5
Cycle Q Clear(g_c), s	14.1	0.0	14.8	59.8	0.0	11.3	42.3	12.7	11.3	31.6	32.4	32.5
Prop In Lane	1.00		0.29	1.00		0.37	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	529	0	931	469	0	918	122	1396	602	267	698	723
V/C Ratio(X)	0.08	0.00	0.40	0.83	0.00	0.32	0.35	0.38	0.34	0.49	0.79	0.79
Avail Cap(c_a), veh/h	547	0	960	485	0	947	122	1396	602	267	698	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.4	0.0	16.3	34.0	0.0	15.5	49.7	25.2	24.8	36.4	31.1	31.1
Incr Delay (d2), s/veh	0.1	0.0	0.3	11.6	0.0	0.2	7.8	0.8	1.6	6.2	8.8	8.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	7.2	13.9	0.0	5.4	1.6	6.3	5.0	4.1	17.3	18.0
LnGrp Delay(d), s/veh	19.5	0.0	16.5	45.6	0.0	15.7	57.5	26.0	26.3	42.6	39.9	39.6
LnGrp LOS	B		B	D		B	E	C	C	D	D	D
Approach Vol, veh/h		413			685			783			1249	
Approach Delay, s/veh		16.9			32.7			27.8			40.0	
Approach LOS		B			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		51.0		67.0		51.0		67.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		47.0		65.0		47.0		65.0
Max Q Clear Time (g_c+I1), s		44.3		16.8		34.5		61.8
Green Ext Time (p_c), s		1.3		2.7		6.5		1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	10	110	20	10	20	50	590	30	10	1280	140
Future Volume (veh/h)	120	10	110	20	10	20	50	590	30	10	1280	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	125	10	115	21	10	21	52	615	31	10	1333	146
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	229	17	195	143	71	150	294	2793	1216	648	2534	276
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1351	124	1425	1247	522	1097	356	3539	1541	781	3211	350
Grp Volume(v), veh/h	125	0	125	21	0	31	52	615	31	10	731	748
Grp Sat Flow(s),veh/h/ln	1351	0	1549	1247	0	1619	356	1770	1541	781	1770	1791
Q Serve(g_s), s	9.7	0.0	8.2	1.7	0.0	1.8	6.7	4.8	0.5	0.4	16.0	16.3
Cycle Q Clear(g_c), s	11.5	0.0	8.2	9.9	0.0	1.8	23.0	4.8	0.5	5.1	16.0	16.3
Prop In Lane	1.00		0.92	1.00		0.68	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	229	0	212	143	0	221	294	2793	1216	648	1397	1413
V/C Ratio(X)	0.55	0.00	0.59	0.15	0.00	0.14	0.18	0.22	0.03	0.02	0.52	0.53
Avail Cap(c_a), veh/h	383	0	388	285	0	406	294	2793	1216	648	1397	1413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	0.0	43.7	48.3	0.0	40.9	8.3	2.9	2.4	3.6	4.1	4.1
Incr Delay (d2), s/veh	2.0	0.0	2.6	0.5	0.0	0.3	1.3	0.2	0.0	0.0	1.4	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	0.0	3.7	0.6	0.0	0.8	0.8	2.4	0.2	0.1	8.3	8.5
LnGrp Delay(d), s/veh	48.0	0.0	46.3	48.8	0.0	41.2	9.6	3.1	2.5	3.6	5.5	5.5
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		250			52			698			1489	
Approach Delay, s/veh		47.2			44.3			3.5			5.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		18.7		89.0		18.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		25.0		13.5		18.3		11.9
Green Ext Time (p_c), s		6.2		0.9		16.3		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Future Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	228	120	207	130	43	33	554	196	76	1380	33
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	431	227	296	709	578	162	1937	838	393	1937	838
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1190	1132	596	1029	1863	1517	379	3539	1532	708	3539	1532
Grp Volume(v), veh/h	43	0	348	207	130	43	33	554	196	76	1380	33
Grp Sat Flow(s),veh/h/ln	1190	0	1727	1029	1863	1517	379	1770	1532	708	1770	1532
Q Serve(g_s), s	2.8	0.0	17.4	21.8	5.2	2.0	7.9	9.4	7.4	7.2	32.2	1.1
Cycle Q Clear(g_c), s	8.0	0.0	17.4	39.2	5.2	2.0	40.1	9.4	7.4	16.5	32.2	1.1
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	0	658	296	709	578	162	1937	838	393	1937	838
V/C Ratio(X)	0.09	0.00	0.53	0.70	0.18	0.07	0.20	0.29	0.23	0.19	0.71	0.04
Avail Cap(c_a), veh/h	554	0	791	375	852	694	162	1937	838	393	1937	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	26.7	41.9	23.0	22.0	33.6	13.5	13.1	18.0	18.7	11.7
Incr Delay (d2), s/veh	0.1	0.0	0.7	4.1	0.1	0.1	2.8	0.4	0.7	1.1	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	8.4	6.5	2.7	0.8	1.0	4.6	3.3	1.5	16.3	0.5
LnGrp Delay(d), s/veh	25.7	0.0	27.4	46.0	23.1	22.0	36.4	13.9	13.7	19.1	21.0	11.8
LnGrp LOS	C		C	D	C	C	D	B	B	B	C	B
Approach Vol, veh/h		391			380			783			1489	
Approach Delay, s/veh		27.2			35.5			14.8			20.7	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		46.4		65.0		46.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		61.0		51.0		61.0		51.0
Max Q Clear Time (g_c+I1), s		42.1		19.4		34.2		41.2
Green Ext Time (p_c), s		4.7		2.4		12.9		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Future Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	186	649	103	175	598	113	113	763	134	82	577	186
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	894	384	211	727	137	143	1428	620	106	998	321
Arrive On Green	0.13	0.25	0.25	0.12	0.25	0.25	0.08	0.40	0.40	0.06	0.38	0.38
Sat Flow, veh/h	1774	3539	1519	1774	2953	556	1774	3539	1537	1774	2610	839
Grp Volume(v), veh/h	186	649	103	175	358	353	113	763	134	82	391	372
Grp Sat Flow(s),veh/h/ln	1774	1770	1519	1774	1770	1740	1774	1770	1537	1774	1770	1680
Q Serve(g_s), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Cycle Q Clear(g_c), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	223	894	384	211	435	428	143	1428	620	106	677	642
V/C Ratio(X)	0.84	0.73	0.27	0.83	0.82	0.83	0.79	0.53	0.22	0.78	0.58	0.58
Avail Cap(c_a), veh/h	385	1208	518	367	586	576	275	1428	620	220	677	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	33.1	29.0	41.6	34.4	34.5	43.7	21.9	18.9	44.8	23.7	23.7
Incr Delay (d2), s/veh	8.0	1.4	0.4	8.1	6.8	7.2	9.4	1.4	0.8	11.5	3.6	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	8.1	2.2	5.0	9.9	9.8	3.3	8.0	2.5	2.5	8.9	8.5
LnGrp Delay(d), s/veh	49.3	34.5	29.3	49.8	41.3	41.7	53.0	23.4	19.7	56.3	27.2	27.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	E	C	C
Approach Vol, veh/h		938			886			1010			845	
Approach Delay, s/veh		36.9			43.1			26.2			30.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	43.0	15.5	28.4	11.8	41.0	16.1	27.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	39.0	20.0	33.0	15.0	36.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	17.9	11.3	18.2	8.0	19.0	11.9	20.6
Green Ext Time (p_c), s	0.1	5.7	0.3	4.1	0.1	4.3	0.3	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	360	10	120	20	710	310	90	670	20
Future Volume (veh/h)	10	10	10	360	10	120	20	710	310	90	670	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.90	0.92		0.90	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	11	11	11	387	11	129	22	763	333	97	720	22
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	390	274	274	490	39	456	409	1385	603	266	2051	63
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1199	807	807	1277	115	1343	714	2366	1031	512	3505	107
Grp Volume(v), veh/h	11	0	22	387	0	140	22	570	526	97	363	379
Grp Sat Flow(s),veh/h/ln	1199	0	1614	1277	0	1457	714	1770	1627	512	1770	1842
Q Serve(g_s), s	0.7	0.0	1.0	30.8	0.0	7.4	1.8	20.9	21.0	15.2	11.4	11.4
Cycle Q Clear(g_c), s	8.2	0.0	1.0	31.8	0.0	7.4	13.1	20.9	21.0	36.1	11.4	11.4
Prop In Lane	1.00		0.50	1.00		0.92	1.00		0.63	1.00		0.06
Lane Grp Cap(c), veh/h	390	0	548	490	0	494	409	1036	952	266	1036	1078
V/C Ratio(X)	0.03	0.00	0.04	0.79	0.00	0.28	0.05	0.55	0.55	0.36	0.35	0.35
Avail Cap(c_a), veh/h	549	0	762	659	0	688	409	1036	952	266	1036	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.6	0.0	23.4	34.1	0.0	25.6	14.9	13.4	13.5	24.5	11.5	11.5
Incr Delay (d2), s/veh	0.0	0.0	0.0	4.7	0.0	0.3	0.2	2.1	2.3	3.8	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	0.0	0.4	11.5	0.0	3.0	0.4	10.7	10.0	2.4	5.8	6.1
LnGrp Delay(d), s/veh	28.6	0.0	23.5	38.8	0.0	25.9	15.1	15.6	15.8	28.3	12.4	12.4
LnGrp LOS	C		C	D		C	B	B	B	C	B	B
Approach Vol, veh/h		33			527			1118			839	
Approach Delay, s/veh		25.2			35.3			15.6			14.2	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		39.9		66.0		39.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		50.0		62.0		50.0
Max Q Clear Time (g_c+I1), s		23.0		10.2		38.1		33.8
Green Ext Time (p_c), s		9.5		0.1		6.0		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	490	790	160	240	1230	240	150	450	170	210	510	430
Future Volume (veh/h)	490	790	160	240	1230	240	150	450	170	210	510	430
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.92	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	505	814	165	247	1268	247	155	464	175	216	526	443
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	503	1481	633	278	1227	239	221	494	184	232	826	346
Arrive On Green	0.28	0.42	0.42	0.16	0.29	0.29	0.06	0.20	0.20	0.09	0.23	0.23
Sat Flow, veh/h	1774	3539	1512	1774	4208	820	1774	2471	922	1774	3539	1482
Grp Volume(v), veh/h	505	814	165	247	1021	494	155	331	308	216	526	443
Grp Sat Flow(s),veh/h/ln	1774	1770	1512	1774	1695	1638	1774	1770	1623	1774	1770	1482
Q Serve(g_s), s	34.0	20.8	8.5	16.4	35.0	35.0	7.0	22.1	22.5	11.0	16.1	28.0
Cycle Q Clear(g_c), s	34.0	20.8	8.5	16.4	35.0	35.0	7.0	22.1	22.5	11.0	16.1	28.0
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.57	1.00		1.00
Lane Grp Cap(c), veh/h	503	1481	633	278	989	478	221	354	325	232	826	346
V/C Ratio(X)	1.00	0.55	0.26	0.89	1.03	1.03	0.70	0.93	0.95	0.93	0.64	1.28
Avail Cap(c_a), veh/h	503	1481	633	384	989	478	221	354	325	232	826	346
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	26.3	22.8	49.6	42.5	42.5	39.5	47.2	47.4	36.3	41.4	46.0
Incr Delay (d2), s/veh	41.3	0.4	0.2	17.1	37.5	50.0	9.6	33.9	38.6	40.0	3.7	146.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.4	10.3	3.6	9.3	21.5	22.4	4.6	14.1	13.6	8.1	8.2	25.5
LnGrp Delay(d), s/veh	84.3	26.8	23.0	66.7	80.0	92.5	49.0	81.1	86.0	76.3	45.2	192.9
LnGrp LOS	F	C	C	E	F	F	D	F	F	E	D	F
Approach Vol, veh/h		1484			1762			794			1185	
Approach Delay, s/veh		45.9			81.6			76.7			106.1	
Approach LOS		D			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	28.0	22.8	54.2	11.0	32.0	38.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	24.0	26.0	43.0	7.0	28.0	34.0	35.0
Max Q Clear Time (g_c+I1), s	13.0	24.5	18.4	22.8	9.0	30.0	36.0	37.0
Green Ext Time (p_c), s	0.0	0.0	0.4	6.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	76.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	220	350	60	180	160	220	300	20	90	750	130
Future Volume (veh/h)	250	220	350	60	180	160	220	300	20	90	750	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	263	232	368	63	189	168	232	316	21	95	789	137
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	281	243	385	82	343	305	291	1832	121	575	1634	284
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1010	633	1004	808	896	796	596	3330	220	1026	2972	516
Grp Volume(v), veh/h	263	0	600	63	0	357	232	165	172	95	465	461
Grp Sat Flow(s),veh/h/ln	1010	0	1637	808	0	1692	596	1752	1798	1026	1752	1735
Q Serve(g_s), s	26.2	0.0	42.8	3.2	0.0	19.8	46.5	5.6	5.7	6.1	19.5	19.5
Cycle Q Clear(g_c), s	46.0	0.0	42.8	46.0	0.0	19.8	66.0	5.6	5.7	11.8	19.5	19.5
Prop In Lane	1.00		0.61	1.00		0.47	1.00		0.12	1.00		0.30
Lane Grp Cap(c), veh/h	281	0	628	82	0	649	291	964	989	575	964	954
V/C Ratio(X)	0.94	0.00	0.96	0.77	0.00	0.55	0.80	0.17	0.17	0.17	0.48	0.48
Avail Cap(c_a), veh/h	281	0	628	82	0	649	291	964	989	575	964	954
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	0.0	36.0	59.5	0.0	28.9	36.9	13.4	13.4	16.4	16.5	16.5
Incr Delay (d2), s/veh	37.2	0.0	25.4	35.8	0.0	1.0	20.0	0.4	0.4	0.6	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	0.0	23.8	2.9	0.0	9.4	9.3	2.8	2.9	1.8	9.9	9.8
LnGrp Delay(d), s/veh	86.2	0.0	61.4	95.3	0.0	29.9	56.9	13.8	13.8	17.0	18.3	18.3
LnGrp LOS	F		E	F		C	E	B	B	B	B	B
Approach Vol, veh/h		863			420			569			1021	
Approach Delay, s/veh		69.0			39.7			31.4			18.2	
Approach LOS		E			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		50.0		70.0		50.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		68.0		48.0		21.5		48.0
Green Ext Time (p_c), s		0.0		0.0		7.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	20	80	90	20	180	30	320	40	210	900	20
Future Volume (veh/h)	30	20	80	90	20	180	30	320	40	210	900	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.98		0.94	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	32	21	85	96	21	191	32	340	43	223	957	21
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	105	53	214	201	26	237	342	1399	1147	751	1399	1173
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1153	303	1225	1239	149	1353	567	1845	1513	983	1845	1547
Grp Volume(v), veh/h	32	0	106	96	0	212	32	340	43	223	957	21
Grp Sat Flow(s),veh/h/ln	1153	0	1528	1239	0	1502	567	1845	1513	983	1845	1547
Q Serve(g_s), s	3.3	0.0	7.4	8.9	0.0	16.3	3.6	6.6	0.8	10.4	31.3	0.4
Cycle Q Clear(g_c), s	19.6	0.0	7.4	16.3	0.0	16.3	34.9	6.6	0.8	17.0	31.3	0.4
Prop In Lane	1.00		0.80	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	105	0	267	201	0	263	342	1399	1147	751	1399	1173
V/C Ratio(X)	0.30	0.00	0.40	0.48	0.00	0.81	0.09	0.24	0.04	0.30	0.68	0.02
Avail Cap(c_a), veh/h	105	0	267	201	0	263	342	1399	1147	751	1399	1173
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	43.9	51.1	0.0	47.6	16.0	4.3	3.6	6.8	7.3	3.6
Incr Delay (d2), s/veh	1.6	0.0	1.0	1.8	0.0	16.7	0.5	0.4	0.1	1.0	2.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.2	3.2	0.0	8.0	0.6	3.5	0.4	3.0	16.7	0.2
LnGrp Delay(d), s/veh	58.5	0.0	44.8	52.9	0.0	64.3	16.6	4.7	3.7	7.8	10.0	3.6
LnGrp LOS	E		D	D		E	B	A	A	A	B	A
Approach Vol, veh/h		138			308			415			1201	
Approach Delay, s/veh		48.0			60.7			5.5			9.5	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		25.0		95.0		25.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		21.0		91.0		21.0
Max Q Clear Time (g_c+I1), s		36.9		21.6		33.3		18.3
Green Ext Time (p_c), s		2.7		0.0		12.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Future Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.88	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	102	245	224	71	204	71	71	214	51	82	929	112
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	501	396	212	342	119	339	1206	994	733	2057	248
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1085	1845	1458	904	1260	439	534	1845	1520	1095	3147	379
Grp Volume(v), veh/h	102	245	224	71	0	275	71	214	51	82	517	524
Grp Sat Flow(s),veh/h/ln	1085	1845	1458	904	0	1699	534	1845	1520	1095	1752	1774
Q Serve(g_s), s	9.7	11.9	14.2	7.7	0.0	15.1	8.1	4.9	1.3	3.4	15.5	15.5
Cycle Q Clear(g_c), s	24.7	11.9	14.2	19.6	0.0	15.1	23.6	4.9	1.3	8.3	15.5	15.5
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	209	501	396	212	0	462	339	1206	994	733	1145	1160
V/C Ratio(X)	0.49	0.49	0.57	0.33	0.00	0.60	0.21	0.18	0.05	0.11	0.45	0.45
Avail Cap(c_a), veh/h	340	723	572	321	0	666	339	1206	994	733	1145	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	32.8	33.6	41.0	0.0	33.9	14.9	7.3	6.6	8.9	9.1	9.1
Incr Delay (d2), s/veh	1.8	0.7	1.3	0.9	0.0	1.2	1.4	0.3	0.1	0.3	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	6.2	5.8	2.0	0.0	7.2	1.3	2.5	0.6	1.1	7.9	8.0
LnGrp Delay(d), s/veh	46.4	33.5	34.8	41.9	0.0	35.1	16.3	7.6	6.7	9.2	10.4	10.4
LnGrp LOS	D	C	C	D		D	B	A	A	A	B	B
Approach Vol, veh/h		571			346			336			1123	
Approach Delay, s/veh		36.3			36.5			9.3			10.3	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		33.1		74.0		33.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		25.6		26.7		17.5		21.6
Green Ext Time (p_c), s		2.3		2.4		9.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Future Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	191	489	117	106	415	96	106	521	64	106	915	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	292	679	299	235	532	230	363	2022	247	526	1849	150
Arrive On Green	0.11	0.19	0.19	0.07	0.15	0.15	0.04	0.63	0.63	0.55	0.55	0.55
Sat Flow, veh/h	1792	3574	1574	1792	3574	1546	1792	3196	391	830	3341	270
Grp Volume(v), veh/h	191	489	117	106	415	96	106	290	295	106	489	500
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1546	1792	1787	1800	830	1787	1824
Q Serve(g_s), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Cycle Q Clear(g_c), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.15
Lane Grp Cap(c), veh/h	292	679	299	235	532	230	363	1130	1139	526	989	1009
V/C Ratio(X)	0.65	0.72	0.39	0.45	0.78	0.42	0.29	0.26	0.26	0.20	0.49	0.49
Avail Cap(c_a), veh/h	383	964	425	301	765	331	471	1130	1139	526	989	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	40.8	38.1	35.7	44.1	41.5	10.8	8.7	8.7	12.3	14.8	14.8
Incr Delay (d2), s/veh	2.5	1.5	0.8	1.4	3.3	1.2	0.4	0.5	0.6	0.9	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	6.9	3.1	2.7	6.2	2.7	1.3	4.0	4.0	1.7	9.3	9.5
LnGrp Delay(d), s/veh	35.3	42.4	38.9	37.1	47.4	42.7	11.3	9.2	9.2	13.2	16.5	16.5
LnGrp LOS	D	D	D	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h		797			617			691			1095	
Approach Delay, s/veh		40.2			44.9			9.5			16.2	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		72.0	11.1	24.4	8.5	63.5	15.5	20.0
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	11.0	29.0	11.0	53.0	17.0	23.0
Max Q Clear Time (g_c+I1), s		9.7	7.3	15.8	4.6	20.1	11.3	14.0
Green Ext Time (p_c), s		3.9	0.1	2.9	0.1	8.3	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Future Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.93	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	217	207	87	272	163	141	511	109	109	707	185
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	404	331	265	330	189	308	1795	381	496	1160	1143
Arrive On Green	0.11	0.22	0.22	0.05	0.16	0.16	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	1774	1863	1524	1774	2108	1208	621	2883	611	798	1863	1545
Grp Volume(v), veh/h	207	217	207	87	226	209	141	313	307	109	707	185
Grp Sat Flow(s),veh/h/ln	1774	1863	1524	1774	1770	1546	621	1770	1724	798	1863	1545
Q Serve(g_s), s	10.6	11.6	13.8	4.6	13.9	14.8	20.1	9.1	9.2	8.2	25.9	4.0
Cycle Q Clear(g_c), s	10.6	11.6	13.8	4.6	13.9	14.8	46.0	9.1	9.2	17.4	25.9	4.0
Prop In Lane	1.00		1.00	1.00		0.78	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	290	404	331	265	277	242	308	1102	1074	496	1160	1143
V/C Ratio(X)	0.71	0.54	0.63	0.33	0.82	0.86	0.46	0.28	0.29	0.22	0.61	0.16
Avail Cap(c_a), veh/h	372	530	434	265	315	275	308	1102	1074	496	1160	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	39.0	39.9	37.0	45.9	46.2	26.9	9.7	9.7	13.7	12.9	4.4
Incr Delay (d2), s/veh	4.6	1.1	1.9	0.7	13.9	21.5	4.9	0.6	0.7	1.0	2.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.1	6.0	2.3	7.9	7.8	3.9	4.6	4.6	1.9	13.9	1.8
LnGrp Delay(d), s/veh	38.4	40.1	41.8	37.7	59.8	67.7	31.7	10.4	10.4	14.7	15.3	4.7
LnGrp LOS	D	D	D	D	E	E	C	B	B	B	B	A
Approach Vol, veh/h		631			522			761			1001	
Approach Delay, s/veh		40.1			59.3			14.3			13.3	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.0	10.0	28.4		74.0	16.8	21.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		70.0	6.0	32.0		70.0	18.0	20.0
Max Q Clear Time (g_c+I1), s		48.0	6.6	15.8		27.9	12.6	16.8
Green Ext Time (p_c), s		5.2	0.0	1.7		7.5	0.3	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Future Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	290	828	366	269	634	65	183	817	183	140	1118	215
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	955	393	310	837	86	244	1134	254	263	1367	560
Arrive On Green	0.14	0.27	0.27	0.13	0.26	0.26	0.08	0.40	0.40	0.06	0.39	0.39
Sat Flow, veh/h	1774	3539	1457	1774	3213	329	1774	2822	632	1774	3539	1449
Grp Volume(v), veh/h	290	828	366	269	349	350	183	512	488	140	1118	215
Grp Sat Flow(s),veh/h/ln	1774	1770	1457	1774	1770	1772	1774	1770	1684	1774	1770	1449
Q Serve(g_s), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Cycle Q Clear(g_c), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	363	955	393	310	461	462	244	711	677	263	1367	560
V/C Ratio(X)	0.80	0.87	0.93	0.87	0.76	0.76	0.75	0.72	0.72	0.53	0.82	0.38
Avail Cap(c_a), veh/h	408	968	398	341	461	462	271	711	677	272	1367	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	40.7	41.6	29.5	39.8	39.9	26.0	29.5	29.5	23.3	32.2	25.9
Incr Delay (d2), s/veh	9.7	8.3	28.3	19.1	7.0	7.2	10.0	6.2	6.5	1.9	5.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	13.9	14.6	7.8	11.3	11.3	4.1	15.2	14.5	2.8	17.2	5.3
LnGrp Delay(d), s/veh	38.1	49.0	69.9	48.6	46.8	47.0	36.0	35.7	36.0	25.1	37.7	27.8
LnGrp LOS	D	D	E	D	D	D	D	D	D	C	D	C
Approach Vol, veh/h		1484			968			1183			1473	
Approach Delay, s/veh		52.1			47.4			35.9			35.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	51.0	19.0	35.6	13.3	49.2	20.0	34.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	47.0	17.0	32.0	11.0	44.0	19.0	30.0
Max Q Clear Time (g_c+I1), s	7.5	30.5	14.8	30.7	9.2	35.1	15.8	23.3
Green Ext Time (p_c), s	0.0	6.0	0.2	0.9	0.1	5.3	0.3	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Future Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.88	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	299	1165	227	155	1144	93	258	691	113	216	1433	289
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1149	222	164	1132	447	241	1237	199	343	1455	421
Arrive On Green	0.17	0.39	0.39	0.09	0.32	0.32	0.10	0.28	0.28	0.10	0.28	0.28
Sat Flow, veh/h	1792	2933	566	1792	3574	1411	1792	4410	710	1792	5136	1487
Grp Volume(v), veh/h	299	705	687	155	1144	93	258	534	270	216	1433	289
Grp Sat Flow(s),veh/h/ln	1792	1787	1712	1792	1787	1411	1792	1712	1696	1792	1712	1487
Q Serve(g_s), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Cycle Q Clear(g_c), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	299	700	670	164	1132	447	241	960	476	343	1455	421
V/C Ratio(X)	1.00	1.01	1.02	0.94	1.01	0.21	1.07	0.56	0.57	0.63	0.98	0.69
Avail Cap(c_a), veh/h	299	700	670	164	1132	447	241	960	476	397	1455	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	36.5	36.5	54.2	41.0	30.0	33.4	36.8	36.9	27.6	42.7	38.2
Incr Delay (d2), s/veh	52.4	35.8	41.1	53.7	29.4	0.2	78.1	2.3	4.8	2.5	20.2	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	30.1	29.8	7.6	23.3	2.3	13.2	7.9	8.3	5.2	18.4	9.5
LnGrp Delay(d), s/veh	102.4	72.4	77.6	107.9	70.4	30.2	111.6	39.1	41.8	30.1	63.0	47.0
LnGrp LOS	F	F	F	F	F	C	F	D	D	C	E	D
Approach Vol, veh/h		1691			1392			1062			1938	
Approach Delay, s/veh		79.8			71.9			57.4			56.9	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	37.7	15.0	51.0	16.0	38.0	24.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	11.0	47.0	12.0	34.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	12.1	18.3	12.3	49.0	14.0	35.3	22.0	40.0
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Future Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.88	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	133	561	224	173	520	276	173	531	153	255	827	61
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	787	306	211	875	346	211	1234	341	297	1765	129
Arrive On Green	0.09	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.17	0.37	0.37
Sat Flow, veh/h	1774	3539	1376	1774	3539	1397	1774	3872	1070	1774	4804	352
Grp Volume(v), veh/h	133	561	224	173	520	276	173	462	222	255	582	306
Grp Sat Flow(s),veh/h/ln	1774	1770	1376	1774	1770	1397	1774	1695	1552	1774	1695	1766
Q Serve(g_s), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Cycle Q Clear(g_c), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.69	1.00		0.20
Lane Grp Cap(c), veh/h	166	787	306	211	875	346	211	1080	495	297	1246	649
V/C Ratio(X)	0.80	0.71	0.73	0.82	0.59	0.80	0.82	0.43	0.45	0.86	0.47	0.47
Avail Cap(c_a), veh/h	307	1071	416	403	1262	498	403	1080	495	556	1246	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	33.3	33.4	39.8	30.7	32.7	39.8	24.9	25.1	37.4	22.4	22.4
Incr Delay (d2), s/veh	8.6	1.4	4.3	7.7	0.6	5.8	7.7	1.2	2.9	7.1	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.8	5.7	4.8	5.9	7.1	4.8	4.8	4.9	6.9	5.9	6.4
LnGrp Delay(d), s/veh	49.6	34.7	37.7	47.6	31.4	38.5	47.6	26.1	28.0	44.6	23.6	24.8
LnGrp LOS	D	C	D	D	C	D	D	C	C	D	C	C
Approach Vol, veh/h		918			969			857			1143	
Approach Delay, s/veh		37.6			36.3			30.9			28.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	33.5	15.0	24.6	15.0	38.0	12.7	26.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	26.0	21.0	28.0	21.0	34.0	16.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	12.5	10.8	16.0	10.8	14.3	8.8	19.1
Green Ext Time (p_c), s	0.6	3.6	0.3	3.5	0.3	5.4	0.2	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Future Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	268	1000	165	423	1247	144	175	505	93	278	928	113
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	1570	258	502	1443	628	236	1270	375	346	1288	156
Arrive On Green	0.10	0.36	0.36	0.15	0.41	0.41	0.07	0.25	0.25	0.10	0.28	0.28
Sat Flow, veh/h	3442	4379	721	3442	3539	1540	3442	5085	1500	3442	4570	554
Grp Volume(v), veh/h	268	774	391	423	1247	144	175	505	93	278	687	354
Grp Sat Flow(s),veh/h/ln	1721	1695	1710	1721	1770	1540	1721	1695	1500	1721	1695	1734
Q Serve(g_s), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Cycle Q Clear(g_c), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Prop In Lane	1.00		0.42	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	332	1215	613	502	1443	628	236	1270	375	346	955	489
V/C Ratio(X)	0.81	0.64	0.64	0.84	0.86	0.23	0.74	0.40	0.25	0.80	0.72	0.72
Avail Cap(c_a), veh/h	407	1294	653	688	1641	714	282	1270	375	469	955	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	29.3	29.4	45.8	29.8	21.3	50.3	34.4	33.0	48.4	35.6	35.6
Incr Delay (d2), s/veh	9.5	1.0	1.9	6.9	4.6	0.2	8.4	0.9	1.6	7.1	4.7	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	9.9	10.2	6.8	18.2	2.9	2.9	4.4	2.4	4.5	10.0	10.9
LnGrp Delay(d), s/veh	58.2	30.3	31.3	52.7	34.4	21.5	58.7	35.3	34.6	55.5	40.3	44.7
LnGrp LOS	E	C	C	D	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1433			1814			773			1319	
Approach Delay, s/veh		35.8			37.6			40.5			44.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	31.5	20.1	43.4	11.5	35.0	14.6	48.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	25.0	22.0	42.0	9.0	31.0	13.0	51.0
Max Q Clear Time (g_c+I1), s	10.7	11.1	15.2	23.0	7.5	22.2	10.4	37.4
Green Ext Time (p_c), s	0.4	3.0	0.9	7.4	0.1	4.2	0.2	7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Future Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	205	102	330	23	114	68	205	830	11	45	1580	216
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	524	36	156	524	235	2760	37	58	1948	265
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.13	0.53	0.53	0.03	0.43	0.43
Sat Flow, veh/h	0	0	1562	0	465	1560	1792	5219	69	1792	4529	617
Grp Volume(v), veh/h	307	0	330	137	0	68	205	544	297	45	1193	603
Grp Sat Flow(s),veh/h/ln	0	0	1562	465	0	1560	1792	1712	1864	1792	1712	1722
Q Serve(g_s), s	0.0	0.0	20.7	0.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Cycle Q Clear(g_c), s	39.0	0.0	20.7	39.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Prop In Lane	0.67		1.00	0.17		1.00	1.00		0.04	1.00		0.36
Lane Grp Cap(c), veh/h	52	0	524	192	0	524	235	1811	986	58	1473	741
V/C Ratio(X)	5.94	0.00	0.63	0.71	0.00	0.13	0.87	0.30	0.30	0.78	0.81	0.81
Avail Cap(c_a), veh/h	52	0	524	192	0	524	293	1811	986	123	1473	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	32.5	31.4	0.0	26.8	49.6	15.3	15.3	55.8	29.0	29.0
Incr Delay (d2), s/veh	2265.5	0.0	2.4	11.7	0.0	0.1	20.6	0.4	0.8	19.4	4.9	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.2	0.0	9.3	3.8	0.0	1.5	7.8	4.9	5.5	1.8	17.7	18.9
LnGrp Delay(d), s/veh	2323.6	0.0	34.9	43.1	0.0	26.9	70.1	15.8	16.1	75.3	33.9	38.6
LnGrp LOS	F		C	D		C	E	B	B	E	C	D
Approach Vol, veh/h		637			205			1046			1841	
Approach Delay, s/veh		1137.9			37.7			26.5			36.4	
Approach LOS		F			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	65.5		43.0	19.2	54.0		43.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	61.0		39.0	19.0	50.0		39.0
Max Q Clear Time (g_c+I1), s	4.9	12.4		41.0	15.0	37.7		41.0
Green Ext Time (p_c), s	0.0	6.0		0.0	0.2	8.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		221.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Future Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.81		0.67	0.82		0.67	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	117	85	106	117	43	53	649	96	85	1532	21
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	353	201	198	353	201	259	2350	989	545	2388	33
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.03	0.66	0.66	0.03	0.67	0.67
Sat Flow, veh/h	992	1863	1063	967	1863	1063	1774	3539	1490	1774	3571	49
Grp Volume(v), veh/h	21	117	85	106	117	43	53	649	96	85	758	795
Grp Sat Flow(s),veh/h/ln	992	1863	1063	967	1863	1063	1774	1770	1490	1774	1770	1850
Q Serve(g_s), s	2.0	5.8	7.5	11.4	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Cycle Q Clear(g_c), s	7.8	5.8	7.5	17.2	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	201	353	201	198	353	201	259	2350	989	545	1183	1238
V/C Ratio(X)	0.10	0.33	0.42	0.54	0.33	0.21	0.20	0.28	0.10	0.16	0.64	0.64
Avail Cap(c_a), veh/h	310	557	318	304	557	318	306	2350	989	567	1183	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	37.5	38.2	44.9	37.5	36.6	9.0	7.4	6.4	5.5	10.3	10.3
Incr Delay (d2), s/veh	0.2	0.5	1.4	2.2	0.5	0.5	0.4	0.3	0.2	0.1	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.0	2.3	3.2	3.0	1.1	0.5	4.0	1.1	0.8	13.7	14.4
LnGrp Delay(d), s/veh	41.1	38.0	39.6	47.2	38.0	37.1	9.4	7.7	6.6	5.6	12.9	12.8
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	B
Approach Vol, veh/h		223			266			798			1638	
Approach Delay, s/veh		38.9			41.5			7.7			12.5	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	75.0		24.2	7.2	75.5		24.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	71.0		32.0	6.0	70.0		32.0
Max Q Clear Time (g_c+I1), s	3.6	10.1		9.8	3.0	28.7		19.2
Green Ext Time (p_c), s	0.0	5.4		1.1	0.0	16.7		1.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Future Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	146	385	167	62	1146	83	167	1177	31	73	969	250
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	164	1549	785	355	1163	84	197	1403	37	172	1009	259
Arrive On Green	0.06	0.45	0.45	0.36	0.36	0.36	0.07	0.41	0.41	0.04	0.38	0.38
Sat Flow, veh/h	1723	3438	1491	822	3242	235	1723	3420	90	1723	2686	691
Grp Volume(v), veh/h	146	385	167	62	607	622	167	592	616	73	619	600
Grp Sat Flow(s),veh/h/ln	1723	1719	1491	822	1719	1758	1723	1719	1791	1723	1719	1658
Q Serve(g_s), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Cycle Q Clear(g_c), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.05	1.00		0.42
Lane Grp Cap(c), veh/h	164	1549	785	355	617	631	197	706	735	172	646	623
V/C Ratio(X)	0.89	0.25	0.21	0.17	0.98	0.99	0.85	0.84	0.84	0.42	0.96	0.96
Avail Cap(c_a), veh/h	164	1549	785	355	617	631	199	706	735	177	646	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	20.4	15.3	26.6	38.1	38.1	28.1	31.8	31.8	26.9	36.5	36.6
Incr Delay (d2), s/veh	40.3	0.1	0.1	0.2	32.1	32.2	27.5	11.4	11.1	1.7	26.6	28.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	4.0	3.0	1.5	25.4	26.0	4.7	19.8	20.6	1.5	24.7	24.2
LnGrp Delay(d), s/veh	69.7	20.4	15.4	26.9	70.2	70.3	55.6	43.2	42.8	28.5	63.1	64.8
LnGrp LOS	E	C	B	C	E	E	E	D	D	C	E	E
Approach Vol, veh/h		698			1291			1375			1292	
Approach Delay, s/veh		29.5			68.2			44.5			62.0	
Approach LOS		C			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	53.2		58.0	12.8	49.0	11.0	47.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0		54.0	9.0	45.0	7.0	43.0
Max Q Clear Time (g_c+I1), s	5.1	39.1		10.3	8.9	44.5	8.3	44.1
Green Ext Time (p_c), s	0.0	5.3		3.2	0.0	0.4	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		53.7
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Future Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
Arrive On Green	0.11	0.32	0.32	0.04	0.25	0.25	0.20	0.46	0.00	0.05	0.31	0.00
Sat Flow, veh/h	1723	3438	1537	1723	3438	1536	1723	3438	1538	1723	3438	1538
Grp Volume(v), veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1537	1723	1719	1536	1723	1719	1538	1723	1719	1538
Q Serve(g_s), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Cycle Q Clear(g_c), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
V/C Ratio(X)	0.85	0.15	0.30	0.78	0.90	0.35	0.91	0.65	0.00	0.78	0.81	0.00
Avail Cap(c_a), veh/h	196	1088	486	136	904	404	393	1577	706	151	1055	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	28.0	29.4	54.4	41.5	35.3	44.8	23.9	0.0	53.9	36.5	0.0
Incr Delay (d2), s/veh	27.5	0.1	0.3	18.0	11.6	0.6	23.7	2.1	0.0	15.4	6.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.9	3.5	2.0	13.2	3.6	11.9	12.9	0.0	2.3	13.3	0.0
LnGrp Delay(d), s/veh	77.6	28.1	29.8	72.4	53.1	35.8	68.6	26.0	0.0	69.2	43.2	0.0
LnGrp LOS	E	C	C	E	D	D	E	C		E	D	
Approach Vol, veh/h		469			958			1343			916	
Approach Delay, s/veh		45.1			51.7			35.9			45.0	
Approach LOS		D			D			D			D	

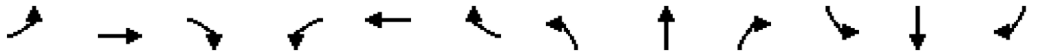
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	56.3	8.4	40.1	26.6	39.0	16.1	32.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	51.0	9.0	34.0	26.0	35.0	13.0	30.0
Max Q Clear Time (g_c+I1), s	6.1	28.4	5.4	10.2	22.2	28.1	12.1	26.8
Green Ext Time (p_c), s	0.0	7.4	0.0	1.4	0.3	3.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	180	630	200	160	790	20	220	560	100	30	550	130
Future Volume (veh/h)	180	630	200	160	790	20	220	560	100	30	550	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	189	663	0	168	832	21	232	589	105	32	579	137
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9	9	9	9	9	9	9
Cap, veh/h	219	1002	448	198	961	426	263	1640	287	39	891	386
Arrive On Green	0.13	0.30	0.00	0.12	0.29	0.29	0.16	0.40	0.40	0.02	0.27	0.27
Sat Flow, veh/h	1660	3312	1482	1660	3312	1469	1660	4058	710	1660	3312	1435
Grp Volume(v), veh/h	189	663	0	168	832	21	232	458	236	32	579	137
Grp Sat Flow(s),veh/h/ln	1660	1656	1482	1660	1656	1469	1660	1586	1596	1660	1656	1435
Q Serve(g_s), s	11.9	18.6	0.0	10.5	25.3	1.1	14.5	10.7	11.0	2.0	16.5	8.2
Cycle Q Clear(g_c), s	11.9	18.6	0.0	10.5	25.3	1.1	14.5	10.7	11.0	2.0	16.5	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	219	1002	448	198	961	426	263	1282	645	39	891	386
V/C Ratio(X)	0.86	0.66	0.00	0.85	0.87	0.05	0.88	0.36	0.37	0.83	0.65	0.35
Avail Cap(c_a), veh/h	297	1059	474	328	1121	497	359	1282	645	94	891	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	32.3	0.0	45.9	35.8	27.2	43.8	22.1	22.2	51.7	34.5	31.4
Incr Delay (d2), s/veh	17.5	1.4	0.0	10.3	6.5	0.0	17.1	0.8	1.6	33.8	3.7	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.7	0.0	5.4	12.4	0.5	7.9	4.8	5.1	1.3	8.0	3.5
LnGrp Delay(d), s/veh	62.7	33.8	0.0	56.1	42.3	27.2	60.9	22.8	23.8	85.5	38.1	34.0
LnGrp LOS	E	C		E	D	C	E	C	C	F	D	C
Approach Vol, veh/h		852			1021			926			748	
Approach Delay, s/veh		40.2			44.2			32.6			39.4	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	47.0	16.7	36.2	20.9	32.6	18.0	34.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	21.0	34.0	23.0	26.0	19.0	36.0
Max Q Clear Time (g_c+I1), s	4.0	13.0	12.5	20.6	16.5	18.5	13.9	27.3
Green Ext Time (p_c), s	0.0	4.7	0.3	3.5	0.3	2.5	0.2	3.5

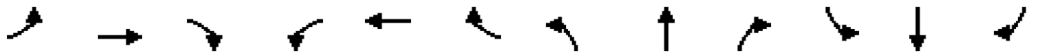
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Future Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1900
Adj Flow Rate, veh/h	74	432	211	105	979	21	168	484	32	42	526	21
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	94	1124	495	132	1200	535	202	1780	117	52	1407	56
Arrive On Green	0.06	0.34	0.34	0.08	0.36	0.36	0.12	0.39	0.39	0.03	0.30	0.30
Sat Flow, veh/h	1675	3343	1471	1675	3343	1490	1675	4600	301	1675	4735	188
Grp Volume(v), veh/h	74	432	211	105	979	21	168	335	181	42	355	192
Grp Sat Flow(s),veh/h/ln	1675	1671	1471	1675	1671	1490	1675	1601	1699	1675	1601	1721
Q Serve(g_s), s	4.2	9.4	10.6	5.9	25.4	0.9	9.4	6.9	7.0	2.4	8.4	8.5
Cycle Q Clear(g_c), s	4.2	9.4	10.6	5.9	25.4	0.9	9.4	6.9	7.0	2.4	8.4	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	94	1124	495	132	1200	535	202	1239	658	52	952	511
V/C Ratio(X)	0.79	0.38	0.43	0.80	0.82	0.04	0.83	0.27	0.27	0.81	0.37	0.38
Avail Cap(c_a), veh/h	193	1573	692	263	1713	764	386	1239	658	123	952	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	24.2	24.6	43.3	27.8	19.9	41.1	20.1	20.1	46.1	26.6	26.6
Incr Delay (d2), s/veh	13.6	0.2	0.6	10.4	2.1	0.0	8.5	0.5	1.0	25.0	1.1	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	4.4	4.4	3.1	12.0	0.4	4.8	3.1	3.4	1.5	3.8	4.3
LnGrp Delay(d), s/veh	58.2	24.4	25.2	53.7	29.9	20.0	49.6	20.6	21.1	71.0	27.7	28.7
LnGrp LOS	E	C	C	D	C	B	D	C	C	E	C	C
Approach Vol, veh/h		717			1105			684			589	
Approach Delay, s/veh		28.1			32.0			27.9			31.1	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	41.0	11.5	36.1	15.5	32.4	9.3	38.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	37.0	15.0	45.0	22.0	22.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	4.4	9.0	7.9	12.6	11.4	10.5	6.2	27.4
Green Ext Time (p_c), s	0.0	3.2	0.1	3.6	0.3	2.5	0.0	6.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	500	0	120	1340	0	0	0	0	570	0	110
Future Volume (vph)	0	500	0	120	1340	0	0	0	0	570	0	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3374		1684	4848					3273		1509
Flt Permitted		1.00		0.38	1.00					0.95		1.00
Satd. Flow (perm)		3374		665	4848					3273		1509
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	549	0	132	1473	0	0	0	0	626	0	121
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	549	0	132	1473	0	0	0	0	626	0	107
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		41.1		41.1	41.1					47.4		47.4
Effective Green, g (s)		41.1		41.1	41.1					47.4		47.4
Actuated g/C Ratio		0.43		0.43	0.43					0.49		0.49
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1437		283	2064					1607		741
v/s Ratio Prot		0.16			c0.30							
v/s Ratio Perm				0.20						c0.19		0.07
v/c Ratio		0.38		0.47	0.71					0.39		0.14
Uniform Delay, d1		19.0		19.8	22.8					15.4		13.4
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		1.2	1.2					0.7		0.4
Delay (s)		19.2		21.1	24.0					16.2		13.9
Level of Service		B		C	C					B		B
Approach Delay (s/veh)		19.2			23.8			0.0			15.8	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	96.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	790	160	20	1000	530	160	150	210	250	650	50
Future Volume (veh/h)	140	790	160	20	1000	530	160	150	210	250	650	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	147	832	168	21	1053	558	168	158	0	263	684	53
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	204	1203	243	30	1310	675	237	789	353	297	1138	498
Arrive On Green	0.06	0.43	0.43	0.02	0.38	0.38	0.07	0.23	0.00	0.17	0.33	0.33
Sat Flow, veh/h	3312	2807	567	1707	3406	1472	3312	3406	1524	1707	3406	1491
Grp Volume(v), veh/h	147	505	495	21	1053	558	168	158	0	263	684	53
Grp Sat Flow(s),veh/h/ln	1656	1703	1671	1707	1703	1472	1656	1703	1524	1707	1703	1491
Q Serve(g_s), s	4.7	26.0	26.0	1.3	29.7	35.8	5.4	4.0	0.0	16.2	18.1	2.6
Cycle Q Clear(g_c), s	4.7	26.0	26.0	1.3	29.7	35.8	5.4	4.0	0.0	16.2	18.1	2.6
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	204	730	716	30	1310	675	237	789	353	297	1138	498
V/C Ratio(X)	0.72	0.69	0.69	0.71	0.80	0.83	0.71	0.20	0.00	0.89	0.60	0.11
Avail Cap(c_a), veh/h	215	730	716	79	1357	696	675	789	353	459	1138	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	25.0	25.0	52.7	29.6	25.7	49.0	33.4	0.0	43.5	29.9	24.8
Incr Delay (d2), s/veh	10.7	2.8	2.8	26.8	3.5	7.9	3.9	0.6	0.0	12.5	2.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	12.8	12.5	0.8	14.5	16.0	2.6	1.9	0.0	8.7	8.8	1.1
LnGrp Delay(d), s/veh	60.4	27.8	27.9	79.5	33.1	33.6	52.9	34.0	0.0	56.0	32.3	25.2
LnGrp LOS	E	C	C	E	C	C	D	C		E	C	C
Approach Vol, veh/h		1147			1632			326			1000	
Approach Delay, s/veh		32.0			33.9			43.7			38.2	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	40.0	5.9	50.3	22.8	29.0	10.6	45.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	32.0	5.0	45.0	29.0	25.0	7.0	43.0
Max Q Clear Time (g_c+I1), s	7.4	20.1	3.3	28.0	18.2	6.0	6.7	37.8
Green Ext Time (p_c), s	0.4	3.5	0.0	5.8	0.5	0.7	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Future Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	167	771	42	62	1271	167	198	1135	21	219	1344	333
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	172	1577	86	79	1212	159	201	1232	547	230	1289	719
Arrive On Green	0.10	0.33	0.33	0.05	0.28	0.28	0.12	0.36	0.36	0.13	0.38	0.38
Sat Flow, veh/h	1723	4792	260	1723	4409	579	1723	3438	1525	1723	3438	1507
Grp Volume(v), veh/h	167	529	284	62	949	489	198	1135	21	219	1344	333
Grp Sat Flow(s),veh/h/ln	1723	1647	1758	1723	1647	1695	1723	1719	1525	1723	1719	1507
Q Serve(g_s), s	11.6	15.4	15.5	4.3	33.0	33.0	13.8	37.9	1.1	15.1	45.0	17.9
Cycle Q Clear(g_c), s	11.6	15.4	15.5	4.3	33.0	33.0	13.8	37.9	1.1	15.1	45.0	17.9
Prop In Lane	1.00		0.15	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	172	1084	579	79	906	466	201	1232	547	230	1289	719
V/C Ratio(X)	0.97	0.49	0.49	0.78	1.05	1.05	0.98	0.92	0.04	0.95	1.04	0.46
Avail Cap(c_a), veh/h	172	1084	579	144	906	466	201	1232	547	230	1289	719
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	32.2	32.2	56.7	43.5	43.5	52.9	36.9	25.0	51.6	37.5	21.2
Incr Delay (d2), s/veh	59.2	0.3	0.6	15.4	43.4	54.9	58.9	12.6	0.1	46.2	36.9	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	7.0	7.6	2.4	20.4	22.5	9.8	20.1	0.5	10.1	27.9	7.8
LnGrp Delay(d), s/veh	113.0	32.5	32.9	72.1	86.9	98.4	111.8	49.5	25.2	97.9	74.4	23.4
LnGrp LOS	F	C	C	E	F	F	F	D	C	F	F	C
Approach Vol, veh/h		980			1500			1354			1896	
Approach Delay, s/veh		46.3			90.0			58.2			68.1	
Approach LOS		D			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	47.0	9.5	43.5	18.0	49.0	16.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	43.0	10.0	35.0	14.0	45.0	12.0	33.0
Max Q Clear Time (g_c+I1), s	17.1	39.9	6.3	17.5	15.8	47.0	13.6	35.0
Green Ext Time (p_c), s	0.0	2.0	0.0	4.7	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	830	150	140	1470	120	100	410	60	100	510	190
Future Volume (veh/h)	110	830	150	140	1470	120	100	410	60	100	510	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.90	0.99		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	118	892	161	151	1581	129	108	441	65	108	548	204
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	144	1547	278	180	1813	148	233	1448	584	349	1002	371
Arrive On Green	0.08	0.37	0.37	0.10	0.39	0.39	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1723	4192	753	1723	4650	379	688	3438	1387	851	2379	881
Grp Volume(v), veh/h	118	700	353	151	1119	591	108	441	65	108	395	357
Grp Sat Flow(s),veh/h/ln	1723	1647	1651	1723	1647	1736	688	1719	1387	851	1719	1541
Q Serve(g_s), s	7.7	19.4	19.6	9.8	35.8	35.9	16.0	9.7	3.2	11.0	19.7	19.9
Cycle Q Clear(g_c), s	7.7	19.4	19.6	9.8	35.8	35.9	35.9	9.7	3.2	20.7	19.7	19.9
Prop In Lane	1.00		0.46	1.00		0.22	1.00		1.00	1.00		0.57
Lane Grp Cap(c), veh/h	144	1215	609	180	1284	677	233	1448	584	349	724	649
V/C Ratio(X)	0.82	0.58	0.58	0.84	0.87	0.87	0.46	0.30	0.11	0.31	0.55	0.55
Avail Cap(c_a), veh/h	197	1215	609	287	1358	716	233	1448	584	349	724	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	28.8	28.9	50.1	32.1	32.1	38.3	21.9	20.0	28.8	24.8	24.8
Incr Delay (d2), s/veh	17.5	0.7	1.4	11.5	6.2	11.1	6.5	0.5	0.4	2.3	2.9	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	9.0	9.2	5.2	17.3	19.1	3.5	4.7	1.3	2.8	9.9	9.0
LnGrp Delay(d), s/veh	68.8	29.5	30.2	61.6	38.3	43.2	44.9	22.4	20.4	31.1	27.7	28.2
LnGrp LOS	E	C	C	E	D	D	D	C	C	C	C	C
Approach Vol, veh/h		1171			1861			614			860	
Approach Delay, s/veh		33.7			41.8			26.2			28.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		52.0	15.9	46.1		52.0	13.5	48.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		48.0	19.0	41.0		48.0	13.0	47.0
Max Q Clear Time (g_c+I1), s		37.9	11.8	21.6		22.7	9.7	37.9
Green Ext Time (p_c), s		3.0	0.2	6.7		6.2	0.1	6.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Future Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.88	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	151	925	54	129	1409	86	97	398	65	333	419	151
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	1642	96	157	1575	96	122	591	444	390	898	318
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.07	0.32	0.32	0.11	0.37	0.37
Sat Flow, veh/h	1757	4861	283	1757	4839	295	1757	1845	1387	3408	2458	870
Grp Volume(v), veh/h	151	638	341	129	977	518	97	398	65	333	297	273
Grp Sat Flow(s),veh/h/ln	1757	1679	1786	1757	1679	1777	1757	1845	1387	1704	1752	1575
Q Serve(g_s), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Cycle Q Clear(g_c), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Prop In Lane	1.00		0.16	1.00		0.17	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	179	1134	603	157	1092	578	122	591	444	390	640	575
V/C Ratio(X)	0.85	0.56	0.56	0.82	0.89	0.89	0.80	0.67	0.15	0.85	0.46	0.48
Avail Cap(c_a), veh/h	213	1134	603	243	1133	600	198	591	444	413	640	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	31.3	31.3	51.7	37.1	37.1	53.0	34.0	28.0	50.2	28.0	28.2
Incr Delay (d2), s/veh	22.7	0.6	1.2	12.2	9.2	15.6	11.3	6.0	0.7	15.3	2.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	8.4	9.1	4.6	16.2	18.2	3.4	11.9	1.6	6.1	7.7	7.1
LnGrp Delay(d), s/veh	73.7	31.9	32.5	64.0	46.3	52.7	64.2	40.1	28.7	65.6	30.4	31.0
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	C	C
Approach Vol, veh/h		1130			1624			560			903	
Approach Delay, s/veh		37.7			49.7			43.0			43.5	
Approach LOS		D			D			D			D	

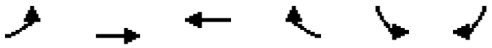
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	41.0	14.3	43.0	12.0	46.2	15.7	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	37.0	16.0	37.0	13.0	38.0	14.0	39.0
Max Q Clear Time (g_c+I1), s	13.1	23.6	10.3	20.0	8.3	17.4	11.8	34.0
Green Ext Time (p_c), s	0.1	2.4	0.1	5.7	0.1	3.8	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Future Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	85	798	394	170	1532	96	574	362	457	223	340	543
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	59	727	328	161	1330	83	512	1458	640	250	935	414
Arrive On Green	0.03	0.22	0.22	0.09	0.28	0.28	0.29	0.42	0.42	0.14	0.27	0.27
Sat Flow, veh/h	1757	3357	1516	1757	4835	303	1757	3505	1539	1757	3505	1554
Grp Volume(v), veh/h	85	798	394	170	1064	564	574	362	457	223	340	543
Grp Sat Flow(s),veh/h/ln	1757	1679	1516	1757	1679	1781	1757	1752	1539	1757	1752	1554
Q Serve(g_s), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Cycle Q Clear(g_c), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	727	328	161	923	490	512	1458	640	250	935	414
V/C Ratio(X)	1.45	1.10	1.20	1.06	1.15	1.15	1.12	0.25	0.71	0.89	0.36	1.31
Avail Cap(c_a), veh/h	59	727	328	161	923	490	512	1458	640	278	935	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	47.0	47.0	54.5	43.5	43.5	42.5	22.8	29.1	50.6	35.7	44.0
Incr Delay (d2), s/veh	275.9	63.0	115.5	86.4	80.9	89.9	77.1	0.4	6.7	26.5	1.1	156.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	18.4	21.4	9.2	25.6	28.4	27.9	4.0	13.8	9.1	4.7	31.7
LnGrp Delay(d), s/veh	333.9	110.0	162.5	141.0	124.4	133.4	119.6	23.2	35.8	77.0	36.8	200.1
LnGrp LOS	F	F	F	F	F	F	F	C	D	E	D	F
Approach Vol, veh/h		1277			1798			1393			1106	
Approach Delay, s/veh		141.1			128.8			67.0			125.1	
Approach LOS		F			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	53.9	15.0	30.0	39.0	36.0	8.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	48.0	11.0	26.0	35.0	32.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	17.0	31.6	13.0	28.0	37.0	34.0	6.0	35.0
Green Ext Time (p_c), s	0.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	115.5
HCM 2010 LOS	F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	320	1050	40	30	180
Future Volume (veh/h)	30	320	1050	40	30	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	33	356	1167	44	33	200
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	165	1528	1528	668	724	646
Arrive On Green	0.46	0.46	0.46	0.46	0.44	0.44
Sat Flow, veh/h	430	3399	3399	1448	1660	1482
Grp Volume(v), veh/h	33	356	1167	44	33	200
Grp Sat Flow(s),veh/h/ln	430	1656	1656	1448	1660	1482
Q Serve(g_s), s	5.4	5.1	22.9	1.3	0.9	6.9
Cycle Q Clear(g_c), s	28.2	5.1	22.9	1.3	0.9	6.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	165	1528	1528	668	724	646
V/C Ratio(X)	0.20	0.23	0.76	0.07	0.05	0.31
Avail Cap(c_a), veh/h	396	3313	3313	1449	724	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	12.7	17.5	11.7	12.7	14.3
Incr Delay (d2), s/veh	0.6	0.1	0.8	0.0	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.3	10.5	0.5	0.4	3.0
LnGrp Delay(d), s/veh	29.8	12.8	18.3	11.7	12.8	15.6
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h		389	1211		233	
Approach Delay, s/veh		14.2	18.0		15.2	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				40.0		38.0		40.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				78.0		34.0		78.0
Max Q Clear Time (g_c+I1), s				30.2		8.9		24.9
Green Ext Time (p_c), s				3.0		0.8		11.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Future Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	97	258	54	204	785	269	97	1065	0	75	677	237
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	120	1132	499	264	851	292	121	1338	599	95	1286	551
Arrive On Green	0.07	0.33	0.33	0.08	0.34	0.34	0.07	0.39	0.00	0.06	0.38	0.38
Sat Flow, veh/h	1707	3406	1503	3312	2491	853	1707	3406	1524	1707	3406	1460
Grp Volume(v), veh/h	97	258	54	204	537	517	97	1065	0	75	677	237
Grp Sat Flow(s),veh/h/ln	1707	1703	1503	1656	1703	1641	1707	1703	1524	1707	1703	1460
Q Serve(g_s), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Cycle Q Clear(g_c), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1132	499	264	582	561	121	1338	599	95	1286	551
V/C Ratio(X)	0.81	0.23	0.11	0.77	0.92	0.92	0.80	0.80	0.00	0.79	0.53	0.43
Avail Cap(c_a), veh/h	149	1132	499	376	610	587	194	1338	599	119	1286	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	27.6	26.5	51.7	36.2	36.2	52.4	30.7	0.0	53.5	27.7	26.5
Incr Delay (d2), s/veh	22.6	0.1	0.1	6.2	19.2	19.8	11.7	5.0	0.0	24.3	1.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.0	1.2	3.4	19.4	18.8	3.4	15.7	0.0	3.0	8.6	5.9
LnGrp Delay(d), s/veh	75.1	27.7	26.6	57.8	55.4	56.1	64.1	35.7	0.0	77.7	29.2	28.9
LnGrp LOS	E	C	C	E	E	E	E	D		E	C	C
Approach Vol, veh/h		409			1258			1162			989	
Approach Delay, s/veh		38.8			56.1			38.1			32.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	49.0	13.1	42.1	12.1	47.2	12.1	43.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	13.0	38.0	13.0	40.0	10.0	41.0
Max Q Clear Time (g_c+I1), s	7.0	33.6	8.9	8.3	8.4	19.7	8.4	36.7
Green Ext Time (p_c), s	0.0	5.4	0.2	1.8	0.1	5.2	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.7
HCM 2010 LOS	D

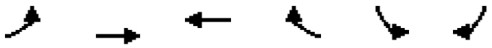
Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	430	1280	50	20	20
Future Vol, veh/h	30	430	1280	50	20	20
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	31	448	1333	52	21	21

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1386	0	-	0	1620	668
Stage 1	-	-	-	-	1334	-
Stage 2	-	-	-	-	286	-
Critical Hdwy	4.28	-	-	-	6.98	7.08
Critical Hdwy Stg 1	-	-	-	-	5.98	-
Critical Hdwy Stg 2	-	-	-	-	5.98	-
Follow-up Hdwy	2.29	-	-	-	3.59	3.39
Pot Cap-1 Maneuver	455	-	-	-	87	385
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	717	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	455	-	-	-	81	385
Mov Cap-2 Maneuver	-	-	-	-	81	-
Stage 1	-	-	-	-	184	-
Stage 2	-	-	-	-	716	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	39.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	455	-	-	-	81	385
HCM Lane V/C Ratio	0.069	-	-	-	0.257	0.054
HCM Control Delay (s/veh)	13.5	-	-	-	64.2	14.9
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.9	0.2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	410	1340	80	50	70
Future Volume (veh/h)	130	410	1340	80	50	70
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712
Adj Flow Rate, veh/h	135	427	1396	83	52	73
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	168	2244	1754	768	350	312
Arrive On Green	0.10	0.69	0.54	0.54	0.21	0.21
Sat Flow, veh/h	1630	3338	3338	1424	1630	1455
Grp Volume(v), veh/h	135	427	1396	83	52	73
Grp Sat Flow(s),veh/h/ln	1630	1626	1626	1424	1630	1455
Q Serve(g_s), s	6.8	3.9	29.1	2.4	2.2	3.5
Cycle Q Clear(g_c), s	6.8	3.9	29.1	2.4	2.2	3.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	168	2244	1754	768	350	312
V/C Ratio(X)	0.80	0.19	0.80	0.11	0.15	0.23
Avail Cap(c_a), veh/h	389	3646	2715	1189	350	312
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	4.6	15.6	9.5	26.7	27.2
Incr Delay (d2), s/veh	8.7	0.0	0.9	0.1	0.9	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	1.7	13.2	1.0	1.1	0.2
LnGrp Delay(d), s/veh	45.4	4.7	16.5	9.5	27.6	29.0
LnGrp LOS	D	A	B	A	C	C
Approach Vol, veh/h		562	1479		125	
Approach Delay, s/veh		14.5	16.1		28.4	
Approach LOS		B	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				61.8		22.0	12.6	49.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				94.0		18.0	20.0	70.0
Max Q Clear Time (g_c+I1), s				5.9		5.5	8.8	31.1
Green Ext Time (p_c), s				3.0		0.3	0.2	14.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Future Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	0	480	10	0	1429	173	0	0	51	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	248	-	-	715
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.36	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.03	-	-	3.43
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	616	0	0	349
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	614	-	-	349
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	11.4	16
HCM LOS			B	C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	614	-	-	-	-	349
HCM Lane V/C Ratio	0.083	-	-	-	-	0.058
HCM Control Delay (s/veh)	11.4	-	-	-	-	16
HCM Lane LOS	B	-	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.2



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	280	180	640	160	210	410	230	150	180	990	100	940
Future Volume (vph)	280	180	640	160	210	410	230	150	180	990	100	940
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.96	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.99	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1424		4504	1422	1656	1743	1462	1583	1304	1482	1656	3213
Flt Permitted	0.95		0.71	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1424		3246	1422	1656	1743	1462	1583	1304	1482	1656	3213
Peak-hour factor, PHF	0.91	0.92	0.91	0.91	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.91
Adj. Flow (vph)	308	196	703	176	231	451	253	163	198	1088	110	1033
RTOR Reduction (vph)	0	0	0	89	0	0	0	129	107	317	0	0
Lane Group Flow (vph)	277	0	930	88	231	451	253	34	537	325	110	1033
Confl. Peds. (#/hr)				12	12							
Confl. Bikes (#/hr)				2			1					
Heavy Vehicles (%)	9%	2%	9%	9%	9%	9%	9%	2%	9%	9%	9%	9%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	Perm	Prot	Prot
Protected Phases	7	7	4		3	8					5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	16.0		45.0	30.0	11.0	25.0	25.0	25.0	37.0	37.0	26.0	26.0
Effective Green, g (s)	16.0		45.0	30.0	11.0	25.0	25.0	25.0	37.0	37.0	26.0	26.0
Actuated g/C Ratio	0.13		0.38	0.25	0.09	0.21	0.21	0.21	0.31	0.31	0.22	0.22
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	189		1384	355	151	363	304	329	402	456	358	696
v/s Ratio Prot	c0.19		0.09		0.14	c0.26					0.07	c0.32
v/s Ratio Perm			0.16	0.06			0.17	0.02	c0.41	0.22		
v/c Ratio	1.47		1.02dl	0.25	1.53	1.24	0.83	0.10	1.34	0.71	0.31	1.48
Uniform Delay, d1	52.0		31.3	36.0	54.5	47.5	45.5	38.4	41.5	36.8	39.4	47.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	236.1		1.3	0.4	268.9	130.4	17.4	0.1	167.0	9.1	0.5	225.5
Delay (s)	288.1		32.6	36.3	323.4	177.9	62.9	38.6	208.5	45.9	39.9	272.5
Level of Service	F		C	D	F	F	E	D	F	D	D	F
Approach Delay (s/veh)			84.3			161.3						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	113.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.37		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	118.5%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	750	330	90	910
Future Volume (vph)	750	330	90	910
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.95		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4714		1770	5085
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4714		1770	5085
Peak-hour factor, PHF	0.92	0.91	0.92	0.92
Adj. Flow (vph)	815	363	98	989
RTOR Reduction (vph)	65	0	0	0
Lane Group Flow (vph)	1113	0	98	989
Confl. Peds. (#/hr)		5		
Confl. Bikes (#/hr)		3		
Heavy Vehicles (%)	2%	9%	2%	2%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	51.9		11.1	37.0
Effective Green, g (s)	51.9		11.1	37.0
Actuated g/C Ratio	0.43		0.09	0.31
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	2038		163	1567
v/s Ratio Prot	0.24		0.06	0.19
v/s Ratio Perm				
v/c Ratio	0.55		0.60	0.63
Uniform Delay, d1	25.3		52.3	35.6
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	1.1		6.1	1.9
Delay (s)	26.4		58.4	37.6
Level of Service	C		E	D
Approach Delay (s/veh)	136.6			39.5
Approach LOS	F			D

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Future Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1759	1759	1759	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	461	843	124	90	787	0	79	382	393	101	730	112
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	541	1452	214	113	1334	597	100	1019	555	125	1093	431
Arrive On Green	0.17	0.50	0.50	0.07	0.40	0.00	0.06	0.21	0.21	0.07	0.23	0.23
Sat Flow, veh/h	3250	2916	429	1675	3343	1495	1675	4803	1445	1675	4803	1450
Grp Volume(v), veh/h	461	483	484	90	787	0	79	382	393	101	730	112
Grp Sat Flow(s),veh/h/ln	1625	1671	1673	1675	1671	1495	1675	1601	1445	1675	1601	1450
Q Serve(g_s), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.4
Cycle Q Clear(g_c), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.4
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	541	832	833	113	1334	597	100	1019	555	125	1093	431
V/C Ratio(X)	0.85	0.58	0.58	0.80	0.59	0.00	0.79	0.37	0.71	0.81	0.67	0.26
Avail Cap(c_a), veh/h	750	832	833	201	1334	597	185	1019	555	216	1108	435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	19.2	19.2	49.8	25.6	0.0	50.3	36.6	28.8	49.4	38.1	29.2
Incr Delay (d2), s/veh	6.9	2.9	2.9	12.1	1.9	0.0	13.1	0.2	4.1	11.3	1.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	10.9	10.9	3.0	9.5	0.0	2.7	3.3	10.6	3.4	6.8	2.6
LnGrp Delay(d), s/veh	50.8	22.2	22.2	61.9	27.5	0.0	63.5	36.8	32.9	60.7	39.7	29.5
LnGrp LOS	D	C	C	E	C		E	D	C	E	D	C
Approach Vol, veh/h		1428			877			854			943	
Approach Delay, s/veh		31.4			31.1			37.5			40.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	58.0	12.1	27.0	22.0	47.3	10.4	28.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	14.0	23.0	25.0	42.0	12.0	25.0
Max Q Clear Time (g_c+I1), s	7.7	24.1	8.4	25.0	16.9	22.1	7.0	17.0
Green Ext Time (p_c), s	0.1	6.7	0.1	0.0	1.1	5.1	0.1	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Future Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
Arrive On Green	0.09	0.08	0.08	0.10	0.09	0.00	0.07	0.51	0.51	0.15	0.58	0.58
Sat Flow, veh/h	1707	3406	1482	1707	3406	1524	1707	3406	1474	1707	3406	1493
Grp Volume(v), veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Grp Sat Flow(s),veh/h/ln	1707	1703	1482	1707	1703	1524	1707	1703	1474	1707	1703	1493
Q Serve(g_s), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Cycle Q Clear(g_c), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
V/C Ratio(X)	0.82	0.62	0.40	0.82	0.61	0.00	0.80	0.62	0.11	0.86	0.58	0.67
Avail Cap(c_a), veh/h	253	539	235	270	573	256	220	1731	749	389	1988	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	44.7	43.8	44.6	44.2	0.0	46.1	17.9	12.9	42.0	13.2	14.3
Incr Delay (d2), s/veh	10.5	2.2	2.0	10.5	2.0	0.0	10.8	1.7	0.3	12.1	1.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.5	1.4	4.3	2.6	0.0	3.1	11.2	1.2	6.8	10.4	11.9
LnGrp Delay(d), s/veh	55.5	46.9	45.9	55.2	46.2	0.0	56.9	19.6	13.2	54.1	14.4	18.3
LnGrp LOS	E	D	D	E	D		E	B	B	D	B	B
Approach Vol, veh/h		360			330			1260			1950	
Approach Delay, s/veh		49.9			50.0			22.2			20.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	55.4	14.1	12.5	11.4	63.0	13.4	13.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	49.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.7	25.1	10.1	7.2	7.8	28.7	9.6	7.4
Green Ext Time (p_c), s	0.4	8.3	0.2	0.7	0.1	12.9	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	55

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	450	100	260	0	120	400
Future Vol, veh/h	450	100	260	0	120	400
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	506	112	292	0	135	449

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	292	0	-	0	1416	-
Stage 1	-	-	-	-	292	-
Stage 2	-	-	-	-	1124	-
Critical Hdwy	4.19	-	-	-	6.49	-
Critical Hdwy Stg 1	-	-	-	-	5.49	-
Critical Hdwy Stg 2	-	-	-	-	5.49	-
Follow-up Hdwy	2.281	-	-	-	3.581	-
Pot Cap-1 Maneuver	1231	-	-	-	146	0
Stage 1	-	-	-	-	742	0
Stage 2	-	-	-	-	301	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1231	-	-	-	~ 86	-
Mov Cap-2 Maneuver	-	-	-	-	~ 86	-
Stage 1	-	-	-	-	437	-
Stage 2	-	-	-	-	301	-

Approach	EB	WB	SW
HCM Control Delay, s/v	8.1	0	$ 388.8
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1231	-	-	-	86	-
HCM Lane V/C Ratio	0.411	-	-	-	1.568	-
HCM Control Delay (s/veh)	9.9	-	-	-	$ 388.8	0
HCM Lane LOS	A	-	-	-	F	A
HCM 95th %tile Q(veh)	2	-	-	-	10.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Future Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	42	104	52	31	281	125	240	1146	0	115	990	94
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	145	303	151	335	312	139	347	1729	773	276	1594	689
Arrive On Green	0.03	0.27	0.27	0.02	0.27	0.27	0.09	0.51	0.00	0.05	0.47	0.47
Sat Flow, veh/h	1707	1119	559	1707	1173	522	1707	3406	1524	1707	3406	1472
Grp Volume(v), veh/h	42	0	156	31	0	406	240	1146	0	115	990	94
Grp Sat Flow(s),veh/h/ln	1707	0	1678	1707	0	1695	1707	1703	1524	1707	1703	1472
Q Serve(g_s), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Cycle Q Clear(g_c), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Prop In Lane	1.00		0.33	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	454	335	0	451	347	1729	773	276	1594	689
V/C Ratio(X)	0.29	0.00	0.34	0.09	0.00	0.90	0.69	0.66	0.00	0.42	0.62	0.14
Avail Cap(c_a), veh/h	163	0	573	359	0	579	475	1729	773	314	1594	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	31.8	28.2	0.0	38.3	17.1	19.8	0.0	16.6	21.6	16.4
Incr Delay (d2), s/veh	1.1	0.0	0.4	0.1	0.0	14.4	2.6	2.0	0.0	1.0	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	3.8	0.7	0.0	13.5	3.7	13.1	0.0	1.8	11.4	1.7
LnGrp Delay(d), s/veh	31.9	0.0	32.2	28.3	0.0	52.7	19.6	21.8	0.0	17.6	23.5	16.8
LnGrp LOS	C		C	C		D	B	C		B	C	B
Approach Vol, veh/h		198			437			1386			1199	
Approach Delay, s/veh		32.2			51.0			21.4			22.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	59.0	6.4	33.3	13.9	54.7	6.9	32.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	55.0	4.0	37.0	18.0	45.0	4.0	37.0
Max Q Clear Time (g_c+I1), s	5.8	29.1	3.4	10.1	9.5	25.6	3.9	27.0
Green Ext Time (p_c), s	0.1	9.3	0.0	0.9	0.4	7.2	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.5
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.6

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	160	50	150	480	30	30
Future Vol, veh/h	160	50	150	480	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	14	14	14	14	14	14
Mvmt Flow	176	55	165	527	33	33

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	231	0	1033	176
Stage 1	-	-	-	-	176	-
Stage 2	-	-	-	-	857	-
Critical Hdwy	-	-	4.24	-	6.54	6.34
Critical Hdwy Stg 1	-	-	-	-	5.54	-
Critical Hdwy Stg 2	-	-	-	-	5.54	-
Follow-up Hdwy	-	-	2.326	-	3.626	3.426
Pot Cap-1 Maneuver	-	-	1269	-	245	837
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	396	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1269	-	200	837
Mov Cap-2 Maneuver	-	-	-	-	200	-
Stage 1	-	-	-	-	826	-
Stage 2	-	-	-	-	323	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2	18
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	200	837	-	-	1269	-
HCM Lane V/C Ratio	0.165	0.039	-	-	0.13	-
HCM Control Delay (s/veh)	26.5	9.5	-	-	8.3	0
HCM Lane LOS	D	A	-	-	A	A
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.4	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	190	10	20	740	40	50
Future Vol, veh/h	190	10	20	740	40	50
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	16	16	16	16	16	16
Mvmt Flow	198	10	21	771	42	52

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	208	0	1011	198
Stage 1	-	-	-	-	198	-
Stage 2	-	-	-	-	813	-
Critical Hdwy	-	-	4.26	-	6.56	6.36
Critical Hdwy Stg 1	-	-	-	-	5.56	-
Critical Hdwy Stg 2	-	-	-	-	5.56	-
Follow-up Hdwy	-	-	2.344	-	3.644	3.444
Pot Cap-1 Maneuver	-	-	1284	-	250	809
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	413	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1284	-	246	809
Mov Cap-2 Maneuver	-	-	-	-	246	-
Stage 1	-	-	-	-	803	-
Stage 2	-	-	-	-	406	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.2	15.5
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	246	809	-	-	1284	-
HCM Lane V/C Ratio	0.169	0.064	-	-	0.016	-
HCM Control Delay (s/veh)	22.6	9.8	-	-	7.9	-
HCM Lane LOS	C	A	-	-	A	-
HCM 95th %tile Q(veh)	0.6	0.2	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	140	50	20	680	60	40
Future Volume (veh/h)	140	50	20	680	60	40
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1624	1624	1624	1624	1624	1624
Adj Flow Rate, veh/h	149	53	21	723	64	43
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	17	17	17	17	17	17
Cap, veh/h	850	722	609	850	527	470
Arrive On Green	0.52	0.52	0.52	0.52	0.34	0.34
Sat Flow, veh/h	1624	1380	1025	1624	1547	1380
Grp Volume(v), veh/h	149	53	21	723	64	43
Grp Sat Flow(s),veh/h/ln	1624	1380	1025	1624	1547	1380
Q Serve(g_s), s	2.8	1.1	0.6	22.5	1.7	1.2
Cycle Q Clear(g_c), s	2.8	1.1	3.5	22.5	1.7	1.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	850	722	609	850	527	470
V/C Ratio(X)	0.18	0.07	0.03	0.85	0.12	0.09
Avail Cap(c_a), veh/h	2544	2162	1679	2544	527	470
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	7.3	6.9	8.3	12.0	13.3	13.2
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.5	0.5	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.4	0.2	10.4	0.8	0.5
LnGrp Delay(d), s/veh	7.4	7.0	8.3	14.5	13.8	13.6
LnGrp LOS	A	A	A	B	B	B
Approach Vol, veh/h	202			744	107	
Approach Delay, s/veh	7.3			14.4	13.7	
Approach LOS	A			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		24.0		34.7				34.7
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		20.0		92.0				92.0
Max Q Clear Time (g_c+I1), s		3.7		4.8				24.5
Green Ext Time (p_c), s		0.2		1.1				6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	4.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	160	10	10	550	160	20
Future Vol, veh/h	160	10	10	550	160	20
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	18	18	18	18	18	18
Mvmt Flow	168	11	11	579	168	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	180	0	770	169
Stage 1	-	-	-	-	169	-
Stage 2	-	-	-	-	601	-
Critical Hdwy	-	-	4.28	-	6.58	6.38
Critical Hdwy Stg 1	-	-	-	-	5.58	-
Critical Hdwy Stg 2	-	-	-	-	5.58	-
Follow-up Hdwy	-	-	2.362	-	3.662	3.462
Pot Cap-1 Maneuver	-	-	1305	-	347	835
Stage 1	-	-	-	-	823	-
Stage 2	-	-	-	-	518	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1304	-	344	834
Mov Cap-2 Maneuver	-	-	-	-	344	-
Stage 1	-	-	-	-	822	-
Stage 2	-	-	-	-	514	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.1	23.4
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	344	834	-	-	1304	-
HCM Lane V/C Ratio	0.49	0.025	-	-	0.008	-
HCM Control Delay (s/veh)	25.1	9.4	-	-	7.8	-
HCM Lane LOS	D	A	-	-	A	-
HCM 95th %tile Q(veh)	2.6	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Future Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1900	1792	1792	1900
Adj Flow Rate, veh/h	281	375	104	198	844	219	52	1115	73	52	885	135
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	318	1065	282	414	939	242	66	1416	93	66	1289	197
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.04	0.44	0.44	0.04	0.44	0.44
Sat Flow, veh/h	1707	3834	1017	1707	3874	999	1707	3241	212	1707	2952	450
Grp Volume(v), veh/h	281	317	162	198	710	353	52	585	603	52	510	510
Grp Sat Flow(s),veh/h/ln	1707	1631	1588	1707	1631	1610	1707	1703	1751	1707	1703	1700
Q Serve(g_s), s	13.3	8.7	9.2	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.1	27.1
Cycle Q Clear(g_c), s	13.3	8.7	9.2	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.1	27.1
Prop In Lane	1.00		0.64	1.00		0.62	1.00		0.12	1.00		0.26
Lane Grp Cap(c), veh/h	318	906	441	414	791	390	66	744	765	66	744	742
V/C Ratio(X)	0.88	0.35	0.37	0.48	0.90	0.90	0.79	0.79	0.79	0.79	0.69	0.69
Avail Cap(c_a), veh/h	399	1018	495	448	814	402	91	744	765	91	744	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	32.4	32.6	27.2	41.2	41.2	53.5	27.1	27.1	53.5	25.4	25.4
Incr Delay (d2), s/veh	17.4	0.2	0.5	0.9	12.6	23.0	26.2	8.2	8.1	26.2	5.1	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	3.9	4.1	4.6	12.0	13.1	2.1	17.2	17.6	2.1	13.7	13.7
LnGrp Delay(d), s/veh	45.3	32.6	33.1	28.1	53.7	64.3	79.7	35.4	35.2	79.7	30.5	30.5
LnGrp LOS	D	C	C	C	D	E	E	D	D	E	C	C
Approach Vol, veh/h		760			1261			1240			1072	
Approach Delay, s/veh		37.4			52.7			37.2			32.9	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	53.0	15.7	35.2	8.3	53.0	19.7	31.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	49.0	14.0	35.0	6.0	49.0	21.0	28.0
Max Q Clear Time (g_c+I1), s	5.4	35.2	11.6	11.2	5.4	29.1	15.3	25.9
Green Ext Time (p_c), s	0.0	6.6	0.1	2.9	0.0	6.6	0.4	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.7
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	170	10	600	230	0	730
Future Volume (veh/h)	170	10	600	230	0	730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	0	1810
Adj Flow Rate, veh/h	191	11	674	0	0	820
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	5	0	5
Cap, veh/h	276	127	2871	1411	0	2871
Arrive On Green	0.08	0.08	0.84	0.00	0.00	0.84
Sat Flow, veh/h	3343	1538	3529	1538	0	3619
Grp Volume(v), veh/h	191	11	674	0	0	820
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	1538	0	1719
Q Serve(g_s), s	5.4	0.6	3.9	0.0	0.0	5.0
Cycle Q Clear(g_c), s	5.4	0.6	3.9	0.0	0.0	5.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	276	127	2871	1411	0	2871
V/C Ratio(X)	0.69	0.09	0.23	0.00	0.00	0.29
Avail Cap(c_a), veh/h	1068	492	2871	1411	0	2871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	43.3	41.1	1.6	0.0	0.0	1.7
Incr Delay (d2), s/veh	3.1	0.3	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.3	1.9	0.0	0.0	2.4
LnGrp Delay(d), s/veh	46.4	41.4	1.8	0.0	0.0	2.0
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	202		674			820
Approach Delay, s/veh	46.1		1.8			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		85.0				85.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		81.0				81.0		31.0
Max Q Clear Time (g_c+I1), s		5.9				7.0		7.4
Green Ext Time (p_c), s		5.0				6.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	240	30	430	600	20	190	10	310	20	20	20
Future Volume (veh/h)	10	240	30	430	600	20	190	10	310	20	20	20
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1900	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	11	261	33	467	652	22	207	11	337	22	22	22
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	18	1455	450	509	2840	95	380	20	355	75	36	36
Arrive On Green	0.01	0.29	0.29	0.29	0.57	0.57	0.23	0.23	0.23	0.04	0.04	0.04
Sat Flow, veh/h	1757	5036	1557	1757	4999	168	1672	89	1564	1757	841	841
Grp Volume(v), veh/h	11	261	33	467	437	237	218	0	337	22	0	44
Grp Sat Flow(s),veh/h/ln	1757	1679	1557	1757	1679	1810	1761	0	1564	1757	0	1682
Q Serve(g_s), s	0.7	4.1	1.6	27.2	6.8	6.9	11.5	0.0	22.4	1.3	0.0	2.7
Cycle Q Clear(g_c), s	0.7	4.1	1.6	27.2	6.8	6.9	11.5	0.0	22.4	1.3	0.0	2.7
Prop In Lane	1.00		1.00	1.00		0.09	0.95		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	18	1455	450	509	1907	1028	400	0	355	75	0	72
V/C Ratio(X)	0.60	0.18	0.07	0.92	0.23	0.23	0.54	0.00	0.95	0.29	0.00	0.61
Avail Cap(c_a), veh/h	67	1455	450	782	1907	1028	400	0	355	266	0	255
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.0	28.2	27.3	36.3	11.3	11.3	36.0	0.0	40.2	49.0	0.0	49.7
Incr Delay (d2), s/veh	27.5	0.3	0.3	11.2	0.3	0.5	1.5	0.0	34.4	2.1	0.0	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	1.9	0.7	14.7	3.2	3.6	5.8	0.0	13.1	0.7	0.0	1.4
LnGrp Delay(d), s/veh	79.5	28.4	27.6	47.5	11.6	11.9	37.5	0.0	74.6	51.1	0.0	57.9
LnGrp LOS	E	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		305			1141			555			66	
Approach Delay, s/veh		30.2			26.3			60.1			55.6	
Approach LOS		C			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	64.0		28.0	34.6	34.5		8.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	60.0		24.0	47.0	17.0		16.0
Max Q Clear Time (g_c+I1), s	2.7	8.9		24.4	29.2	6.1		4.7
Green Ext Time (p_c), s	0.0	5.1		0.0	1.4	1.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.9
HCM 2010 LOS	D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	190	120	530	670	340	10	1120	290	120	1320	70
Future Volume (veh/h)	30	190	120	530	670	340	10	1120	290	120	1320	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	32	202	128	564	713	362	11	1191	309	128	1404	74
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	40	595	257	631	1165	651	38	1368	620	155	1852	813
Arrive On Green	0.02	0.17	0.17	0.19	0.34	0.34	0.41	0.41	0.41	0.09	0.53	0.53
Sat Flow, veh/h	1740	3471	1501	3375	3471	1528	11	3348	1517	1740	3471	1524
Grp Volume(v), veh/h	32	202	128	564	713	362	639	563	309	128	1404	74
Grp Sat Flow(s),veh/h/ln	1740	1736	1501	1688	1736	1528	1780	1579	1517	1740	1736	1524
Q Serve(g_s), s	2.0	5.7	8.6	18.1	19.1	19.8	8.0	36.3	16.8	8.0	35.2	2.6
Cycle Q Clear(g_c), s	2.0	5.7	8.6	18.1	19.1	19.8	36.2	36.3	16.8	8.0	35.2	2.6
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	595	257	631	1165	651	760	645	620	155	1852	813
V/C Ratio(X)	0.81	0.34	0.50	0.89	0.61	0.56	0.84	0.87	0.50	0.83	0.76	0.09
Avail Cap(c_a), veh/h	78	595	257	700	1165	651	847	726	697	173	2065	906
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	40.4	41.6	44.0	30.8	24.1	29.9	30.1	24.4	49.7	20.3	12.7
Incr Delay (d2), s/veh	30.3	1.6	6.7	13.0	2.4	3.4	7.0	10.4	0.6	25.2	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.8	4.0	9.6	9.5	8.9	19.4	17.6	7.1	5.0	17.2	1.1
LnGrp Delay(d), s/veh	84.3	42.0	48.4	57.0	33.2	27.5	36.9	40.5	25.0	74.9	21.8	12.7
LnGrp LOS	F	D	D	E	C	C	D	D	C	E	C	B
Approach Vol, veh/h		362			1639			1511			1606	
Approach Delay, s/veh		48.0			40.2			35.8			25.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	41.2	13.9	49.3	24.8	23.0		63.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0	11.0	51.0	23.0	19.0		66.0
Max Q Clear Time (g_c+I1), s	4.0	21.8	10.0	38.3	20.1	10.6		37.2
Green Ext Time (p_c), s	0.0	5.2	0.0	7.0	0.7	1.0		12.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.9
HCM 2010 LOS	C

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	390	220	400	830	670	20
Future Volume (vph)	390	220	400	830	670	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3471	1553	1736	3471	3366	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3471	1553	1736	3471	3366	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	398	224	408	847	684	20
RTOR Reduction (vph)	0	87	0	0	2	0
Lane Group Flow (vph)	398	137	408	847	702	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	39.6	68.6	31.6	75.2	29.0	
Effective Green, g (s)	39.6	68.6	31.6	75.2	29.0	
Actuated g/C Ratio	0.35	0.61	0.28	0.67	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1225	1004	488	2326	870	
v/s Ratio Prot	0.11	0.04	c0.24	c0.24	c0.21	
v/s Ratio Perm		0.05				
v/c Ratio	0.32	0.14	0.84	0.36	0.81	
Uniform Delay, d1	26.5	9.2	37.9	8.1	39.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.1	11.8	0.4	5.5	
Delay (s)	27.2	9.3	49.7	8.5	44.5	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	20.8			21.9	44.5	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	112.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	430	290	80	430	1080	280
Future Volume (veh/h)	430	290	80	430	1080	280
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	439	0	82	439	1102	286
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	790	363	279	2363	2363	1055
Arrive On Green	0.23	0.00	0.68	0.68	0.68	0.68
Sat Flow, veh/h	3375	1553	381	3563	3563	1549
Grp Volume(v), veh/h	439	0	82	439	1102	286
Grp Sat Flow(s),veh/h/ln	1688	1553	381	1736	1736	1549
Q Serve(g_s), s	10.8	0.0	12.1	4.3	14.0	6.8
Cycle Q Clear(g_c), s	10.8	0.0	26.0	4.3	14.0	6.8
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	790	363	279	2363	2363	1055
V/C Ratio(X)	0.56	0.00	0.29	0.19	0.47	0.27
Avail Cap(c_a), veh/h	790	363	279	2363	2363	1055
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.7	0.0	13.1	5.5	7.0	5.9
Incr Delay (d2), s/veh	2.8	0.0	0.6	0.0	0.7	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	0.0	1.3	2.1	6.8	3.0
LnGrp Delay(d), s/veh	34.5	0.0	13.7	5.5	7.7	6.5
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	439			521	1388	
Approach Delay, s/veh	34.5			6.8	7.4	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		68.0				68.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		64.0				64.0
Max Q Clear Time (g_c+I1), s		12.8		28.0				16.0
Green Ext Time (p_c), s		1.1		4.6				11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	48.4

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	160	0	10	880	0	0	1200	10	10	10
Future Vol, veh/h	160	0	10	880	0	0	1200	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	165	0	10	907	0	0	1237	10	10	10

Major/Minor	Minor1			Major1			Major2			Minor2	
Conflicting Flow All	1546	454	1247	0	-	-	-	0	1716	624	
Stage 1	927	-	-	-	-	-	-	-	1242	-	
Stage 2	619	-	-	-	-	-	-	-	474	-	
Critical Hdwy	7.6	7	4.2	-	-	-	-	-	7.6	7	
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-	-	6.6	-	
Critical Hdwy Stg 2	6.6	-	-	-	-	-	-	-	6.6	-	
Follow-up Hdwy	3.55	3.35	2.25	-	-	-	-	-	3.55	3.35	
Pot Cap-1 Maneuver	~ 76	545	538	-	0	0	-	-	56	421	
Stage 1	283	-	-	-	0	0	-	-	180	-	
Stage 2	436	-	-	-	0	0	-	-	532	-	
Platoon blocked, %				-			-	-			
Mov Cap-1 Maneuver	~ 72	545	538	-	-	-	-	-	17	421	
Mov Cap-2 Maneuver	~ 72	-	-	-	-	-	-	-	17	-	
Stage 1	273	-	-	-	-	-	-	-	173	-	
Stage 2	425	-	-	-	-	-	-	-	163	-	

Approach	NB	SE	NW	SW
HCM Control Delay, s/v	236.7	0.3	0	224.1
HCM LOS	F			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	72	545	-	-	538	-	33
HCM Lane V/C Ratio	2.291	0.681	-	-	0.019	-	0.625
HCM Control Delay (s/veh)	$ 714.1	24.5	-	-	11.8	0.2	224.1
HCM Lane LOS	F	C	-	-	B	A	F
HCM 95th %tile Q(veh)	15.6	5.2	-	-	0.1	-	2.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	20	20	20	1110	1160	60
Future Vol, veh/h	20	20	20	1110	1160	60
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	20	20	20	1133	1184	61

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1843	644	1266	0	-	0
Stage 1	1236	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.9	7	4.2	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-
Pot Cap-1 Maneuver	64	408	529	-	-	-
Stage 1	231	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	60	401	520	-	-	-
Mov Cap-2 Maneuver	60	-	-	-	-	-
Stage 1	219	-	-	-	-	-
Stage 2	490	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	53.9	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	520	-	60	401
HCM Lane V/C Ratio	-	-	0.039	-	0.34	0.051
HCM Control Delay (s/veh)	-	-	12.2	-	93.2	14.5
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1.2	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	210	1020	280	20	1080	490	80	550	460	340	560	20
Future Volume (veh/h)	210	1020	280	20	1080	490	80	550	460	340	560	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1690	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	226	1097	301	22	1161	527	86	591	0	366	602	22
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	241	1523	834	30	1186	607	109	897	401	394	1066	39
Arrive On Green	0.15	0.47	0.47	0.02	0.34	0.34	0.06	0.26	0.00	0.12	0.31	0.31
Sat Flow, veh/h	1609	3211	1405	1740	3471	1493	1740	3471	1553	3375	3411	125
Grp Volume(v), veh/h	226	1097	301	22	1161	527	86	591	0	366	306	318
Grp Sat Flow(s),veh/h/ln	1609	1605	1405	1740	1736	1493	1740	1736	1553	1688	1736	1800
Q Serve(g_s), s	16.7	32.7	13.4	1.5	39.7	39.0	5.9	18.3	0.0	12.9	17.7	17.7
Cycle Q Clear(g_c), s	16.7	32.7	13.4	1.5	39.7	39.0	5.9	18.3	0.0	12.9	17.7	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	241	1523	834	30	1186	607	109	897	401	394	543	563
V/C Ratio(X)	0.94	0.72	0.36	0.73	0.98	0.87	0.79	0.66	0.00	0.93	0.56	0.57
Avail Cap(c_a), veh/h	241	1523	834	72	1186	607	217	897	401	394	543	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	25.2	12.8	58.7	39.1	32.9	55.5	39.8	0.0	52.5	34.4	34.4
Incr Delay (d2), s/veh	40.7	1.7	0.3	28.3	21.1	12.7	12.1	3.8	0.0	28.3	4.2	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	14.8	5.3	1.0	22.5	18.2	3.2	9.3	0.0	7.5	9.0	9.4
LnGrp Delay(d), s/veh	91.1	26.9	13.0	87.0	60.2	45.7	67.6	43.6	0.0	80.8	38.6	38.5
LnGrp LOS	F	C	B	F	E	D	E	D		F	D	D
Approach Vol, veh/h		1624			1710			677			990	
Approach Delay, s/veh		33.2			56.1			46.6			54.2	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	41.5	6.1	60.9	18.0	35.0	22.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	30.0	5.0	54.0	14.0	31.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	7.9	19.7	3.5	34.7	14.9	20.3	18.7	41.7
Green Ext Time (p_c), s	0.1	2.8	0.0	8.6	0.0	3.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	10	460	30	60	780
Future Vol, veh/h	20	10	460	30	60	780
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	21	10	479	31	63	813

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1014	242	0	0	512	0
Stage 1	481	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.94	7.04	-	-	4.24	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-
Follow-up Hdwy	3.57	3.37	-	-	2.27	-
Pot Cap-1 Maneuver	226	744	-	-	1015	-
Stage 1	573	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	212	743	-	-	1013	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	19.2	0	0.6
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	212	743	1013	-
HCM Lane V/C Ratio	-	-	0.098	0.014	0.062	-
HCM Control Delay (s/veh)	-	-	23.8	9.9	8.8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0.2	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	90	430	40	80	710
Future Volume (veh/h)	60	90	430	40	80	710
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	62	94	448	42	83	740
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	144	129	2831	1266	776	2831
Arrive On Green	0.08	0.08	0.83	0.83	0.83	0.83
Sat Flow, veh/h	1707	1524	3495	1524	869	3495
Grp Volume(v), veh/h	62	94	448	42	83	740
Grp Sat Flow(s),veh/h/ln	1707	1524	1703	1524	869	1703
Q Serve(g_s), s	3.3	5.7	2.4	0.5	2.0	4.5
Cycle Q Clear(g_c), s	3.3	5.7	2.4	0.5	4.4	4.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	144	129	2831	1266	776	2831
V/C Ratio(X)	0.43	0.73	0.16	0.03	0.11	0.26
Avail Cap(c_a), veh/h	593	529	2831	1266	776	2831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	42.4	1.6	1.4	2.0	1.7
Incr Delay (d2), s/veh	2.0	7.6	0.1	0.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.7	1.2	0.2	0.5	2.1
LnGrp Delay(d), s/veh	43.3	50.1	1.7	1.4	2.3	2.0
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	156		490			823
Approach Delay, s/veh	47.4		1.7			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		4.4				6.5		7.7
Green Ext Time (p_c), s		3.2				6.4		0.5

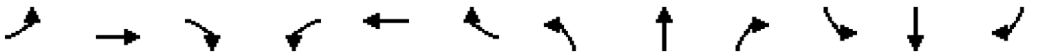
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.7
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	10
Intersection LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	80	170	70	50	30
Future Vol, veh/h	30	80	170	70	50	30
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	19	19	19	19	19	19
Mvmt Flow	33	87	185	76	54	33
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	8.6	11.3	8.2
HCM LOS	A	B	A

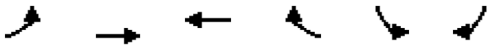
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	71%	100%	0%	0%	0%
Vol Thru, %	29%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	240	30	80	50	30
LT Vol	170	30	0	0	0
Through Vol	70	0	0	50	0
RT Vol	0	0	80	0	30
Lane Flow Rate	261	33	87	54	33
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.376	0.056	0.121	0.081	0.042
Departure Headway (Hd)	5.188	6.231	5.024	5.386	4.682
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	694	576	714	666	765
Service Time	3.209	3.96	2.753	3.113	2.408
HCM Lane V/C Ratio	0.376	0.057	0.122	0.081	0.043
HCM Control Delay, s/veh	11.3	9.3	8.4	8.6	7.6
HCM Lane LOS	B	A	A	A	A
HCM 95th-tile Q	1.8	0.2	0.4	0.3	0.1



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Future Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.96			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1703	4869		1703	4676			3391	1524	1550	3135	1492
Flt Permitted	0.95	1.00		0.95	1.00			0.92	1.00	0.95	0.58	1.00
Satd. Flow (perm)	1703	4869		1703	4676			3131	1524	1550	1878	1492
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	189	663	21	453	1316	442	21	263	589	368	42	32
RTOR Reduction (vph)	0	2	0	0	51	0	0	0	401	0	0	19
Lane Group Flow (vph)	189	682	0	453	1707	0	0	284	188	184	226	13
Confl. Peds. (#/hr)	6					6	4					4
Confl. Bikes (#/hr)			2			4						
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Effective Green, g (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Actuated g/C Ratio	0.12	0.21		0.29	0.38			0.24	0.24	0.13	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	210	1007		497	1756			737	358	204	918	597
v/s Ratio Prot	0.11	0.14		c0.27	c0.37					c0.12	0.03	
v/s Ratio Perm								0.09	c0.12		0.07	0.01
v/c Ratio	0.90	0.68		0.91	0.97			0.39	0.53	0.90	0.87dl	0.02
Uniform Delay, d1	51.8	43.8		40.9	36.8			38.5	40.0	51.2	23.9	21.7
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.0	1.8		20.9	15.4			1.5	5.4	37.1	0.1	0.1
Delay (s)	87.8	45.6		61.8	52.1			40.0	45.4	88.3	24.0	21.8
Level of Service	F	D		E	D			D	D	F	C	C
Approach Delay (s/veh)		54.7			54.1			43.7			50.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	51.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	1000	1580	80	60	30
Future Volume (veh/h)	80	1000	1580	80	60	30
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1658	1658	1792	1792	1792	1792
Adj Flow Rate, veh/h	92	1149	1816	92	69	34
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	176	2442	2640	1156	256	228
Arrive On Green	0.78	0.78	0.78	0.78	0.15	0.15
Sat Flow, veh/h	209	3233	3495	1491	1707	1524
Grp Volume(v), veh/h	92	1149	1816	92	69	34
Grp Sat Flow(s),veh/h/ln	209	1575	1703	1491	1707	1524
Q Serve(g_s), s	40.5	13.8	27.4	1.6	3.8	2.1
Cycle Q Clear(g_c), s	67.9	13.8	27.4	1.6	3.8	2.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	176	2442	2640	1156	256	228
V/C Ratio(X)	0.52	0.47	0.69	0.08	0.27	0.15
Avail Cap(c_a), veh/h	202	2833	3063	1341	256	228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	4.2	5.8	2.9	40.2	39.5
Incr Delay (d2), s/veh	2.4	0.1	0.5	0.0	2.6	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.0	12.8	0.6	2.0	1.0
LnGrp Delay(d), s/veh	24.5	4.4	6.3	2.9	42.8	40.8
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		1241	1908		103	
Approach Delay, s/veh		5.9	6.2		42.1	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				86.7		20.0		86.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				96.0		16.0		96.0
Max Q Clear Time (g_c+I1), s				69.9		5.8		29.4
Green Ext Time (p_c), s				12.8		0.2		26.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Future Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	234	660	85	213	1479	128	96	574	117	74	713	223
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	262	1623	207	244	1648	143	119	1055	466	94	1004	437
Arrive On Green	0.15	0.36	0.36	0.14	0.35	0.35	0.07	0.30	0.30	0.05	0.29	0.29
Sat Flow, veh/h	1740	4470	569	1740	4674	404	1740	3471	1533	1740	3471	1511
Grp Volume(v), veh/h	234	489	256	213	1052	555	96	574	117	74	713	223
Grp Sat Flow(s),veh/h/ln	1740	1663	1714	1740	1663	1754	1740	1736	1533	1740	1736	1511
Q Serve(g_s), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Cycle Q Clear(g_c), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Prop In Lane	1.00		0.33	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	1207	622	244	1172	618	119	1055	466	94	1004	437
V/C Ratio(X)	0.89	0.41	0.41	0.87	0.90	0.90	0.81	0.54	0.25	0.79	0.71	0.51
Avail Cap(c_a), veh/h	302	1207	622	363	1212	639	136	1055	466	106	1004	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	27.4	27.5	48.5	35.3	35.3	52.9	33.4	30.2	53.8	36.6	34.1
Incr Delay (d2), s/veh	24.4	0.2	0.4	14.3	8.9	15.2	25.9	2.0	1.3	29.2	4.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	5.8	6.2	7.6	17.2	19.3	3.9	7.9	3.0	3.1	10.7	6.4
LnGrp Delay(d), s/veh	72.4	27.6	27.9	62.8	44.2	50.5	78.8	35.5	31.5	83.1	40.9	38.3
LnGrp LOS	E	C	C	E	D	D	E	D	C	F	D	D
Approach Vol, veh/h		979			1820			787			1010	
Approach Delay, s/veh		38.4			48.3			40.2			43.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	39.0	20.2	45.8	11.9	37.3	21.4	44.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	24.0	38.0	9.0	33.0	20.0	42.0
Max Q Clear Time (g_c+I1), s	6.8	17.9	15.8	14.9	8.3	23.2	17.2	36.5
Green Ext Time (p_c), s	0.0	3.6	0.4	4.7	0.0	3.7	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Future Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	160	670	117	298	1553	149	117	1106	170	85	989	117
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	176	1104	190	326	1591	153	142	1140	175	88	1206	687
Arrive On Green	0.10	0.26	0.26	0.19	0.34	0.34	0.08	0.38	0.38	0.05	0.34	0.34
Sat Flow, veh/h	1757	4305	741	1757	4658	446	1757	3039	466	1757	3505	1539
Grp Volume(v), veh/h	160	520	267	298	1119	583	117	636	640	85	989	117
Grp Sat Flow(s),veh/h/ln	1757	1679	1689	1757	1679	1747	1757	1752	1752	1757	1752	1539
Q Serve(g_s), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Cycle Q Clear(g_c), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Prop In Lane	1.00		0.44	1.00		0.26	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	176	861	433	326	1147	597	142	657	657	88	1206	687
V/C Ratio(X)	0.91	0.60	0.62	0.92	0.98	0.98	0.82	0.97	0.97	0.97	0.82	0.17
Avail Cap(c_a), veh/h	176	861	433	366	1147	597	161	657	657	88	1206	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.3	39.4	48.0	39.0	39.0	54.3	36.8	36.9	56.9	35.9	20.1
Incr Delay (d2), s/veh	43.3	1.2	2.6	25.4	20.8	30.9	25.6	28.2	29.1	85.0	6.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.7	8.1	12.0	21.5	24.2	4.8	25.8	26.1	4.9	16.0	2.4
LnGrp Delay(d), s/veh	96.7	40.5	42.0	73.4	59.8	70.0	80.0	65.0	66.1	141.9	42.2	20.6
LnGrp LOS	F	D	D	E	E	E	E	E	E	F	D	C
Approach Vol, veh/h		947			2000			1393			1191	
Approach Delay, s/veh		50.4			64.8			66.7			47.2	
Approach LOS		D			E			E			D	

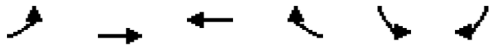
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	26.2	34.8	13.7	45.3	16.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	25.0	28.0	11.0	40.0	12.0	41.0
Max Q Clear Time (g_c+I1), s	7.8	45.1	22.0	18.7	9.9	32.9	12.8	41.6
Green Ext Time (p_c), s	0.0	0.0	0.3	3.3	0.0	3.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Future Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	73	823	115	219	1615	73	594	365	500	188	375	167
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	88	1084	150	246	1645	74	614	1373	601	331	413	181
Arrive On Green	0.05	0.24	0.24	0.14	0.33	0.33	0.31	0.39	0.39	0.09	0.18	0.18
Sat Flow, veh/h	1757	4457	619	1757	4934	223	1757	3505	1534	1757	2350	1028
Grp Volume(v), veh/h	73	619	319	219	1099	589	594	365	500	188	278	264
Grp Sat Flow(s),veh/h/ln	1757	1679	1718	1757	1679	1800	1757	1752	1534	1757	1752	1626
Q Serve(g_s), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Cycle Q Clear(g_c), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Prop In Lane	1.00		0.36	1.00		0.12	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	88	816	418	246	1119	600	614	1373	601	331	308	286
V/C Ratio(X)	0.83	0.76	0.76	0.89	0.98	0.98	0.97	0.27	0.83	0.57	0.90	0.92
Avail Cap(c_a), veh/h	88	816	418	278	1119	600	615	1373	601	331	308	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	42.1	42.2	50.7	39.6	39.7	31.2	24.8	32.9	36.0	48.4	48.6
Incr Delay (d2), s/veh	46.1	4.1	8.2	25.8	22.5	32.2	28.2	0.5	12.7	2.3	31.3	36.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	10.0	10.8	8.9	21.5	24.7	24.1	4.2	17.0	5.3	11.7	11.5
LnGrp Delay(d), s/veh	102.6	46.3	50.4	76.5	62.1	71.8	59.4	25.3	45.7	38.3	79.7	85.3
LnGrp LOS	F	D	D	E	E	E	E	C	D	D	E	F
Approach Vol, veh/h		1011			1907			1459			730	
Approach Delay, s/veh		51.6			66.8			46.2			71.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	51.0	20.8	33.2	40.9	25.1	10.0	44.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	47.0	19.0	27.0	37.0	21.0	6.0	40.0
Max Q Clear Time (g_c+I1), s	12.5	37.3	16.7	22.7	36.8	21.2	6.9	41.0
Green Ext Time (p_c), s	0.0	3.3	0.1	2.2	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.5
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	820	1720	0	470	520
Future Volume (veh/h)	0	820	1720	0	470	520
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	0	1706	1706
Adj Flow Rate, veh/h	0	845	1773	0	485	536
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	1858	1858	0	654	584
Arrive On Green	0.00	0.53	0.53	0.00	0.40	0.40
Sat Flow, veh/h	0	3689	3689	0	1625	1450
Grp Volume(v), veh/h	0	845	1773	0	485	536
Grp Sat Flow(s),veh/h/ln	0	1752	1752	0	1625	1450
Q Serve(g_s), s	0.0	17.8	57.3	0.0	30.3	41.7
Cycle Q Clear(g_c), s	0.0	17.8	57.3	0.0	30.3	41.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1858	1858	0	654	584
V/C Ratio(X)	0.00	0.45	0.95	0.00	0.74	0.92
Avail Cap(c_a), veh/h	0	1882	1882	0	654	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.3	26.6	0.0	30.3	33.7
Incr Delay (d2), s/veh	0.0	0.2	11.7	0.0	7.4	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.6	30.6	0.0	15.0	20.2
LnGrp Delay(d), s/veh	0.0	17.5	38.3	0.0	37.7	55.4
LnGrp LOS		B	D		D	E
Approach Vol, veh/h		845	1773		1021	
Approach Delay, s/veh		17.5	38.3		47.0	
Approach LOS		B	D		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				67.2		52.0		67.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				64.0		48.0		64.0
Max Q Clear Time (g_c+I1), s				19.8		43.7		59.3
Green Ext Time (p_c), s				6.3		1.7		3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Future Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	863	358	147	1463	568	211	379	147	368	537	326
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	217	1464	605	175	1388	617	238	492	213	348	712	310
Arrive On Green	0.13	0.42	0.42	0.10	0.40	0.40	0.14	0.14	0.14	0.20	0.21	0.21
Sat Flow, veh/h	1740	3447	1424	1740	3471	1543	1740	3471	1504	1740	3471	1513
Grp Volume(v), veh/h	232	832	389	147	1463	568	211	379	147	368	537	326
Grp Sat Flow(s),veh/h/ln	1740	1663	1547	1740	1736	1543	1740	1736	1504	1740	1736	1513
Q Serve(g_s), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Cycle Q Clear(g_c), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Prop In Lane	1.00		0.92	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	1412	657	175	1388	617	238	492	213	348	712	310
V/C Ratio(X)	1.07	0.59	0.59	0.84	1.05	0.92	0.89	0.77	0.69	1.06	0.75	1.05
Avail Cap(c_a), veh/h	217	1412	657	261	1388	617	261	492	213	348	712	310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	26.5	26.5	53.0	36.0	34.2	50.9	49.6	49.0	48.0	44.9	47.7
Incr Delay (d2), s/veh	79.8	0.6	1.4	14.4	39.7	19.2	27.3	11.1	16.8	64.2	7.3	64.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	10.6	10.1	5.5	30.6	21.1	8.7	6.8	5.6	17.7	9.1	15.9
LnGrp Delay(d), s/veh	132.3	27.1	27.9	67.5	75.7	53.4	78.2	60.7	65.8	112.2	52.1	112.6
LnGrp LOS	F	C	C	E	F	D	E	E	E	F	D	F
Approach Vol, veh/h		1453			2178			737			1231	
Approach Delay, s/veh		44.1			69.3			66.7			86.1	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	21.0	16.0	55.0	20.4	28.6	19.0	52.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	18.0	23.0	15.0	48.0
Max Q Clear Time (g_c+I1), s	26.0	14.6	12.0	25.2	16.3	26.6	17.0	50.0
Green Ext Time (p_c), s	0.0	0.7	0.2	7.9	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Future Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	154	901	143	110	1473	275	143	549	99	286	956	143
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	1732	274	136	1578	294	223	900	374	387	1103	464
Arrive On Green	0.10	0.40	0.40	0.08	0.37	0.37	0.08	0.26	0.26	0.13	0.31	0.31
Sat Flow, veh/h	1757	4373	691	1757	4261	794	1757	3505	1456	1757	3505	1473
Grp Volume(v), veh/h	154	691	353	110	1160	588	143	549	99	286	956	143
Grp Sat Flow(s),veh/h/ln	1757	1679	1706	1757	1679	1697	1757	1752	1456	1757	1752	1473
Q Serve(g_s), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Cycle Q Clear(g_c), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Prop In Lane	1.00		0.40	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	1330	676	136	1244	629	223	900	374	387	1103	464
V/C Ratio(X)	0.85	0.52	0.52	0.81	0.93	0.94	0.64	0.61	0.26	0.74	0.87	0.31
Avail Cap(c_a), veh/h	209	1330	676	224	1257	635	225	900	374	407	1103	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	27.0	27.0	53.4	35.6	35.6	31.7	38.5	34.8	26.9	37.9	30.5
Incr Delay (d2), s/veh	24.3	0.4	0.7	10.8	12.5	21.2	5.9	3.1	1.7	6.6	9.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	8.6	8.9	3.9	20.2	22.0	3.7	8.2	2.7	7.2	16.0	3.7
LnGrp Delay(d), s/veh	76.1	27.3	27.7	64.2	48.0	56.8	37.6	41.5	36.5	33.5	47.1	32.3
LnGrp LOS	E	C	C	E	D	E	D	D	D	C	D	C
Approach Vol, veh/h		1198			1858			791			1385	
Approach Delay, s/veh		33.7			51.8			40.2			42.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	34.2	13.1	50.6	12.9	41.0	16.1	47.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	15.0	43.0	9.0	37.0	14.0	44.0
Max Q Clear Time (g_c+I1), s	15.5	18.2	9.2	20.5	9.0	32.2	12.1	41.2
Green Ext Time (p_c), s	0.1	2.8	0.1	7.0	0.0	2.7	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Future Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	232	895	147	32	1516	274	74	179	11	326	358	211
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	2249	368	40	1674	302	306	1226	75	449	1282	565
Arrive On Green	0.15	0.51	0.51	0.02	0.39	0.39	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1774	4395	719	1774	4324	779	839	3385	206	1187	3539	1560
Grp Volume(v), veh/h	232	689	353	32	1188	602	74	93	97	326	358	211
Grp Sat Flow(s),veh/h/ln	1774	1695	1724	1774	1695	1712	839	1770	1822	1187	1770	1560
Q Serve(g_s), s	14.9	14.5	14.6	2.1	38.3	38.6	8.0	4.1	4.2	29.6	8.3	11.6
Cycle Q Clear(g_c), s	14.9	14.5	14.6	2.1	38.3	38.6	16.3	4.1	4.2	33.8	8.3	11.6
Prop In Lane	1.00		0.42	1.00		0.45	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	261	1735	882	40	1313	663	306	641	660	449	1282	565
V/C Ratio(X)	0.89	0.40	0.40	0.80	0.90	0.91	0.24	0.15	0.15	0.73	0.28	0.37
Avail Cap(c_a), veh/h	306	1754	892	92	1345	679	306	641	660	449	1282	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	17.4	17.4	56.4	33.5	33.6	32.0	24.9	24.9	36.3	26.2	27.3
Incr Delay (d2), s/veh	23.3	0.1	0.3	28.7	8.8	16.0	1.9	0.5	0.5	9.8	0.5	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	7.0	1.3	19.4	21.2	2.0	2.1	2.2	10.9	4.2	5.3
LnGrp Delay(d), s/veh	71.9	17.5	17.7	85.1	42.3	49.6	33.9	25.4	25.4	46.1	26.8	29.2
LnGrp LOS	E	B	B	F	D	D	C	C	C	D	C	C
Approach Vol, veh/h		1274			1822			264			895	
Approach Delay, s/veh		27.5			45.5			27.8			34.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		46.0	6.6	63.3		46.0	21.1	48.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		42.0	6.0	60.0		42.0	20.0	46.0
Max Q Clear Time (g_c+I1), s		18.3	4.1	16.6		35.8	16.9	40.6
Green Ext Time (p_c), s		1.4	0.0	8.1		2.3	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Future Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5027		1787	5054		1785	3574	1568	1781	3574	1573
Flt Permitted	0.95	1.00		0.95	1.00		0.30	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)	1787	5027		1787	5054		568	3574	1568	948	3574	1573
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	968	138	128	1394	138	106	340	43	106	649	287
RTOR Reduction (vph)	0	15	0	0	9	0	0	0	25	0	0	169
Lane Group Flow (vph)	106	1091	0	128	1523	0	106	340	18	106	649	118
Confl. Peds. (#/hr)	6		3	3		6	2		3	3		2
Confl. Bikes (#/hr)			3			2			2			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7			7				2			2	
Permitted Phases		8			8		2		2	2		2
Actuated Green, G (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Effective Green, g (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Actuated g/C Ratio	0.11	0.38		0.11	0.38		0.41	0.41	0.41	0.41	0.41	0.41
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	199	1888		199	1899		232	1465	642	388	1465	644
v/s Ratio Prot	0.06			c0.07				0.10			0.18	
v/s Ratio Perm		0.22			c0.30		c0.19		0.01	0.11		0.07
v/c Ratio	0.53	0.58		0.64	0.80		0.46	0.23	0.03	0.27	0.44	0.18
Uniform Delay, d1	49.1	29.1		49.8	32.7		25.1	22.5	20.6	23.0	24.9	22.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	0.4		6.9	2.5		6.4	0.4	0.1	1.7	1.0	0.6
Delay (s)	51.8	29.6		56.7	35.2		31.4	22.9	20.7	24.7	25.9	22.7
Level of Service	D	C		E	D		C	C	C	C	C	C
Approach Delay (s/veh)		31.5			36.8			24.6			24.9	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	40.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	210	590	0	940	610	0
Future Vol, veh/h	210	590	0	940	610	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	236	663	0	1056	685	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1213	343	-	0	-	0
Stage 1	685	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	-	-
Pot Cap-1 Maneuver	~ 170	~ 644	0	-	-	0
Stage 1	454	-	0	-	-	0
Stage 2	548	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 170	~ 644	-	-	-	-
Mov Cap-2 Maneuver	~ 170	-	-	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	118.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	170	644	-
HCM Lane V/C Ratio	-	1.388	1.029	-
HCM Control Delay (s/veh)	-	257.9	68.5	-
HCM Lane LOS	-	F	F	-
HCM 95th %tile Q(veh)	-	14.4	17	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Future Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	12	12	25	358	12	284	12	580	160	284	1012	12
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	127	217	462	530	449	334	2238	985	468	2238	996
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	282	442	755	1344	1845	1561	543	3505	1542	709	3505	1559
Grp Volume(v), veh/h	49	0	0	358	12	284	12	580	160	284	1012	12
Grp Sat Flow(s),veh/h/ln	1479	0	0	1344	1845	1561	543	1752	1542	709	1752	1559
Q Serve(g_s), s	0.0	0.0	0.0	24.7	0.5	17.1	1.2	7.7	4.5	31.3	15.9	0.3
Cycle Q Clear(g_c), s	2.3	0.0	0.0	27.0	0.5	17.1	17.1	7.7	4.5	39.1	15.9	0.3
Prop In Lane	0.24		0.51	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	467	0	0	462	530	449	334	2238	985	468	2238	996
V/C Ratio(X)	0.11	0.00	0.00	0.78	0.02	0.63	0.04	0.26	0.16	0.61	0.45	0.01
Avail Cap(c_a), veh/h	625	0	0	610	734	621	334	2238	985	468	2238	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	36.8	27.6	33.5	14.3	8.5	7.9	16.9	9.9	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	4.5	0.0	1.5	0.2	0.3	0.4	5.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	10.8	0.3	7.5	0.2	3.8	2.0	6.8	7.8	0.1
LnGrp Delay(d), s/veh	28.4	0.0	0.0	41.3	27.6	35.0	14.5	8.7	8.2	22.7	10.6	7.1
LnGrp LOS	C			D	C	D	B	A	A	C	B	A
Approach Vol, veh/h		49			654			752			1308	
Approach Delay, s/veh		28.4			38.3			8.7			13.2	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		35.1		73.0		35.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		43.0		69.0		43.0
Max Q Clear Time (g_c+I1), s		19.1		4.3		41.1		29.0
Green Ext Time (p_c), s		5.1		0.3		11.3		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.8

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	370	30	250	820	60	150
Future Vol, veh/h	370	30	250	820	60	150
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	425	34	287	943	69	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	459	0	1488	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	1046	-
Critical Hdwy	-	-	4.12	-	6.82	-
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	-
Pot Cap-1 Maneuver	-	-	1105	-	116	0
Stage 1	-	-	-	-	618	0
Stage 2	-	-	-	-	302	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1105	-	86	-
Mov Cap-2 Maneuver	-	-	-	-	86	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	223	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	2.2	133
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	86	-	1105	-
HCM Lane V/C Ratio	-	-	0.802	-	0.26	-
HCM Control Delay (s/veh)	-	-	133	0	9.4	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4.1	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Future Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	1359	196	141	1489	163	163	228	130	217	272	33
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	111	1734	250	174	1966	215	198	692	304	255	806	359
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.11	0.20	0.20	0.15	0.23	0.23
Sat Flow, veh/h	1757	4437	640	1757	4608	504	1757	3505	1539	1757	3505	1562
Grp Volume(v), veh/h	87	1028	527	141	1085	567	163	228	130	217	272	33
Grp Sat Flow(s),veh/h/ln	1757	1679	1720	1757	1679	1755	1757	1752	1539	1757	1752	1562
Q Serve(g_s), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Cycle Q Clear(g_c), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Prop In Lane	1.00		0.37	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	1312	672	174	1432	749	198	692	304	255	806	359
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.76	0.76	0.82	0.33	0.43	0.85	0.34	0.09
Avail Cap(c_a), veh/h	220	1579	809	331	1790	936	349	692	304	441	806	359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	25.6	25.6	42.2	23.2	23.2	41.5	33.0	33.7	39.9	30.7	29.0
Incr Delay (d2), s/veh	11.1	2.2	4.2	8.6	1.5	2.8	8.3	1.3	4.4	7.8	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	12.3	12.9	4.1	12.3	13.2	4.7	2.7	3.4	6.2	3.1	0.7
LnGrp Delay(d), s/veh	55.3	27.8	29.8	50.7	24.7	26.1	49.8	34.2	38.0	47.6	31.9	29.5
LnGrp LOS	E	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1642			1793			521			522	
Approach Delay, s/veh		29.9			27.2			40.0			38.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	22.9	13.5	41.4	14.8	26.0	10.1	44.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	19.0	22.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	13.5	9.1	9.5	27.7	10.7	8.2	6.7	28.2
Green Ext Time (p_c), s	0.4	1.1	0.2	9.6	0.2	1.4	0.1	12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Future Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	61	235	163	61	337	204	61	378	61	235	827	92
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	78	418	277	78	441	262	394	1647	718	622	2423	268
Arrive On Green	0.05	0.21	0.21	0.05	0.21	0.21	0.03	0.47	0.47	0.09	0.53	0.53
Sat Flow, veh/h	1740	1986	1318	1740	2097	1244	1740	3471	1514	1740	4551	504
Grp Volume(v), veh/h	61	204	194	61	278	263	61	378	61	235	603	316
Grp Sat Flow(s),veh/h/ln	1740	1736	1568	1740	1736	1605	1740	1736	1514	1740	1663	1729
Q Serve(g_s), s	3.1	9.5	10.0	3.1	13.6	14.0	1.6	5.8	2.0	5.8	9.3	9.4
Cycle Q Clear(g_c), s	3.1	9.5	10.0	3.1	13.6	14.0	1.6	5.8	2.0	5.8	9.3	9.4
Prop In Lane	1.00		0.84	1.00		0.78	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	78	365	330	78	365	338	394	1647	718	622	1770	921
V/C Ratio(X)	0.78	0.56	0.59	0.78	0.76	0.78	0.15	0.23	0.08	0.38	0.34	0.34
Avail Cap(c_a), veh/h	251	674	609	251	674	623	488	1647	718	943	1770	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	31.9	32.1	42.6	33.5	33.6	11.4	14.0	13.0	9.2	12.0	12.1
Incr Delay (d2), s/veh	15.2	1.3	1.7	15.2	3.3	3.9	0.2	0.3	0.2	0.4	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.7	4.5	1.8	6.8	6.5	0.8	2.9	0.9	2.8	4.4	4.7
LnGrp Delay(d), s/veh	57.8	33.2	33.7	57.8	36.8	37.5	11.5	14.3	13.2	9.6	12.6	13.1
LnGrp LOS	E	C	C	E	D	D	B	B	B	A	B	B
Approach Vol, veh/h		459			602			500			1154	
Approach Delay, s/veh		36.7			39.2			13.8			12.1	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	46.8	8.1	23.0	7.1	52.0	8.1	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	25.0	31.0	13.0	35.0	8.0	48.0	13.0	35.0
Max Q Clear Time (g_c+I1), s	7.8	7.8	5.1	12.0	3.6	11.4	5.1	16.0
Green Ext Time (p_c), s	0.6	2.7	0.1	2.2	0.0	7.4	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Future Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	715	1845	1543	928	1845	1528	561	3505	1528	778	3505	1530
Grp Volume(v), veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Grp Sat Flow(s),veh/h/ln	715	1845	1543	928	1845	1528	561	1752	1528	778	1752	1530
Q Serve(g_s), s	5.1	16.7	5.0	23.0	30.7	9.6	13.3	10.2	2.4	29.1	17.2	4.6
Cycle Q Clear(g_c), s	35.8	16.7	5.0	39.7	30.7	9.6	30.4	10.2	2.4	39.4	17.2	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
V/C Ratio(X)	0.23	0.49	0.17	0.68	0.78	0.31	0.31	0.30	0.08	0.59	0.45	0.15
Avail Cap(c_a), veh/h	168	761	636	311	761	630	288	1927	840	421	1927	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	27.4	23.8	42.6	31.8	25.2	24.8	14.1	12.3	24.7	15.7	12.8
Incr Delay (d2), s/veh	0.8	0.5	0.1	5.1	5.0	0.3	2.8	0.4	0.2	5.9	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.6	2.2	6.3	16.6	4.1	2.3	5.0	1.0	6.9	8.5	2.0
LnGrp Delay(d), s/veh	48.3	28.0	24.0	47.7	36.7	25.5	27.6	14.5	12.5	30.6	16.4	13.2
LnGrp LOS	D	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		483			922			730			1236	
Approach Delay, s/veh		28.6			36.8			15.9			18.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		68.0		48.4		68.0		48.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		64.0		48.0		64.0		48.0
Max Q Clear Time (g_c+I1), s		32.4		37.8		41.4		41.7
Green Ext Time (p_c), s		5.2		1.8		8.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	10	350	270	430	770	40
Future Vol, veh/h	10	350	270	430	770	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	393	303	483	865	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1713	433	910	0	-	0
Stage 1	865	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	81	571	744	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	48	571	744	-	-	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	221	-	-	-	-	-
Stage 2	380	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	26.3	5.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	744	-	48	571	-	-
HCM Lane V/C Ratio	0.408	-	0.234	0.689	-	-
HCM Control Delay (s/veh)	13.1	-	101.6	24.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2	-	0.8	5.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Future Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	41	557	227	247	1031	52	258	660	186	72	979	72
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	52	623	246	276	1491	75	288	1657	728	92	1267	555
Arrive On Green	0.03	0.18	0.18	0.16	0.30	0.30	0.16	0.47	0.47	0.05	0.36	0.36
Sat Flow, veh/h	1757	3535	1398	1757	4905	247	1757	3505	1540	1757	3505	1536
Grp Volume(v), veh/h	41	528	256	247	705	378	258	660	186	72	979	72
Grp Sat Flow(s),veh/h/ln	1757	1679	1575	1757	1679	1795	1757	1752	1540	1757	1752	1536
Q Serve(g_s), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Cycle Q Clear(g_c), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Prop In Lane	1.00		0.89	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	592	278	276	1021	546	288	1657	728	92	1267	555
V/C Ratio(X)	0.79	0.89	0.92	0.89	0.69	0.69	0.90	0.40	0.26	0.78	0.77	0.13
Avail Cap(c_a), veh/h	108	592	278	325	1021	546	341	1657	728	155	1267	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	45.7	45.9	46.9	34.8	34.8	46.5	19.4	17.9	53.1	32.1	24.3
Incr Delay (d2), s/veh	22.3	15.8	33.9	23.0	2.0	3.7	22.6	0.7	0.8	13.4	4.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.4	10.5	9.4	10.0	11.0	9.8	6.9	3.7	2.6	14.4	1.6
LnGrp Delay(d), s/veh	77.0	61.4	79.8	69.8	36.8	38.5	69.1	20.1	18.8	66.5	36.7	24.7
LnGrp LOS	E	E	E	E	D	D	E	C	B	E	D	C
Approach Vol, veh/h		825			1330			1104			1123	
Approach Delay, s/veh		67.9			43.4			31.3			37.9	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	57.6	21.9	24.0	22.6	45.0	7.4	38.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	53.0	21.0	20.0	22.0	41.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	6.6	15.9	17.6	20.1	18.3	30.1	4.6	23.0
Green Ext Time (p_c), s	0.0	5.5	0.2	0.0	0.3	4.8	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Future Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	98	87	196	98	141	87	163	1022	43	43	1337	109
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	28	443	44	38	443	191	2043	891	55	1771	769
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.58	0.58	0.03	0.51	0.51
Sat Flow, veh/h	0	99	1565	0	133	1565	1757	3505	1528	1757	3505	1521
Grp Volume(v), veh/h	185	0	196	239	0	87	163	1022	43	43	1337	109
Grp Sat Flow(s),veh/h/ln	99	0	1565	133	0	1565	1757	1752	1528	1757	1752	1521
Q Serve(g_s), s	0.0	0.0	12.0	0.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Cycle Q Clear(g_c), s	33.0	0.0	12.0	33.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Prop In Lane	0.53		1.00	0.41		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	443	81	0	443	191	2043	891	55	1771	769
V/C Ratio(X)	2.46	0.00	0.44	2.94	0.00	0.20	0.85	0.50	0.05	0.78	0.76	0.14
Avail Cap(c_a), veh/h	75	0	443	81	0	443	256	2043	891	105	1771	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	34.3	43.6	0.0	31.8	51.0	14.3	10.4	56.1	23.1	15.4
Incr Delay (d2), s/veh	693.8	0.0	0.7	907.6	0.0	0.2	18.2	0.9	0.1	21.1	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	0.0	5.2	23.1	0.0	2.1	6.1	9.9	0.6	1.7	17.8	2.0
LnGrp Delay(d), s/veh	740.1	0.0	35.0	951.2	0.0	32.0	69.2	15.2	10.5	77.2	26.1	15.8
LnGrp LOS	F		C	F		C	E	B	B	E	C	B
Approach Vol, veh/h		381			326			1228			1489	
Approach Delay, s/veh		377.4			705.9			22.2			26.9	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	72.0		37.0	16.7	62.9		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	68.0		33.0	17.0	58.0		33.0
Max Q Clear Time (g_c+I1), s	4.8	22.0		35.0	12.6	37.6		35.0
Green Ext Time (p_c), s	0.0	8.5		0.0	0.1	9.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		128.8
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Future Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
Arrive On Green	0.07	0.22	0.22	0.15	0.31	0.31	0.10	0.42	0.42	0.07	0.39	0.39
Sat Flow, veh/h	1757	3505	1526	1757	3505	1531	1757	3505	1534	1757	3505	1528
Grp Volume(v), veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Grp Sat Flow(s),veh/h/ln	1757	1752	1526	1757	1752	1531	1757	1752	1534	1757	1752	1528
Q Serve(g_s), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Cycle Q Clear(g_c), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
V/C Ratio(X)	0.90	1.00	0.24	1.04	0.89	0.40	1.02	0.62	0.10	0.81	1.00	0.16
Avail Cap(c_a), veh/h	117	789	343	264	1081	472	176	1464	641	205	1373	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	46.5	38.1	51.0	39.5	32.7	54.0	27.4	21.2	54.7	36.4	23.7
Incr Delay (d2), s/veh	52.5	32.2	0.4	66.2	9.1	0.5	72.9	2.0	0.3	12.1	23.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	16.6	2.3	13.6	16.4	5.0	9.4	12.1	1.3	3.9	27.1	2.1
LnGrp Delay(d), s/veh	108.0	78.7	38.5	117.2	48.6	33.3	127.1	29.4	21.5	66.8	59.9	24.2
LnGrp LOS	F	F	D	F	D	C	F	C	C	E	E	C
Approach Vol, veh/h		978			1421			1147			1568	
Approach Delay, s/veh		78.4			59.8			44.2			58.2	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	54.1	22.0	31.0	16.0	51.0	12.0	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	45.0	18.0	27.0	12.0	47.0	8.0	37.0
Max Q Clear Time (g_c+I1), s	9.1	26.3	20.0	29.0	14.0	48.7	9.1	33.2
Green Ext Time (p_c), s	0.1	5.9	0.0	0.0	0.0	0.0	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Future Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	71	101	141	131	162	91	899	0	101	1485	20
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	156	139	175	313	280	117	1962	878	129	2901	39
Arrive On Green	0.01	0.09	0.09	0.10	0.18	0.18	0.07	0.57	0.00	0.07	0.57	0.57
Sat Flow, veh/h	1740	1736	1553	1740	1736	1553	1740	3471	1553	1740	5070	68
Grp Volume(v), veh/h	10	71	101	141	131	162	91	899	0	101	974	531
Grp Sat Flow(s),veh/h/ln	1740	1736	1553	1740	1736	1553	1740	1736	1553	1740	1663	1814
Q Serve(g_s), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Cycle Q Clear(g_c), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	17	156	139	175	313	280	117	1962	878	129	1903	1038
V/C Ratio(X)	0.59	0.46	0.73	0.81	0.42	0.58	0.78	0.46	0.00	0.79	0.51	0.51
Avail Cap(c_a), veh/h	74	296	265	371	592	530	278	1962	878	278	1903	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	40.5	41.6	41.3	34.1	35.2	43.1	12.0	0.0	42.7	12.1	12.1
Incr Delay (d2), s/veh	28.2	2.1	7.0	8.4	0.9	1.9	10.7	0.8	0.0	10.0	1.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.8	2.8	4.0	3.1	4.0	2.7	7.0	0.0	2.9	7.8	8.8
LnGrp Delay(d), s/veh	74.5	42.6	48.5	49.7	35.0	37.0	53.8	12.7	0.0	52.7	13.1	13.9
LnGrp LOS	E	D	D	D	C	D	D	B		D	B	B
Approach Vol, veh/h		182			434			990			1606	
Approach Delay, s/veh		47.6			40.5			16.5			15.9	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	57.0	13.4	12.4	10.3	57.6	4.9	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	53.0	20.0	16.0	15.0	53.0	4.0	32.0
Max Q Clear Time (g_c+I1), s	7.4	16.2	9.4	7.9	6.8	18.6	2.5	11.0
Green Ext Time (p_c), s	0.1	6.7	0.2	0.5	0.1	12.2	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Future Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	11	11	87	22	11	11	109	1011	33	22	1652	54
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	62	44	173	74	26	173	136	2599	1137	31	3413	112
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.08	0.76	0.76	0.02	0.70	0.70
Sat Flow, veh/h	96	394	1534	157	230	1534	1723	3438	1504	1723	4909	160
Grp Volume(v), veh/h	22	0	87	33	0	11	109	1011	33	22	1108	598
Grp Sat Flow(s),veh/h/ln	490	0	1534	387	0	1534	1723	1719	1504	1723	1647	1777
Q Serve(g_s), s	0.1	0.0	5.6	1.2	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Cycle Q Clear(g_c), s	10.6	0.0	5.6	11.1	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Prop In Lane	0.50		1.00	0.67		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	106	0	173	100	0	173	136	2599	1137	31	2289	1235
V/C Ratio(X)	0.21	0.00	0.50	0.33	0.00	0.06	0.80	0.39	0.03	0.71	0.48	0.48
Avail Cap(c_a), veh/h	224	0	290	207	0	290	326	2599	1137	130	2289	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	44.2	46.3	0.0	41.9	48.0	4.5	3.2	51.7	7.4	7.4
Incr Delay (d2), s/veh	1.0	0.0	2.2	1.9	0.0	0.2	10.5	0.4	0.0	26.2	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.5	1.0	0.0	0.3	3.5	5.2	0.3	0.9	7.6	8.4
LnGrp Delay(d), s/veh	43.5	0.0	46.4	48.2	0.0	42.1	58.5	4.9	3.3	77.9	8.1	8.8
LnGrp LOS	D		D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		109			44			1153			1728	
Approach Delay, s/veh		45.8			46.7			9.9			9.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	84.0		16.5	12.4	77.5		16.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	80.0		20.0	20.0	68.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	12.8		12.6	8.6	18.4		13.1
Green Ext Time (p_c), s	0.0	8.5		0.1	0.2	16.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	730	110	150	1100	120	90
Future Volume (veh/h)	730	110	150	1100	120	90
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1900	1827	1827	1827	1827
Adj Flow Rate, veh/h	785	118	161	1183	129	97
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1211	181	207	2263	750	670
Arrive On Green	0.28	0.28	0.12	0.45	0.43	0.43
Sat Flow, veh/h	4530	651	1740	5152	1740	1553
Grp Volume(v), veh/h	596	307	161	1183	129	97
Grp Sat Flow(s),veh/h/ln	1663	1691	1740	1663	1740	1553
Q Serve(g_s), s	11.0	11.1	6.3	11.8	3.2	2.6
Cycle Q Clear(g_c), s	11.0	11.1	6.3	11.8	3.2	2.6
Prop In Lane		0.38	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	923	469	207	2263	750	670
V/C Ratio(X)	0.65	0.65	0.78	0.52	0.17	0.14
Avail Cap(c_a), veh/h	2199	1118	800	5879	750	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.2	29.8	13.6	12.2	12.0
Incr Delay (d2), s/veh	0.8	1.5	6.2	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	5.4	3.4	5.4	1.6	1.2
LnGrp Delay(d), s/veh	22.9	23.7	36.0	13.8	12.6	12.5
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	903			1344	226	
Approach Delay, s/veh	23.2			16.5	12.6	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		34.0	12.3	23.3				35.6
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		30.0	32.0	46.0				82.0
Max Q Clear Time (g_c+I1), s		5.2	8.3	13.1				13.8
Green Ext Time (p_c), s		0.6	0.4	6.2				10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	23.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Future Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	24	200	35	59	188	165	35	129	94	106	153	35
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	18.7	37.8	13.6	14.6
HCM LOS	C	E	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	14%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	85%	46%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	15%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	110	80	20	200	350	90	130	30
LT Vol	30	0	0	20	0	50	90	0	0
Through Vol	0	110	0	0	170	160	0	130	0
RT Vol	0	0	80	0	30	140	0	0	30
Lane Flow Rate	35	129	94	24	235	412	106	153	35
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.088	0.304	0.202	0.057	0.527	0.837	0.26	0.354	0.074
Departure Headway (Hd)	8.973	8.452	7.723	8.686	8.068	7.431	8.832	8.324	7.596
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	401	427	466	414	449	490	408	434	474
Service Time	6.701	6.18	5.451	6.395	5.778	5.131	6.559	6.039	5.311
HCM Lane V/C Ratio	0.087	0.302	0.202	0.058	0.523	0.841	0.26	0.353	0.074
HCM Control Delay, s/veh	12.6	14.8	12.4	11.9	19.4	37.8	14.6	15.5	10.9
HCM Lane LOS	B	B	B	B	C	E	B	C	B
HCM 95th-tile Q	0.3	1.3	0.7	0.2	3	8.3	1	1.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Future Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	96	904	117	43	1160	85	43	32	21	74	43	74
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	125	1681	736	55	1542	676	75	36	517	78	28	510
Arrive On Green	0.07	0.48	0.48	0.03	0.44	0.44	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1757	3505	1534	1757	3505	1535	0	110	1565	0	86	1545
Grp Volume(v), veh/h	96	904	117	43	1160	85	75	0	21	117	0	74
Grp Sat Flow(s),veh/h/ln	1757	1752	1534	1757	1752	1535	110	0	1565	86	0	1545
Q Serve(g_s), s	4.1	13.7	3.3	1.8	21.0	2.5	0.0	0.0	0.7	0.0	0.0	2.5
Cycle Q Clear(g_c), s	4.1	13.7	3.3	1.8	21.0	2.5	25.0	0.0	0.7	25.0	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	0.57		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	125	1681	736	55	1542	676	111	0	517	106	0	510
V/C Ratio(X)	0.77	0.54	0.16	0.78	0.75	0.13	0.67	0.00	0.04	1.10	0.00	0.14
Avail Cap(c_a), veh/h	395	3427	1500	209	3056	1339	111	0	517	106	0	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.5	13.8	11.1	36.4	17.7	12.6	26.1	0.0	17.2	31.3	0.0	17.8
Incr Delay (d2), s/veh	9.5	0.3	0.1	20.5	0.8	0.1	28.2	0.0	0.1	118.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.6	1.4	1.2	10.2	1.1	2.4	0.0	0.3	5.7	0.0	1.2
LnGrp Delay(d), s/veh	44.1	14.1	11.2	56.9	18.5	12.6	54.3	0.0	17.3	149.5	0.0	18.4
LnGrp LOS	D	B	B	E	B	B	D		B	F		B
Approach Vol, veh/h		1117			1288			96			191	
Approach Delay, s/veh		16.3			19.4			46.2			98.7	
Approach LOS		B			B			D			F	

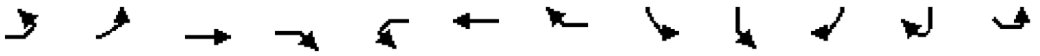
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	6.4	40.3		29.0	9.4	37.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	9.0	74.0		25.0	17.0	66.0
Max Q Clear Time (g_c+I1), s		27.0	3.8	15.7		27.0	6.1	23.0
Green Ext Time (p_c), s		0.0	0.0	7.6		0.0	0.1	10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	190	0	140	20	1040	130	100	1160	10
Future Volume (veh/h)	10	10	10	190	0	140	20	1040	130	100	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	11	11	11	211	0	156	22	1156	144	111	1289	11
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	105	102	81	313	0	325	31	2079	909	139	2293	1003
Arrive On Green	0.21	0.21	0.21	0.21	0.00	0.21	0.02	0.60	0.60	0.08	0.66	0.66
Sat Flow, veh/h	286	488	387	1356	0	1551	1740	3471	1518	1740	3471	1518
Grp Volume(v), veh/h	33	0	0	211	0	156	22	1156	144	111	1289	11
Grp Sat Flow(s),veh/h/ln	1161	0	0	1356	0	1551	1740	1736	1518	1740	1736	1518
Q Serve(g_s), s	0.1	0.0	0.0	9.7	0.0	9.5	1.4	21.5	4.5	6.7	21.6	0.3
Cycle Q Clear(g_c), s	9.6	0.0	0.0	19.3	0.0	9.5	1.4	21.5	4.5	6.7	21.6	0.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	288	0	0	313	0	325	31	2079	909	139	2293	1003
V/C Ratio(X)	0.11	0.00	0.00	0.67	0.00	0.48	0.71	0.56	0.16	0.80	0.56	0.01
Avail Cap(c_a), veh/h	418	0	0	432	0	462	81	2079	909	275	2293	1003
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.4	0.0	0.0	42.1	0.0	37.3	52.5	13.0	9.6	48.6	9.9	6.2
Incr Delay (d2), s/veh	0.2	0.0	0.0	2.5	0.0	1.1	25.1	1.1	0.4	10.2	1.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	6.3	0.0	4.2	0.9	10.6	2.0	3.6	10.5	0.1
LnGrp Delay(d), s/veh	34.5	0.0	0.0	44.6	0.0	38.4	77.6	14.0	9.9	58.8	10.9	6.3
LnGrp LOS	C			D		D	E	B	A	E	B	A
Approach Vol, veh/h		33			367			1322			1411	
Approach Delay, s/veh		34.5			42.0			14.7			14.6	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.6	68.4		26.6	5.9	75.0		26.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	17.0	59.0		32.0	5.0	71.0		32.0
Max Q Clear Time (g_c+I1), s	8.7	23.5		11.6	3.4	23.6		21.3
Green Ext Time (p_c), s	0.1	10.2		0.1	0.0	12.0		1.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		18.0
HCM 2010 LOS		B



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL2
Lane Configurations												
Traffic Volume (vph)	60	90	490	90	10	1220	80	10	10	10	10	20
Future Volume (vph)	60	90	490	90	10	1220	80	10	10	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%			15%			
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00	1.00		
Frpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	0.98		
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Frt		1.00	0.98		1.00	0.99			1.00	0.85		
Flt Protected		0.95	1.00		0.95	1.00			0.95	1.00		
Satd. Flow (prot)		1787	5006		1787	5088			1653	1453		
Flt Permitted		0.95	1.00		0.40	1.00			0.95	1.00		
Satd. Flow (perm)		1787	5006		760	5088			1653	1453		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	97	527	97	11	1312	86	11	11	11	11	22
RTOR Reduction (vph)	0	0	19	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	162	605	0	11	1398	0	0	22	22	0	0
Confl. Peds. (#/hr)									2	3		
Confl. Bikes (#/hr)				1								
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Prot	Perm		Perm
Protected Phases	7	7	4		3	8		9	9			
Permitted Phases					8					10		6
Actuated Green, G (s)		12.9	49.3		37.8	37.1			1.4	3.0		
Effective Green, g (s)		12.9	49.3		37.8	37.1			1.4	3.0		
Actuated g/C Ratio		0.12	0.47		0.36	0.36			0.01	0.03		
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0	3.0		
Lane Grp Cap (vph)		221	2370		282	1813			22	41		
v/s Ratio Prot		c0.09	0.12		0.00	c0.27			c0.01			
v/s Ratio Perm					0.01					c0.02		
v/c Ratio		0.73	0.26		0.04	0.77			1.00	0.54		
Uniform Delay, d1		43.9	16.4		21.2	29.7			51.4	49.9		
Progression Factor		1.00	1.00		1.00	1.00			1.00	1.00		
Incremental Delay, d2		11.8	0.1		0.1	2.1			191.9	12.8		
Delay (s)		55.8	16.5		21.3	31.8			243.2	62.7		
Level of Service		E	B		C	C			F	E		
Approach Delay (s/veh)			24.6			31.7			153.0			
Approach LOS			C			C			F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	104.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NWR2
Lane Configurations							
Traffic Volume (vph)	40	120	150	180	210	40	10
Future Volume (vph)	40	120	150	180	210	40	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1787	1881	1599	1787	1881	1599	
Flt Permitted	0.48	1.00	1.00	0.63	1.00	1.00	
Satd. Flow (perm)	900	1881	1599	1194	1881	1599	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	43	129	161	194	226	43	11
RTOR Reduction (vph)	0	0	115	0	0	39	0
Lane Group Flow (vph)	65	129	46	194	226	15	0
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		6			2		
Permitted Phases	6		6	2		2	
Actuated Green, G (s)	29.7	29.7	29.7	29.7	29.7	29.7	
Effective Green, g (s)	29.7	29.7	29.7	29.7	29.7	29.7	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	256	536	456	340	536	456	
v/s Ratio Prot		0.07			0.12		
v/s Ratio Perm	0.07		0.03	c0.16		0.01	
v/c Ratio	0.25	0.24	0.10	0.57	0.42	0.03	
Uniform Delay, d1	28.7	28.5	27.4	31.8	30.2	26.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.2	0.1	6.8	2.4	0.1	
Delay (s)	29.2	28.8	27.5	38.6	32.6	27.0	
Level of Service	C	C	C	D	C	C	
Approach Delay (s/veh)		28.3			34.4		
Approach LOS		C			C		

Intersection Summary

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	580	10	10	850	10	10	10	130	10	10	30
Future Volume (Veh/h)	10	580	10	10	850	10	10	10	130	10	10	30
Sign Control		Free			Free			Stop			Yield	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	11	652	11	11	955	11	11	11	146	11	11	34
Pedestrians		1						3			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		4.0						4.0			4.0	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					499							
pX, platoon unblocked												
vC, conflicting volume	968			666			1223	1673	335	1484	1673	486
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	968			666			1223	1673	335	1484	1673	486
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			90	88	78	82	88	94
cM capacity (veh/h)	712			924			113	93	663	60	93	529

Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	NE 2	SW 1
Volume Total	337	337	489	489	71	97	56
Volume Left	11	0	11	0	11	0	11
Volume Right	0	11	0	11	49	97	34
cSH	712	1700	924	1700	244	663	153
Volume to Capacity	0.02	0.20	0.01	0.29	0.29	0.15	0.36
Queue Length 95th (ft)	1	0	1	0	29	13	38
Control Delay (s/veh)	0.5	0.0	0.3	0.0	25.6	11.4	41.4
Lane LOS	A		A		D	B	E
Approach Delay (s/veh)	0.3		0.2		17.4		41.4
Approach LOS					C		E

Intersection Summary				
Average Delay	3.0			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	350	1570	50	10	2490	410	210	20	400	270	50	20
Future Volume (vph)	350	1570	50	10	2490	410	210	20	400	270	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.86	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5055		1766	5085	1583	1766	1512	1485	1770	1863	1558
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.72	1.00	1.00	0.45	1.00	1.00
Satd. Flow (perm)	3433	5055		1766	5085	1583	1342	1512	1485	843	1863	1558
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	380	1707	54	11	2707	446	228	22	435	293	54	22
RTOR Reduction (vph)	0	2	0	0	0	144	0	103	103	0	0	15
Lane Group Flow (vph)	380	1759	0	11	2707	302	228	128	123	293	54	7
Confl. Peds. (#/hr)			6	6			1					1
Confl. Bikes (#/hr)			1						1			2
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	13.0	73.4		0.8	61.2	61.2	37.0	37.0	37.0	37.0	37.0	37.0
Effective Green, g (s)	13.0	73.4		0.8	61.2	61.2	37.0	37.0	37.0	37.0	37.0	37.0
Actuated g/C Ratio	0.11	0.60		0.01	0.50	0.50	0.30	0.30	0.30	0.30	0.30	0.30
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	362	3011		11	2525	786	403	454	445	253	559	467
v/s Ratio Prot	c0.11	0.35		0.01	c0.53			0.08			0.03	
v/s Ratio Perm						0.19	0.17		0.08	c0.35		0.00
v/c Ratio	1.05	0.58		1.00	1.07	0.38	0.57	0.28	0.28	1.16	0.10	0.01
Uniform Delay, d1	55.1	15.4		61.2	31.0	19.3	36.3	32.9	32.9	43.1	31.1	30.3
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	60.9	0.8		271.4	40.9	1.4	1.8	0.3	0.3	106.1	0.1	0.0
Delay (s)	116.0	16.3		332.6	71.9	20.7	38.2	33.3	33.2	149.2	31.1	30.3
Level of Service	F	B		F	E	C	D	C	C	F	C	C
Approach Delay (s/veh)		34.0			65.5			34.9			124.8	
Approach LOS		C			E			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	60	220	80	190	20	640	630	10	10	1010	480
Future Volume (veh/h)	220	60	220	80	190	20	640	630	10	10	1010	480
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	229	62	229	83	198	21	667	656	0	10	1052	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	291	305	259	106	230	24	753	2237	1001	17	1497	670
Arrive On Green	0.08	0.16	0.16	0.06	0.14	0.14	0.22	0.63	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3476	1881	1596	1792	1672	177	3476	3574	1599	1792	3574	1599
Grp Volume(v), veh/h	229	62	229	83	0	219	667	656	0	10	1052	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1596	1792	0	1849	1738	1787	1599	1792	1787	1599
Q Serve(g_s), s	7.2	3.2	15.7	5.1	0.0	13.0	20.8	9.4	0.0	0.6	27.1	0.0
Cycle Q Clear(g_c), s	7.2	3.2	15.7	5.1	0.0	13.0	20.8	9.4	0.0	0.6	27.1	0.0
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	305	259	106	0	255	753	2237	1001	17	1497	670
V/C Ratio(X)	0.79	0.20	0.88	0.78	0.00	0.86	0.89	0.29	0.00	0.58	0.70	0.00
Avail Cap(c_a), veh/h	342	320	271	176	0	314	901	2237	1001	64	1497	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.3	40.6	45.8	51.9	0.0	47.2	42.5	9.6	0.0	55.2	26.8	0.0
Incr Delay (d2), s/veh	10.0	0.3	26.6	11.8	0.0	17.8	9.3	0.3	0.0	27.8	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.7	8.8	2.9	0.0	7.9	11.0	4.8	0.0	0.4	13.9	0.0
LnGrp Delay(d), s/veh	60.3	40.9	72.5	63.7	0.0	64.9	51.7	9.9	0.0	83.0	29.5	0.0
LnGrp LOS	E	D	E	E		E	D	A		F	C	
Approach Vol, veh/h		520			302			1323			1062	
Approach Delay, s/veh		63.3			64.6			31.0			30.0	
Approach LOS		E			E			C			C	

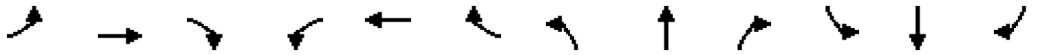
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	74.0	10.6	22.1	28.2	50.8	13.4	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	70.0	11.0	19.0	29.0	45.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	2.6	11.4	7.1	17.7	22.8	29.1	9.2	15.0
Green Ext Time (p_c), s	0.0	4.8	0.1	0.2	1.4	6.4	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.1
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	370	1320	320	180	1840	300	120	730	550	470	670	70
Future Volume (veh/h)	370	1320	320	180	1840	300	120	730	550	470	670	70
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	394	1404	340	191	1957	319	128	777	585	500	713	74
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	458	2054	627	221	2011	698	187	730	530	473	1354	139
Arrive On Green	0.13	0.40	0.40	0.12	0.39	0.39	0.05	0.20	0.20	0.14	0.29	0.29
Sat Flow, veh/h	3476	5136	1567	1792	5136	1563	3476	3574	1565	3476	4722	486
Grp Volume(v), veh/h	394	1404	340	191	1957	319	128	777	585	500	515	272
Grp Sat Flow(s),veh/h/ln	1738	1712	1567	1792	1712	1563	1738	1787	1565	1738	1712	1784
Q Serve(g_s), s	13.0	26.5	19.5	12.3	44.0	16.7	4.3	24.0	24.0	16.0	14.8	15.0
Cycle Q Clear(g_c), s	13.0	26.5	19.5	12.3	44.0	16.7	4.3	24.0	24.0	16.0	14.8	15.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	458	2054	627	221	2011	698	187	730	530	473	982	512
V/C Ratio(X)	0.86	0.68	0.54	0.86	0.97	0.46	0.69	1.06	1.10	1.06	0.52	0.53
Avail Cap(c_a), veh/h	533	2054	627	305	2011	698	355	730	530	473	982	512
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	29.1	27.0	50.5	35.1	22.7	54.6	46.7	39.1	50.7	35.2	35.2
Incr Delay (d2), s/veh	12.1	1.9	3.4	16.8	14.6	2.2	4.4	51.6	70.4	57.0	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	12.8	9.0	7.1	23.4	7.6	2.2	17.0	27.5	11.4	7.1	7.5
LnGrp Delay(d), s/veh	62.0	31.0	30.4	67.3	49.8	24.9	59.0	98.4	109.5	107.7	35.7	36.3
LnGrp LOS	E	C	C	E	D	C	E	F	F	F	D	D
Approach Vol, veh/h		2138			2467			1490			1287	
Approach Delay, s/veh		36.6			47.9			99.4			63.8	
Approach LOS		D			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	51.0	20.0	28.0	19.5	50.0	10.3	37.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	44.0	16.0	24.0	18.0	46.0	12.0	28.0
Max Q Clear Time (g_c+I1), s	14.3	28.5	18.0	26.0	15.0	46.0	6.3	17.0
Green Ext Time (p_c), s	0.2	9.0	0.0	0.0	0.4	0.0	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.8
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	10	10	70	20	1760	10	40	2620	210
Future Volume (veh/h)	110	20	20	10	10	70	20	1760	10	40	2620	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	115	21	21	10	10	73	21	1833	10	42	2729	219
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	57	4	291	46	32	295	30	3544	19	54	3326	259
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.02	0.68	0.68	0.03	0.69	0.69
Sat Flow, veh/h	0	23	1548	0	169	1568	1774	5219	28	1774	4803	374
Grp Volume(v), veh/h	136	0	21	20	0	73	21	1191	652	42	1903	1045
Grp Sat Flow(s),veh/h/ln	23	0	1548	169	0	1568	1774	1695	1857	1774	1695	1787
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	4.6	1.4	20.3	20.3	2.8	46.0	50.7
Cycle Q Clear(g_c), s	22.0	0.0	1.3	22.0	0.0	4.6	1.4	20.3	20.3	2.8	46.0	50.7
Prop In Lane	0.85		1.00	0.50		1.00	1.00		0.02	1.00		0.21
Lane Grp Cap(c), veh/h	61	0	291	78	0	295	30	2302	1261	54	2347	1237
V/C Ratio(X)	2.22	0.00	0.07	0.26	0.00	0.25	0.70	0.52	0.52	0.78	0.81	0.84
Avail Cap(c_a), veh/h	61	0	291	78	0	295	76	2302	1261	106	2347	1237
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	39.1	40.7	0.0	40.4	57.2	9.3	9.3	56.3	12.6	13.3
Incr Delay (d2), s/veh	599.8	0.0	0.1	1.7	0.0	0.4	25.4	0.8	1.5	21.3	3.2	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.2	0.0	0.6	0.6	0.0	2.0	0.9	9.7	10.9	1.7	22.2	27.2
LnGrp Delay(d), s/veh	656.7	0.0	39.2	42.4	0.0	40.9	82.6	10.1	10.8	77.6	15.8	20.5
LnGrp LOS	F		D	D		D	F	B	B	E	B	C
Approach Vol, veh/h		157			93			1864			2990	
Approach Delay, s/veh		574.1			41.2			11.2			18.3	
Approach LOS		F			D			B			B	

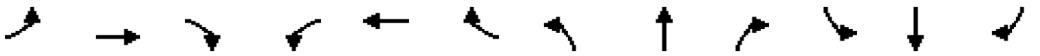
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	83.4		26.0	6.0	85.0		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	79.0		22.0	5.0	81.0		22.0
Max Q Clear Time (g_c+I1), s	4.8	22.3		24.0	3.4	52.7		24.0
Green Ext Time (p_c), s	0.0	20.7		0.0	0.0	25.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	520	70	60	570	120	90	1370	60	100	2000	420
Future Volume (veh/h)	370	520	70	60	570	120	90	1370	60	100	2000	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	378	531	71	61	582	122	92	1398	61	102	2041	429
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	976	433	103	640	279	115	2577	112	154	2227	452
Arrive On Green	0.12	0.28	0.28	0.03	0.18	0.18	0.03	0.52	0.52	0.04	0.53	0.53
Sat Flow, veh/h	3442	3539	1570	3442	3539	1542	3442	4995	218	3442	4225	857
Grp Volume(v), veh/h	378	531	71	61	582	122	92	949	510	102	1623	847
Grp Sat Flow(s),veh/h/ln	1721	1770	1570	1721	1770	1542	1721	1695	1823	1721	1695	1692
Q Serve(g_s), s	12.9	15.3	4.1	2.1	19.3	8.4	3.2	22.5	22.5	3.5	51.9	56.7
Cycle Q Clear(g_c), s	12.9	15.3	4.1	2.1	19.3	8.4	3.2	22.5	22.5	3.5	51.9	56.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.51
Lane Grp Cap(c), veh/h	430	976	433	103	640	279	115	1749	941	154	1787	892
V/C Ratio(X)	0.88	0.54	0.16	0.60	0.91	0.44	0.80	0.54	0.54	0.66	0.91	0.95
Avail Cap(c_a), veh/h	432	976	433	144	651	284	115	1749	941	202	1787	892
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	36.9	32.8	57.3	48.0	43.6	57.4	19.4	19.4	56.2	25.6	26.8
Incr Delay (d2), s/veh	18.4	0.6	0.2	5.4	16.8	1.1	31.5	1.2	2.2	5.1	8.3	20.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	7.5	1.8	1.1	10.9	3.7	2.0	10.8	11.9	1.8	26.2	31.4
LnGrp Delay(d), s/veh	69.8	37.5	33.0	62.7	64.8	44.6	88.8	20.7	21.7	61.3	33.9	46.9
LnGrp LOS	E	D	C	E	E	D	F	C	C	E	C	D
Approach Vol, veh/h		980			765			1551			2572	
Approach Delay, s/veh		49.6			61.4			25.0			39.3	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.3	65.7	7.6	37.0	8.0	67.0	18.9	25.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	60.0	5.0	32.0	4.0	63.0	15.0	22.0
Max Q Clear Time (g_c+I1), s	5.5	24.5	4.1	17.3	5.2	58.7	14.9	21.3
Green Ext Time (p_c), s	0.0	12.4	0.0	3.1	0.0	4.1	0.0	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	750	380	860	720	10	180	200	370	10	160	10
Future Volume (vph)	10	750	380	860	720	10	180	200	370	10	160	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1787	3574	1571	3467	3567		1698	1780	1579		1860	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.54	0.97	1.00		0.98	
Satd. Flow (perm)	1787	3574	1571	3467	3567		959	1732	1579		1827	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	789	400	905	758	11	189	211	389	11	168	11
RTOR Reduction (vph)	0	0	199	0	1	0	0	0	268	0	2	0
Lane Group Flow (vph)	11	789	201	905	768	0	170	230	121	0	188	0
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			2						1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	0.8	34.0	34.0	33.9	67.1		36.2	36.2	36.2		36.2	
Effective Green, g (s)	0.8	34.0	34.0	33.9	67.1		36.2	36.2	36.2		36.2	
Actuated g/C Ratio	0.01	0.29	0.29	0.29	0.58		0.31	0.31	0.31		0.31	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	12	1046	460	1012	2061		299	540	492		569	
v/s Ratio Prot	0.01	c0.22		c0.26	0.22							
v/s Ratio Perm			0.13				c0.18	0.13	0.08		0.10	
v/c Ratio	0.92	0.75	0.44	0.89	0.37		0.57	0.43	0.25		0.33	
Uniform Delay, d1	57.6	37.3	33.3	39.4	13.2		33.4	31.7	29.8		30.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	212.2	3.1	0.7	10.2	0.1		7.6	2.4	1.2		1.6	
Delay (s)	269.8	40.4	33.9	49.6	13.3		41.1	34.2	31.0		32.2	
Level of Service	F	D	C	D	B		D	C	C		C	
Approach Delay (s/veh)		40.3			32.9			34.1			32.2	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	116.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	78.7%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	170	10	30	10	650	100	130	1220	10
Future Volume (veh/h)	10	10	10	170	10	30	10	650	100	130	1220	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	11	11	185	11	33	11	707	109	141	1326	11
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	184	311	280	13	38	19	2071	906	174	2380	1041
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.01	0.59	0.59	0.10	0.67	0.67
Sat Flow, veh/h	742	928	1569	1087	65	194	1774	3539	1548	1774	3539	1548
Grp Volume(v), veh/h	22	0	11	229	0	0	11	707	109	141	1326	11
Grp Sat Flow(s),veh/h/ln	1670	0	1569	1345	0	0	1774	1770	1548	1774	1770	1548
Q Serve(g_s), s	0.0	0.0	0.6	15.9	0.0	0.0	0.6	10.5	3.2	7.9	19.8	0.2
Cycle Q Clear(g_c), s	1.0	0.0	0.6	16.8	0.0	0.0	0.6	10.5	3.2	7.9	19.8	0.2
Prop In Lane	0.50		1.00	0.81		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	385	0	311	331	0	0	19	2071	906	174	2380	1041
V/C Ratio(X)	0.06	0.00	0.04	0.69	0.00	0.00	0.59	0.34	0.12	0.81	0.56	0.01
Avail Cap(c_a), veh/h	632	0	559	554	0	0	70	2071	906	333	2380	1041
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.9	0.0	32.7	39.7	0.0	0.0	49.8	10.9	9.4	44.7	8.7	5.5
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.6	0.0	0.0	26.2	0.5	0.3	8.8	0.9	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.3	6.4	0.0	0.0	0.4	5.2	1.4	4.3	9.9	0.1
LnGrp Delay(d), s/veh	32.9	0.0	32.8	42.3	0.0	0.0	76.1	11.3	9.6	53.5	9.6	5.5
LnGrp LOS	C		C	D			E	B	A	D	A	A
Approach Vol, veh/h		33			229			827			1478	
Approach Delay, s/veh		32.9			42.3			12.0			13.8	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.9	63.2		24.1	5.1	72.0		24.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	19.0	53.0		36.0	4.0	68.0		36.0
Max Q Clear Time (g_c+I1), s	9.9	12.5		3.0	2.6	21.8		18.8
Green Ext Time (p_c), s	0.2	5.6		0.1	0.0	13.0		1.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		16.0
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	360	150	30	230	10	70	280	80	30	540	490
Future Volume (veh/h)	360	360	150	30	230	10	70	280	80	30	540	490
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	396	396	165	33	253	11	77	308	88	33	593	538
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	504	733	301	207	362	16	307	1975	862	582	1975	870
Arrive On Green	0.22	0.30	0.30	0.02	0.10	0.10	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1792	2460	1011	1792	3490	151	501	3574	1560	993	3574	1575
Grp Volume(v), veh/h	396	286	275	33	129	135	77	308	88	33	593	538
Grp Sat Flow(s),veh/h/ln	1792	1787	1683	1792	1787	1853	501	1787	1560	993	1787	1575
Q Serve(g_s), s	17.9	12.8	13.1	1.6	6.7	6.7	9.4	4.0	2.6	1.6	8.5	22.3
Cycle Q Clear(g_c), s	17.9	12.8	13.1	1.6	6.7	6.7	17.9	4.0	2.6	5.7	8.5	22.3
Prop In Lane	1.00		0.60	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	532	502	207	185	192	307	1975	862	582	1975	870
V/C Ratio(X)	0.79	0.54	0.55	0.16	0.70	0.70	0.25	0.16	0.10	0.06	0.30	0.62
Avail Cap(c_a), veh/h	804	950	895	238	335	348	307	1975	862	582	1975	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	28.1	28.2	37.1	41.5	41.5	16.3	10.5	10.2	11.9	11.5	14.6
Incr Delay (d2), s/veh	2.7	0.8	0.9	0.4	4.6	4.6	2.0	0.2	0.2	0.2	0.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	6.5	6.2	0.8	3.5	3.7	1.4	2.0	1.2	0.5	4.3	10.3
LnGrp Delay(d), s/veh	29.9	29.0	29.2	37.5	46.2	46.1	18.3	10.7	10.4	12.1	11.9	17.9
LnGrp LOS	C	C	C	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		957			297			473			1164	
Approach Delay, s/veh		29.4			45.2			11.9			14.7	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	6.3	32.6		57.0	25.0	14.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	4.0	51.0		53.0	37.0	18.0
Max Q Clear Time (g_c+I1), s		19.9	3.6	15.1		24.3	19.9	8.7
Green Ext Time (p_c), s		3.4	0.0	3.5		6.7	1.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	550	110	340	600	10	170	30	190	30	60	20
Future Volume (veh/h)	10	550	110	340	600	10	170	30	190	30	60	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	11	618	124	382	674	11	191	34	213	34	67	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	302	780	156	455	1558	25	590	651	543	441	734	229
Arrive On Green	0.01	0.26	0.26	0.18	0.43	0.43	0.10	0.35	0.35	0.03	0.28	0.28
Sat Flow, veh/h	1792	2959	592	1792	3597	59	1792	1881	1569	1792	2667	832
Grp Volume(v), veh/h	11	373	369	382	335	350	191	34	213	34	44	45
Grp Sat Flow(s),veh/h/ln	1792	1787	1764	1792	1787	1869	1792	1881	1569	1792	1787	1712
Q Serve(g_s), s	0.4	16.8	16.9	12.5	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Cycle Q Clear(g_c), s	0.4	16.8	16.9	12.5	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Prop In Lane	1.00		0.34	1.00		0.03	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	302	471	465	455	774	809	590	651	543	441	492	471
V/C Ratio(X)	0.04	0.79	0.79	0.84	0.43	0.43	0.32	0.05	0.39	0.08	0.09	0.10
Avail Cap(c_a), veh/h	366	721	712	856	1360	1422	686	651	543	477	492	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	29.7	29.7	18.8	17.1	17.2	17.9	18.9	21.5	21.6	23.4	23.4
Incr Delay (d2), s/veh	0.0	3.4	3.5	4.2	0.4	0.4	0.3	0.2	2.1	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	8.7	8.7	6.7	5.7	5.9	3.1	0.6	4.1	0.6	0.8	0.9
LnGrp Delay(d), s/veh	23.0	33.1	33.2	23.0	17.5	17.5	18.2	19.0	23.6	21.7	23.7	23.8
LnGrp LOS	C	C	C	C	B	B	B	B	C	C	C	C
Approach Vol, veh/h		753			1067			438			123	
Approach Delay, s/veh		33.0			19.5			20.9			23.2	
Approach LOS		C			B			C			C	

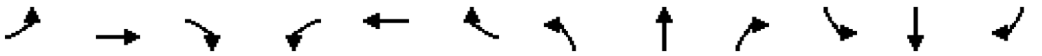
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	34.0	19.6	26.9	12.4	27.9	4.9	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	30.0	35.0	35.0	13.0	21.0	4.0	66.0
Max Q Clear Time (g_c+I1), s	3.2	10.9	14.5	18.9	8.3	3.7	2.4	13.3
Green Ext Time (p_c), s	0.0	0.8	1.1	4.0	0.2	0.3	0.0	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	340	80	40	420	140	100	160	30	220	320	160
Future Volume (veh/h)	120	340	80	40	420	140	100	160	30	220	320	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	136	386	91	45	477	159	114	182	34	250	364	182
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	1061	464	57	611	202	146	947	173	295	919	451
Arrive On Green	0.10	0.30	0.30	0.03	0.24	0.24	0.08	0.32	0.32	0.17	0.40	0.40
Sat Flow, veh/h	1774	3539	1547	1774	2597	859	1774	2979	545	1774	2286	1123
Grp Volume(v), veh/h	136	386	91	45	324	312	114	107	109	250	280	266
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1770	1686	1774	1770	1755	1774	1770	1640
Q Serve(g_s), s	6.5	7.5	3.8	2.2	14.9	15.1	5.5	3.8	4.0	11.9	9.8	10.1
Cycle Q Clear(g_c), s	6.5	7.5	3.8	2.2	14.9	15.1	5.5	3.8	4.0	11.9	9.8	10.1
Prop In Lane	1.00		1.00	1.00		0.51	1.00		0.31	1.00		0.68
Lane Grp Cap(c), veh/h	172	1061	464	57	416	396	146	562	558	295	711	659
V/C Ratio(X)	0.79	0.36	0.20	0.79	0.78	0.79	0.78	0.19	0.20	0.85	0.39	0.40
Avail Cap(c_a), veh/h	387	1789	782	163	671	639	346	562	558	632	711	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.5	24.0	22.7	41.8	31.2	31.3	39.2	21.6	21.6	35.2	18.5	18.6
Incr Delay (d2), s/veh	8.0	0.2	0.2	21.1	3.2	3.5	8.7	0.7	0.8	6.6	1.6	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.7	1.6	1.4	7.7	7.4	3.0	2.0	2.0	6.4	5.1	4.8
LnGrp Delay(d), s/veh	46.4	24.2	22.9	62.9	34.4	34.8	47.9	22.3	22.4	41.8	20.1	20.4
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		613			681			330			796	
Approach Delay, s/veh		28.9			36.4			31.2			27.0	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	31.7	6.8	30.1	11.2	39.0	12.4	24.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	21.0	8.0	44.0	17.0	35.0	19.0	33.0
Max Q Clear Time (g_c+I1), s	13.9	6.0	4.2	9.5	7.5	12.1	8.5	17.1
Green Ext Time (p_c), s	0.6	0.9	0.0	2.8	0.2	3.2	0.2	3.3

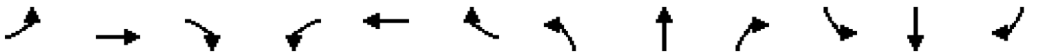
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Future Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		0.99		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1610	3319		1770	3539	1572		3426		1681	1747	2739
Flt Permitted	0.95	0.64		0.95	1.00	1.00		0.89		0.95	0.47	1.00
Satd. Flow (perm)	1610	2163		1770	3539	1572		3057		1681	823	2739
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	478	33	65	283	228	43	467	87	478	293	761
RTOR Reduction (vph)	0	3	0	0	0	49	0	11	0	0	0	39
Lane Group Flow (vph)	328	669	0	65	283	179	0	586	0	378	393	722
Confl. Peds. (#/hr)	2		2	2		2	1		12	12		1
Confl. Bikes (#/hr)			3			2			9			2
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Effective Green, g (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Actuated g/C Ratio	0.23	0.43		0.03	0.16	0.40		0.24		0.24	0.51	0.74
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	368	1184		59	575	679		728		397	637	2111
v/s Ratio Prot	c0.20	0.13		0.04	0.08	0.06				c0.22	0.15	0.08
v/s Ratio Perm		c0.11				0.05		c0.19			0.17	0.19
v/c Ratio	0.89	0.57		1.10	0.49	0.26		0.80		0.95	0.62	0.34
Uniform Delay, d1	44.8	26.1		58.0	45.7	24.2		43.1		45.1	21.1	5.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	22.6	0.6		148.0	0.7	0.2		9.2		32.9	1.8	0.1
Delay (s)	67.4	26.7		206.0	46.4	24.4		52.3		78.0	22.9	5.6
Level of Service	E	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		40.1			55.7			52.3			27.9	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Future Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1753	3539	1567	1770	3520		1681	1689	1552	1740	1723	
Flt Permitted	0.52	1.00	1.00	0.17	1.00		0.95	0.61	1.00	0.95	1.00	
Satd. Flow (perm)	967	3539	1567	317	3520		1681	1086	1552	1740	1723	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	10	542	604	552	375	10	385	10	510	10	10	10
RTOR Reduction (vph)	0	0	270	0	2	0	0	0	46	0	8	0
Lane Group Flow (vph)	10	542	334	552	383	0	196	199	464	10	12	0
Confl. Peds. (#/hr)	9		2	2		9			11	11		
Confl. Bikes (#/hr)			3			4			4			
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Effective Green, g (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Actuated g/C Ratio	0.21	0.21	0.36	0.54	0.49		0.16	0.39	0.65	0.01	0.20	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	209	727	625	599	1741		266	522	1059	10	343	
v/s Ratio Prot	0.00	0.15	c0.08	c0.27	0.11		c0.12	0.06	c0.13	0.01	0.01	
v/s Ratio Perm	0.01		0.13	c0.22				0.09	0.17			
v/c Ratio	0.05	0.75	0.53	0.92	0.22		0.74	0.38	0.44	1.00	0.03	
Uniform Delay, d1	35.4	42.3	28.5	28.4	16.2		45.4	24.6	9.8	56.4	36.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	4.2	0.9	19.7	0.1		10.2	0.5	0.3	284.6	0.2	
Delay (s)	35.5	46.4	29.3	48.1	16.3		55.6	25.0	10.1	341.0	36.8	
Level of Service	D	D	C	D	B		E	C	B	F	D	
Approach Delay (s/veh)		37.4			35.1			23.3			138.2	
Approach LOS		D			D			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Future Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	140	333	140	871	613	570	75	602	183	183	882	54
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	321	132	814	840	724	131	623	189	200	930	57
Arrive On Green	0.08	0.13	0.13	0.43	0.47	0.47	0.03	0.23	0.23	0.08	0.28	0.28
Sat Flow, veh/h	1774	2410	989	1774	1770	1525	1774	2671	810	1774	3383	207
Grp Volume(v), veh/h	140	242	231	871	613	570	75	398	387	183	461	475
Grp Sat Flow(s),veh/h/ln	1774	1770	1629	1774	1770	1525	1774	1770	1711	1774	1770	1821
Q Serve(g_s), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Cycle Q Clear(g_c), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Prop In Lane	1.00		0.61	1.00		1.00	1.00		0.47	1.00		0.11
Lane Grp Cap(c), veh/h	270	236	217	814	840	724	131	413	399	200	487	501
V/C Ratio(X)	0.52	1.03	1.06	1.07	0.73	0.79	0.57	0.97	0.97	0.92	0.95	0.95
Avail Cap(c_a), veh/h	300	236	217	814	840	724	131	413	399	200	487	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	52.0	52.0	28.9	25.3	26.4	36.8	45.5	45.6	34.9	42.7	42.7
Incr Delay (d2), s/veh	1.5	65.7	78.4	52.0	3.2	5.8	6.0	36.4	37.7	41.1	29.7	29.2
Initial Q Delay(d3),s/veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	12.1	11.9	38.7	17.1	17.0	2.1	17.2	16.9	3.9	19.0	19.5
LnGrp Delay(d), s/veh	41.5	117.8	130.4	80.9	28.6	32.2	42.8	81.9	83.3	76.0	72.4	71.8
LnGrp LOS	D	F	F	F	C	C	D	F	F	E	E	E
Approach Vol, veh/h		613			2054			860			1119	
Approach Delay, s/veh		105.1			51.8			79.1			72.7	
Approach LOS		F			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	32.0	55.0	20.0	8.0	37.0	14.0	61.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	28.0	51.0	16.0	4.0	33.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	11.0	28.8	53.0	18.0	5.9	32.7	10.1	39.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.2	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1080	160	190	460	130	100	950	190	220	1140	140
Future Volume (veh/h)	230	1080	160	190	460	130	100	950	190	220	1140	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	247	1161	172	204	495	140	108	1022	204	237	1226	151
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	309	1269	188	260	1068	292	133	1283	673	266	1548	816
Arrive On Green	0.09	0.28	0.28	0.07	0.27	0.27	0.07	0.36	0.36	0.15	0.43	0.43
Sat Flow, veh/h	3476	4498	666	3476	3988	1091	1792	3574	1542	1792	3574	1555
Grp Volume(v), veh/h	247	884	449	204	423	212	108	1022	204	237	1226	151
Grp Sat Flow(s),veh/h/ln	1738	1712	1740	1738	1712	1655	1792	1787	1542	1792	1787	1555
Q Serve(g_s), s	8.2	29.4	29.4	6.8	12.1	12.7	7.0	30.2	10.2	15.3	34.9	6.1
Cycle Q Clear(g_c), s	8.2	29.4	29.4	6.8	12.1	12.7	7.0	30.2	10.2	15.3	34.9	6.1
Prop In Lane	1.00		0.38	1.00		0.66	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	309	966	491	260	917	443	133	1283	673	266	1548	816
V/C Ratio(X)	0.80	0.91	0.92	0.79	0.46	0.48	0.81	0.80	0.30	0.89	0.79	0.19
Avail Cap(c_a), veh/h	413	988	502	266	917	443	152	1283	673	304	1548	816
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	40.9	40.9	53.6	36.0	36.2	53.7	33.9	21.8	49.2	28.8	14.9
Incr Delay (d2), s/veh	7.8	12.5	21.2	14.1	0.4	0.8	24.6	5.2	1.2	24.4	4.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	15.5	17.0	3.8	5.8	5.9	4.4	15.8	4.6	9.4	18.1	2.7
LnGrp Delay(d), s/veh	60.5	53.4	62.1	67.7	36.4	37.0	78.3	39.1	22.9	73.6	33.1	15.4
LnGrp LOS	E	D	E	E	D	D	E	D	C	E	C	B
Approach Vol, veh/h		1580			839			1334			1614	
Approach Delay, s/veh		57.0			44.2			39.8			37.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.5	46.3	12.8	37.2	12.8	55.0	14.5	35.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	41.0	9.0	34.0	10.0	51.0	14.0	29.0
Max Q Clear Time (g_c+I1), s	17.3	32.2	8.8	31.4	9.0	36.9	10.2	14.7
Green Ext Time (p_c), s	0.2	4.8	0.0	1.8	0.0	7.7	0.3	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Future Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1129	280	634	871	75	97	806	495	118	914	269
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	731	2497	619	463	3124	970	75	1162	511	115	681	200
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.04	0.32	0.32	0.25	0.25	0.25
Sat Flow, veh/h	1156	4104	1018	745	5136	1594	1792	3574	1572	426	2724	800
Grp Volume(v), veh/h	258	942	467	634	871	75	97	806	495	118	599	584
Grp Sat Flow(s),veh/h/ln	578	1712	1698	373	1712	1594	1792	1787	1572	426	1787	1737
Q Serve(g_s), s	16.3	17.8	17.8	55.2	9.6	2.3	5.0	23.6	37.2	15.4	30.0	30.0
Cycle Q Clear(g_c), s	25.9	17.8	17.8	73.0	9.6	2.3	5.0	23.6	37.2	30.0	30.0	30.0
Prop In Lane	1.00		0.60	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
V/C Ratio(X)	0.35	0.45	0.45	1.37	0.28	0.08	1.30	0.69	0.97	1.03	1.34	1.35
Avail Cap(c_a), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	12.7	12.7	39.6	11.1	9.7	57.5	35.3	39.9	56.3	45.0	45.0
Incr Delay (d2), s/veh	0.3	0.2	0.3	180.2	0.0	0.0	203.9	3.4	32.8	91.9	167.7	170.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.4	8.4	19.2	4.5	1.0	6.7	12.2	20.7	6.7	35.6	34.9
LnGrp Delay(d), s/veh	17.5	12.9	13.0	219.7	11.1	9.7	261.4	38.7	72.7	148.7	212.7	215.1
LnGrp LOS	B	B	B	F	B	A	F	D	E	F	F	F
Approach Vol, veh/h		1667			1580			1398			1301	
Approach Delay, s/veh		13.6			94.8			66.2			208.0	
Approach LOS		B			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		43.0		77.0	9.0	34.0		77.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		39.0		73.0	5.0	30.0		73.0
Max Q Clear Time (g_c+I1), s		39.2		27.9	7.0	32.0		75.0
Green Ext Time (p_c), s		0.0		17.2	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		90.1
HCM 2010 LOS		F



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	280	70	60	1020	1480	220
Future Volume (veh/h)	280	70	60	1020	1480	220
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	73	62	1062	1542	229
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	293	80	2630	2047	298
Arrive On Green	0.19	0.19	0.04	0.74	0.66	0.66
Sat Flow, veh/h	1774	1583	1774	3632	3184	450
Grp Volume(v), veh/h	292	73	62	1062	870	901
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1772
Q Serve(g_s), s	17.9	4.4	3.9	12.3	36.5	39.0
Cycle Q Clear(g_c), s	17.9	4.4	3.9	12.3	36.5	39.0
Prop In Lane	1.00	1.00	1.00			0.25
Lane Grp Cap(c), veh/h	329	293	80	2630	1172	1174
V/C Ratio(X)	0.89	0.25	0.78	0.40	0.74	0.77
Avail Cap(c_a), veh/h	461	411	111	2630	1172	1174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	38.9	52.8	5.3	12.5	12.9
Incr Delay (d2), s/veh	14.4	0.4	20.2	0.5	4.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.1	2.3	6.1	19.0	20.3
LnGrp Delay(d), s/veh	58.8	39.3	73.0	5.7	16.8	17.8
LnGrp LOS	E	D	E	A	B	B
Approach Vol, veh/h	365			1124	1771	
Approach Delay, s/veh	54.9			9.4	17.3	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		87.0		24.7	9.0	78.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		83.0		29.0	7.0	72.0		
Max Q Clear Time (g_c+I1), s		14.3		19.9	5.9	41.0		
Green Ext Time (p_c), s		9.4		0.8	0.0	16.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Future Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	250	783	0	0	674	0	11	152	22	630	0	424
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	450	1721	0	0	997	446	40	554	80	0	0	0
Arrive On Green	0.13	0.49	0.00	0.00	0.28	0.00	0.37	0.37	0.37	0.00	0.00	0.00
Sat Flow, veh/h	1774	3632	0	0	3632	1583	108	1488	215		0	
Grp Volume(v), veh/h	250	783	0	0	674	0	185	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1811	0	0			
Q Serve(g_s), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Cycle Q Clear(g_c), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.06		0.12			
Lane Grp Cap(c), veh/h	450	1721	0	0	997	446	674	0	0			
V/C Ratio(X)	0.56	0.46	0.00	0.00	0.68	0.00	0.27	0.00	0.00			
Avail Cap(c_a), veh/h	905	3574	0	0	1944	870	674	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.7	9.6	0.0	0.0	18.0	0.0	12.4	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.2	0.0	0.0	0.8	0.0	1.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	4.0	0.0	0.0	4.7	0.0	2.2	0.0	0.0			
LnGrp Delay(d), s/veh	12.7	9.8	0.0	0.0	18.8	0.0	13.4	0.0	0.0			
LnGrp LOS	B	A			B		B					
Approach Vol, veh/h		1033			674			185				
Approach Delay, s/veh		10.5			18.8			13.4				
Approach LOS		B			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		25.0		31.4			11.5	19.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		57.0			22.0	31.0
Max Q Clear Time (g_c+I1), s		6.0		10.2			7.1	11.5
Green Ext Time (p_c), s		0.8		6.3			0.6	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Future Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	155	742	196	124	1423	52	443	505	93	93	670	361
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	174	1229	321	150	1481	54	478	1474	657	142	704	379
Arrive On Green	0.10	0.31	0.31	0.09	0.30	0.30	0.14	0.42	0.42	0.04	0.32	0.32
Sat Flow, veh/h	1740	3920	1023	1740	4938	180	3375	3471	1546	3375	2165	1166
Grp Volume(v), veh/h	155	628	310	124	958	517	443	505	93	93	537	494
Grp Sat Flow(s),veh/h/ln	1740	1663	1618	1740	1663	1793	1688	1736	1546	1688	1736	1596
Q Serve(g_s), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Cycle Q Clear(g_c), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Prop In Lane	1.00		0.63	1.00		0.10	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	174	1043	507	150	998	538	478	1474	657	142	564	519
V/C Ratio(X)	0.89	0.60	0.61	0.82	0.96	0.96	0.93	0.34	0.14	0.65	0.95	0.95
Avail Cap(c_a), veh/h	174	1043	507	232	998	538	478	1474	657	197	564	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	34.8	35.0	53.9	41.3	41.3	50.9	23.2	21.1	56.6	39.6	39.6
Incr Delay (d2), s/veh	39.0	1.0	2.1	13.1	19.6	29.0	24.2	0.6	0.5	5.0	27.7	29.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	8.9	9.0	4.6	18.3	21.1	8.9	5.7	2.0	1.6	21.6	20.1
LnGrp Delay(d), s/veh	92.4	35.8	37.1	67.0	60.9	70.3	75.1	23.9	21.6	61.6	67.3	68.9
LnGrp LOS	F	D	D	E	E	E	E	C	C	E	E	E
Approach Vol, veh/h		1093			1599			1041			1124	
Approach Delay, s/veh		44.2			64.4			45.5			67.6	
Approach LOS		D			E			D			E	

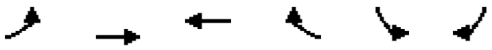
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	54.9	14.4	41.6	21.0	43.0	16.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	49.0	16.0	32.0	17.0	39.0	12.0	36.0
Max Q Clear Time (g_c+I1), s	5.3	13.8	10.4	21.5	17.6	38.3	12.6	36.0
Green Ext Time (p_c), s	0.0	3.6	0.1	4.3	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Future Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	74	695	179	242	1421	116	253	800	284	253	884	137
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	1176	596	272	1586	129	282	1095	719	282	1095	566
Arrive On Green	0.05	0.23	0.23	0.16	0.34	0.34	0.16	0.31	0.31	0.16	0.31	0.31
Sat Flow, veh/h	1757	5036	1477	1757	4734	386	1757	3505	1522	1757	3505	1544
Grp Volume(v), veh/h	74	695	179	242	1008	529	253	800	284	253	884	137
Grp Sat Flow(s),veh/h/ln	1757	1679	1477	1757	1679	1763	1757	1752	1522	1757	1752	1544
Q Serve(g_s), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Cycle Q Clear(g_c), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	1176	596	272	1125	591	282	1095	719	282	1095	566
V/C Ratio(X)	0.79	0.59	0.30	0.89	0.90	0.90	0.90	0.73	0.40	0.90	0.81	0.24
Avail Cap(c_a), veh/h	107	1176	596	351	1165	612	320	1095	719	320	1095	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	39.3	24.1	47.7	36.4	36.4	47.5	35.3	20.1	47.5	36.4	25.4
Incr Delay (d2), s/veh	28.5	0.8	0.3	19.5	9.1	15.5	24.7	4.3	1.6	24.7	6.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.6	4.0	9.0	16.7	18.6	9.8	12.0	6.2	9.8	13.9	3.2
LnGrp Delay(d), s/veh	82.3	40.1	24.4	67.2	45.5	51.9	72.1	39.6	21.7	72.1	42.9	26.4
LnGrp LOS	F	D	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		948			1779			1337			1274	
Approach Delay, s/veh		40.4			50.4			42.0			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	40.0	21.9	30.9	22.5	40.0	10.2	42.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	36.0	23.0	24.0	21.0	36.0	7.0	40.0
Max Q Clear Time (g_c+I1), s	18.3	25.4	17.6	16.1	18.3	28.7	6.8	34.9
Green Ext Time (p_c), s	0.2	4.6	0.3	3.1	0.2	3.5	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.7
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	320	850	730	500	100	100
Future Volume (vph)	320	850	730	500	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.95	1.00	1.00
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	0.96	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.96	1.00
Satd. Flow (prot)	1584	3195	3195	1362	3020	1301
Flt Permitted	0.33	1.00	1.00	1.00	0.96	1.00
Satd. Flow (perm)	556	3195	3195	1362	3020	1301
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	340	904	777	532	106	106
RTOR Reduction (vph)	0	0	0	172	30	52
Lane Group Flow (vph)	340	904	777	360	115	15
Confl. Peds. (#/hr)	11			11	1	
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	53.6	53.6	53.6	53.6	17.7	17.7
Effective Green, g (s)	53.6	53.6	53.6	53.6	17.7	17.7
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.22	0.22
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	375	2159	2159	920	674	290
v/s Ratio Prot		0.28	0.24		c0.04	
v/s Ratio Perm	c0.61			0.26		0.01
v/c Ratio	0.91	0.42	0.36	0.39	0.17	0.05
Uniform Delay, d1	10.8	5.8	5.5	5.7	24.9	24.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	24.7	0.1	0.1	0.3	0.6	0.3
Delay (s)	35.4	5.9	5.6	5.9	25.4	24.5
Level of Service	D	A	A	A	C	C
Approach Delay (s/veh)		14.0	5.7		25.1	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	79.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	2.2

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	10	20	40	1400	1920	30
Future Vol, veh/h	10	20	40	1400	1920	30
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	100	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	10	21	41	1443	1979	31

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2787	994	2014	0	-	0
Stage 1	1983	-	-	-	-	-
Stage 2	804	-	-	-	-	-
Critical Hdwy	6.88	6.98	4.18	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.34	2.24	-	-	-
Pot Cap-1 Maneuver	14	240	272	-	-	-
Stage 1	91	-	-	-	-	-
Stage 2	396	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	12	239	271	-	-	-
Mov Cap-2 Maneuver	12	-	-	-	-	-
Stage 1	77	-	-	-	-	-
Stage 2	395	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	219.4	0.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	271	-	12	239	-	-
HCM Lane V/C Ratio	0.152	-	0.859	0.086	-	-
HCM Control Delay (s/veh)	20.7	-	$ 615.3	21.5	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.5	-	1.9	0.3	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Future Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	21	830	64	74	1787	96	117	96	85	64	32	21
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	152	2629	202	363	2698	145	541	657	549	462	657	549
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	238	4760	365	614	4886	262	1329	1845	1543	1184	1845	1543
Grp Volume(v), veh/h	21	584	310	74	1227	656	117	96	85	64	32	21
Grp Sat Flow(s),veh/h/ln	238	1679	1769	614	1679	1791	1329	1845	1543	1184	1845	1543
Q Serve(g_s), s	6.0	8.2	8.3	6.5	22.5	22.6	5.5	3.1	3.3	3.4	1.0	0.8
Cycle Q Clear(g_c), s	28.5	8.2	8.3	14.8	22.5	22.6	6.5	3.1	3.3	6.5	1.0	0.8
Prop In Lane	1.00		0.21	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1854	977	363	1854	989	541	657	549	462	657	549
V/C Ratio(X)	0.14	0.32	0.32	0.20	0.66	0.66	0.22	0.15	0.15	0.14	0.05	0.04
Avail Cap(c_a), veh/h	242	3123	1645	595	3123	1665	541	657	549	462	657	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	10.6	10.6	14.6	13.8	13.8	20.5	19.1	19.1	21.2	18.4	18.3
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.3	0.4	0.8	0.9	0.5	0.6	0.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.8	4.1	1.1	10.5	11.3	2.2	1.7	1.5	1.2	0.5	0.3
LnGrp Delay(d), s/veh	24.3	10.7	10.8	14.9	14.2	14.6	21.4	19.5	19.7	21.9	18.5	18.4
LnGrp LOS	C	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		915			1957			298			117	
Approach Delay, s/veh		11.0			14.3			20.3			20.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		52.1		35.0		52.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		81.0		31.0		81.0
Max Q Clear Time (g_c+I1), s		8.5		30.5		8.5		24.6
Green Ext Time (p_c), s		1.2		7.5		0.4		23.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	110	10	10	10	10	500	10	60	870	60
Future Volume (veh/h)	110	10	110	10	10	10	10	500	10	60	870	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1854	1845	1863	1845	1845	1845	1845	1863
Adj Flow Rate, veh/h	128	12	128	12	12	12	12	581	12	70	1012	70
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	2
Cap, veh/h	60	3	453	47	32	449	20	1957	857	90	2098	948
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.01	0.56	0.56	0.05	0.60	0.60
Sat Flow, veh/h	0	11	1583	0	112	1568	1774	3505	1535	1757	3505	1583
Grp Volume(v), veh/h	140	0	128	24	0	12	12	581	12	70	1012	70
Grp Sat Flow(s),veh/h/ln	11	0	1583	112	0	1568	1774	1752	1535	1757	1752	1583
Q Serve(g_s), s	0.0	0.0	7.2	0.0	0.0	0.6	0.8	10.1	0.4	4.5	18.8	2.1
Cycle Q Clear(g_c), s	33.0	0.0	7.2	33.0	0.0	0.6	0.8	10.1	0.4	4.5	18.8	2.1
Prop In Lane	0.91		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	63	0	453	79	0	449	20	1957	857	90	2098	948
V/C Ratio(X)	2.23	0.00	0.28	0.30	0.00	0.03	0.61	0.30	0.01	0.78	0.48	0.07
Avail Cap(c_a), veh/h	63	0	453	79	0	449	92	1957	857	244	2098	948
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	31.9	33.9	0.0	29.6	56.8	13.5	11.3	54.0	13.1	9.7
Incr Delay (d2), s/veh	600.8	0.0	0.3	2.1	0.0	0.0	27.0	0.4	0.0	13.2	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.5	0.0	3.2	0.6	0.0	0.3	0.5	4.9	0.2	2.5	9.2	1.0
LnGrp Delay(d), s/veh	656.9	0.0	32.3	36.0	0.0	29.6	83.7	13.9	11.4	67.3	13.9	9.9
LnGrp LOS	F		C	D		C	F	B	B	E	B	A
Approach Vol, veh/h		268			36			605			1152	
Approach Delay, s/veh		358.6			33.9			15.2			16.9	
Approach LOS		F			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	68.4		37.0	5.3	73.0		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	16.0	59.0		33.0	6.0	69.0		33.0
Max Q Clear Time (g_c+I1), s	6.5	12.1		35.0	2.8	20.8		35.0
Green Ext Time (p_c), s	0.1	4.4		0.0	0.0	9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	61.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Future Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	11	11	114	57	11	11	45	375	45	11	545	11
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	31	326	55	6	315	137	1123	1112	40	1332	1116
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	0	149	1563	0	29	1510	143	1548	1534	13	1837	1539
Grp Volume(v), veh/h	22	0	114	68	0	11	420	0	45	556	0	11
Grp Sat Flow(s),veh/h/ln	149	0	1563	29	0	1510	1692	0	1534	1850	0	1539
Q Serve(g_s), s	0.0	0.0	7.5	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	25.0	0.0	7.5	25.0	0.0	0.7	9.6	0.0	1.0	14.0	0.0	0.2
Prop In Lane	0.50		1.00	0.84		1.00	0.11		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
V/C Ratio(X)	0.29	0.00	0.35	1.11	0.00	0.03	0.33	0.00	0.04	0.41	0.00	0.01
Avail Cap(c_a), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.3	0.0	40.6	57.6	0.0	37.9	5.9	0.0	4.7	6.5	0.0	4.6
Incr Delay (d2), s/veh	2.1	0.0	0.6	149.2	0.0	0.0	0.7	0.0	0.1	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.3	4.6	0.0	0.3	5.1	0.0	0.4	7.4	0.0	0.1
LnGrp Delay(d), s/veh	42.3	0.0	41.2	207.8	0.0	37.9	6.6	0.0	4.7	7.4	0.0	4.6
LnGrp LOS	D		D	F		D	A		A	A		A
Approach Vol, veh/h		136			79			465			567	
Approach Delay, s/veh		41.4			184.2			6.4			7.3	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0		29.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		87.0		25.0		87.0		25.0
Max Q Clear Time (g_c+I1), s		11.6		27.0		16.0		27.0
Green Ext Time (p_c), s		3.6		0.0		4.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Future Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	44	44	66	121	209	66	297	1275	44	33	1077	110
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	56	236	367	150	242	77	373	2101	72	42	1831	807
Arrive On Green	0.03	0.13	0.13	0.09	0.18	0.18	0.11	0.61	0.61	0.02	0.52	0.52
Sat Flow, veh/h	1757	1845	1528	1757	1333	421	3408	3454	119	1757	3505	1545
Grp Volume(v), veh/h	44	44	66	121	0	275	297	646	673	33	1077	110
Grp Sat Flow(s),veh/h/ln	1757	1845	1528	1757	0	1755	1704	1752	1820	1757	1752	1545
Q Serve(g_s), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Cycle Q Clear(g_c), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	56	236	367	150	0	319	373	1066	1107	42	1831	807
V/C Ratio(X)	0.79	0.19	0.18	0.80	0.00	0.86	0.80	0.61	0.61	0.79	0.59	0.14
Avail Cap(c_a), veh/h	119	338	452	271	0	474	559	1066	1107	102	1831	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.3	31.5	46.5	0.0	41.1	45.0	12.6	12.6	50.3	17.0	12.7
Incr Delay (d2), s/veh	21.1	0.4	0.2	9.6	0.0	10.3	4.8	2.6	2.5	27.7	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.1	1.5	3.8	0.0	8.6	4.4	12.1	12.5	1.3	11.0	1.7
LnGrp Delay(d), s/veh	70.9	40.7	31.7	56.1	0.0	51.4	49.7	15.2	15.1	78.0	18.4	13.1
LnGrp LOS	E	D	C	E		D	D	B	B	E	B	B
Approach Vol, veh/h		154			396			1616			1220	
Approach Delay, s/veh		45.5			52.9			21.5			19.6	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	67.0	12.9	17.3	15.3	58.1	7.3	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	63.0	16.0	19.0	17.0	52.0	7.0	28.0
Max Q Clear Time (g_c+I1), s	3.9	25.8	9.0	5.6	10.8	23.9	4.6	17.8
Green Ext Time (p_c), s	0.0	11.0	0.1	0.3	0.5	8.9	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	24.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Future Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	34	57	102	136	136	11	102	273	45	11	352	68
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	12.9	22.3	29.2	25.5
HCM LOS	B	C	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	38%	0%	50%	0%	3%	0%
Vol Thru, %	73%	0%	63%	0%	50%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	330	40	80	90	240	10	320	60
LT Vol	90	0	30	0	120	0	10	0
Through Vol	240	0	50	0	120	0	310	0
RT Vol	0	40	0	90	0	10	0	60
Lane Flow Rate	375	45	91	102	273	11	364	68
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.774	0.083	0.212	0.213	0.611	0.022	0.739	0.125
Departure Headway (Hd)	7.431	6.572	8.402	7.483	8.061	7.082	7.321	6.586
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	542	425	477	447	503	491	541
Service Time	5.212	4.353	6.201	5.281	5.846	4.865	5.103	4.368
HCM Lane V/C Ratio	0.775	0.083	0.214	0.214	0.611	0.022	0.741	0.126
HCM Control Delay, s/veh	31.5	10	13.5	12.3	22.8	10	28.3	10.3
HCM Lane LOS	D	A	B	B	C	A	D	B
HCM 95th-tile Q	6.8	0.3	0.8	0.8	4	0.1	6.1	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	640	130	70	880	220	160	530	70	180	730	290
Future Volume (veh/h)	210	640	130	70	880	220	160	530	70	180	730	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	228	696	141	76	957	239	174	576	76	196	793	315
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	231	1906	830	338	1906	850	177	1271	167	269	1430	640
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	471	3574	1557	660	3574	1594	512	3176	418	785	3574	1599
Grp Volume(v), veh/h	228	696	141	76	957	239	174	323	329	196	793	315
Grp Sat Flow(s),veh/h/ln	471	1787	1557	660	1787	1594	512	1787	1807	785	1787	1599
Q Serve(g_s), s	43.5	13.5	5.6	9.0	20.5	9.9	27.5	15.9	16.0	29.3	20.5	17.7
Cycle Q Clear(g_c), s	64.0	13.5	5.6	22.6	20.5	9.9	48.0	15.9	16.0	45.3	20.5	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	231	1906	830	338	1906	850	177	715	723	269	1430	640
V/C Ratio(X)	0.99	0.37	0.17	0.23	0.50	0.28	0.98	0.45	0.45	0.73	0.55	0.49
Avail Cap(c_a), veh/h	231	1906	830	338	1906	850	177	715	723	269	1430	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	16.2	14.4	22.8	17.8	15.4	50.8	26.4	26.4	43.0	27.8	26.9
Incr Delay (d2), s/veh	55.8	0.1	0.1	0.3	0.2	0.2	63.2	2.1	2.1	15.8	1.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	6.7	2.4	1.7	10.2	4.4	8.9	8.2	8.4	7.5	10.4	8.3
LnGrp Delay(d), s/veh	99.5	16.3	14.5	23.1	18.1	15.6	113.9	28.4	28.5	58.8	29.3	29.6
LnGrp LOS	F	B	B	C	B	B	F	C	C	E	C	C
Approach Vol, veh/h		1065			1272			826			1304	
Approach Delay, s/veh		33.9			17.9			46.5			33.8	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		52.0		68.0		52.0		68.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		48.0		64.0		48.0		64.0
Max Q Clear Time (g_c+I1), s		50.0		66.0		47.3		24.6
Green Ext Time (p_c), s		0.0		0.0		0.5		9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	640	100	270	1090	110	180	860	210	110	1100	370
Future Volume (veh/h)	200	640	100	270	1090	110	180	860	210	110	1100	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1810
Adj Flow Rate, veh/h	211	674	105	284	1147	116	189	905	221	116	1158	389
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	237	934	144	311	1181	119	196	1075	262	130	1411	619
Arrive On Green	0.14	0.22	0.22	0.18	0.26	0.26	0.06	0.39	0.39	0.08	0.41	0.41
Sat Flow, veh/h	1723	4313	664	1723	4549	460	3343	2730	666	1723	3438	1508
Grp Volume(v), veh/h	211	513	266	284	830	433	189	569	557	116	1158	389
Grp Sat Flow(s),veh/h/ln	1723	1647	1684	1723	1647	1715	1672	1719	1677	1723	1719	1508
Q Serve(g_s), s	14.4	17.3	17.6	19.3	29.8	29.8	6.7	35.9	36.0	8.0	35.8	24.5
Cycle Q Clear(g_c), s	14.4	17.3	17.6	19.3	29.8	29.8	6.7	35.9	36.0	8.0	35.8	24.5
Prop In Lane	1.00		0.39	1.00		0.27	1.00		0.40	1.00		1.00
Lane Grp Cap(c), veh/h	237	713	365	311	855	445	196	677	660	130	1411	619
V/C Ratio(X)	0.89	0.72	0.73	0.91	0.97	0.97	0.96	0.84	0.84	0.89	0.82	0.63
Avail Cap(c_a), veh/h	245	713	365	346	855	445	196	677	660	130	1411	619
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	43.4	43.5	48.0	43.8	43.8	56.1	32.8	32.9	54.7	31.3	28.0
Incr Delay (d2), s/veh	30.2	3.5	7.3	26.3	23.8	35.3	53.8	12.1	12.5	48.1	5.5	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	8.2	8.9	11.5	16.3	18.4	4.6	19.2	18.8	5.5	18.0	11.0
LnGrp Delay(d), s/veh	80.8	46.9	50.8	74.3	67.6	79.0	109.9	44.9	45.3	102.8	36.8	32.7
LnGrp LOS	F	D	D	E	E	E	F	D	D	F	D	C
Approach Vol, veh/h		990			1547			1315			1663	
Approach Delay, s/veh		55.2			72.0			54.4			40.4	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	51.0	25.5	29.9	11.0	53.0	20.4	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	47.0	24.0	24.0	7.0	49.0	17.0	31.0
Max Q Clear Time (g_c+I1), s	10.0	38.0	21.3	19.6	8.7	37.8	16.4	31.8
Green Ext Time (p_c), s	0.0	4.5	0.2	1.9	0.0	7.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Future Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	266	43	330	319	170	32	1351	298	64	1989	85
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	393	206	405	391	203	41	2398	528	83	2994	128
Arrive On Green	0.05	0.11	0.11	0.12	0.18	0.18	0.02	0.57	0.57	0.05	0.60	0.60
Sat Flow, veh/h	1774	3539	1526	3442	2230	1158	1774	4170	919	1774	5002	213
Grp Volume(v), veh/h	74	266	43	330	251	238	32	1098	551	64	1347	727
Grp Sat Flow(s),veh/h/ln	1774	1770	1526	1721	1770	1618	1774	1695	1698	1774	1695	1825
Q Serve(g_s), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Cycle Q Clear(g_c), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.54	1.00		0.12
Lane Grp Cap(c), veh/h	95	393	206	405	310	284	41	1949	977	83	2029	1092
V/C Ratio(X)	0.78	0.68	0.21	0.81	0.81	0.84	0.79	0.56	0.56	0.78	0.66	0.67
Avail Cap(c_a), veh/h	166	530	265	579	397	363	100	1949	977	166	2029	1092
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	45.7	41.3	46.0	42.4	42.6	52.0	14.3	14.3	50.4	14.3	14.3
Incr Delay (d2), s/veh	12.8	2.1	0.5	5.9	9.5	12.8	27.3	1.2	2.4	14.2	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.9	1.2	5.1	7.9	7.8	1.3	10.4	10.7	2.2	13.6	15.1
LnGrp Delay(d), s/veh	62.7	47.8	41.8	51.9	51.9	55.4	79.3	15.5	16.7	64.7	16.0	17.5
LnGrp LOS	E	D	D	D	D	E	E	B	B	E	B	B
Approach Vol, veh/h		383			819			1681			2138	
Approach Delay, s/veh		50.0			52.9			17.1			18.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	65.5	16.6	15.9	6.5	68.0	9.7	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	60.0	18.0	16.0	6.0	64.0	10.0	24.0
Max Q Clear Time (g_c+I1), s	5.8	23.8	12.0	9.7	3.9	30.5	6.4	17.2
Green Ext Time (p_c), s	0.0	15.9	0.6	0.8	0.0	20.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	160	200	10	30	30
Future Vol, veh/h	20	160	200	10	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	174	217	11	33	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	228	0	-	0	435	217
Stage 1	-	-	-	-	217	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1340	-	-	-	578	823
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1340	-	-	-	568	823
Mov Cap-2 Maneuver	-	-	-	-	568	-
Stage 1	-	-	-	-	804	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1340	-	-	-	568	823
HCM Lane V/C Ratio	0.016	-	-	-	0.057	0.04
HCM Control Delay (s/veh)	7.7	0	-	-	11.7	9.6
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	30	0	50	20	10	10	20	350	20	80	490	10
Future Vol, veh/h	30	0	50	20	10	10	20	350	20	80	490	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	0	54	22	11	11	22	380	22	87	533	11

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	881	1153	201	947	1159	272	544	0	0	402	0	0
Stage 1	435	435	-	713	713	-	-	-	-	-	-	-
Stage 2	446	718	-	234	446	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	241	196	806	216	194	726	1021	-	-	1153	-	-
Stage 1	570	579	-	389	434	-	-	-	-	-	-	-
Stage 2	561	431	-	748	572	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	210	177	806	187	176	726	1021	-	-	1153	-	-
Mov Cap-2 Maneuver	210	177	-	187	176	-	-	-	-	-	-	-
Stage 1	557	566	-	380	401	-	-	-	-	-	-	-
Stage 2	497	399	-	683	559	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	15.1	24.8	0.4	1.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	210	390	806	1153	-	-	1021	-	-	225
HCM Lane V/C Ratio	0.104	0.074	0.045	0.075	-	-	0.021	-	-	0.193
HCM Control Delay (s/veh)	24.1	15	9.7	8.4	-	-	8.6	-	-	24.8
HCM Lane LOS	C	C	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0.2	0.1	0.2	-	-	0.1	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	140	10	10	380	50	50	10	10	60	10	20
Future Volume (veh/h)	120	140	10	10	380	50	50	10	10	60	10	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	130	152	11	11	413	54	54	11	11	65	11	22
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	269	470	34	58	918	118	805	156	954	651	116	199
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	584	1578	114	28	3085	395	1203	262	1599	959	194	334
Grp Volume(v), veh/h	130	0	163	254	0	224	65	0	11	98	0	0
Grp Sat Flow(s),veh/h/ln	584	0	1692	1866	0	1642	1465	0	1599	1486	0	0
Q Serve(g_s), s	10.0	0.0	5.7	0.0	0.0	8.4	0.0	0.0	0.2	0.9	0.0	0.0
Cycle Q Clear(g_c), s	18.3	0.0	5.7	8.3	0.0	8.4	1.1	0.0	0.2	2.0	0.0	0.0
Prop In Lane	1.00		0.07	0.04		0.24	0.83		1.00	0.66		0.22
Lane Grp Cap(c), veh/h	269	0	504	605	0	489	961	0	954	966	0	0
V/C Ratio(X)	0.48	0.00	0.32	0.42	0.00	0.46	0.07	0.00	0.01	0.10	0.00	0.00
Avail Cap(c_a), veh/h	819	0	1502	1691	0	1458	961	0	954	966	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.0	0.0	20.6	21.5	0.0	21.6	6.4	0.0	6.2	6.5	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.4	0.5	0.0	0.7	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	2.7	4.4	0.0	3.9	0.6	0.0	0.1	0.9	0.0	0.0
LnGrp Delay(d), s/veh	30.4	0.0	21.0	22.0	0.0	22.2	6.5	0.0	6.2	6.7	0.0	0.0
LnGrp LOS	C		C	C		C	A		A	A		
Approach Vol, veh/h		293			478			76			98	
Approach Delay, s/veh		25.1			22.1			6.5			6.7	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		26.5		49.0		26.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0		45.0		67.0
Max Q Clear Time (g_c+I1), s		3.1		20.3		4.0		10.4
Green Ext Time (p_c), s		0.4		2.1		0.6		2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	120	10	10	470	30	10	10	10	20	10	10
Future Volume (veh/h)	10	120	10	10	470	30	10	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	130	11	11	511	33	11	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	99	753	62	77	804	51	374	373	328	541	271	236
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	89	3100	255	26	3307	211	467	615	541	725	447	390
Grp Volume(v), veh/h	80	0	72	293	0	262	33	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1777	0	1667	1868	0	1675	1624	0	0	1562	0	0
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	1.8	7.4	0.0	7.4	0.4	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.14		0.15	0.04		0.13	0.33		0.33	0.50		0.25
Lane Grp Cap(c), veh/h	509	0	405	525	0	407	1074	0	0	1048	0	0
V/C Ratio(X)	0.16	0.00	0.18	0.56	0.00	0.64	0.03	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	2569	0	2523	2871	0	2535	1074	0	0	1048	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	15.8	17.9	0.0	17.9	4.2	0.0	0.0	4.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.9	0.0	1.7	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.8	4.0	0.0	3.6	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	16.0	0.0	16.0	18.9	0.0	19.6	4.2	0.0	0.0	4.3	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		152			555			33			44	
Approach Delay, s/veh		16.0			19.2			4.2			4.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		16.8		36.0		16.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		80.0		32.0		80.0
Max Q Clear Time (g_c+I1), s		2.4		3.8		2.5		9.4
Green Ext Time (p_c), s		0.1		0.9		0.2		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	120	10	10	470	20	150	10	10	10	10	10
Future Volume (veh/h)	10	120	10	10	470	20	150	10	10	10	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	130	11	11	511	22	163	11	11	11	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	67	588	50	52	705	30	953	65	59	403	402	373
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	74	2820	238	28	3382	144	1255	93	85	496	581	538
Grp Volume(v), veh/h	75	0	77	286	0	258	185	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	1463	0	1670	1867	0	1686	1434	0	0	1615	0	0
Q Serve(g_s), s	0.1	0.0	3.1	1.3	0.0	11.5	3.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.7	0.0	3.1	11.5	0.0	11.5	3.5	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.15		0.14	0.04		0.09	0.88		0.06	0.33		0.33
Lane Grp Cap(c), veh/h	356	0	348	435	0	351	1077	0	0	1178	0	0
V/C Ratio(X)	0.21	0.00	0.22	0.66	0.00	0.73	0.17	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	1136	0	1157	1329	0	1168	1077	0	0	1178	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.4	0.0	26.6	29.9	0.0	29.9	4.3	0.0	0.0	3.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.3	1.7	0.0	3.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	1.5	6.2	0.0	5.7	1.5	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	26.7	0.0	26.9	31.6	0.0	32.9	4.7	0.0	0.0	3.9	0.0	0.0
LnGrp LOS	C		C	C		C	A			A		
Approach Vol, veh/h		152			544			185			33	
Approach Delay, s/veh		26.8			32.2			4.7			3.9	
Approach LOS		C			C			A			A	

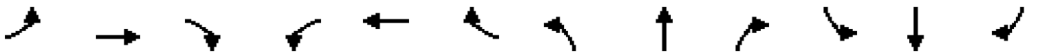
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		20.8		60.0		20.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s		5.5		13.7		2.5		13.5
Green Ext Time (p_c), s		1.3		0.9		0.2		3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	130	10	10	520	10	30	10	30	30	10	10
Future Volume (veh/h)	10	130	10	10	520	10	30	10	30	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	141	11	11	565	11	33	11	33	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	88	753	57	69	846	16	467	172	414	634	212	187
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	82	3093	236	24	3478	67	611	276	665	864	340	301
Grp Volume(v), veh/h	85	0	78	308	0	279	77	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1740	0	1670	1869	0	1700	1552	0	0	1506	0	0
Q Serve(g_s), s	0.0	0.0	2.2	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	2.2	8.8	0.0	8.8	1.0	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.13		0.14	0.04		0.04	0.43		0.43	0.60		0.20
Lane Grp Cap(c), veh/h	492	0	407	518	0	414	1052	0	0	1034	0	0
V/C Ratio(X)	0.17	0.00	0.19	0.60	0.00	0.67	0.07	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	2143	0	2106	2397	0	2144	1052	0	0	1034	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	0.0	17.9	20.4	0.0	20.4	4.4	0.0	0.0	4.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	1.1	0.0	1.9	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	4.7	0.0	4.3	0.5	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	18.0	0.0	18.1	21.5	0.0	22.3	4.6	0.0	0.0	4.5	0.0	0.0
LnGrp LOS	B		B	C		C	A			A		
Approach Vol, veh/h		163			587			77			55	
Approach Delay, s/veh		18.0			21.9			4.6			4.5	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		41.0		18.5		41.0		18.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		37.0		75.0		37.0		75.0
Max Q Clear Time (g_c+I1), s		3.0		10.8		2.7		10.8
Green Ext Time (p_c), s		0.4		1.0		0.3		3.6

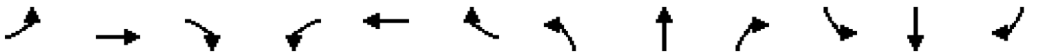
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	400	10	10	420	340	10	10	10	50	30	70
Future Volume (vph)	10	400	10	10	420	340	10	10	10	50	30	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0		4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95			1.00		0.95	0.91	0.95
Frt		1.00		1.00	0.93			0.96		1.00	0.95	0.85
Flt Protected		1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)		3557		1787	3334			1767		1698	1611	1519
Flt Permitted		0.93		0.95	1.00			0.95		0.95	0.99	1.00
Satd. Flow (perm)		3310		1787	3334			1698		1698	1607	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	435	11	11	457	370	11	11	11	54	33	76
RTOR Reduction (vph)	0	2	0	0	192	0	0	6	0	0	8	22
Lane Group Flow (vph)	0	455	0	11	635	0	0	27	0	49	52	32
Turn Type	Perm	NA		Prot	NA		Perm	NA		Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		18.9		1.2	24.1			38.1		4.9	47.0	47.0
Effective Green, g (s)		18.9		1.2	24.1			38.1		4.9	47.0	47.0
Actuated g/C Ratio		0.24		0.02	0.30			0.48		0.06	0.59	0.59
Clearance Time (s)		4.0		4.0	4.0			4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		790		27	1015			817		105	955	902
v/s Ratio Prot				0.01	c0.19					c0.03	0.00	0.02
v/s Ratio Perm		0.14						0.02			c0.03	
v/c Ratio		0.58		0.41	0.63			0.03		0.47	0.05	0.04
Uniform Delay, d1		26.6		38.6	23.6			10.8		35.8	6.7	6.7
Progression Factor		1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2		1.0		9.7	1.2			0.1		3.3	0.0	0.1
Delay (s)		27.6		48.3	24.8			10.9		39.1	6.8	6.7
Level of Service		C		D	C			B		D	A	A
Approach Delay (s/veh)		27.6			25.1			10.9			16.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	79.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	350	10	10	530	820	10	10	20	380	10	140
Future Volume (vph)	340	350	10	10	530	820	10	10	20	380	10	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1599	1787	3574	1599		1733		1698	1623	1519
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.92		0.78	0.75	1.00
Satd. Flow (perm)	1787	3574	1599	1787	3574	1599		1616		1395	1276	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	380	11	11	576	891	11	11	22	413	11	152
RTOR Reduction (vph)	0	0	4	0	0	375	0	16	0	0	2	100
Lane Group Flow (vph)	370	380	7	11	576	516	0	28	0	219	218	37
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	25.4	66.0	66.0	0.7	41.3	41.3		29.0		29.0	29.0	29.0
Effective Green, g (s)	25.4	66.0	66.0	0.7	41.3	41.3		29.0		29.0	29.0	29.0
Actuated g/C Ratio	0.24	0.61	0.61	0.01	0.38	0.38		0.27		0.27	0.27	0.27
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	421	2190	979	11	1370	613		435		375	343	409
v/s Ratio Prot	c0.21	0.11		0.01	0.16							
v/s Ratio Perm			0.00			c0.32		0.02		0.16	c0.17	0.02
v/c Ratio	0.88	0.17	0.01	1.00	0.42	0.84		0.06		0.58	0.64	0.09
Uniform Delay, d1	39.7	9.0	8.1	53.5	24.4	30.2		29.3		34.1	34.7	29.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	18.4	0.0	0.0	271.4	0.2	10.2		0.3		6.5	8.7	0.4
Delay (s)	58.0	9.1	8.1	324.9	24.6	40.4		29.5		40.6	43.4	29.9
Level of Service	E	A	A	F	C	D		C		D	D	C
Approach Delay (s/veh)		32.9			36.4			29.5			39.1	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	107.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	90	60	230	10	50	180	1060	130	20	970	10
Future Volume (veh/h)	10	90	60	230	10	50	180	1060	130	20	970	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	11	98	65	250	11	54	196	1152	141	22	1054	11
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	40	244	388	71	0	388	363	2419	1082	297	2452	26
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	0	1007	1599	0	0	1599	533	3574	1599	429	3624	38
Grp Volume(v), veh/h	109	0	65	261	0	54	196	1152	141	22	520	545
Grp Sat Flow(s),veh/h/ln	1007	0	1599	0	0	1599	533	1787	1599	429	1787	1875
Q Serve(g_s), s	0.0	0.0	3.2	0.0	0.0	2.6	26.3	15.2	3.1	2.6	13.1	13.1
Cycle Q Clear(g_c), s	24.0	0.0	3.2	24.0	0.0	2.6	39.4	15.2	3.1	17.8	13.1	13.1
Prop In Lane	0.10		1.00	0.96		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	284	0	388	71	0	388	363	2419	1082	297	1209	1269
V/C Ratio(X)	0.38	0.00	0.17	3.67	0.00	0.14	0.54	0.48	0.13	0.07	0.43	0.43
Avail Cap(c_a), veh/h	284	0	388	71	0	388	363	2419	1082	297	1209	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	29.6	49.5	0.0	29.4	16.3	7.6	5.7	11.9	7.3	7.3
Incr Delay (d2), s/veh	0.8	0.0	0.2	1233.5	0.0	0.2	5.7	0.7	0.2	0.5	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.4	26.3	0.0	1.2	4.4	7.6	1.4	0.3	6.7	7.0
LnGrp Delay(d), s/veh	31.6	0.0	29.8	1283.0	0.0	29.6	21.9	8.3	5.9	12.4	8.4	8.4
LnGrp LOS	C		C	F		C	C	A	A	B	A	A
Approach Vol, veh/h		174			315			1489			1087	
Approach Delay, s/veh		31.0			1068.1			9.9			8.5	
Approach LOS		C			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		28.0		71.0		28.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		17.0		67.0		24.0
Max Q Clear Time (g_c+I1), s		41.4		26.0		19.8		26.0
Green Ext Time (p_c), s		12.3		0.0		9.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	119.3
HCM 2010 LOS	F

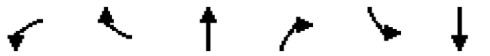
Intersection	
Int Delay, s/veh	0

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2	1	0	0	1	0
Stage 1	1	-	-	-	-	-
Stage 2	1	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	1023	1086	-	-	1628	-
Stage 1	1024	-	-	-	-	-
Stage 2	1024	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	1022	1085	-	-	1627	-
Mov Cap-2 Maneuver	1022	-	-	-	-	-
Stage 1	1023	-	-	-	-	-
Stage 2	1024	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	-	-	1627	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	-	-	0	0	0	-
HCM Lane LOS	-	-	A	A	A	-
HCM 95th %tile Q(veh)	-	-	-	-	0	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	0	0	0	0	0	0
Future Volume (vph)	0	0	0	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)						
Lane Util. Factor						
Frpb, ped/bikes						
Flpb, ped/bikes						
Frt						
Flt Protected						
Satd. Flow (prot)						
Flt Permitted						
Satd. Flow (perm)						
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	0	0	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	0	0	0	0	0	0
Confl. Peds. (#/hr)	11			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot	pm+ov			pm+pt	
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)						
Effective Green, g (s)						
Actuated g/C Ratio						
Clearance Time (s)						
Vehicle Extension (s)						
Lane Grp Cap (vph)						
v/s Ratio Prot						
v/s Ratio Perm						
v/c Ratio						
Uniform Delay, d1						
Progression Factor						
Incremental Delay, d2						
Delay (s)						
Level of Service						
Approach Delay (s/veh)	0.0		0.0		0.0	
Approach LOS	A		A		A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	0.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.00		
Actuated Cycle Length (s)	63.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	16.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	5	5	0	0	10	0	6	6	0	10
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	11	17	16	11	17	6	11	0	0	6	0	0
Stage 1	11	11	-	6	6	-	-	-	-	-	-	-
Stage 2	0	6	-	5	11	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	929	877	897	929	877	910	1141	-	-	1147	-	-
Stage 1	927	886	-	934	890	-	-	-	-	-	-	-
Stage 2	-	890	-	936	886	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	922	866	886	921	866	905	1131	-	-	1141	-	-
Mov Cap-2 Maneuver	922	866	-	921	866	-	-	-	-	-	-	-
Stage 1	920	879	-	929	886	-	-	-	-	-	-	-
Stage 2	-	886	-	932	879	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	1131	-	-	-	-	1141	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	0	0	0	-	-
HCM Lane LOS	A	-	-	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Future Volume (veh/h)	0	0	0	0	0	0	0	0	0	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	--2147483648	2147483648	--2147483648	2147483648	--2147483648	2147483648	--2147483648	2147483648	--2147483648	2147483648	0	
Arrive On Green	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	1774	1863	0	1774	1863	0	1774	5253	0	1774	5253	0
Grp Volume(v), veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	1774	1863	0	1774	1863	0	1774	1695	0	1774	1695	0
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.00	1.00		0.00	1.00		0.00	1.00		0.00
Lane Grp Cap(c), veh/h	1056	1903	0	1056	1903	0	1056	1903	0	1056	1903	0
V/C Ratio(X)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	611	1211	0	611	1211	0	611	1082	0	611	1082	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LnGrp LOS												
Approach Vol, veh/h		0			0			0			0	
Approach Delay, s/veh		0.0			0.0			0.0			0.0	
Approach LOS												

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	20.0	32.0	20.0	32.0	20.0	32.0
Max Q Clear Time (g_c+I1), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	0.0
HCM 2010 LOS	A

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	30	490	510	20	30
Future Vol, veh/h	10	30	490	510	20	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	31	510	531	21	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	41	0	1577	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	1551	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1581	-	122	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	194	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1581	-	66	1056
Mov Cap-2 Maneuver	-	-	-	-	66	-
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	105	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	4.1	38.3
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	66	1056	-	-	1581	-
HCM Lane V/C Ratio	0.316	0.03	-	-	0.323	-
HCM Control Delay (s/veh)	82.9	8.5	-	-	8.4	0
HCM Lane LOS	F	A	-	-	A	A
HCM 95th %tile Q(veh)	1.2	0.1	-	-	1.4	-

Intersection	
Int Delay, s/veh	7.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	90	940	50	50	870
Future Vol, veh/h	60	90	940	50	50	870
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	63	94	979	52	52	906

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1564	518	0	0	1033	0
Stage 1	1007	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	103	505	-	-	674	-
Stage 1	316	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	87	504	-	-	673	-
Mov Cap-2 Maneuver	87	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	456	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	98.5	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	173	673	-
HCM Lane V/C Ratio	-	-	0.903	0.077	-
HCM Control Delay (s/veh)	-	-	98.5	10.8	0.8
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	6.7	0.3	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	20	60	40	320	1220	40
Future Volume (veh/h)	20	60	40	320	1220	40
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	21	64	43	340	1298	43
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	358	320	297	2621	2587	86
Arrive On Green	0.20	0.20	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1792	1599	410	3668	3622	117
Grp Volume(v), veh/h	21	64	43	340	657	684
Grp Sat Flow(s),veh/h/ln	1792	1599	410	1787	1787	1857
Q Serve(g_s), s	1.1	4.0	5.9	3.4	18.6	18.7
Cycle Q Clear(g_c), s	1.1	4.0	24.6	3.4	18.6	18.7
Prop In Lane	1.00	1.00	1.00			0.06
Lane Grp Cap(c), veh/h	358	320	297	2621	1311	1362
V/C Ratio(X)	0.06	0.20	0.14	0.13	0.50	0.50
Avail Cap(c_a), veh/h	358	320	297	2621	1311	1362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	40.0	11.9	4.7	6.7	6.8
Incr Delay (d2), s/veh	0.3	1.4	1.0	0.1	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.8	1.7	9.6	10.0
LnGrp Delay(d), s/veh	39.2	41.4	13.0	4.8	8.1	8.1
LnGrp LOS	D	D	B	A	A	A
Approach Vol, veh/h	85			383	1341	
Approach Delay, s/veh	40.9			5.7	8.1	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				92.0		28.0		92.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				88.0		24.0		88.0
Max Q Clear Time (g_c+I1), s				26.6		6.0		20.7
Green Ext Time (p_c), s				3.0		0.2		11.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.1
HCM 2010 LOS	A

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Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Future Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.94	1.00	1.00		1.00		0.96		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.98	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3337	1372	1787	3555		3467		1532		
Flt Permitted			0.90	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3014	1372	1787	3555		3467		1532		
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	22	725	516	187	1044	33	769	0	209	0	0
RTOR Reduction (vph)	0	0	8	281	0	2	0	0	0	117	0	0
Lane Group Flow (vph)	0	0	837	137	187	1075	0	769	0	92	0	0
Confl. Peds. (#/hr)		2		18	18		2			13	13	
Confl. Bikes (#/hr)				11						5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases		4		4						2		
Actuated Green, G (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Effective Green, g (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Actuated g/C Ratio			0.33	0.33	0.13	0.49		0.24		0.44		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			984	448	229	1740		845		676		
v/s Ratio Prot					c0.10	0.30		c0.22				
v/s Ratio Perm			c0.28	0.10						c0.06		
v/c Ratio			0.85	0.30	0.82	0.62		0.91		0.14		
Uniform Delay, d1			36.4	29.2	49.2	21.7		42.6		19.3		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			7.2	0.4	19.7	0.7		13.8		0.4		
Delay (s)			43.6	29.6	68.9	22.3		56.4		19.7		
Level of Service			D	C	E	C		E		B		
Approach Delay (s/veh)			38.9			29.2			48.5			40.7
Approach LOS			D			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1627
Flt Permitted	1.00
Satd. Flow (perm)	1627
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	18.9
Effective Green, g (s)	18.9
Actuated g/C Ratio	0.16
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	265
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	40.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	40.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	90	10	20	110	0	1010	50	10	610
Future Volume (vph)	0	0	60	90	10	20	110	0	1010	50	10	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.94	1.00	0.96		1.00		1.00	0.94	1.00	1.00
Flpb, ped/bikes			1.00	0.96	1.00		1.00		1.00	1.00	0.99	1.00
Frt			0.87	1.00	0.90		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1522	1713	1624		1787		3574	1510	1775	3574
Flt Permitted			1.00	0.95	1.00		0.40		1.00	1.00	0.25	1.00
Satd. Flow (perm)			1522	1713	1624		758		3574	1510	471	3574
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	96	11	21	117	0	1074	53	11	649
RTOR Reduction (vph)	0	0	57	0	19	0	0	0	0	8	0	0
Lane Group Flow (vph)	0	0	7	96	13	0	117	0	1074	45	11	649
Confl. Peds. (#/hr)	25		20	20		25		8		10	10	
Confl. Bikes (#/hr)			6			1				5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			11.5	11.5	11.5		90.7		90.7	90.7	90.7	90.7
Effective Green, g (s)			11.5	11.5	11.5		90.7		90.7	90.7	90.7	90.7
Actuated g/C Ratio			0.10	0.10	0.10		0.82		0.82	0.82	0.82	0.82
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			158	178	169		623		2941	1242	387	2941
v/s Ratio Prot					0.01				c0.30			0.18
v/s Ratio Perm			0.00	c0.06			0.15			0.03	0.02	
v/c Ratio			0.04	0.54	0.08		0.19		0.37	0.04	0.03	0.22
Uniform Delay, d1			44.4	46.8	44.6		2.0		2.5	1.8	1.8	2.1
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	3.1	0.2		0.7		0.4	0.1	0.1	0.2
Delay (s)			44.5	50.0	44.8		2.7		2.8	1.8	1.9	2.3
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		44.5			48.7				2.8			2.3
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.6	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	110.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.7%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	20
Future Volume (vph)	20
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	0.95
Flpb, ped/bikes	1.00
Frt	0.85
Flt Protected	1.00
Satd. Flow (prot)	1520
Flt Permitted	1.00
Satd. Flow (perm)	1520
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	21
RTOR Reduction (vph)	2
Lane Group Flow (vph)	19
Confl. Peds. (#/hr)	8
Confl. Bikes (#/hr)	6
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	90.7
Effective Green, g (s)	90.7
Actuated g/C Ratio	0.82
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	1251
v/s Ratio Prot	
v/s Ratio Perm	0.01
v/c Ratio	0.01
Uniform Delay, d1	1.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	1.8
Level of Service	A
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	940	130	320	1280	290	140	700	240	250	380	80
Future Volume (veh/h)	120	940	130	320	1280	290	140	700	240	250	380	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	989	137	337	1347	305	147	737	253	263	400	84
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1102	152	366	1507	341	418	1038	452	332	1214	666
Arrive On Green	0.09	0.24	0.24	0.21	0.37	0.37	0.07	0.29	0.29	0.12	0.34	0.34
Sat Flow, veh/h	1774	4497	621	1774	4125	933	1774	3539	1541	1774	3539	1544
Grp Volume(v), veh/h	126	745	381	337	1107	545	147	737	253	263	400	84
Grp Sat Flow(s),veh/h/ln	1774	1695	1728	1774	1695	1667	1774	1770	1541	1774	1770	1544
Q Serve(g_s), s	8.1	24.8	24.9	21.7	35.9	36.0	6.7	21.7	16.2	11.6	9.8	3.8
Cycle Q Clear(g_c), s	8.1	24.8	24.9	21.7	35.9	36.0	6.7	21.7	16.2	11.6	9.8	3.8
Prop In Lane	1.00		0.36	1.00		0.56	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	830	423	366	1238	609	418	1038	452	332	1214	666
V/C Ratio(X)	0.83	0.90	0.90	0.92	0.89	0.90	0.35	0.71	0.56	0.79	0.33	0.13
Avail Cap(c_a), veh/h	183	843	430	411	1279	629	418	1038	452	366	1214	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	42.6	42.7	45.4	34.9	34.9	26.0	36.8	34.8	26.5	28.4	20.1
Incr Delay (d2), s/veh	22.4	12.2	21.4	24.4	8.2	15.2	0.5	4.1	4.9	10.3	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	13.0	14.4	13.2	18.2	19.1	3.3	11.1	7.5	6.6	4.9	1.7
LnGrp Delay(d), s/veh	74.9	54.8	64.1	69.8	43.1	50.1	26.5	40.9	39.8	36.9	29.1	20.5
LnGrp LOS	E	D	E	E	D	D	C	D	D	D	C	C
Approach Vol, veh/h		1252			1989			1137			747	
Approach Delay, s/veh		59.6			49.5			38.8			30.9	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	38.2	28.1	32.6	12.0	44.0	14.0	46.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	32.0	27.0	29.0	8.0	40.0	12.0	44.0
Max Q Clear Time (g_c+I1), s	13.6	23.7	23.7	26.9	8.7	11.8	10.1	38.0
Green Ext Time (p_c), s	0.2	3.7	0.3	1.4	0.0	2.9	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	200	30	240	200	140	80	950	280	120	700	70
Future Volume (veh/h)	50	200	30	240	200	140	80	950	280	120	700	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	53	211	32	253	211	147	84	1000	295	126	737	74
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	248	554	84	347	356	248	367	2046	884	238	1871	188
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	1019	1575	239	1130	1012	705	670	3539	1530	424	3237	325
Grp Volume(v), veh/h	53	0	243	253	0	358	84	1000	295	126	403	408
Grp Sat Flow(s),veh/h/ln	1019	0	1813	1130	0	1717	670	1770	1530	424	1770	1792
Q Serve(g_s), s	5.1	0.0	11.5	24.6	0.0	19.5	8.9	19.0	11.5	28.4	14.2	14.2
Cycle Q Clear(g_c), s	24.6	0.0	11.5	36.1	0.0	19.5	23.2	19.0	11.5	47.3	14.2	14.2
Prop In Lane	1.00		0.13	1.00		0.41	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	248	0	638	347	0	604	367	2046	884	238	1023	1036
V/C Ratio(X)	0.21	0.00	0.38	0.73	0.00	0.59	0.23	0.49	0.33	0.53	0.39	0.39
Avail Cap(c_a), veh/h	300	0	731	405	0	692	367	2046	884	238	1023	1036
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	0.0	27.7	41.2	0.0	30.3	19.5	14.2	12.6	28.1	13.2	13.2
Incr Delay (d2), s/veh	0.4	0.0	0.4	5.5	0.0	1.0	1.5	0.8	1.0	8.2	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	5.8	8.2	0.0	9.4	1.8	9.4	5.1	3.9	7.3	7.4
LnGrp Delay(d), s/veh	40.8	0.0	28.1	46.7	0.0	31.3	20.9	15.0	13.6	36.3	14.3	14.3
LnGrp LOS	D		C	D		C	C	B	B	D	B	B
Approach Vol, veh/h		296			611			1379			937	
Approach Delay, s/veh		30.4			37.7			15.1			17.2	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		44.2		70.0		44.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		25.2		26.6		49.3		38.1
Green Ext Time (p_c), s		11.6		1.5		6.4		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	10	60	10	10	10	100	1220	60	10	860	200
Future Volume (veh/h)	140	10	60	10	10	10	100	1220	60	10	860	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.94	0.97		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	146	10	62	10	10	10	104	1271	62	10	896	208
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	31	194	204	122	122	411	2747	1192	335	2200	510
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1336	213	1322	1283	829	829	508	3539	1535	409	2834	657
Grp Volume(v), veh/h	146	0	72	10	0	20	104	1271	62	10	559	545
Grp Sat Flow(s),veh/h/ln	1336	0	1535	1283	0	1659	508	1770	1535	409	1770	1722
Q Serve(g_s), s	11.1	0.0	4.4	0.7	0.0	1.1	8.8	13.1	1.0	0.9	10.8	10.8
Cycle Q Clear(g_c), s	12.1	0.0	4.4	5.1	0.0	1.1	19.6	13.1	1.0	14.0	10.8	10.8
Prop In Lane	1.00		0.86	1.00		0.50	1.00		1.00	1.00		0.38
Lane Grp Cap(c), veh/h	252	0	226	204	0	244	411	2747	1192	335	1374	1337
V/C Ratio(X)	0.58	0.00	0.32	0.05	0.00	0.08	0.25	0.46	0.05	0.03	0.41	0.41
Avail Cap(c_a), veh/h	452	0	456	396	0	493	411	2747	1192	335	1374	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	0.0	39.8	42.1	0.0	38.4	7.0	4.1	2.7	6.5	3.8	3.8
Incr Delay (d2), s/veh	2.1	0.0	0.8	0.1	0.0	0.1	1.5	0.6	0.1	0.2	0.9	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	0.0	1.9	0.3	0.0	0.5	1.4	6.4	0.4	0.1	5.5	5.3
LnGrp Delay(d), s/veh	45.8	0.0	40.6	42.2	0.0	38.6	8.5	4.6	2.8	6.7	4.7	4.7
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		218			30			1437			1114	
Approach Delay, s/veh		44.1			39.8			4.8			4.7	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.0		19.3		85.0		19.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		81.0		31.0		81.0		31.0
Max Q Clear Time (g_c+I1), s		21.6		14.1		16.0		7.1
Green Ext Time (p_c), s		16.5		0.7		9.8		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Future Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	161	65	151	183	65	118	1301	183	54	871	32
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	334	135	248	499	404	402	2331	1000	229	2331	999
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1116	1245	502	1143	1863	1508	614	3539	1518	354	3539	1517
Grp Volume(v), veh/h	43	0	226	151	183	65	118	1301	183	54	871	32
Grp Sat Flow(s),veh/h/ln	1116	0	1747	1143	1863	1508	614	1770	1518	354	1770	1517
Q Serve(g_s), s	3.6	0.0	11.9	14.0	8.7	3.6	11.8	21.7	5.1	10.6	12.2	0.8
Cycle Q Clear(g_c), s	12.3	0.0	11.9	25.9	8.7	3.6	23.9	21.7	5.1	32.3	12.2	0.8
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	468	248	499	404	402	2331	1000	229	2331	999
V/C Ratio(X)	0.16	0.00	0.48	0.61	0.37	0.16	0.29	0.56	0.18	0.24	0.37	0.03
Avail Cap(c_a), veh/h	385	0	639	360	682	552	402	2331	1000	229	2331	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	33.6	44.5	32.5	30.6	13.9	10.1	7.2	18.8	8.4	6.5
Incr Delay (d2), s/veh	0.3	0.0	0.8	2.4	0.4	0.2	1.8	1.0	0.4	2.4	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	5.8	4.6	4.5	1.5	2.2	10.8	2.2	1.2	6.1	0.4
LnGrp Delay(d), s/veh	37.7	0.0	34.4	46.9	32.9	30.8	15.7	11.0	7.6	21.2	8.9	6.6
LnGrp LOS	D		C	D	C	C	B	B	A	C	A	A
Approach Vol, veh/h		269			399			1602			957	
Approach Delay, s/veh		34.9			37.9			11.0			9.5	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		33.3		76.0		33.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		25.9		14.3		34.3		27.9
Green Ext Time (p_c), s		16.8		1.5		8.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Future Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	196	660	155	227	959	134	165	773	227	165	711	309
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	222	1067	466	257	997	139	192	1133	494	193	763	331
Arrive On Green	0.12	0.30	0.30	0.14	0.32	0.32	0.11	0.32	0.32	0.11	0.32	0.32
Sat Flow, veh/h	1792	3574	1560	1792	3139	438	1792	3574	1558	1792	2401	1043
Grp Volume(v), veh/h	196	660	155	227	546	547	165	773	227	165	529	491
Grp Sat Flow(s),veh/h/ln	1792	1787	1560	1792	1787	1790	1792	1787	1558	1792	1787	1657
Q Serve(g_s), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Cycle Q Clear(g_c), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	222	1067	466	257	567	568	192	1133	494	193	568	526
V/C Ratio(X)	0.88	0.62	0.33	0.88	0.96	0.96	0.86	0.68	0.46	0.86	0.93	0.93
Avail Cap(c_a), veh/h	225	1067	466	329	568	569	195	1133	494	225	568	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	36.1	32.7	50.3	40.1	40.1	52.5	35.6	32.7	52.5	39.6	39.6
Incr Delay (d2), s/veh	30.5	1.1	0.4	19.9	28.4	28.5	30.0	3.3	3.1	23.8	24.3	25.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.5	4.1	8.8	22.2	22.3	7.0	11.6	6.4	6.6	20.7	19.4
LnGrp Delay(d), s/veh	82.0	37.2	33.1	70.2	68.5	68.6	82.5	38.9	35.7	76.3	63.8	65.2
LnGrp LOS	F	D	C	E	E	E	F	D	D	E	E	E
Approach Vol, veh/h		1011			1320			1165			1185	
Approach Delay, s/veh		45.3			68.8			44.5			66.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	41.9	21.1	39.7	16.8	42.0	18.9	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	36.0	22.0	31.0	13.0	38.0	15.0	38.0
Max Q Clear Time (g_c+I1), s	12.8	24.5	16.9	21.0	12.8	36.4	14.9	37.9
Green Ext Time (p_c), s	0.1	4.6	0.3	3.5	0.0	1.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	240	20	100	10	890	180	90	790	40
Future Volume (veh/h)	10	10	10	240	20	100	10	890	180	90	790	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		0.93	0.95		0.93	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	11	11	11	258	22	108	11	957	194	97	849	43
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	268	193	193	364	61	297	446	2058	417	341	2421	123
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1246	840	840	1344	264	1295	633	2968	601	496	3492	177
Grp Volume(v), veh/h	11	0	22	258	0	130	11	582	569	97	439	453
Grp Sat Flow(s),veh/h/ln	1246	0	1679	1344	0	1559	633	1805	1763	496	1805	1864
Q Serve(g_s), s	0.8	0.0	1.1	19.3	0.0	7.3	0.7	15.1	15.2	11.4	10.2	10.2
Cycle Q Clear(g_c), s	8.1	0.0	1.1	20.3	0.0	7.3	11.0	15.1	15.2	26.6	10.2	10.2
Prop In Lane	1.00		0.50	1.00		0.83	1.00		0.34	1.00		0.09
Lane Grp Cap(c), veh/h	268	0	385	364	0	358	446	1252	1223	341	1252	1292
V/C Ratio(X)	0.04	0.00	0.06	0.71	0.00	0.36	0.02	0.46	0.47	0.28	0.35	0.35
Avail Cap(c_a), veh/h	462	0	647	573	0	601	446	1252	1223	341	1252	1292
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	0.0	31.2	39.2	0.0	33.6	8.7	7.2	7.2	13.2	6.4	6.4
Incr Delay (d2), s/veh	0.1	0.0	0.1	2.6	0.0	0.6	0.1	1.2	1.3	2.1	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.5	7.4	0.0	3.2	0.1	7.9	7.7	1.8	5.3	5.4
LnGrp Delay(d), s/veh	37.1	0.0	31.3	41.7	0.0	34.2	8.8	8.4	8.5	15.3	7.2	7.2
LnGrp LOS	D		C	D		C	A	A	A	B	A	A
Approach Vol, veh/h		33			388			1162			989	
Approach Delay, s/veh		33.2			39.2			8.5			8.0	
Approach LOS		C			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		27.8		76.0		27.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		17.2		10.1		28.6		22.3
Green Ext Time (p_c), s		10.3		0.1		8.4		1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	1000	220	150	1340	300	330	470	150	300	420	420
Future Volume (veh/h)	420	1000	220	150	1340	300	330	470	150	300	420	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	462	1099	242	165	1473	330	363	516	165	330	462	462
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	433	1609	961	194	1317	294	367	460	146	299	506	596
Arrive On Green	0.24	0.45	0.45	0.11	0.32	0.32	0.17	0.17	0.17	0.13	0.14	0.14
Sat Flow, veh/h	1792	3574	1542	1792	4160	927	1792	2629	835	1792	3574	1480
Grp Volume(v), veh/h	462	1099	242	165	1211	592	363	350	331	330	462	462
Grp Sat Flow(s),veh/h/ln	1792	1787	1542	1792	1712	1664	1792	1787	1677	1792	1787	1480
Q Serve(g_s), s	29.0	29.3	8.6	10.9	38.0	38.0	20.0	21.0	21.0	16.0	15.3	17.0
Cycle Q Clear(g_c), s	29.0	29.3	8.6	10.9	38.0	38.0	20.0	21.0	21.0	16.0	15.3	17.0
Prop In Lane	1.00		1.00	1.00		0.56	1.00		0.50	1.00		1.00
Lane Grp Cap(c), veh/h	433	1609	961	194	1084	527	367	313	294	299	506	596
V/C Ratio(X)	1.07	0.68	0.25	0.85	1.12	1.12	0.99	1.12	1.13	1.10	0.91	0.77
Avail Cap(c_a), veh/h	433	1609	961	269	1084	527	367	313	294	299	506	596
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.5	26.2	10.4	52.6	41.0	41.0	36.1	49.5	49.5	40.0	50.8	32.9
Incr Delay (d2), s/veh	62.2	1.2	0.1	16.8	65.3	78.0	43.7	86.5	91.9	82.9	23.3	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.8	14.6	3.7	6.3	27.8	28.8	14.4	17.9	17.2	15.3	9.2	15.0
LnGrp Delay(d), s/veh	107.7	27.4	10.6	69.4	106.3	119.0	79.8	136.0	141.4	123.0	74.0	42.4
LnGrp LOS	F	C	B	E	F	F	E	F	F	F	E	D
Approach Vol, veh/h		1803			1968			1044			1254	
Approach Delay, s/veh		45.7			107.0			118.2			75.3	
Approach LOS		D			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	25.0	17.0	58.0	24.0	21.0	33.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	21.0	18.0	49.0	20.0	17.0	29.0	38.0
Max Q Clear Time (g_c+I1), s	18.0	23.0	12.9	31.3	22.0	19.0	31.0	40.0
Green Ext Time (p_c), s	0.0	0.0	0.2	8.3	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	84.2
HCM 2010 LOS	F

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	160	270	40	280	120	310	640	50	90	240	240
Future Volume (veh/h)	160	160	270	40	280	120	310	640	50	90	240	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	165	165	278	41	289	124	320	660	52	93	247	247
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	249	236	397	209	473	203	488	1851	146	390	988	876
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	979	622	1047	952	1246	535	907	3349	264	742	1787	1585
Grp Volume(v), veh/h	165	0	443	41	0	413	320	352	360	93	247	247
Grp Sat Flow(s),veh/h/ln	979	0	1669	952	0	1781	907	1787	1825	742	1787	1585
Q Serve(g_s), s	19.3	0.0	26.4	4.5	0.0	22.0	34.0	12.9	12.9	9.4	8.4	9.7
Cycle Q Clear(g_c), s	41.3	0.0	26.4	30.9	0.0	22.0	43.7	12.9	12.9	22.3	8.4	9.7
Prop In Lane	1.00		0.63	1.00		0.30	1.00		0.14	1.00		1.00
Lane Grp Cap(c), veh/h	249	0	633	209	0	675	488	988	1009	390	988	876
V/C Ratio(X)	0.66	0.00	0.70	0.20	0.00	0.61	0.66	0.36	0.36	0.24	0.25	0.28
Avail Cap(c_a), veh/h	269	0	667	228	0	712	488	988	1009	390	988	876
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	0.0	30.8	43.9	0.0	29.5	25.5	14.7	14.7	20.9	13.7	13.9
Incr Delay (d2), s/veh	5.4	0.0	3.1	0.5	0.0	1.4	6.8	1.0	1.0	1.4	0.6	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	12.7	1.2	0.0	11.1	9.4	6.6	6.8	2.1	4.3	4.4
LnGrp Delay(d), s/veh	51.6	0.0	33.9	44.3	0.0	30.9	32.3	15.7	15.6	22.3	14.3	14.7
LnGrp LOS	D		C	D		C	C	B	B	C	B	B
Approach Vol, veh/h		608			454			1032			587	
Approach Delay, s/veh		38.7			32.1			20.8			15.7	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		48.6		69.0		48.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		45.7		43.3		24.3		32.9
Green Ext Time (p_c), s		6.2		1.3		4.2		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	500	280	10	240	60	750	130	210	1170	10
Future Volume (veh/h)	20	10	500	280	10	240	60	750	130	210	1170	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	21	11	532	298	11	255	64	798	138	223	1245	11
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	416	14	667	177	28	656	60	941	779	139	941	779
Arrive On Green	0.43	0.43	0.43	0.43	0.43	0.43	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	1119	32	1540	868	65	1513	445	1881	1558	602	1881	1558
Grp Volume(v), veh/h	21	0	543	298	0	266	64	798	138	223	1245	11
Grp Sat Flow(s),veh/h/ln	1119	0	1572	868	0	1578	445	1881	1558	602	1881	1558
Q Serve(g_s), s	1.6	0.0	35.9	16.1	0.0	13.8	0.0	44.2	5.8	15.8	60.0	0.4
Cycle Q Clear(g_c), s	15.3	0.0	35.9	52.0	0.0	13.8	60.0	44.2	5.8	60.0	60.0	0.4
Prop In Lane	1.00		0.98	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	416	0	681	177	0	684	60	941	779	139	941	779
V/C Ratio(X)	0.05	0.00	0.80	1.69	0.00	0.39	1.07	0.85	0.18	1.60	1.32	0.01
Avail Cap(c_a), veh/h	416	0	681	177	0	684	60	941	779	139	941	779
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	29.4	54.7	0.0	23.2	60.0	26.1	16.5	55.5	30.0	15.1
Incr Delay (d2), s/veh	0.0	0.0	6.6	332.8	0.0	0.4	135.9	9.4	0.5	301.7	153.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	1.9	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	16.8	22.2	0.0	6.1	4.2	25.3	2.6	16.3	70.8	0.2
LnGrp Delay(d), s/veh	28.5	0.0	36.0	387.5	0.0	23.5	197.8	35.5	17.0	357.2	183.1	15.1
LnGrp LOS	C		D	F		C	F	D	B	F	F	B
Approach Vol, veh/h		564			564			1000			1479	
Approach Delay, s/veh		35.8			215.8			43.3			208.1	
Approach LOS		D			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		56.0		64.0		56.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		62.0		37.9		62.0		54.0
Green Ext Time (p_c), s		0.0		3.4		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	136.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Future Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	84	274	116	32	168	42	137	737	116	53	337	53
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	187	391	324	138	300	75	749	1353	1124	416	2222	346
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1175	1881	1561	999	1442	361	999	1881	1563	651	3090	481
Grp Volume(v), veh/h	84	274	116	32	0	210	137	737	116	53	193	197
Grp Sat Flow(s),veh/h/ln	1175	1881	1561	999	0	1803	999	1881	1563	651	1787	1783
Q Serve(g_s), s	7.6	14.8	7.0	3.4	0.0	11.5	5.5	19.9	2.5	4.5	3.7	3.8
Cycle Q Clear(g_c), s	19.0	14.8	7.0	18.2	0.0	11.5	9.3	19.9	2.5	24.4	3.7	3.8
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	187	391	324	138	0	375	749	1353	1124	416	1285	1283
V/C Ratio(X)	0.45	0.70	0.36	0.23	0.00	0.56	0.18	0.54	0.10	0.13	0.15	0.15
Avail Cap(c_a), veh/h	296	565	469	231	0	542	749	1353	1124	416	1285	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	40.3	37.2	48.8	0.0	39.0	6.3	7.1	4.7	12.7	4.9	4.9
Incr Delay (d2), s/veh	1.7	2.3	0.7	0.8	0.0	1.3	0.5	1.6	0.2	0.6	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.9	3.1	1.0	0.0	5.9	1.6	10.8	1.1	0.9	1.9	1.9
LnGrp Delay(d), s/veh	49.2	42.6	37.9	49.6	0.0	40.3	6.9	8.7	4.9	13.4	5.1	5.1
LnGrp LOS	D	D	D	D		D	A	A	A	B	A	A
Approach Vol, veh/h		474			242			990			443	
Approach Delay, s/veh		42.6			41.5			8.0			6.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		26.8		83.0		26.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		21.9		21.0		26.4		20.2
Green Ext Time (p_c), s		7.2		1.8		3.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Future Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	467	130	98	435	98	261	967	76	130	707	217
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	306	741	318	243	517	219	418	2103	165	321	1355	416
Arrive On Green	0.12	0.21	0.21	0.06	0.14	0.14	0.09	0.63	0.63	0.51	0.51	0.51
Sat Flow, veh/h	1792	3574	1533	1792	3574	1515	1792	3352	263	543	2677	822
Grp Volume(v), veh/h	228	467	130	98	435	98	261	516	527	130	472	452
Grp Sat Flow(s),veh/h/ln	1792	1787	1533	1792	1787	1515	1792	1787	1828	543	1787	1711
Q Serve(g_s), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	18.9	20.3	20.3
Cycle Q Clear(g_c), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	22.3	20.3	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.48
Lane Grp Cap(c), veh/h	306	741	318	243	517	219	418	1121	1147	321	904	866
V/C Ratio(X)	0.74	0.63	0.41	0.40	0.84	0.45	0.62	0.46	0.46	0.40	0.52	0.52
Avail Cap(c_a), veh/h	351	903	387	244	592	251	481	1121	1147	321	904	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	41.5	39.4	38.5	47.8	44.9	14.0	11.2	11.2	20.7	19.0	19.0
Incr Delay (d2), s/veh	7.2	1.0	0.8	1.1	9.5	1.4	2.0	1.4	1.3	3.7	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.8	3.6	2.7	7.4	2.9	3.9	8.9	9.1	3.2	10.5	10.1
LnGrp Delay(d), s/veh	42.2	42.5	40.2	39.6	57.3	46.3	16.0	12.5	12.5	24.4	21.2	21.3
LnGrp LOS	D	D	D	D	E	D	B	B	B	C	C	C
Approach Vol, veh/h		825			631			1304			1054	
Approach Delay, s/veh		42.0			52.8			13.2			21.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		76.0	11.0	27.8	13.9	62.1	18.1	20.6
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		72.0	7.0	29.0	14.0	54.0	17.0	19.0
Max Q Clear Time (g_c+I1), s		19.3	7.3	15.7	9.6	24.3	14.0	15.6
Green Ext Time (p_c), s		8.4	0.0	2.9	0.3	8.7	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Future Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	253	126	168	105	463	221	116	663	53	95	484	242
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	338	600	498	424	567	268	330	1740	139	367	979	1017
Arrive On Green	0.12	0.32	0.32	0.05	0.24	0.24	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1810	1900	1577	1810	2355	1115	740	3376	270	746	1900	1582
Grp Volume(v), veh/h	253	126	168	105	354	330	116	354	362	95	484	242
Grp Sat Flow(s),veh/h/ln	1810	1900	1577	1810	1805	1665	740	1805	1841	746	1900	1582
Q Serve(g_s), s	10.1	4.9	8.2	4.4	18.7	18.9	12.2	11.9	12.0	8.9	16.7	6.6
Cycle Q Clear(g_c), s	10.1	4.9	8.2	4.4	18.7	18.9	28.9	11.9	12.0	20.8	16.7	6.6
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	338	600	498	424	435	401	330	930	949	367	979	1017
V/C Ratio(X)	0.75	0.21	0.34	0.25	0.81	0.82	0.35	0.38	0.38	0.26	0.49	0.24
Avail Cap(c_a), veh/h	525	961	797	424	590	545	330	930	949	367	979	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	25.3	26.4	27.0	36.2	36.3	25.3	14.7	14.7	21.0	15.9	7.7
Incr Delay (d2), s/veh	3.3	0.2	0.4	0.3	6.3	7.3	2.9	1.2	1.2	1.7	1.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	2.6	3.6	2.2	10.1	9.5	2.7	6.2	6.3	2.0	9.2	3.0
LnGrp Delay(d), s/veh	28.5	25.4	26.8	27.3	42.5	43.6	28.2	15.9	15.9	22.7	17.7	8.3
LnGrp LOS	C	C	C	C	D	D	C	B	B	C	B	A
Approach Vol, veh/h		547			789			832			821	
Approach Delay, s/veh		27.3			40.9			17.6			15.5	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	9.0	35.9		56.0	16.6	28.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	5.0	51.0		52.0	23.0	33.0
Max Q Clear Time (g_c+I1), s		30.9	6.4	10.2		22.8	12.1	20.9
Green Ext Time (p_c), s		5.3	0.0	1.3		4.9	0.5	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Future Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	274	653	505	611	832	105	463	1063	168	126	853	295
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	344	625	258	538	954	120	403	1152	182	169	834	347
Arrive On Green	0.14	0.17	0.17	0.27	0.30	0.30	0.19	0.38	0.38	0.05	0.23	0.23
Sat Flow, veh/h	1792	3574	1473	1792	3172	400	1792	3071	484	1792	3574	1487
Grp Volume(v), veh/h	274	653	505	611	469	468	463	618	613	126	853	295
Grp Sat Flow(s),veh/h/ln	1792	1787	1473	1792	1787	1785	1792	1787	1768	1792	1787	1487
Q Serve(g_s), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Cycle Q Clear(g_c), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	344	625	258	538	537	537	403	670	663	169	834	347
V/C Ratio(X)	0.80	1.04	1.96	1.14	0.87	0.87	1.15	0.92	0.93	0.75	1.02	0.85
Avail Cap(c_a), veh/h	360	625	258	538	537	537	403	670	663	169	834	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	49.5	49.5	35.0	39.8	39.8	36.8	35.8	35.9	37.6	46.0	44.0
Incr Delay (d2), s/veh	11.4	48.0	445.4	82.1	14.6	14.6	91.6	20.1	20.8	16.4	37.1	22.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	14.5	40.4	30.0	16.9	16.9	23.6	23.3	23.3	3.9	18.1	11.5
LnGrp Delay(d), s/veh	46.0	97.5	494.9	117.1	54.4	54.4	128.5	55.9	56.7	53.9	83.1	66.1
LnGrp LOS	D	F	F	F	D	D	F	E	E	D	F	E
Approach Vol, veh/h		1432			1548			1694			1274	
Approach Delay, s/veh		227.8			79.1			76.0			76.3	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	36.0	25.0	27.0	32.0	20.9	40.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	32.0	21.0	23.0	28.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	8.0	41.9	34.0	23.0	25.0	30.0	16.8	31.8
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	0.0	0.1	1.7

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		113.4	
HCM 2010 LOS		F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Future Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.89	1.00		0.93	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	333	1031	146	156	1469	198	365	1240	167	125	1000	271
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1334	189	183	1311	520	314	1322	178	144	984	276
Arrive On Green	0.17	0.43	0.43	0.10	0.37	0.37	0.14	0.29	0.29	0.04	0.19	0.19
Sat Flow, veh/h	1792	3096	438	1792	3574	1418	1792	4532	610	1792	5136	1441
Grp Volume(v), veh/h	333	594	583	156	1469	198	365	937	470	125	1000	271
Grp Sat Flow(s),veh/h/ln	1792	1787	1746	1792	1787	1418	1792	1712	1719	1792	1712	1441
Q Serve(g_s), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Cycle Q Clear(g_c), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	299	770	753	183	1311	520	314	999	501	144	984	276
V/C Ratio(X)	1.12	0.77	0.77	0.85	1.12	0.38	1.16	0.94	0.94	0.87	1.02	0.98
Avail Cap(c_a), veh/h	299	770	753	209	1311	520	314	999	501	144	984	276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	29.1	29.1	53.0	38.0	28.0	35.0	41.4	41.4	44.7	48.5	48.3
Incr Delay (d2), s/veh	86.7	4.8	5.0	24.8	65.1	0.5	102.7	17.0	27.4	38.9	32.7	49.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	17.7	17.4	6.3	33.5	4.9	19.3	17.4	19.0	4.9	13.8	12.8
LnGrp Delay(d), s/veh	136.7	33.9	34.2	77.7	103.1	28.4	137.6	58.4	68.9	83.6	81.2	97.9
LnGrp LOS	F	C	C	E	F	C	F	E	E	F	F	F
Approach Vol, veh/h		1510			1823			1772			1396	
Approach Delay, s/veh		56.7			92.8			77.5			84.7	
Approach LOS		E			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	39.0	16.3	55.7	21.0	27.0	24.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	35.0	14.0	50.0	17.0	23.0	20.0	44.0
Max Q Clear Time (g_c+I1), s	7.0	34.0	12.3	36.2	19.0	25.0	22.0	46.0
Green Ext Time (p_c), s	0.0	0.8	0.1	6.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	78.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Future Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.90	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	200	484	211	347	1021	389	358	1000	137	305	800	137
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	226	779	308	376	1077	436	385	1135	155	331	965	163
Arrive On Green	0.13	0.22	0.22	0.21	0.30	0.30	0.21	0.25	0.25	0.19	0.22	0.22
Sat Flow, veh/h	1792	3574	1411	1792	3574	1445	1792	4493	613	1792	4332	732
Grp Volume(v), veh/h	200	484	211	347	1021	389	358	761	376	305	630	307
Grp Sat Flow(s),veh/h/ln	1792	1787	1411	1792	1787	1445	1792	1712	1683	1792	1712	1640
Q Serve(g_s), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Cycle Q Clear(g_c), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.45
Lane Grp Cap(c), veh/h	226	779	308	376	1077	436	385	865	425	331	763	366
V/C Ratio(X)	0.88	0.62	0.69	0.92	0.95	0.89	0.93	0.88	0.88	0.92	0.83	0.84
Avail Cap(c_a), veh/h	226	779	308	422	1083	438	407	865	425	347	763	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	42.0	42.7	46.0	40.6	39.7	45.8	42.7	42.7	47.5	44.0	44.1
Incr Delay (d2), s/veh	31.1	1.5	6.2	24.3	16.3	20.1	27.2	12.4	22.6	28.3	9.9	20.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	7.4	6.9	13.7	18.7	14.6	14.4	13.4	14.6	12.4	10.9	11.7
LnGrp Delay(d), s/veh	82.1	43.5	48.9	70.3	56.9	59.7	72.9	55.1	65.3	75.9	53.9	64.3
LnGrp LOS	F	D	D	E	E	E	E	E	E	E	D	E
Approach Vol, veh/h		895			1757			1495			1242	
Approach Delay, s/veh		53.4			60.2			61.9			61.9	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	34.0	28.9	29.9	29.5	30.5	19.0	39.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	30.0	28.0	23.0	27.0	26.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	21.9	27.5	24.5	18.3	25.3	23.2	15.0	35.2
Green Ext Time (p_c), s	0.1	1.6	0.4	1.6	0.2	1.5	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Future Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	354	1081	152	374	1293	253	495	919	141	323	788	172
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	378	1639	230	440	1362	572	523	1372	399	379	941	203
Arrive On Green	0.11	0.36	0.36	0.13	0.38	0.38	0.15	0.27	0.27	0.11	0.23	0.23
Sat Flow, veh/h	3476	4514	634	3476	3574	1500	3476	5136	1492	3476	4167	898
Grp Volume(v), veh/h	354	820	413	374	1293	253	495	919	141	323	646	314
Grp Sat Flow(s),veh/h/ln	1738	1712	1724	1738	1787	1500	1738	1712	1492	1738	1712	1642
Q Serve(g_s), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Cycle Q Clear(g_c), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	378	1243	626	440	1362	572	523	1372	399	379	773	371
V/C Ratio(X)	0.94	0.66	0.66	0.85	0.95	0.44	0.95	0.67	0.35	0.85	0.84	0.85
Avail Cap(c_a), veh/h	378	1243	626	552	1375	577	523	1372	399	407	773	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	31.9	31.9	51.1	35.9	27.5	50.3	39.1	35.4	52.3	44.2	44.3
Incr Delay (d2), s/veh	30.6	1.3	2.6	9.9	13.9	0.5	26.4	2.6	2.4	15.0	10.3	20.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	11.5	11.8	6.6	23.3	6.3	10.0	9.4	4.1	6.0	11.2	12.1
LnGrp Delay(d), s/veh	83.5	33.2	34.5	61.0	49.8	28.1	76.7	41.7	37.9	67.3	54.5	65.1
LnGrp LOS	F	C	C	E	D	C	E	D	D	E	D	E
Approach Vol, veh/h		1587			1920			1555			1283	
Approach Delay, s/veh		44.7			49.1			52.5			60.3	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	36.0	19.1	47.4	22.0	31.0	17.0	49.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	19.0	40.0	18.0	27.0	13.0	46.0
Max Q Clear Time (g_c+I1), s	12.9	21.1	14.6	26.0	18.9	23.9	14.1	43.9
Green Ext Time (p_c), s	0.1	4.5	0.6	6.7	0.0	1.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Future Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	287	32	191	11	32	32	202	1415	21	32	777	202
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	59	0	632	39	94	643	234	2457	36	40	1468	377
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.47	0.47	0.02	0.36	0.36
Sat Flow, veh/h	0	0	1568	0	233	1595	1792	5211	77	1792	4038	1038
Grp Volume(v), veh/h	319	0	191	43	0	32	202	930	506	32	658	321
Grp Sat Flow(s),veh/h/ln	0	0	1568	233	0	1595	1792	1712	1865	1792	1712	1652
Q Serve(g_s), s	0.0	0.0	9.7	0.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Cycle Q Clear(g_c), s	47.0	0.0	9.7	47.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Prop In Lane	0.90		1.00	0.26		1.00	1.00		0.04	1.00		0.63
Lane Grp Cap(c), veh/h	59	0	632	133	0	643	234	1615	879	40	1245	600
V/C Ratio(X)	5.44	0.00	0.30	0.32	0.00	0.05	0.86	0.58	0.58	0.79	0.53	0.54
Avail Cap(c_a), veh/h	59	0	632	133	0	643	384	1615	879	92	1245	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	23.7	28.5	0.0	21.2	49.7	22.4	22.4	56.7	29.2	29.3
Incr Delay (d2), s/veh	2035.1	0.0	0.3	1.4	0.0	0.0	10.6	1.5	2.7	28.1	1.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.0	0.0	4.2	0.9	0.0	0.6	7.1	11.2	12.5	1.3	8.6	8.8
LnGrp Delay(d), s/veh	2093.4	0.0	23.9	29.9	0.0	21.2	60.3	23.9	25.1	84.8	30.8	32.7
LnGrp LOS	F		C	C		C	E	C	C	F	C	C
Approach Vol, veh/h		510			75			1638			1011	
Approach Delay, s/veh		1318.4			26.2			28.7			33.2	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	59.0		51.0	19.2	46.4		51.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	55.0		47.0	25.0	36.0		47.0
Max Q Clear Time (g_c+I1), s	4.1	25.0		49.0	14.9	19.9		49.0
Green Ext Time (p_c), s	0.0	11.4		0.0	0.4	5.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		233.4
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Future Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.95		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	42	73	125	125	125	73	156	1250	94	62	948	52
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	319	246	223	319	248	462	2447	1049	336	2296	126
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.68	0.68	0.03	0.67	0.67
Sat Flow, veh/h	1142	1881	1453	1135	1881	1462	1792	3574	1532	1792	3437	188
Grp Volume(v), veh/h	42	73	125	125	125	73	156	1250	94	62	493	507
Grp Sat Flow(s),veh/h/ln	1142	1881	1453	1135	1881	1462	1792	1787	1532	1792	1787	1838
Q Serve(g_s), s	3.6	3.5	8.2	11.3	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Cycle Q Clear(g_c), s	9.8	3.5	8.2	14.8	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	194	319	246	223	319	248	462	2447	1049	336	1194	1228
V/C Ratio(X)	0.22	0.23	0.51	0.56	0.39	0.29	0.34	0.51	0.09	0.18	0.41	0.41
Avail Cap(c_a), veh/h	305	501	387	332	501	389	648	2447	1049	415	1194	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	37.7	39.7	44.1	38.9	38.2	5.8	8.0	5.6	6.4	8.0	8.0
Incr Delay (d2), s/veh	0.5	0.4	1.6	2.2	0.8	0.7	0.4	0.8	0.2	0.3	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	3.4	3.7	3.3	1.9	1.4	8.9	1.0	0.6	6.8	7.0
LnGrp Delay(d), s/veh	43.8	38.1	41.3	46.3	39.6	38.8	6.2	8.8	5.7	6.6	9.1	9.0
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		240			323			1500			1062	
Approach Delay, s/veh		40.8			42.0			8.3			8.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	76.0		21.8	9.1	74.3		21.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	72.0		28.0	16.0	64.0		28.0
Max Q Clear Time (g_c+I1), s	3.1	19.8		11.8	4.8	15.3		16.8
Green Ext Time (p_c), s	0.0	13.2		0.9	0.3	8.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1340	420	40	530	60	120	1080	30	150	1080	150
Future Volume (veh/h)	260	1340	420	40	530	60	120	1080	30	150	1080	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	271	1396	438	42	552	62	125	1125	31	156	1125	156
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	354	1504	747	73	933	104	193	1397	38	236	1271	176
Arrive On Green	0.10	0.43	0.43	0.29	0.29	0.29	0.06	0.40	0.40	0.07	0.41	0.41
Sat Flow, veh/h	1757	3505	1529	250	3167	355	1757	3482	96	1757	3083	426
Grp Volume(v), veh/h	271	1396	438	42	305	309	125	566	590	156	638	643
Grp Sat Flow(s),veh/h/ln	1757	1752	1529	250	1752	1769	1757	1752	1825	1757	1752	1757
Q Serve(g_s), s	12.0	44.9	24.5	6.1	17.6	17.8	4.9	34.0	34.0	6.1	40.0	40.3
Cycle Q Clear(g_c), s	12.0	44.9	24.5	35.0	17.6	17.8	4.9	34.0	34.0	6.1	40.0	40.3
Prop In Lane	1.00		1.00	1.00		0.20	1.00		0.05	1.00		0.24
Lane Grp Cap(c), veh/h	354	1504	747	73	516	521	193	703	732	236	723	725
V/C Ratio(X)	0.77	0.93	0.59	0.57	0.59	0.59	0.65	0.81	0.81	0.66	0.88	0.89
Avail Cap(c_a), veh/h	354	1504	747	73	516	521	210	703	732	264	723	725
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	32.2	21.9	58.5	35.8	35.8	27.2	31.5	31.5	25.5	32.3	32.4
Incr Delay (d2), s/veh	9.7	10.4	1.2	10.3	1.8	1.8	6.0	9.5	9.2	5.1	14.7	15.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	23.9	10.6	1.6	8.8	8.9	2.7	18.2	18.9	3.3	22.3	22.5
LnGrp Delay(d), s/veh	37.5	42.6	23.1	68.8	37.6	37.7	33.3	41.0	40.7	30.6	47.0	47.4
LnGrp LOS	D	D	C	E	D	D	C	D	D	C	D	D
Approach Vol, veh/h		2105			656			1281			1437	
Approach Delay, s/veh		37.9			39.6			40.1			45.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	51.7		55.0	10.8	53.0	16.0	39.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	47.0		51.0	8.0	49.0	12.0	35.0
Max Q Clear Time (g_c+I1), s	8.1	36.0		46.9	6.9	42.3	14.0	37.0
Green Ext Time (p_c), s	0.1	5.5		3.3	0.0	4.2	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		40.6
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	870	500	40	410	50	210	900	30	130	1170	110
Future Volume (veh/h)	190	870	500	40	410	50	210	900	30	130	1170	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	906	521	42	427	52	219	938	0	135	1219	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	225	1009	444	53	666	293	246	1590	711	163	1424	637
Arrive On Green	0.13	0.29	0.29	0.03	0.19	0.19	0.14	0.45	0.00	0.09	0.41	0.00
Sat Flow, veh/h	1757	3505	1544	1757	3505	1542	1757	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	198	906	521	42	427	52	219	938	0	135	1219	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1544	1757	1752	1542	1757	1752	1568	1757	1752	1568
Q Serve(g_s), s	13.1	29.3	34.0	2.8	13.3	3.3	14.5	23.6	0.0	8.9	37.4	0.0
Cycle Q Clear(g_c), s	13.1	29.3	34.0	2.8	13.3	3.3	14.5	23.6	0.0	8.9	37.4	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1009	444	53	666	293	246	1590	711	163	1424	637
V/C Ratio(X)	0.88	0.90	1.17	0.79	0.64	0.18	0.89	0.59	0.00	0.83	0.86	0.00
Avail Cap(c_a), veh/h	253	1009	444	59	666	293	268	1590	711	253	1424	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.6	40.4	42.1	56.9	44.1	40.1	49.9	24.1	0.0	52.7	31.9	0.0
Incr Delay (d2), s/veh	25.9	10.7	99.3	45.3	2.1	0.3	27.3	1.6	0.0	12.5	6.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	15.7	26.7	2.0	6.6	1.4	8.9	11.7	0.0	4.9	19.5	0.0
LnGrp Delay(d), s/veh	76.5	51.1	141.4	102.2	46.2	40.4	77.2	25.7	0.0	65.2	38.7	0.0
LnGrp LOS	E	D	F	F	D	D	E	C		E	D	
Approach Vol, veh/h		1625			521			1157			1354	
Approach Delay, s/veh		83.2			50.2			35.4			41.4	
Approach LOS		F			D			D			D	

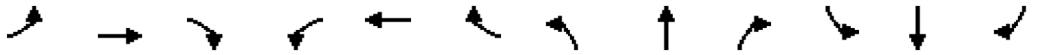
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	57.6	7.6	38.0	20.5	52.0	19.2	26.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	49.0	4.0	34.0	18.0	48.0	17.0	21.0
Max Q Clear Time (g_c+I1), s	10.9	25.6	4.8	36.0	16.5	39.4	15.1	15.3
Green Ext Time (p_c), s	0.1	6.6	0.0	0.0	0.1	5.0	0.1	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	170	1180	90	40	850	130	130	560	150	150	420	160
Future Volume (veh/h)	170	1180	90	40	850	130	130	560	150	150	420	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	179	1242	0	42	895	137	137	589	158	158	442	168
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9	9	9	9	9	9	9
Cap, veh/h	211	1470	658	52	1152	512	167	935	245	189	875	379
Arrive On Green	0.13	0.44	0.00	0.03	0.35	0.35	0.10	0.25	0.25	0.11	0.26	0.26
Sat Flow, veh/h	1660	3312	1482	1660	3312	1471	1660	3728	975	1660	3312	1435
Grp Volume(v), veh/h	179	1242	0	42	895	137	137	499	248	158	442	168
Grp Sat Flow(s),veh/h/ln	1660	1656	1482	1660	1656	1471	1660	1586	1531	1660	1656	1435
Q Serve(g_s), s	10.5	33.3	0.0	2.5	24.1	6.7	8.1	13.9	14.4	9.3	11.3	9.7
Cycle Q Clear(g_c), s	10.5	33.3	0.0	2.5	24.1	6.7	8.1	13.9	14.4	9.3	11.3	9.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.64	1.00		1.00
Lane Grp Cap(c), veh/h	211	1470	658	52	1152	512	167	795	384	189	875	379
V/C Ratio(X)	0.85	0.84	0.00	0.81	0.78	0.27	0.82	0.63	0.65	0.84	0.51	0.44
Avail Cap(c_a), veh/h	333	1860	832	83	1362	605	283	795	384	300	875	379
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	24.7	0.0	48.0	29.1	23.4	44.0	33.2	33.4	43.3	31.2	30.6
Incr Delay (d2), s/veh	11.2	3.1	0.0	25.9	2.5	0.3	9.6	3.7	8.1	10.9	2.1	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	15.8	0.0	1.5	11.3	2.7	4.1	6.5	7.0	4.8	5.4	4.2
LnGrp Delay(d), s/veh	53.7	27.7	0.0	74.0	31.5	23.7	53.6	37.0	41.6	54.2	33.2	34.3
LnGrp LOS	D	C		E	C	C	D	D	D	D	C	C
Approach Vol, veh/h		1421			1074			884			768	
Approach Delay, s/veh		31.0			32.2			40.8			37.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	29.0	7.1	48.3	14.0	30.3	16.7	38.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	25.0	5.0	56.0	17.0	26.0	20.0	41.0
Max Q Clear Time (g_c+I1), s	11.3	16.4	4.5	35.3	10.1	13.3	12.5	26.1
Green Ext Time (p_c), s	0.2	3.0	0.0	9.0	0.2	2.7	0.3	5.6

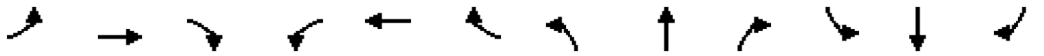
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	990	130	190	870	40	160	550	90	60	470	20
Future Volume (veh/h)	60	990	130	190	870	40	160	550	90	60	470	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	65	1076	141	207	946	43	174	598	98	65	511	22
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Cap, veh/h	82	1266	556	240	1581	704	206	1157	186	82	968	41
Arrive On Green	0.05	0.38	0.38	0.14	0.47	0.47	0.12	0.28	0.28	0.05	0.20	0.20
Sat Flow, veh/h	1691	3374	1482	1691	3374	1504	1691	4191	675	1691	4760	204
Grp Volume(v), veh/h	65	1076	141	207	946	43	174	459	237	65	346	187
Grp Sat Flow(s),veh/h/ln	1691	1687	1482	1691	1687	1504	1691	1616	1634	1691	1616	1732
Q Serve(g_s), s	3.9	29.7	6.7	12.1	21.0	1.6	10.2	12.1	12.5	3.9	9.7	9.8
Cycle Q Clear(g_c), s	3.9	29.7	6.7	12.1	21.0	1.6	10.2	12.1	12.5	3.9	9.7	9.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.41	1.00		0.12
Lane Grp Cap(c), veh/h	82	1266	556	240	1581	704	206	892	451	82	657	352
V/C Ratio(X)	0.79	0.85	0.25	0.86	0.60	0.06	0.85	0.51	0.53	0.79	0.53	0.53
Avail Cap(c_a), veh/h	167	1497	658	350	1863	830	300	892	451	167	657	352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	29.1	21.9	42.5	19.9	14.7	43.6	31.0	31.1	47.7	36.0	36.1
Incr Delay (d2), s/veh	15.1	4.2	0.2	13.8	0.4	0.0	13.7	2.1	4.3	15.1	3.0	5.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	14.5	2.8	6.6	9.8	0.7	5.6	5.7	6.1	2.2	4.6	5.2
LnGrp Delay(d), s/veh	62.8	33.3	22.1	56.3	20.3	14.8	57.3	33.1	35.4	62.8	39.0	41.7
LnGrp LOS	E	C	C	E	C	B	E	C	D	E	D	D
Approach Vol, veh/h		1282			1196			870			598	
Approach Delay, s/veh		33.5			26.3			38.5			42.5	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.9	32.0	18.4	42.1	16.3	24.6	8.9	51.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	28.0	21.0	45.0	18.0	20.0	10.0	56.0
Max Q Clear Time (g_c+I1), s	5.9	14.5	14.1	31.7	12.2	11.8	5.9	23.0
Green Ext Time (p_c), s	0.0	3.6	0.3	6.4	0.2	2.0	0.0	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.8
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1380	0	310	890	0	0	0	0	220	0	40
Future Volume (vph)	0	1380	0	310	890	0	0	0	0	220	0	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3438		1719	4940					3335		1538
Flt Permitted		1.00		0.16	1.00					0.95		1.00
Satd. Flow (perm)		3438		282	4940					3335		1538
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1453	0	326	937	0	0	0	0	232	0	42
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	36
Lane Group Flow (vph)	0	1453	0	326	937	0	0	0	0	232	0	6
Confl. Peds. (#/hr)			1	1								
Heavy Vehicles (%)	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%	5%
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		96.0		96.0	96.0					16.0		16.0
Effective Green, g (s)		96.0		96.0	96.0					16.0		16.0
Actuated g/C Ratio		0.80		0.80	0.80					0.13		0.13
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		2750		225	3952					444		205
v/s Ratio Prot		0.42			0.19							
v/s Ratio Perm				c1.16						c0.07		0.00
v/c Ratio		0.53		1.45	0.24					0.52		0.03
Uniform Delay, d1		4.2		12.0	3.0					48.4		45.2
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		225.2	0.0					4.3		0.2
Delay (s)		4.3		237.2	3.0					52.8		45.5
Level of Service		A		F	A					D		D
Approach Delay (s/veh)		4.3			63.4			0.0			51.7	
Approach LOS		A			E			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	1.31		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	1100	260	60	670	500	290	540	270	260	330	50
Future Volume (veh/h)	140	1100	260	60	670	500	290	540	270	260	330	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	146	1146	271	62	698	521	302	562	0	271	344	52
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	201	1195	280	72	1430	795	372	750	335	296	958	417
Arrive On Green	0.06	0.43	0.43	0.04	0.42	0.42	0.11	0.22	0.00	0.17	0.28	0.28
Sat Flow, veh/h	3343	2752	645	1723	3438	1501	3343	3438	1538	1723	3438	1499
Grp Volume(v), veh/h	146	712	705	62	698	521	302	562	0	271	344	52
Grp Sat Flow(s),veh/h/ln	1672	1719	1677	1723	1719	1501	1672	1719	1538	1723	1719	1499
Q Serve(g_s), s	5.1	47.7	49.0	4.3	17.7	30.0	10.5	18.2	0.0	18.4	9.6	3.1
Cycle Q Clear(g_c), s	5.1	47.7	49.0	4.3	17.7	30.0	10.5	18.2	0.0	18.4	9.6	3.1
Prop In Lane	1.00		0.38	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	201	746	728	72	1430	795	372	750	335	296	958	417
V/C Ratio(X)	0.73	0.95	0.97	0.86	0.49	0.66	0.81	0.75	0.00	0.92	0.36	0.12
Avail Cap(c_a), veh/h	280	750	731	72	1430	795	645	750	335	303	958	417
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.1	32.6	32.9	56.8	25.5	20.4	51.8	43.6	0.0	48.5	34.5	32.2
Incr Delay (d2), s/veh	5.7	22.2	25.6	60.3	0.3	1.9	4.3	6.8	0.0	30.5	1.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	27.1	27.7	3.2	8.5	12.8	5.1	9.4	0.0	11.3	4.7	1.4
LnGrp Delay(d), s/veh	60.7	54.7	58.5	117.0	25.8	22.4	56.1	50.4	0.0	79.0	35.5	32.8
LnGrp LOS	E	D	E	F	C	C	E	D		E	D	C
Approach Vol, veh/h		1563			1281			864			667	
Approach Delay, s/veh		57.0			28.8			52.4			53.0	
Approach LOS		E			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	37.2	9.0	55.8	24.5	30.0	11.2	53.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	24.0	5.0	52.0	21.0	26.0	10.0	47.0
Max Q Clear Time (g_c+I1), s	12.5	11.6	6.3	51.0	20.4	20.2	7.1	32.0
Green Ext Time (p_c), s	0.7	1.7	0.0	0.8	0.1	1.7	0.1	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1100	70	50	890	150	60	1040	70	280	1060	290
Future Volume (veh/h)	210	1100	70	50	890	150	60	1040	70	280	1060	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	221	1158	74	53	937	158	63	1095	74	295	1116	305
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	230	1473	94	67	920	155	80	1175	516	302	1616	916
Arrive On Green	0.13	0.31	0.31	0.04	0.22	0.22	0.05	0.34	0.34	0.17	0.47	0.47
Sat Flow, veh/h	1723	4737	303	1723	4248	714	1723	3438	1511	1723	3438	1513
Grp Volume(v), veh/h	221	805	427	53	726	369	63	1095	74	295	1116	305
Grp Sat Flow(s),veh/h/ln	1723	1647	1746	1723	1647	1668	1723	1719	1511	1723	1719	1513
Q Serve(g_s), s	15.3	26.7	26.8	3.7	26.0	26.0	4.3	36.9	4.1	20.4	30.6	12.0
Cycle Q Clear(g_c), s	15.3	26.7	26.8	3.7	26.0	26.0	4.3	36.9	4.1	20.4	30.6	12.0
Prop In Lane	1.00		0.17	1.00		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	230	1024	543	67	714	361	80	1175	516	302	1616	916
V/C Ratio(X)	0.96	0.79	0.79	0.79	1.02	1.02	0.79	0.93	0.14	0.98	0.69	0.33
Avail Cap(c_a), veh/h	230	1024	543	86	714	361	129	1175	516	302	1616	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	37.7	37.7	57.2	47.0	47.0	56.6	38.2	27.3	49.3	24.9	11.8
Incr Delay (d2), s/veh	48.5	4.1	7.6	29.8	38.0	53.0	15.3	14.3	0.6	45.7	2.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	12.8	14.1	2.3	15.6	17.3	2.4	19.8	1.8	13.6	15.0	5.2
LnGrp Delay(d), s/veh	100.2	41.8	45.3	86.9	85.0	100.1	71.9	52.5	27.9	95.0	27.4	12.8
LnGrp LOS	F	D	D	F	F	F	E	D	C	F	C	B
Approach Vol, veh/h		1453			1148			1232			1716	
Approach Delay, s/veh		51.7			89.9			52.0			36.4	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	25.0	45.0	8.7	41.3	9.6	60.4	20.0	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	41.0	6.0	36.0	9.0	53.0	16.0	26.0
Max Q Clear Time (g_c+I1), s	22.4	38.9	5.7	28.8	6.3	32.6	17.3	28.0
Green Ext Time (p_c), s	0.0	1.4	0.0	4.2	0.0	9.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1210	200	110	630	140	80	570	90	170	770	130
Future Volume (veh/h)	240	1210	200	110	630	140	80	570	90	170	770	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	247	1247	206	113	649	144	82	588	93	175	794	134
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	279	1446	239	139	1047	228	232	1657	719	338	1411	238
Arrive On Green	0.16	0.34	0.34	0.08	0.26	0.26	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1740	4294	709	1740	4084	891	589	3471	1506	741	2957	499
Grp Volume(v), veh/h	247	966	487	113	526	267	82	588	93	175	466	462
Grp Sat Flow(s),veh/h/ln	1740	1663	1678	1740	1663	1651	589	1736	1506	741	1736	1720
Q Serve(g_s), s	15.7	30.7	30.7	7.2	15.8	16.2	13.1	12.1	3.9	22.0	21.7	21.7
Cycle Q Clear(g_c), s	15.7	30.7	30.7	7.2	15.8	16.2	34.8	12.1	3.9	34.1	21.7	21.7
Prop In Lane	1.00		0.42	1.00		0.54	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	279	1120	565	139	852	423	232	1657	719	338	828	821
V/C Ratio(X)	0.89	0.86	0.86	0.81	0.62	0.63	0.35	0.35	0.13	0.52	0.56	0.56
Avail Cap(c_a), veh/h	400	1205	608	200	852	423	232	1657	719	338	828	821
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	35.1	35.1	51.2	37.2	37.3	33.6	18.6	16.5	29.3	21.1	21.1
Incr Delay (d2), s/veh	15.4	6.3	11.6	15.2	1.4	3.0	4.2	0.6	0.4	5.6	2.8	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	15.1	16.0	4.1	7.4	7.8	2.4	5.9	1.7	5.0	11.0	10.9
LnGrp Delay(d), s/veh	61.8	41.4	46.6	66.4	38.5	40.3	37.8	19.2	16.8	34.9	23.9	23.9
LnGrp LOS	E	D	D	E	D	D	D	B	B	C	C	C
Approach Vol, veh/h		1700			906			763			1103	
Approach Delay, s/veh		45.9			42.5			20.9			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	13.0	42.1		58.0	22.1	33.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	13.0	41.0		54.0	26.0	28.0
Max Q Clear Time (g_c+I1), s		36.8	9.2	32.7		36.1	17.7	18.2
Green Ext Time (p_c), s		5.0	0.1	5.4		7.2	0.4	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Future Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	1542	115	146	1031	167	104	271	104	312	281	83
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	1840	137	176	1814	293	131	484	393	381	798	230
Arrive On Green	0.07	0.38	0.38	0.10	0.41	0.41	0.07	0.26	0.26	0.11	0.30	0.30
Sat Flow, veh/h	1774	4827	360	1774	4387	709	1774	1863	1514	3442	2686	774
Grp Volume(v), veh/h	94	1083	574	146	796	402	104	271	104	312	183	181
Grp Sat Flow(s),veh/h/ln	1774	1695	1796	1774	1695	1706	1774	1863	1514	1721	1770	1691
Q Serve(g_s), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Cycle Q Clear(g_c), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Prop In Lane	1.00		0.20	1.00		0.42	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	119	1293	685	176	1402	706	131	484	393	381	526	502
V/C Ratio(X)	0.79	0.84	0.84	0.83	0.57	0.57	0.80	0.56	0.26	0.82	0.35	0.36
Avail Cap(c_a), veh/h	214	1416	750	264	1511	760	214	484	393	479	526	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	30.3	30.3	47.6	24.2	24.2	49.1	34.5	31.7	46.8	29.7	29.8
Incr Delay (d2), s/veh	10.9	4.3	7.8	12.7	0.4	0.9	10.4	4.6	1.6	8.7	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	15.4	16.9	4.9	9.2	9.3	3.4	7.6	2.6	5.0	4.5	4.5
LnGrp Delay(d), s/veh	60.4	34.6	38.1	60.2	24.6	25.1	59.5	39.1	33.3	55.5	31.5	31.8
LnGrp LOS	E	C	D	E	C	C	E	D	C	E	C	C
Approach Vol, veh/h		1751			1344			479			676	
Approach Delay, s/veh		37.1			28.6			42.3			42.7	
Approach LOS		D			C			D			D	

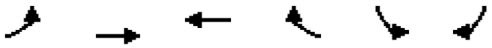
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	32.0	14.7	45.1	11.9	36.0	11.2	48.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	28.0	16.0	45.0	13.0	30.0	13.0	48.0
Max Q Clear Time (g_c+I1), s	11.5	15.6	10.7	33.3	8.2	11.1	7.6	21.5
Green Ext Time (p_c), s	0.4	1.6	0.2	7.8	0.1	2.2	0.1	8.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Future Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	253	1326	474	200	1063	147	305	653	316	242	316	337
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	1334	473	224	1487	205	332	834	365	268	706	313
Arrive On Green	0.16	0.36	0.36	0.13	0.33	0.33	0.19	0.23	0.23	0.15	0.20	0.20
Sat Flow, veh/h	1792	3720	1321	1792	4550	628	1792	3574	1565	1792	3574	1584
Grp Volume(v), veh/h	253	1220	580	200	799	411	305	653	316	242	316	337
Grp Sat Flow(s),veh/h/ln	1792	1712	1617	1792	1712	1755	1792	1787	1565	1792	1787	1584
Q Serve(g_s), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Cycle Q Clear(g_c), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Prop In Lane	1.00		0.82	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1228	580	224	1119	574	332	834	365	268	706	313
V/C Ratio(X)	0.90	0.99	1.00	0.89	0.71	0.72	0.92	0.78	0.86	0.90	0.45	1.08
Avail Cap(c_a), veh/h	314	1228	580	224	1119	574	359	834	365	269	706	313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	38.3	38.5	51.7	35.4	35.5	48.0	43.1	44.1	50.1	42.4	48.1
Incr Delay (d2), s/veh	25.7	24.0	37.6	33.0	2.2	4.2	26.9	7.2	22.9	31.0	2.0	72.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	24.3	25.2	8.6	12.0	12.7	12.4	11.0	12.4	10.2	4.8	16.7
LnGrp Delay(d), s/veh	75.4	62.4	76.1	84.6	37.6	39.7	74.9	50.3	67.1	81.1	44.4	120.9
LnGrp LOS	E	E	F	F	D	D	E	D	E	F	D	F
Approach Vol, veh/h		2053			1410			1274			895	
Approach Delay, s/veh		67.9			44.9			60.4			83.1	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	32.0	19.0	47.0	26.2	27.7	22.8	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	28.0	15.0	43.0	24.0	22.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	17.9	25.3	15.2	45.0	22.0	25.7	18.6	26.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.2	0.0	0.2	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.8
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	820	440	30	70	60
Future Volume (veh/h)	100	820	440	30	70	60
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	105	863	463	32	74	63
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	360	1277	1277	558	811	724
Arrive On Green	0.38	0.38	0.38	0.38	0.48	0.48
Sat Flow, veh/h	849	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	105	863	463	32	74	63
Grp Sat Flow(s),veh/h/ln	849	1671	1671	1461	1675	1495
Q Serve(g_s), s	6.1	12.9	5.9	0.8	1.4	1.4
Cycle Q Clear(g_c), s	12.0	12.9	5.9	0.8	1.4	1.4
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	360	1277	1277	558	811	724
V/C Ratio(X)	0.29	0.68	0.36	0.06	0.09	0.09
Avail Cap(c_a), veh/h	1212	4633	4633	2025	811	724
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.6	15.4	13.3	11.7	8.3	8.3
Incr Delay (d2), s/veh	0.4	0.6	0.2	0.0	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	6.0	2.7	0.3	0.7	0.6
LnGrp Delay(d), s/veh	18.0	16.0	13.4	11.7	8.6	8.6
LnGrp LOS	B	B	B	B	A	A
Approach Vol, veh/h		968	495		137	
Approach Delay, s/veh		16.3	13.3		8.6	
Approach LOS		B	B		A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				26.9		33.0		26.9
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s				14.9		3.4		7.9
Green Ext Time (p_c), s				8.0		0.4		3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	670	130	140	340	150	40	890	230	310	1200	90
Future Volume (veh/h)	140	670	130	140	340	150	40	890	230	310	1200	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	147	705	137	147	358	158	42	937	0	326	1263	95
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	175	805	354	202	448	194	53	1257	562	357	1863	778
Arrive On Green	0.10	0.23	0.23	0.06	0.19	0.19	0.03	0.36	0.00	0.21	0.54	0.54
Sat Flow, veh/h	1740	3471	1527	3375	2343	1015	1740	3471	1553	1740	3471	1448
Grp Volume(v), veh/h	147	705	137	147	263	253	42	937	0	326	1263	95
Grp Sat Flow(s),veh/h/ln	1740	1736	1527	1688	1736	1622	1740	1736	1553	1740	1736	1448
Q Serve(g_s), s	9.4	22.2	8.6	4.9	16.4	16.9	2.7	26.8	0.0	20.8	30.1	3.7
Cycle Q Clear(g_c), s	9.4	22.2	8.6	4.9	16.4	16.9	2.7	26.8	0.0	20.8	30.1	3.7
Prop In Lane	1.00		1.00	1.00		0.63	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	175	805	354	202	332	310	53	1257	562	357	1863	778
V/C Ratio(X)	0.84	0.88	0.39	0.73	0.79	0.81	0.79	0.75	0.00	0.91	0.68	0.12
Avail Cap(c_a), veh/h	214	886	390	208	336	314	107	1257	562	444	1863	778
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.2	42.1	36.8	52.5	43.8	44.0	54.7	31.7	0.0	44.1	19.2	13.0
Incr Delay (d2), s/veh	21.4	9.2	0.7	11.7	12.2	14.9	22.1	4.1	0.0	20.2	2.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	11.7	3.7	2.6	9.0	8.9	1.6	13.5	0.0	12.0	14.9	1.5
LnGrp Delay(d), s/veh	71.6	51.3	37.5	64.2	56.0	58.9	76.8	35.7	0.0	64.3	21.2	13.4
LnGrp LOS	E	D	D	E	E	E	E	D		E	C	B
Approach Vol, veh/h		989			663			979			1684	
Approach Delay, s/veh		52.4			58.9			37.5			29.1	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	27.3	45.1	10.8	30.3	7.5	65.0	15.4	25.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	39.0	7.0	29.0	7.0	61.0	14.0	22.0
Max Q Clear Time (g_c+I1), s	22.8	28.8	6.9	24.2	4.7	32.1	11.4	18.9
Green Ext Time (p_c), s	0.5	4.4	0.0	2.1	0.0	11.0	0.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.9
HCM 2010 LOS	D

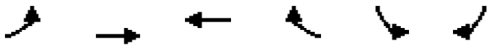
Intersection	
Int Delay, s/veh	1.2

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	40	1440	650	10	30	40
Future Vol, veh/h	40	1440	650	10	30	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	42	1516	684	11	32	42

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	695	0	-	0	1526	342
Stage 1	-	-	-	-	684	-
Stage 2	-	-	-	-	842	-
Critical Hdwy	4.26	-	-	-	6.96	7.06
Critical Hdwy Stg 1	-	-	-	-	5.96	-
Critical Hdwy Stg 2	-	-	-	-	5.96	-
Follow-up Hdwy	2.28	-	-	-	3.58	3.38
Pot Cap-1 Maneuver	858	-	-	-	102	637
Stage 1	-	-	-	-	447	-
Stage 2	-	-	-	-	368	-
Platoon blocked, %			-	-	-	
Mov Cap-1 Maneuver	858	-	-	-	97	637
Mov Cap-2 Maneuver	-	-	-	-	97	-
Stage 1	-	-	-	-	425	-
Stage 2	-	-	-	-	368	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.3	0	31.7
HCM LOS			D

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	858	-	-	-	97	637
HCM Lane V/C Ratio	0.049	-	-	-	0.326	0.066
HCM Control Delay (s/veh)	9.4	-	-	-	59.1	11.1
HCM Lane LOS	A	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	1.3	0.2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	1230	570	30	160	150
Future Volume (veh/h)	90	1230	570	30	160	150
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	96	1309	606	32	170	160
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	123	1698	1284	561	655	585
Arrive On Green	0.07	0.51	0.38	0.38	0.39	0.39
Sat Flow, veh/h	1675	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	96	1309	606	32	170	160
Grp Sat Flow(s),veh/h/ln	1675	1671	1671	1461	1675	1495
Q Serve(g_s), s	4.5	25.1	10.8	1.1	5.4	5.8
Cycle Q Clear(g_c), s	4.5	25.1	10.8	1.1	5.4	5.8
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	123	1698	1284	561	655	585
V/C Ratio(X)	0.78	0.77	0.47	0.06	0.26	0.27
Avail Cap(c_a), veh/h	402	3416	2446	1069	655	585
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	15.8	18.4	15.4	16.3	16.5
Incr Delay (d2), s/veh	10.2	0.8	0.3	0.0	1.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	11.6	5.0	0.4	2.7	5.8
LnGrp Delay(d), s/veh	46.3	16.5	18.6	15.4	17.3	17.6
LnGrp LOS	D	B	B	B	B	B
Approach Vol, veh/h		1405	638		330	
Approach Delay, s/veh		18.6	18.5		17.5	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				44.3		35.0	9.8	34.4
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				81.0		31.0	19.0	58.0
Max Q Clear Time (g_c+I1), s				27.1		7.8	6.5	12.8
Green Ext Time (p_c), s				13.2		1.0	0.2	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.4
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	0.5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	1360	10	0	590	40	0	0	40	0	0	20
Future Vol, veh/h	0	1360	10	0	590	40	0	0	40	0	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	12	12	12	12	12	12	12	12	12	12	12	12
Mvmt Flow	0	1388	10	0	602	41	0	0	41	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	699	-	-	301
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.34	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.02	-	-	3.42
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	310	0	0	666
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	310	-	-	666
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	18.4	10.6
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	310	-	-	-	-	666
HCM Lane V/C Ratio	0.132	-	-	-	-	0.031
HCM Control Delay (s/veh)	18.4	-	-	-	-	10.6
HCM Lane LOS	C	-	-	-	-	B
HCM 95th %tile Q(veh)	0.4	-	-	-	-	0.1



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	590	290	590	690	360	290	400	220	0	0	70	900
Future Volume (vph)	590	290	590	690	360	290	400	220	0	0	70	900
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0			4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00			1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00	0.99	1.00			1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85			1.00	1.00
Flt Protected	0.95		0.98	1.00	0.95	1.00	1.00	1.00			0.95	0.95
Satd. Flow (prot)	1451		4476	1467	1687	1776	1489	1509			1687	3273
Flt Permitted	0.95		0.68	1.00	0.95	1.00	1.00	1.00			0.95	0.95
Satd. Flow (perm)	1451		3133	1467	1687	1776	1489	1509			1687	3273
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	602	296	602	704	367	296	408	224	0	0	71	918
RTOR Reduction (vph)	0	0	0	144	0	0	0	168	0	0	0	0
Lane Group Flow (vph)	367	0	1133	560	367	296	408	56	0	0	71	918
Confl. Peds. (#/hr)				7	7							
Confl. Bikes (#/hr)				1			2					
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	Perm	Prot	Prot
Protected Phases	7	7	4		3	8					5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	26.0		60.0	36.0	20.0	30.0	30.0	30.0			26.0	26.0
Effective Green, g (s)	26.0		60.0	36.0	20.0	30.0	30.0	30.0			26.0	26.0
Actuated g/C Ratio	0.22		0.50	0.30	0.17	0.25	0.25	0.25			0.22	0.22
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	314		1857	440	281	444	372	377			365	709
v/s Ratio Prot	c0.25		0.13		c0.22	0.17					0.04	c0.28
v/s Ratio Perm			0.17	c0.38			0.27	0.04				
v/c Ratio	1.17		1.53dl	1.27	1.31	0.67	1.10	0.15			0.19	1.29
Uniform Delay, d1	47.0		21.6	42.0	50.0	40.5	45.0	35.1			38.4	47.0
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2	104.7		0.6	139.3	161.1	3.8	75.3	0.2			0.3	143.0
Delay (s)	151.7		22.2	181.3	211.1	44.3	120.3	35.2			38.7	190.0
Level of Service	F		C	F	F	D	F	D			D	F
Approach Delay (s/veh)			94.6			113.9						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	102.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	102.5%	ICU Level of Service	G
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	550	190	90	870
Future Volume (vph)	550	190	90	870
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.96		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4636		1687	4848
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4636		1687	4848
Peak-hour factor, PHF	0.98	0.98	0.98	0.98
Adj. Flow (vph)	561	194	92	888
RTOR Reduction (vph)	50	0	0	0
Lane Group Flow (vph)	705	0	92	888
Confl. Peds. (#/hr)		4		
Confl. Bikes (#/hr)				
Heavy Vehicles (%)	7%	7%	7%	7%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	37.0		11.0	22.0
Effective Green, g (s)	37.0		11.0	22.0
Actuated g/C Ratio	0.31		0.09	0.18
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	1429		154	888
v/s Ratio Prot	0.15		0.05	c0.18
v/s Ratio Perm				
v/c Ratio	0.49		0.60	1.00
Uniform Delay, d1	33.8		52.4	49.0
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	1.2		6.1	30.2
Delay (s)	35.1		58.5	79.2
Level of Service	D		E	E
Approach Delay (s/veh)	116.8			77.3
Approach LOS	F			E

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	360	780	80	130	760	70	110	990	400	90	610	100
Future Volume (veh/h)	360	780	80	130	760	70	110	990	400	90	610	100
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	367	796	82	133	776	0	112	1010	408	92	622	102
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	444	1292	133	162	1281	573	139	1329	617	116	1263	531
Arrive On Green	0.13	0.42	0.42	0.09	0.38	0.00	0.08	0.27	0.27	0.07	0.26	0.26
Sat Flow, veh/h	3312	3110	320	1707	3406	1524	1707	4893	1519	1707	4893	1497
Grp Volume(v), veh/h	367	436	442	133	776	0	112	1010	408	92	622	102
Grp Sat Flow(s),veh/h/ln	1656	1703	1728	1707	1703	1524	1707	1631	1519	1707	1631	1497
Q Serve(g_s), s	11.5	21.4	21.4	8.1	19.6	0.0	6.9	20.1	23.2	5.6	11.5	5.0
Cycle Q Clear(g_c), s	11.5	21.4	21.4	8.1	19.6	0.0	6.9	20.1	23.2	5.6	11.5	5.0
Prop In Lane	1.00		0.19	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	444	707	718	162	1281	573	139	1329	617	116	1263	531
V/C Ratio(X)	0.83	0.62	0.62	0.82	0.61	0.00	0.81	0.76	0.66	0.80	0.49	0.19
Avail Cap(c_a), veh/h	654	707	718	273	1281	573	241	1426	647	193	1288	539
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	24.4	24.4	47.3	26.8	0.0	48.0	35.5	25.7	48.9	33.5	23.9
Incr Delay (d2), s/veh	5.6	4.0	3.9	9.8	2.1	0.0	10.5	2.3	2.4	11.6	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	10.8	11.0	4.3	9.5	0.0	3.6	9.4	10.1	3.0	5.2	2.1
LnGrp Delay(d), s/veh	50.5	28.4	28.4	57.1	29.0	0.0	58.5	37.8	28.0	60.5	33.8	24.1
LnGrp LOS	D	C	C	E	C		E	D	C	E	C	C
Approach Vol, veh/h		1245			909			1530			816	
Approach Delay, s/veh		34.9			33.1			36.7			35.6	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.1	48.2	11.2	32.9	18.3	44.0	12.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	44.0	12.0	31.0	21.0	40.0	15.0	28.0
Max Q Clear Time (g_c+I1), s	10.1	23.4	7.6	25.2	13.5	21.6	8.9	13.5
Green Ext Time (p_c), s	0.2	5.3	0.1	3.7	0.8	4.9	0.1	3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	230	820	90	50	260	120	200	960	140	260	1140	220
Future Volume (veh/h)	230	820	90	50	260	120	200	960	140	260	1140	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	242	863	95	53	274	0	211	1011	147	274	1200	232
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	271	966	424	68	559	250	239	1277	553	303	1404	615
Arrive On Green	0.16	0.28	0.28	0.04	0.16	0.00	0.14	0.37	0.37	0.17	0.40	0.40
Sat Flow, veh/h	1740	3471	1525	1740	3471	1553	1740	3471	1504	1740	3471	1520
Grp Volume(v), veh/h	242	863	95	53	274	0	211	1011	147	274	1200	232
Grp Sat Flow(s),veh/h/ln	1740	1736	1525	1740	1736	1553	1740	1736	1504	1740	1736	1520
Q Serve(g_s), s	15.5	27.2	5.5	3.4	8.2	0.0	13.5	29.5	7.8	17.5	35.8	12.2
Cycle Q Clear(g_c), s	15.5	27.2	5.5	3.4	8.2	0.0	13.5	29.5	7.8	17.5	35.8	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	271	966	424	68	559	250	239	1277	553	303	1404	615
V/C Ratio(X)	0.89	0.89	0.22	0.78	0.49	0.00	0.88	0.79	0.27	0.90	0.85	0.38
Avail Cap(c_a), veh/h	321	1038	456	92	580	260	275	1277	553	352	1404	615
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.0	39.4	31.6	54.2	43.4	0.0	48.1	32.0	25.2	46.0	30.8	23.8
Incr Delay (d2), s/veh	22.9	9.6	0.3	25.8	0.7	0.0	24.3	5.1	1.2	23.6	6.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.2	14.2	2.3	2.1	4.0	0.0	8.1	15.1	3.4	10.4	18.3	5.4
LnGrp Delay(d), s/veh	69.9	49.0	31.9	79.9	44.1	0.0	72.4	37.1	26.3	69.6	37.6	25.5
LnGrp LOS	E	D	C	E	D		E	D	C	E	D	C
Approach Vol, veh/h		1200			327			1369			1706	
Approach Delay, s/veh		51.9			49.9			41.4			41.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.8	45.8	8.4	35.6	19.6	50.0	21.7	22.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	41.0	6.0	34.0	18.0	46.0	21.0	19.0
Max Q Clear Time (g_c+I1), s	19.5	31.5	5.4	29.2	15.5	37.8	17.5	10.2
Green Ext Time (p_c), s	0.3	4.8	0.0	2.5	0.1	5.2	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.6
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	108.9

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Vol, veh/h	850	380	340	0	40	90
Future Vol, veh/h	850	380	340	0	40	90
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	150	-	-	-	200	0
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	924	413	370	0	43	98

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	370	0	-	0	2631	-
Stage 1	-	-	-	-	370	-
Stage 2	-	-	-	-	2261	-
Critical Hdwy	4.15	-	-	-	6.45	-
Critical Hdwy Stg 1	-	-	-	-	5.45	-
Critical Hdwy Stg 2	-	-	-	-	5.45	-
Follow-up Hdwy	2.245	-	-	-	3.545	-
Pot Cap-1 Maneuver	1172	-	-	-	~ 26	0
Stage 1	-	-	-	-	692	0
Stage 2	-	-	-	-	83	0
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1172	-	-	-	~ 6	-
Mov Cap-2 Maneuver	-	-	-	-	~ 6	-
Stage 1	-	-	-	-	147	-
Stage 2	-	-	-	-	83	-

Approach	EB	WB	SW
HCM Control Delay, s/v	12.7	0	$ 3993.3
HCM LOS			F

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SWLn1	SWLn2
Capacity (veh/h)	1172	-	-	-	6	-
HCM Lane V/C Ratio	0.788	-	-	-	7.246	-
HCM Control Delay (s/veh)	18.4	-	-	-	$ 3993.3	0
HCM Lane LOS	C	-	-	-	F	A
HCM 95th %tile Q(veh)	8.7	-	-	-	7	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	180	40	150	170	60	980	50	270	1170	90
Future Volume (veh/h)	210	430	180	40	150	170	60	980	50	270	1170	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	443	186	41	155	175	62	1010	0	278	1206	93
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	356	450	189	111	229	258	176	1231	551	311	1517	659
Arrive On Green	0.10	0.37	0.37	0.02	0.29	0.29	0.03	0.35	0.00	0.12	0.44	0.44
Sat Flow, veh/h	1740	1215	510	1740	776	876	1740	3471	1553	1740	3471	1508
Grp Volume(v), veh/h	216	0	629	41	0	330	62	1010	0	278	1206	93
Grp Sat Flow(s),veh/h/ln	1740	0	1726	1740	0	1652	1740	1736	1553	1740	1736	1508
Q Serve(g_s), s	9.9	0.0	43.0	2.0	0.0	21.0	2.7	31.5	0.0	11.6	35.7	4.4
Cycle Q Clear(g_c), s	9.9	0.0	43.0	2.0	0.0	21.0	2.7	31.5	0.0	11.6	35.7	4.4
Prop In Lane	1.00		0.30	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	356	0	638	111	0	487	176	1231	551	311	1517	659
V/C Ratio(X)	0.61	0.00	0.99	0.37	0.00	0.68	0.35	0.82	0.00	0.89	0.79	0.14
Avail Cap(c_a), veh/h	358	0	638	126	0	500	176	1231	551	344	1517	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.3	0.0	37.2	33.3	0.0	37.0	26.4	34.9	0.0	25.9	28.9	20.1
Incr Delay (d2), s/veh	2.9	0.0	31.8	2.1	0.0	3.6	1.2	6.2	0.0	22.9	4.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	26.1	1.0	0.0	10.0	1.3	16.1	0.0	7.5	18.0	1.9
LnGrp Delay(d), s/veh	29.2	0.0	69.0	35.3	0.0	40.5	27.6	41.1	0.0	48.8	33.3	20.5
LnGrp LOS	C		E	D		D	C	D		D	C	C
Approach Vol, veh/h		845			371			1072			1577	
Approach Delay, s/veh		58.8			40.0			40.3			35.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.8	46.2	7.0	48.0	8.0	56.0	15.9	39.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	40.0	4.0	44.0	4.0	52.0	12.0	36.0
Max Q Clear Time (g_c+I1), s	13.6	33.5	4.0	45.0	4.7	37.7	11.9	23.0
Green Ext Time (p_c), s	0.2	3.5	0.0	0.0	0.0	7.5	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	3.7

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	740	50	50	210	60	120
Future Vol, veh/h	740	50	50	210	60	120
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	-	-	0	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	787	53	53	223	64	128

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	840	0	1116	788
Stage 1	-	-	-	-	787	-
Stage 2	-	-	-	-	329	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	770	-	224	382
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	716	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	770	-	206	382
Mov Cap-2 Maneuver	-	-	-	-	206	-
Stage 1	-	-	-	-	438	-
Stage 2	-	-	-	-	659	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	1.9	22.8
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	206	382	-	-	770	-
HCM Lane V/C Ratio	0.31	0.334	-	-	0.069	-
HCM Control Delay (s/veh)	30.1	19.1	-	-	10	0
HCM Lane LOS	D	C	-	-	B	A
HCM 95th %tile Q(veh)	1.3	1.4	-	-	0.2	-

Intersection	
Int Delay, s/veh	1.9

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	880	40	10	260	60	20
Future Vol, veh/h	880	40	10	260	60	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	25	200	-	0	25
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	10	10	10	10	10	10
Mvmt Flow	917	42	10	271	63	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	959	0	1208	917
Stage 1	-	-	-	-	917	-
Stage 2	-	-	-	-	291	-
Critical Hdwy	-	-	4.2	-	6.5	6.3
Critical Hdwy Stg 1	-	-	-	-	5.5	-
Critical Hdwy Stg 2	-	-	-	-	5.5	-
Follow-up Hdwy	-	-	2.29	-	3.59	3.39
Pot Cap-1 Maneuver	-	-	686	-	195	319
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	741	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	686	-	192	319
Mov Cap-2 Maneuver	-	-	-	-	192	-
Stage 1	-	-	-	-	377	-
Stage 2	-	-	-	-	730	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.4	28.6
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	192	319	-	-	686	-
HCM Lane V/C Ratio	0.326	0.065	-	-	0.015	-
HCM Control Delay (s/veh)	32.5	17.1	-	-	10.3	-
HCM Lane LOS	D	C	-	-	B	-
HCM 95th %tile Q(veh)	1.3	0.2	-	-	0	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	830	120	90	270	50	70
Future Volume (veh/h)	830	120	90	270	50	70
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	874	126	95	284	53	74
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	1083	921	227	1083	442	395
Arrive On Green	0.62	0.62	0.62	0.62	0.27	0.27
Sat Flow, veh/h	1743	1482	525	1743	1660	1482
Grp Volume(v), veh/h	874	126	95	284	53	74
Grp Sat Flow(s),veh/h/ln	1743	1482	525	1743	1660	1482
Q Serve(g_s), s	27.2	2.5	12.0	5.3	1.7	2.7
Cycle Q Clear(g_c), s	27.2	2.5	39.1	5.3	1.7	2.7
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1083	921	227	1083	442	395
V/C Ratio(X)	0.81	0.14	0.42	0.26	0.12	0.19
Avail Cap(c_a), veh/h	2274	1933	586	2274	442	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	10.3	5.6	25.1	6.1	19.8	20.2
Incr Delay (d2), s/veh	1.5	0.1	1.2	0.1	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.3	1.0	1.8	2.6	0.8	1.2
LnGrp Delay(d), s/veh	11.7	5.7	26.3	6.2	20.4	21.2
LnGrp LOS	B	A	C	A	C	C
Approach Vol, veh/h	1000			379	127	
Approach Delay, s/veh	11.0			11.3	20.9	
Approach LOS	B			B	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		23.0		48.3				48.3
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		19.0		93.0				93.0
Max Q Clear Time (g_c+I1), s		4.7		29.2				41.1
Green Ext Time (p_c), s		0.3		9.0				3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.9
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	43.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	910	10	10	240	150	350
Future Vol, veh/h	910	10	10	240	150	350
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	50	100	-	0	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	8	8	8	8	8	8
Mvmt Flow	968	11	11	255	160	372

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	979	0	1245	968
Stage 1	-	-	-	-	968	-
Stage 2	-	-	-	-	277	-
Critical Hdwy	-	-	4.18	-	6.48	6.28
Critical Hdwy Stg 1	-	-	-	-	5.48	-
Critical Hdwy Stg 2	-	-	-	-	5.48	-
Follow-up Hdwy	-	-	2.272	-	3.572	3.372
Pot Cap-1 Maneuver	-	-	682	-	187	~ 300
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	756	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	682	-	184	~ 300
Mov Cap-2 Maneuver	-	-	-	-	184	-
Stage 1	-	-	-	-	359	-
Stage 2	-	-	-	-	744	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0.4	144.8
HCM LOS			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	184	300	-	-	682	-
HCM Lane V/C Ratio	0.867	1.241	-	-	0.016	-
HCM Control Delay (s/veh)	87	169.5	-	-	10.4	-
HCM Lane LOS	F	F	-	-	B	-
HCM 95th %tile Q(veh)	6.4	17.2	-	-	0	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	600	90	110	340	50	40	910	120	190	1100	70
Future Volume (veh/h)	160	600	90	110	340	50	40	910	120	190	1100	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	167	625	94	115	354	52	42	948	125	198	1146	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	300	755	112	211	644	92	53	1460	192	229	1902	121
Arrive On Green	0.10	0.17	0.17	0.07	0.15	0.15	0.03	0.48	0.48	0.13	0.58	0.58
Sat Flow, veh/h	1723	4324	641	1723	4357	623	1723	3054	403	1723	3279	209
Grp Volume(v), veh/h	167	474	245	115	265	141	42	534	539	198	600	619
Grp Sat Flow(s),veh/h/ln	1723	1647	1671	1723	1647	1686	1723	1719	1737	1723	1719	1768
Q Serve(g_s), s	9.0	15.5	15.9	6.3	8.4	8.7	2.7	26.3	26.3	12.6	25.3	25.3
Cycle Q Clear(g_c), s	9.0	15.5	15.9	6.3	8.4	8.7	2.7	26.3	26.3	12.6	25.3	25.3
Prop In Lane	1.00		0.38	1.00		0.37	1.00		0.23	1.00		0.12
Lane Grp Cap(c), veh/h	300	575	292	211	487	249	53	822	831	229	997	1026
V/C Ratio(X)	0.56	0.82	0.84	0.54	0.54	0.56	0.79	0.65	0.65	0.87	0.60	0.60
Avail Cap(c_a), veh/h	361	647	328	241	500	256	108	822	831	323	997	1026
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	44.6	44.7	37.4	44.2	44.4	54.0	22.1	22.1	47.6	15.2	15.2
Incr Delay (d2), s/veh	1.6	7.8	16.1	2.2	1.2	2.7	22.6	4.0	3.9	15.9	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	7.7	8.7	3.1	3.9	4.3	1.6	13.4	13.5	7.0	12.6	12.9
LnGrp Delay(d), s/veh	36.5	52.4	60.8	39.6	45.4	47.1	76.5	26.1	26.0	63.5	17.9	17.8
LnGrp LOS	D	D	E	D	D	D	E	C	C	E	B	B
Approach Vol, veh/h		886			521			1115			1417	
Approach Delay, s/veh		51.7			44.6			28.0			24.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	57.6	12.1	23.6	7.4	69.0	15.0	20.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	51.0	10.0	22.0	7.0	65.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.6	28.3	8.3	17.9	4.7	27.3	11.0	10.7
Green Ext Time (p_c), s	0.3	7.4	0.0	1.6	0.0	10.3	0.1	1.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	210	10	720	260	0	730
Future Volume (veh/h)	210	10	720	260	0	730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	0	1827
Adj Flow Rate, veh/h	226	11	774	0	0	785
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	0	4
Cap, veh/h	317	146	2856	1423	0	2856
Arrive On Green	0.09	0.09	0.82	0.00	0.00	0.82
Sat Flow, veh/h	3375	1553	3563	1553	0	3654
Grp Volume(v), veh/h	226	11	774	0	0	785
Grp Sat Flow(s),veh/h/ln	1688	1553	1736	1553	0	1736
Q Serve(g_s), s	6.2	0.6	4.9	0.0	0.0	5.0
Cycle Q Clear(g_c), s	6.2	0.6	4.9	0.0	0.0	5.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	317	146	2856	1423	0	2856
V/C Ratio(X)	0.71	0.08	0.27	0.00	0.00	0.27
Avail Cap(c_a), veh/h	1160	534	2856	1423	0	2856
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	42.2	39.7	1.9	0.0	0.0	1.9
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.3	2.4	0.0	0.0	2.4
LnGrp Delay(d), s/veh	45.2	39.9	2.2	0.0	0.0	2.2
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	237		774			785
Approach Delay, s/veh	45.0		2.2			2.2
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		13.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		6.9				7.0		8.2
Green Ext Time (p_c), s		6.0				6.1		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.8
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	890	70	600	470	60	90	20	200	40	80	10
Future Volume (veh/h)	30	890	70	600	470	60	90	20	200	40	80	10
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1900	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	927	73	625	490	62	94	21	208	42	83	10
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	40	1309	405	662	2777	345	216	48	232	132	121	15
Arrive On Green	0.02	0.26	0.26	0.37	0.61	0.61	0.15	0.15	0.15	0.07	0.07	0.07
Sat Flow, veh/h	1774	5085	1574	1774	4567	567	1463	327	1570	1774	1628	196
Grp Volume(v), veh/h	31	927	73	625	361	191	115	0	208	42	0	93
Grp Sat Flow(s),veh/h/ln	1774	1695	1574	1774	1695	1744	1790	0	1570	1774	0	1824
Q Serve(g_s), s	1.9	18.0	3.9	37.0	5.1	5.2	6.4	0.0	14.1	2.4	0.0	5.4
Cycle Q Clear(g_c), s	1.9	18.0	3.9	37.0	5.1	5.2	6.4	0.0	14.1	2.4	0.0	5.4
Prop In Lane	1.00		1.00	1.00		0.33	0.82		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	40	1309	405	662	2062	1061	264	0	232	132	0	136
V/C Ratio(X)	0.78	0.71	0.18	0.94	0.18	0.18	0.44	0.00	0.90	0.32	0.00	0.68
Avail Cap(c_a), veh/h	98	1309	405	768	2062	1061	264	0	232	262	0	269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	52.8	36.6	31.4	32.9	9.3	9.4	42.1	0.0	45.5	47.6	0.0	49.0
Incr Delay (d2), s/veh	27.3	3.3	1.0	18.6	0.2	0.4	1.1	0.0	33.4	1.4	0.0	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.8	1.8	21.5	2.4	2.6	3.2	0.0	8.2	1.2	0.0	2.9
LnGrp Delay(d), s/veh	80.1	39.9	32.4	51.5	9.5	9.7	43.3	0.0	78.8	49.0	0.0	54.9
LnGrp LOS	F	D	C	D	A	A	D		E	D		D
Approach Vol, veh/h		1031			1177			323			135	
Approach Delay, s/veh		40.5			31.9			66.2			53.0	
Approach LOS		D			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	70.0		20.0	44.5	31.9		12.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	66.0		16.0	47.0	25.0		16.0
Max Q Clear Time (g_c+I1), s	3.9	7.2		16.1	39.0	20.0		7.4
Green Ext Time (p_c), s	0.0	4.1		0.0	1.5	2.6		0.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		40.5
HCM 2010 LOS		D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	640	300	320	440	380	10	900	360	120	970	60
Future Volume (veh/h)	40	640	300	320	440	380	10	900	360	120	970	60
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	42	667	312	333	458	396	10	938	375	125	1010	62
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	53	1055	466	400	1361	734	39	1135	514	153	1609	707
Arrive On Green	0.03	0.30	0.30	0.12	0.39	0.39	0.34	0.34	0.34	0.09	0.46	0.46
Sat Flow, veh/h	1740	3471	1535	3375	3471	1524	12	3362	1524	1740	3471	1525
Grp Volume(v), veh/h	42	667	312	333	458	396	505	443	375	125	1010	62
Grp Sat Flow(s),veh/h/ln	1740	1736	1535	1688	1736	1524	1795	1579	1524	1740	1736	1525
Q Serve(g_s), s	2.5	17.4	18.7	10.2	9.7	19.2	4.3	27.2	22.8	7.4	23.2	2.4
Cycle Q Clear(g_c), s	2.5	17.4	18.7	10.2	9.7	19.2	26.9	27.2	22.8	7.4	23.2	2.4
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	1055	466	400	1361	734	641	533	514	153	1609	707
V/C Ratio(X)	0.79	0.63	0.67	0.83	0.34	0.54	0.79	0.83	0.73	0.82	0.63	0.09
Avail Cap(c_a), veh/h	99	1055	466	481	1361	734	780	660	637	215	2011	884
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	31.6	32.0	45.4	22.4	19.2	32.0	32.1	30.6	47.2	21.4	15.8
Incr Delay (d2), s/veh	22.6	2.9	7.4	10.2	0.7	2.8	4.5	7.3	3.3	15.2	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	8.8	8.8	5.3	4.8	8.6	14.3	12.9	10.0	4.2	11.2	1.0
LnGrp Delay(d), s/veh	73.4	34.5	39.5	55.5	23.1	22.1	36.4	39.4	33.9	62.3	21.8	15.8
LnGrp LOS	E	C	D	E	C	C	D	D	C	E	C	B
Approach Vol, veh/h		1021			1187			1323			1197	
Approach Delay, s/veh		37.6			31.8			36.7			25.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	7.2	45.3	13.3	39.5	16.5	36.0		52.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	41.0	13.0	44.0	15.0	32.0		61.0
Max Q Clear Time (g_c+I1), s	4.5	21.2	9.4	29.2	12.2	20.7		25.2
Green Ext Time (p_c), s	0.0	4.1	0.1	6.4	0.3	4.0		8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.9
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	910	270	390	530	500	30
Future Volume (vph)	910	270	390	530	500	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3505	1568	1752	3505	3388	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3505	1568	1752	3505	3388	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	958	284	411	558	526	32
RTOR Reduction (vph)	0	78	0	0	4	0
Lane Group Flow (vph)	958	206	411	558	554	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	50.9	74.1	32.2	87.1	23.2	
Effective Green, g (s)	50.9	74.1	32.2	87.1	23.2	
Actuated g/C Ratio	0.43	0.63	0.27	0.74	0.20	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1508	1035	476	2580	664	
v/s Ratio Prot	c0.27	0.04	c0.23	0.16	c0.16	
v/s Ratio Perm		0.09				
v/c Ratio	0.64	0.20	0.86	0.22	0.83	
Uniform Delay, d1	26.4	9.4	41.0	4.9	45.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.1	0.1	14.9	0.2	8.9	
Delay (s)	28.5	9.5	55.9	5.1	54.6	
Level of Service	C	A	E	A	D	
Approach Delay (s/veh)	24.1			26.6	54.6	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	118.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	670	320	190	840	600	450
Future Volume (veh/h)	670	320	190	840	600	450
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	698	0	198	875	625	469
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1076	495	337	2103	2103	941
Arrive On Green	0.32	0.00	0.60	0.60	0.60	0.60
Sat Flow, veh/h	3408	1568	508	3597	3597	1568
Grp Volume(v), veh/h	698	0	198	875	625	469
Grp Sat Flow(s),veh/h/ln	1704	1568	508	1752	1752	1568
Q Serve(g_s), s	16.7	0.0	29.5	12.6	8.2	16.2
Cycle Q Clear(g_c), s	16.7	0.0	37.7	12.6	8.2	16.2
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1076	495	337	2103	2103	941
V/C Ratio(X)	0.65	0.00	0.59	0.42	0.30	0.50
Avail Cap(c_a), veh/h	1076	495	337	2103	2103	941
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.0	0.0	18.4	10.1	9.2	10.8
Incr Delay (d2), s/veh	3.0	0.0	2.7	0.1	0.4	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	4.4	6.1	4.1	7.4
LnGrp Delay(d), s/veh	31.0	0.0	21.1	10.3	9.6	12.7
LnGrp LOS	C		C	B	A	B
Approach Vol, veh/h	698			1073	1094	
Approach Delay, s/veh	31.0			12.3	10.9	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		34.0		61.0				61.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		30.0		57.0				57.0
Max Q Clear Time (g_c+I1), s		18.7		39.7				18.2
Green Ext Time (p_c), s		2.1		7.5				6.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	162.8

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	200	0	10	1440	0	0	810	10	0	10
Future Vol, veh/h	200	0	10	1440	0	0	810	10	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	204	0	10	1469	0	0	827	10	0	10

Major/Minor	Minor1			Major1			Major2			
Conflicting Flow All	1903	735	837	0	-	-	-	0	1587	419
Stage 1	1489	-	-	-	-	-	-	-	832	-
Stage 2	414	-	-	-	-	-	-	-	755	-
Critical Hdwy	7.56	6.96	4.16	-	-	-	-	-	7.56	6.96
Critical Hdwy Stg 1	6.56	-	-	-	-	-	-	-	6.56	-
Critical Hdwy Stg 2	6.56	-	-	-	-	-	-	-	6.56	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-	-	-	3.53	3.33
Pot Cap-1 Maneuver	~ 41	360	786	-	0	0	-	-	72	580
Stage 1	~ 129	-	-	-	0	0	-	-	328	-
Stage 2	584	-	-	-	0	0	-	-	365	-
Platoon blocked, %				-			-	-		
Mov Cap-1 Maneuver	~ 38	360	786	-	-	-	-	-	18	580
Mov Cap-2 Maneuver	~ 38	-	-	-	-	-	-	-	18	-
Stage 1	~ 120	-	-	-	-	-	-	-	305	-
Stage 2	574	-	-	-	-	-	-	-	89	-

Approach	NB	SE	NW	SW
HCM Control Delay, s/v	$ 968.1	0.4	0	11.3
HCM LOS	F			B

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SETSWLn1
Capacity (veh/h)	38	360	-	-	786	- 580
HCM Lane V/C Ratio	5.371	0.737	-	-	0.013	- 0.018
HCM Control Delay (s/veh)	$ 2176.7	38.4	-	-	9.6	0.3 11.3
HCM Lane LOS	F	E	-	-	A	A B
HCM 95th %tile Q(veh)	24	5.7	-	-	0	- 0.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	6.8

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	70	120	40	1690	740	40
Future Vol, veh/h	70	120	40	1690	740	40
Conflicting Peds, #/hr	0	0	15	0	0	15
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	73	125	42	1760	771	42

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1771	422	828	0	-	0
Stage 1	807	-	-	-	-	-
Stage 2	964	-	-	-	-	-
Critical Hdwy	6.86	6.96	4.16	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	2.23	-	-	-
Pot Cap-1 Maneuver	74	577	793	-	-	-
Stage 1	397	-	-	-	-	-
Stage 2	328	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 68	570	783	-	-	-
Mov Cap-2 Maneuver	~ 68	-	-	-	-	-
Stage 1	371	-	-	-	-	-
Stage 2	324	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	94.8	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	783	-	68	570
HCM Lane V/C Ratio	-	-	0.053	-	1.072	0.219
HCM Control Delay (s/veh)	-	-	9.9	-	234.9	13.1
HCM Lane LOS	-	-	A	-	F	B
HCM 95th %tile Q(veh)	-	-	0.2	-	5.5	0.8

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Future Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1706	1706	1706	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	147	1242	526	137	979	242	189	1032	0	316	453	32
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	1243	690	132	1238	742	218	1081	483	341	942	66
Arrive On Green	0.10	0.38	0.38	0.08	0.35	0.35	0.12	0.31	0.00	0.10	0.28	0.28
Sat Flow, veh/h	1625	3242	1422	1757	3505	1550	1757	3505	1568	3408	3316	233
Grp Volume(v), veh/h	147	1242	526	137	979	242	189	1032	0	316	239	246
Grp Sat Flow(s),veh/h/ln	1625	1621	1422	1757	1752	1550	1757	1752	1568	1704	1752	1797
Q Serve(g_s), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Cycle Q Clear(g_c), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	171	1243	690	132	1238	742	218	1081	483	341	498	511
V/C Ratio(X)	0.86	1.00	0.76	1.04	0.79	0.33	0.87	0.95	0.00	0.93	0.48	0.48
Avail Cap(c_a), veh/h	176	1243	690	132	1238	742	307	1081	483	341	498	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	37.0	25.4	55.5	34.8	19.4	51.6	40.7	0.0	53.6	35.6	35.6
Incr Delay (d2), s/veh	32.1	25.4	5.0	89.4	3.5	0.3	16.6	18.5	0.0	30.7	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	24.9	15.1	7.6	15.2	5.0	7.1	19.5	0.0	6.6	7.0	7.2
LnGrp Delay(d), s/veh	85.0	62.4	30.4	145.3	38.4	19.7	68.2	59.2	0.0	84.3	38.9	38.9
LnGrp LOS	F	E	C	F	D	B	E	E		F	D	D
Approach Vol, veh/h		1915			1358			1221			801	
Approach Delay, s/veh		55.3			45.8			60.6			56.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	38.1	13.0	50.0	16.0	41.0	16.6	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	28.0	9.0	46.0	12.0	37.0	13.0	42.0
Max Q Clear Time (g_c+I1), s	14.7	15.6	11.0	48.0	13.0	36.6	12.7	32.1
Green Ext Time (p_c), s	0.3	2.3	0.0	0.0	0.0	0.2	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	40	690	20	30	1270
Future Vol, veh/h	30	40	690	20	30	1270
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	41	711	21	31	1309

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1431	359	0	0	735	0
Stage 1	714	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	124	635	-	-	860	-
Stage 1	444	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	119	633	-	-	858	-
Mov Cap-2 Maneuver	119	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	426	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	25.9	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	119	633	858	-
HCM Lane V/C Ratio	-	-	0.26	0.065	0.036	-
HCM Control Delay (s/veh)	-	-	45.6	11.1	9.4	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.2	0.1	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	110	600	50	400	920
Future Volume (veh/h)	80	110	600	50	400	920
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	82	113	619	52	412	948
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	158	141	2912	1297	664	2912
Arrive On Green	0.09	0.09	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1740	1553	3563	1546	748	3563
Grp Volume(v), veh/h	82	113	619	52	412	948
Grp Sat Flow(s),veh/h/ln	1740	1553	1736	1546	748	1736
Q Serve(g_s), s	5.1	8.2	4.0	0.6	27.5	6.9
Cycle Q Clear(g_c), s	5.1	8.2	4.0	0.6	31.5	6.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	158	141	2912	1297	664	2912
V/C Ratio(X)	0.52	0.80	0.21	0.04	0.62	0.33
Avail Cap(c_a), veh/h	243	217	2912	1297	664	2912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	51.0	1.8	1.5	4.9	2.0
Incr Delay (d2), s/veh	2.6	11.2	0.2	0.1	4.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.0	2.0	0.3	6.3	3.4
LnGrp Delay(d), s/veh	52.2	62.2	2.0	1.6	9.2	2.3
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	195		671			1360
Approach Delay, s/veh	58.0		1.9			4.4
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		100.0				100.0		14.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		96.0				96.0		16.0
Max Q Clear Time (g_c+I1), s		6.0				33.5		10.2
Green Ext Time (p_c), s		4.7				14.2		0.3

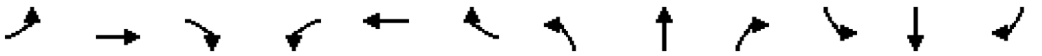
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.4
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	16.7
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	500	50	40	50	30
Future Vol, veh/h	40	500	50	40	50	30
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	47	588	59	47	59	35
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	18.8	10.7	9.5
HCM LOS	C	B	A

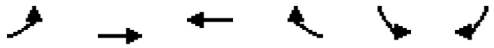
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	56%	100%	0%	0%	0%
Vol Thru, %	44%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	40	500	50	30
LT Vol	50	40	0	0	0
Through Vol	40	0	0	50	0
RT Vol	0	0	500	0	30
Lane Flow Rate	106	47	588	59	35
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.182	0.076	0.747	0.103	0.055
Departure Headway (Hd)	6.198	5.778	4.573	6.331	5.621
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	574	619	788	561	630
Service Time	4.291	3.523	2.318	4.131	3.42
HCM Lane V/C Ratio	0.185	0.076	0.746	0.105	0.056
HCM Control Delay, s/veh	10.7	9	19.6	9.9	8.8
HCM Lane LOS	B	A	C	A	A
HCM 95th-tile Q	0.7	0.2	6.9	0.3	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Future Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.93			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	1752	5029		1752	4609			3493	1568	1595	3242	1538
Flt Permitted	0.95	1.00		0.95	1.00			0.93	1.00	0.95	0.62	1.00
Satd. Flow (perm)	1752	5029		1752	4609			3271	1568	1595	2089	1538
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	367	1102	10	745	643	612	20	296	867	153	31	10
RTOR Reduction (vph)	0	1	0	0	140	0	0	0	501	0	0	7
Lane Group Flow (vph)	367	1111	0	745	1115	0	0	316	366	76	108	3
Confl. Peds. (#/hr)	6					6	3					3
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Effective Green, g (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Actuated g/C Ratio	0.23	0.19		0.39	0.35			0.23	0.23	0.05	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	407	963		686	1616			763	365	79	719	487
v/s Ratio Prot	0.21	c0.22		c0.43	0.24					c0.05	0.01	
v/s Ratio Perm								0.10	c0.23		0.04	0.00
v/c Ratio	0.90	1.15		1.09	0.90dr			0.41	1.00	0.96	0.93dl	0.01
Uniform Delay, d1	44.7	48.5		36.5	33.4			39.0	46.0	56.9	29.4	28.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	22.6	81.2		60.1	1.3			1.7	47.5	87.9	0.1	0.0
Delay (s)	67.3	129.7		96.6	34.7			40.7	93.5	144.8	29.5	28.1
Level of Service	E	F		F	C			D	F	F	C	C
Approach Delay (s/veh)		114.2			57.7			79.4			74.6	
Approach LOS		F			E			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	80.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	1360	1130	40	320	190
Future Volume (veh/h)	50	1360	1130	40	320	190
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1827	1827	1827	1827
Adj Flow Rate, veh/h	53	1447	1202	43	340	202
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	190	1734	1875	838	664	593
Arrive On Green	0.54	0.54	0.54	0.54	0.38	0.38
Sat Flow, veh/h	404	3295	3563	1551	1740	1553
Grp Volume(v), veh/h	53	1447	1202	43	340	202
Grp Sat Flow(s),veh/h/ln	404	1605	1736	1551	1740	1553
Q Serve(g_s), s	10.9	38.6	24.9	1.3	15.4	9.5
Cycle Q Clear(g_c), s	35.8	38.6	24.9	1.3	15.4	9.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	190	1734	1875	838	664	593
V/C Ratio(X)	0.28	0.83	0.64	0.05	0.51	0.34
Avail Cap(c_a), veh/h	260	2293	2479	1108	664	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	19.7	16.5	11.1	24.3	22.5
Incr Delay (d2), s/veh	0.8	2.1	0.4	0.0	2.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	17.4	11.9	0.6	7.9	4.3
LnGrp Delay(d), s/veh	29.9	21.8	16.9	11.1	27.1	24.0
LnGrp LOS	C	C	B	B	C	C
Approach Vol, veh/h		1500	1245		542	
Approach Delay, s/veh		22.1	16.7		26.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.2		43.0		59.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				73.0		39.0		73.0
Max Q Clear Time (g_c+I1), s				40.6		17.4		26.9
Green Ext Time (p_c), s				14.7		1.8		11.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Future Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	266	1394	170	170	787	117	43	1074	170	191	915	287
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	1413	172	177	1087	160	55	1209	535	207	1512	661
Arrive On Green	0.17	0.31	0.31	0.10	0.24	0.24	0.03	0.34	0.34	0.12	0.43	0.43
Sat Flow, veh/h	1774	4583	559	1774	4472	660	1774	3539	1565	1774	3539	1548
Grp Volume(v), veh/h	266	1031	533	170	595	309	43	1074	170	191	915	287
Grp Sat Flow(s),veh/h/ln	1774	1695	1752	1774	1695	1742	1774	1770	1565	1774	1770	1548
Q Serve(g_s), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Cycle Q Clear(g_c), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Prop In Lane	1.00		0.32	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	1045	540	177	824	423	55	1209	535	207	1512	661
V/C Ratio(X)	0.91	0.99	0.99	0.96	0.72	0.73	0.78	0.89	0.32	0.92	0.61	0.43
Avail Cap(c_a), veh/h	325	1045	540	177	824	423	103	1209	535	207	1512	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	41.2	41.3	53.8	41.7	41.8	57.7	37.3	29.2	52.5	26.5	24.2
Incr Delay (d2), s/veh	26.2	24.4	35.2	55.2	3.1	6.3	20.7	9.9	1.6	41.6	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	20.4	22.7	8.3	9.5	10.2	1.7	18.4	4.4	8.7	12.1	7.1
LnGrp Delay(d), s/veh	75.4	65.7	76.4	109.0	44.9	48.1	78.4	47.2	30.7	94.1	28.4	26.2
LnGrp LOS	E	E	E	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1830			1074			1287			1393	
Approach Delay, s/veh		70.2			55.9			46.1			36.9	
Approach LOS		E			E			D			D	

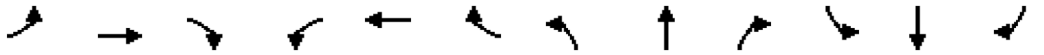
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	45.0	16.0	41.0	7.7	55.3	23.8	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	41.0	12.0	37.0	7.0	48.0	22.0	27.0
Max Q Clear Time (g_c+I1), s	14.8	36.4	13.4	38.3	4.9	26.0	19.7	21.6
Green Ext Time (p_c), s	0.0	2.8	0.0	0.0	0.0	7.2	0.2	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Future Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	216	1340	175	227	845	134	93	938	124	134	1072	103
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	1360	178	237	1298	204	103	1098	145	148	1327	795
Arrive On Green	0.14	0.30	0.30	0.13	0.30	0.30	0.06	0.35	0.35	0.08	0.38	0.38
Sat Flow, veh/h	1774	4535	592	1774	4397	692	1774	3137	415	1774	3539	1537
Grp Volume(v), veh/h	216	1002	513	227	650	329	93	529	533	134	1072	103
Grp Sat Flow(s),veh/h/ln	1774	1695	1736	1774	1695	1699	1774	1770	1782	1774	1770	1537
Q Serve(g_s), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Cycle Q Clear(g_c), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Prop In Lane	1.00		0.34	1.00		0.41	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	245	1017	521	237	1001	502	103	619	624	148	1327	795
V/C Ratio(X)	0.88	0.99	0.99	0.96	0.65	0.66	0.90	0.85	0.85	0.91	0.81	0.13
Avail Cap(c_a), veh/h	310	1017	521	237	1001	502	103	619	624	148	1327	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	41.7	41.7	51.7	36.9	37.0	56.1	36.2	36.2	54.5	33.6	15.2
Incr Delay (d2), s/veh	20.7	24.5	35.5	47.1	1.5	3.1	57.4	14.0	14.0	47.4	5.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	19.9	22.0	10.6	9.6	9.9	4.7	18.6	18.7	6.3	16.9	1.9
LnGrp Delay(d), s/veh	71.4	66.2	77.2	98.8	38.4	40.0	113.6	50.2	50.1	101.9	39.0	15.6
LnGrp LOS	E	E	E	F	D	D	F	D	D	F	D	B
Approach Vol, veh/h		1731			1206			1155			1309	
Approach Delay, s/veh		70.1			50.2			55.3			43.6	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	46.0	20.0	40.0	11.0	49.0	20.6	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	42.0	16.0	36.0	7.0	45.0	21.0	31.0
Max Q Clear Time (g_c+I1), s	11.0	35.3	17.3	37.2	8.3	34.6	16.3	22.3
Green Ext Time (p_c), s	0.0	3.5	0.0	0.0	0.0	5.3	0.2	3.9

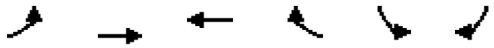
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.1
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Future Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	153	1367	500	806	918	184	235	224	163	133	510	153
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1034	374	591	2171	433	178	649	274	303	486	145
Arrive On Green	0.10	0.28	0.28	0.33	0.51	0.51	0.07	0.18	0.18	0.07	0.18	0.18
Sat Flow, veh/h	1774	3649	1320	1774	4221	842	1774	3539	1494	1774	2649	789
Grp Volume(v), veh/h	153	1269	598	806	736	366	235	224	163	133	339	324
Grp Sat Flow(s),veh/h/ln	1774	1695	1578	1774	1695	1672	1774	1770	1494	1774	1770	1669
Q Serve(g_s), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Cycle Q Clear(g_c), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Prop In Lane	1.00		0.84	1.00		0.50	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	181	961	447	591	1744	860	178	649	274	303	324	306
V/C Ratio(X)	0.84	1.32	1.34	1.36	0.42	0.42	1.32	0.35	0.60	0.44	1.05	1.06
Avail Cap(c_a), veh/h	266	961	447	591	1744	860	178	649	274	303	324	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	43.0	43.0	40.0	18.1	18.1	42.8	42.7	44.9	36.7	49.0	49.0
Incr Delay (d2), s/veh	14.8	151.9	166.3	174.1	0.2	0.3	177.0	1.5	9.2	1.0	62.6	67.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	36.1	35.4	48.1	7.6	7.6	8.8	3.4	5.6	3.6	16.4	15.8
LnGrp Delay(d), s/veh	67.7	194.9	209.3	214.1	18.2	18.4	219.8	44.2	54.1	37.7	111.6	116.4
LnGrp LOS	E	F	F	F	B	B	F	D	D	D	F	F
Approach Vol, veh/h		2020			1908			622			796	
Approach Delay, s/veh		189.5			101.0			113.1			101.2	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	26.0	44.0	38.0	12.0	26.0	16.3	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	22.0	40.0	34.0	8.0	22.0	18.0	56.0
Max Q Clear Time (g_c+I1), s	9.3	14.0	42.0	36.0	10.0	24.0	12.2	18.3
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.0	0.2	8.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		135.9
HCM 2010 LOS		F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↰	↱
Traffic Volume (veh/h)	0	1490	1200	0	340	270
Future Volume (veh/h)	0	1490	1200	0	340	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1723	1723
Adj Flow Rate, veh/h	0	1568	1263	0	358	284
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1847	1847	0	661	590
Arrive On Green	0.00	0.52	0.52	0.00	0.40	0.40
Sat Flow, veh/h	0	3725	3725	0	1641	1465
Grp Volume(v), veh/h	0	1568	1263	0	358	284
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1641	1465
Q Serve(g_s), s	0.0	40.6	28.3	0.0	17.8	15.3
Cycle Q Clear(g_c), s	0.0	40.6	28.3	0.0	17.8	15.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1847	1847	0	661	590
V/C Ratio(X)	0.00	0.85	0.68	0.00	0.54	0.48
Avail Cap(c_a), veh/h	0	2289	2289	0	661	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	19.0	0.0	24.3	23.6
Incr Delay (d2), s/veh	0.0	2.7	0.6	0.0	3.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.3	13.8	0.0	8.6	6.6
LnGrp Delay(d), s/veh	0.0	24.6	19.6	0.0	27.5	26.4
LnGrp LOS		C	B		C	C
Approach Vol, veh/h		1568	1263		642	
Approach Delay, s/veh		24.6	19.6		27.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.7		47.0		59.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				69.0		43.0		69.0
Max Q Clear Time (g_c+I1), s				42.6		19.8		30.3
Green Ext Time (p_c), s				13.1		2.1		11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Future Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	235	1214	398	214	959	276	204	561	153	408	551	296
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1199	392	222	1062	458	232	678	294	414	1042	455
Arrive On Green	0.14	0.32	0.32	0.13	0.30	0.30	0.13	0.19	0.19	0.23	0.29	0.29
Sat Flow, veh/h	1774	3785	1239	1774	3539	1526	1774	3539	1535	1774	3539	1547
Grp Volume(v), veh/h	235	1087	525	214	959	276	204	561	153	408	551	296
Grp Sat Flow(s),veh/h/ln	1774	1695	1634	1774	1770	1526	1774	1770	1535	1774	1770	1547
Q Serve(g_s), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Cycle Q Clear(g_c), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	1074	518	222	1062	458	232	678	294	414	1042	455
V/C Ratio(X)	0.94	1.01	1.01	0.97	0.90	0.60	0.88	0.83	0.52	0.99	0.53	0.65
Avail Cap(c_a), veh/h	251	1074	518	222	1062	458	266	678	294	414	1042	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	41.0	41.0	52.2	40.3	35.9	51.2	46.6	43.5	45.8	35.4	36.9
Incr Delay (d2), s/veh	39.4	30.6	43.1	50.4	10.8	2.2	24.8	11.1	6.4	40.3	1.9	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.3	23.3	10.2	16.8	8.1	8.2	10.0	5.1	18.1	7.9	9.4
LnGrp Delay(d), s/veh	90.4	71.6	84.1	102.6	51.1	38.1	76.0	57.7	50.0	86.1	37.3	44.0
LnGrp LOS	F	F	F	F	D	D	E	E	D	F	D	D
Approach Vol, veh/h		1847			1449			918			1255	
Approach Delay, s/veh		77.6			56.2			60.5			54.7	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	27.0	19.0	42.0	19.7	39.3	21.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	23.0	15.0	38.0	18.0	33.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	29.5	20.3	16.4	40.0	15.6	22.0	17.7	33.2
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.1	3.5	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Future Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	177	1031	125	177	812	302	115	885	94	198	865	156
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	208	1214	147	208	963	356	284	1338	581	315	1443	626
Arrive On Green	0.12	0.27	0.27	0.12	0.27	0.27	0.06	0.38	0.38	0.09	0.41	0.41
Sat Flow, veh/h	1757	4543	550	1757	3604	1330	1757	3505	1520	1757	3505	1522
Grp Volume(v), veh/h	177	761	395	177	756	358	115	885	94	198	865	156
Grp Sat Flow(s),veh/h/ln	1757	1679	1736	1757	1679	1577	1757	1752	1520	1757	1752	1522
Q Serve(g_s), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Cycle Q Clear(g_c), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Prop In Lane	1.00		0.32	1.00		0.84	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	897	464	208	897	421	284	1338	581	315	1443	626
V/C Ratio(X)	0.85	0.85	0.85	0.85	0.84	0.85	0.40	0.66	0.16	0.63	0.60	0.25
Avail Cap(c_a), veh/h	289	983	508	289	983	462	330	1338	581	389	1443	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	38.0	38.0	47.2	37.9	38.0	20.3	27.9	22.3	20.8	25.1	21.1
Incr Delay (d2), s/veh	15.7	6.6	12.2	15.7	6.3	13.1	0.9	2.6	0.6	2.2	1.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.7	12.9	6.2	11.6	11.8	2.1	11.5	2.0	3.6	10.6	3.3
LnGrp Delay(d), s/veh	63.0	44.6	50.2	63.0	44.2	51.1	21.2	30.5	22.9	23.0	27.0	22.0
LnGrp LOS	E	D	D	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1333			1291			1094			1219	
Approach Delay, s/veh		48.7			48.7			28.9			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	45.7	16.9	33.2	10.2	49.0	16.9	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	40.0	18.0	32.0	9.0	45.0	18.0	32.0
Max Q Clear Time (g_c+I1), s	9.2	24.8	12.8	25.6	6.3	23.1	12.8	25.5
Green Ext Time (p_c), s	0.2	5.5	0.2	3.6	0.1	6.5	0.2	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Future Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	276	1163	71	41	816	265	133	367	31	327	255	214
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1853	113	52	896	289	475	1615	136	479	1731	774
Arrive On Green	0.17	0.38	0.38	0.03	0.24	0.24	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	4897	299	1774	3794	1223	920	3301	277	982	3539	1582
Grp Volume(v), veh/h	276	805	429	41	729	352	133	196	202	327	255	214
Grp Sat Flow(s),veh/h/ln	1774	1695	1805	1774	1695	1626	920	1770	1809	982	1770	1582
Q Serve(g_s), s	17.8	22.6	22.6	2.7	24.4	24.6	10.8	7.4	7.5	33.5	4.6	9.3
Cycle Q Clear(g_c), s	17.8	22.6	22.6	2.7	24.4	24.6	15.5	7.4	7.5	40.9	4.6	9.3
Prop In Lane	1.00		0.17	1.00		0.75	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	305	1283	683	52	800	384	475	865	885	479	1731	774
V/C Ratio(X)	0.91	0.63	0.63	0.78	0.91	0.92	0.28	0.23	0.23	0.68	0.15	0.28
Avail Cap(c_a), veh/h	350	1283	683	107	814	391	475	865	885	479	1731	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	29.5	29.5	56.2	43.3	43.4	20.7	17.1	17.1	28.9	16.4	17.6
Incr Delay (d2), s/veh	24.1	1.0	1.8	21.8	14.1	26.0	1.5	0.6	0.6	7.7	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	10.7	11.5	1.6	13.0	13.8	2.9	3.7	3.9	10.1	2.3	4.3
LnGrp Delay(d), s/veh	71.4	30.5	31.4	78.0	57.4	69.4	22.1	17.7	17.7	36.6	16.6	18.5
LnGrp LOS	E	C	C	E	E	E	C	B	B	D	B	B
Approach Vol, veh/h		1510			1122			531			796	
Approach Delay, s/veh		38.2			61.9			18.8			25.3	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		61.0	7.4	48.1		61.0	24.0	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		57.0	7.0	44.0		57.0	23.0	28.0
Max Q Clear Time (g_c+I1), s		17.5	4.7	24.6		42.9	19.8	26.6
Green Ext Time (p_c), s		3.1	0.0	7.9		3.4	0.3	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Future Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5078		1787	5051		1784	3574	1576	1786	3574	1574
Flt Permitted	0.95	1.00		0.95	1.00		0.44	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1787	5078		1787	5051		823	3574	1576	725	3574	1574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	177	1302	94	73	844	104	125	583	177	135	490	135
RTOR Reduction (vph)	0	8	0	0	13	0	0	0	21	0	0	63
Lane Group Flow (vph)	177	1388	0	73	935	0	125	583	156	135	490	72
Confl. Peds. (#/hr)			1	1			2		1	1		2
Confl. Bikes (#/hr)			4						1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4!			7!	8!			2			6	
Permitted Phases		4!					2		2	6		6
Actuated Green, G (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Effective Green, g (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Actuated g/C Ratio	0.39	0.39		0.08	0.27		0.54	0.54	0.54	0.54	0.54	0.54
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	694	1974		140	1373		440	1912	843	387	1912	842
v/s Ratio Prot	0.10			0.04	0.19			0.16			0.14	
v/s Ratio Perm		c0.27					0.15		0.10	c0.19		0.05
v/c Ratio	0.26	0.70		0.52	0.68		0.28	0.30	0.19	0.35	0.26	0.09
Uniform Delay, d1	21.8	27.0		46.5	34.2		13.4	13.6	12.6	14.0	13.2	11.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.2		3.5	1.4		1.6	0.4	0.5	2.5	0.3	0.2
Delay (s)	22.0	28.2		50.0	35.6		15.0	14.0	13.1	16.4	13.5	12.1
Level of Service	C	C		D	D		B	B	B	B	B	B
Approach Delay (s/veh)		27.5			36.7			14.0			13.8	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Intersection	
Int Delay, s/veh	160.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	370	750	0	1060	680	0
Future Vol, veh/h	370	750	0	1060	680	0
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	407	824	0	1165	747	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1330	374	-	0	-	0
Stage 1	747	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	-	-
Pot Cap-1 Maneuver	~ 145	~ 621	0	-	-	0
Stage 1	426	-	0	-	-	0
Stage 2	518	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 145	~ 621	-	-	-	-
Mov Cap-2 Maneuver	~ 145	-	-	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 409.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	145	621	-
HCM Lane V/C Ratio	-	2.804	1.327	-
HCM Control Delay (s/veh)	-	$ 878.6	178.7	-
HCM Lane LOS	-	F	F	-
HCM 95th %tile Q(veh)	-	36.8	34.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Future Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	11	11	359	0	250	11	707	87	250	1011	11
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	162	141	460	532	447	339	2269	1001	441	2269	1014
Arrive On Green	0.29	0.29	0.29	0.29	0.00	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	420	569	494	1361	1863	1565	550	3539	1562	681	3539	1581
Grp Volume(v), veh/h	33	0	0	359	0	250	11	707	87	250	1011	11
Grp Sat Flow(s),veh/h/ln	1483	0	0	1361	1863	1565	550	1770	1562	681	1770	1581
Q Serve(g_s), s	0.0	0.0	0.0	25.9	0.0	14.8	1.1	9.8	2.3	28.4	15.7	0.3
Cycle Q Clear(g_c), s	1.5	0.0	0.0	27.4	0.0	14.8	16.8	9.8	2.3	38.2	15.7	0.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	468	0	0	460	532	447	339	2269	1001	441	2269	1014
V/C Ratio(X)	0.07	0.00	0.00	0.78	0.00	0.56	0.03	0.31	0.09	0.57	0.45	0.01
Avail Cap(c_a), veh/h	611	0	0	595	717	602	339	2269	1001	441	2269	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	0.0	37.5	0.0	33.2	14.1	8.8	7.4	17.4	9.8	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	5.0	0.0	1.1	0.2	0.4	0.2	5.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	11.0	0.0	6.5	0.2	4.8	1.0	5.9	7.8	0.1
LnGrp Delay(d), s/veh	28.5	0.0	0.0	42.5	0.0	34.3	14.2	9.1	7.6	22.5	10.5	7.1
LnGrp LOS	C			D		C	B	A	A	C	B	A
Approach Vol, veh/h		33			609			805			1272	
Approach Delay, s/veh		28.5			39.1			9.0			12.8	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		35.2		74.0		35.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		18.8		3.5		40.2		29.4
Green Ext Time (p_c), s		6.1		0.2		11.3		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Future Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	57	1307	193	148	1523	125	193	159	114	148	239	114
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	1680	248	182	2094	172	231	888	396	182	792	348
Arrive On Green	0.04	0.38	0.38	0.10	0.44	0.44	0.13	0.25	0.25	0.10	0.22	0.22
Sat Flow, veh/h	1774	4464	659	1774	4784	392	1774	3539	1578	1774	3539	1553
Grp Volume(v), veh/h	57	993	507	148	1079	569	193	159	114	148	239	114
Grp Sat Flow(s),veh/h/ln	1774	1695	1733	1774	1695	1786	1774	1770	1578	1774	1770	1553
Q Serve(g_s), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Cycle Q Clear(g_c), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Prop In Lane	1.00		0.38	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	1276	652	182	1484	782	231	888	396	182	792	348
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.73	0.73	0.84	0.18	0.29	0.81	0.30	0.33
Avail Cap(c_a), veh/h	167	1560	797	334	1879	990	408	888	396	334	792	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	26.3	26.3	42.0	22.2	22.2	40.6	28.1	28.9	42.0	30.9	31.1
Incr Delay (d2), s/veh	15.9	2.1	4.0	8.4	1.1	2.0	7.8	0.4	1.8	8.4	1.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.9	12.6	4.2	11.9	12.8	5.5	1.7	2.6	4.2	2.7	2.8
LnGrp Delay(d), s/veh	61.3	28.4	30.3	50.4	23.2	24.2	48.5	28.5	30.8	50.4	31.9	33.6
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1557			1796			466			501	
Approach Delay, s/veh		30.2			25.8			37.3			37.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	28.0	13.8	40.0	16.4	25.4	8.0	45.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	24.0	18.0	44.0	22.0	20.0	9.0	53.0
Max Q Clear Time (g_c+I1), s	9.8	7.6	9.8	26.7	12.2	7.9	5.0	27.1
Green Ext Time (p_c), s	0.2	1.1	0.2	9.3	0.3	1.4	0.0	13.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Future Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	43	174	87	141	424	293	130	891	130	207	772	130
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	55	425	202	172	498	341	411	1714	764	377	2225	371
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.05	0.49	0.49	0.08	0.51	0.51
Sat Flow, veh/h	1757	2292	1091	1757	1978	1354	1757	3505	1562	1757	4337	724
Grp Volume(v), veh/h	43	131	130	141	375	342	130	891	130	207	596	306
Grp Sat Flow(s),veh/h/ln	1757	1752	1631	1757	1752	1580	1757	1752	1562	1757	1679	1704
Q Serve(g_s), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	11.3	11.4
Cycle Q Clear(g_c), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	11.3	11.4
Prop In Lane	1.00		0.67	1.00		0.86	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	55	325	302	172	442	398	411	1714	764	377	1722	874
V/C Ratio(X)	0.79	0.40	0.43	0.82	0.85	0.86	0.32	0.52	0.17	0.55	0.35	0.35
Avail Cap(c_a), veh/h	115	360	335	295	539	486	462	1714	764	501	1722	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	38.4	38.7	47.5	38.2	38.3	12.5	18.8	15.3	13.9	15.5	15.5
Incr Delay (d2), s/veh	21.5	0.8	1.0	9.4	10.5	12.3	0.4	1.1	0.5	1.2	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.5	3.5	4.6	11.8	11.0	1.9	9.3	2.2	3.0	5.3	5.6
LnGrp Delay(d), s/veh	73.1	39.3	39.6	56.8	48.6	50.6	13.0	19.9	15.8	15.1	16.0	16.6
LnGrp LOS	E	D	D	E	D	D	B	B	B	B	B	B
Approach Vol, veh/h		304			858			1151			1109	
Approach Delay, s/veh		44.2			50.8			18.6			16.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	56.4	14.5	23.9	9.9	59.0	7.3	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	48.0	18.0	22.0	9.0	55.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	8.1	20.7	10.4	9.6	5.9	13.4	4.6	24.1
Green Ext Time (p_c), s	0.3	7.7	0.2	1.1	0.1	7.4	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Future Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	746	1845	1546	898	1845	1533	691	3505	1567	601	3505	1567
Grp Volume(v), veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Grp Sat Flow(s),veh/h/ln	746	1845	1546	898	1845	1533	691	1752	1567	601	1752	1567
Q Serve(g_s), s	16.6	22.4	3.9	9.0	25.4	13.9	11.1	15.8	2.5	38.2	11.7	3.6
Cycle Q Clear(g_c), s	42.0	22.4	3.9	31.4	25.4	13.9	22.7	15.8	2.5	54.1	11.7	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
V/C Ratio(X)	0.64	0.64	0.14	0.36	0.70	0.43	0.27	0.41	0.08	0.67	0.32	0.11
Avail Cap(c_a), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	32.6	26.6	45.7	33.6	29.9	18.7	13.7	10.9	28.5	12.8	11.2
Incr Delay (d2), s/veh	8.3	2.1	0.1	1.0	3.4	0.6	1.6	0.6	0.2	10.2	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	11.8	1.7	2.3	13.6	5.9	2.3	7.8	1.1	7.3	5.7	1.6
LnGrp Delay(d), s/veh	60.1	34.7	26.7	46.8	37.0	30.4	20.3	14.3	11.1	38.7	13.3	11.4
LnGrp LOS	E	C	C	D	D	C	C	B	B	D	B	B
Approach Vol, veh/h		590			759			1021			989	
Approach Delay, s/veh		38.2			35.9			14.7			18.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		46.0		74.0		46.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		24.7		44.0		56.1		33.4
Green Ext Time (p_c), s		7.9		0.0		5.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	12.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	40	340	360	820	600	20
Future Vol, veh/h	40	340	360	820	600	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	374	396	901	659	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1902	330	681	0	-	0
Stage 1	659	-	-	-	-	-
Stage 2	1243	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	61	666	907	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	235	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 34	666	907	-	-	-
Mov Cap-2 Maneuver	~ 34	-	-	-	-	-
Stage 1	268	-	-	-	-	-
Stage 2	235	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	60.9	3.7	0
HCM LOS	F		

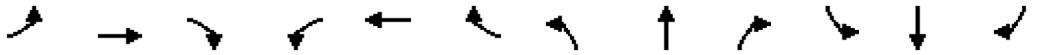
Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	907	-	34	666	-	-
HCM Lane V/C Ratio	0.436	-	1.293	0.561	-	-
HCM Control Delay (s/veh)	12	-	$ 433.6	17.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.2	-	4.7	3.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Future Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	111	949	273	253	556	71	263	980	192	81	747	61
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1031	296	282	1576	198	292	1348	590	103	970	420
Arrive On Green	0.08	0.26	0.26	0.16	0.35	0.35	0.16	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	1774	3908	1121	1774	4565	574	1774	3539	1549	1774	3539	1533
Grp Volume(v), veh/h	111	823	399	253	411	216	263	980	192	81	747	61
Grp Sat Flow(s),veh/h/ln	1774	1695	1638	1774	1695	1749	1774	1770	1549	1774	1770	1533
Q Serve(g_s), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Cycle Q Clear(g_c), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Prop In Lane	1.00		0.68	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	895	432	282	1171	604	292	1348	590	103	970	420
V/C Ratio(X)	0.81	0.92	0.92	0.90	0.35	0.36	0.90	0.73	0.33	0.79	0.77	0.15
Avail Cap(c_a), veh/h	230	910	440	322	1171	604	338	1348	590	123	970	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	41.3	41.4	47.7	28.2	28.3	47.3	30.6	25.3	53.7	38.6	31.7
Incr Delay (d2), s/veh	10.5	14.1	24.8	24.3	0.2	0.4	23.7	3.5	1.5	24.4	5.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.6	15.4	9.8	4.9	5.2	10.2	14.0	4.5	3.3	11.8	1.6
LnGrp Delay(d), s/veh	63.0	55.4	66.2	71.9	28.4	28.6	71.0	34.1	26.7	78.1	44.5	32.4
LnGrp LOS	E	E	E	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		1333			880			1435			889	
Approach Delay, s/veh		59.3			40.9			39.9			46.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	48.0	22.4	34.5	23.0	35.7	13.0	43.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	21.0	31.0	22.0	30.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.2	29.4	18.2	29.4	18.8	24.4	9.1	12.7
Green Ext Time (p_c), s	0.0	6.3	0.2	1.1	0.2	2.3	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Future Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	83	188	52	94	62	125	1365	52	42	1167	83
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	0	570	42	58	562	153	1792	781	54	1595	695
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.09	0.51	0.51	0.03	0.45	0.45
Sat Flow, veh/h	0	0	1582	0	160	1559	1774	3539	1543	1774	3539	1542
Grp Volume(v), veh/h	281	0	188	146	0	62	125	1365	52	42	1167	83
Grp Sat Flow(s),veh/h/ln	0	0	1582	160	0	1559	1774	1770	1543	1774	1770	1542
Q Serve(g_s), s	0.0	0.0	10.1	0.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Cycle Q Clear(g_c), s	42.0	0.0	10.1	42.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Prop In Lane	0.70		1.00	0.36		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	0	570	100	0	562	153	1792	781	54	1595	695
V/C Ratio(X)	5.34	0.00	0.33	1.46	0.00	0.11	0.82	0.76	0.07	0.78	0.73	0.12
Avail Cap(c_a), veh/h	53	0	570	100	0	562	244	1792	781	107	1595	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	27.0	35.0	0.0	24.8	52.4	23.1	14.7	56.1	26.2	18.6
Incr Delay (d2), s/veh	1992.4	0.0	0.3	255.6	0.0	0.1	11.1	3.1	0.2	21.3	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.8	0.0	4.4	10.3	0.0	1.3	4.4	18.4	0.9	1.7	16.1	1.6
LnGrp Delay(d), s/veh	2050.6	0.0	27.4	290.6	0.0	24.9	63.5	26.2	14.9	77.4	29.2	18.9
LnGrp LOS	F		C	F		C	E	C	B	E	C	B
Approach Vol, veh/h		469			208			1542			1292	
Approach Delay, s/veh		1239.6			211.4			28.9			30.1	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	63.0		46.0	14.0	56.5		46.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	59.0		42.0	16.0	50.0		42.0
Max Q Clear Time (g_c+I1), s	4.7	38.1		44.0	10.1	33.5		44.0
Green Ext Time (p_c), s	0.0	9.9		0.0	0.1	7.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		201.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Future Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
Arrive On Green	0.10	0.27	0.27	0.12	0.29	0.29	0.07	0.35	0.35	0.12	0.40	0.40
Sat Flow, veh/h	1774	3539	1548	1774	3539	1554	1774	3539	1551	1774	3539	1555
Grp Volume(v), veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Grp Sat Flow(s),veh/h/ln	1774	1770	1548	1774	1770	1554	1774	1770	1551	1774	1770	1555
Q Serve(g_s), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Cycle Q Clear(g_c), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
V/C Ratio(X)	0.85	0.95	0.22	0.89	0.74	0.43	0.81	0.93	0.11	0.88	0.74	0.08
Avail Cap(c_a), veh/h	208	976	427	208	1025	450	148	1243	545	222	1430	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	42.6	33.5	52.0	38.4	34.5	54.8	37.4	26.2	51.5	30.3	22.0
Incr Delay (d2), s/veh	24.5	17.3	0.3	33.5	2.8	0.7	24.1	13.2	0.4	30.7	3.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	17.1	2.4	7.9	11.6	5.3	4.2	20.5	1.4	8.2	15.6	1.1
LnGrp Delay(d), s/veh	77.3	59.9	33.8	85.6	41.2	35.1	78.8	50.6	26.6	82.3	33.8	22.2
LnGrp LOS	E	E	C	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1163			1133			1316			1306	
Approach Delay, s/veh		60.1			47.4			51.7			40.6	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	46.0	18.0	36.8	12.5	52.3	16.1	38.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	42.0	14.0	33.0	10.0	47.0	14.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	39.5	14.2	32.4	8.8	32.5	12.1	25.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.4	0.0	6.1	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Future Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	146	167	83	125	115	94	1219	0	115	1219	21
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	230	201	106	327	276	119	1996	893	143	2973	51
Arrive On Green	0.01	0.13	0.13	0.06	0.18	0.18	0.07	0.58	0.00	0.08	0.59	0.59
Sat Flow, veh/h	1740	1736	1514	1740	1782	1501	1740	3471	1553	1740	5049	87
Grp Volume(v), veh/h	10	146	167	83	121	119	94	1219	0	115	803	437
Grp Sat Flow(s),veh/h/ln	1740	1736	1514	1740	1736	1548	1740	1736	1553	1740	1663	1811
Q Serve(g_s), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Cycle Q Clear(g_c), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Prop In Lane	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	17	230	201	106	319	284	119	1996	893	143	1958	1067
V/C Ratio(X)	0.60	0.63	0.83	0.79	0.38	0.42	0.79	0.61	0.00	0.81	0.41	0.41
Avail Cap(c_a), veh/h	65	260	227	195	389	347	211	1996	893	244	1958	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	43.9	45.2	49.6	38.3	38.6	49.1	14.9	0.0	48.3	11.9	11.9
Incr Delay (d2), s/veh	29.7	4.1	20.4	12.0	0.7	1.0	11.2	1.4	0.0	10.2	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.4	6.0	2.8	3.2	3.2	3.1	12.1	0.0	3.8	6.5	7.3
LnGrp Delay(d), s/veh	82.5	48.1	65.6	61.6	39.1	39.6	60.3	16.3	0.0	58.4	12.6	13.1
LnGrp LOS	F	D	E	E	D	D	E	B		E	B	B
Approach Vol, veh/h		323			323			1313			1355	
Approach Delay, s/veh		58.2			45.0			19.4			16.6	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	65.5	10.5	18.2	11.3	67.0	5.0	23.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	61.0	12.0	16.0	13.0	63.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	9.0	26.6	7.0	13.5	7.7	16.0	2.6	9.2
Green Ext Time (p_c), s	0.1	10.2	0.1	0.4	0.1	9.8	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Future Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	42	0	94	42	0	21	52	1365	21	10	1417	31
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	63	0	264	63	0	268	67	2473	1079	17	3433	75
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.04	0.71	0.71	0.01	0.68	0.68
Sat Flow, veh/h	0	0	1519	0	0	1539	1740	3471	1514	1740	5022	110
Grp Volume(v), veh/h	42	0	94	42	0	21	52	1365	21	10	938	510
Grp Sat Flow(s),veh/h/ln	0	0	1519	0	0	1539	1740	1736	1514	1740	1663	1807
Q Serve(g_s), s	0.0	0.0	6.3	0.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Cycle Q Clear(g_c), s	20.0	0.0	6.3	20.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	63	0	264	63	0	268	67	2473	1079	17	2273	1235
V/C Ratio(X)	0.67	0.00	0.36	0.67	0.00	0.08	0.78	0.55	0.02	0.60	0.41	0.41
Avail Cap(c_a), veh/h	63	0	264	63	0	268	197	2473	1079	91	2273	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	41.9	57.5	0.0	39.8	54.9	7.8	4.8	56.8	8.0	8.0
Incr Delay (d2), s/veh	24.5	0.0	0.8	24.5	0.0	0.1	17.4	0.9	0.0	30.6	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.7	1.8	0.0	0.6	2.0	10.4	0.2	0.5	6.7	7.4
LnGrp Delay(d), s/veh	82.0	0.0	42.7	82.0	0.0	40.0	72.3	8.7	4.9	87.4	8.6	9.0
LnGrp LOS	F		D	F		D	E	A	A	F	A	A
Approach Vol, veh/h		136			63			1438			1458	
Approach Delay, s/veh		54.8			68.0			11.0			9.3	
Approach LOS		D			E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	86.0		24.0	8.4	82.7		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	82.0		20.0	13.0	75.0		20.0
Max Q Clear Time (g_c+I1), s	2.7	23.4		22.0	5.4	16.3		22.0
Green Ext Time (p_c), s	0.0	13.7		0.0	0.0	12.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	970	140	70	830	170	190
Future Volume (veh/h)	970	140	70	830	170	190
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1900	1845	1845	1845	1845
Adj Flow Rate, veh/h	1102	159	80	943	193	216
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1589	229	104	2353	762	680
Arrive On Green	0.36	0.36	0.06	0.47	0.43	0.43
Sat Flow, veh/h	4598	639	1757	5202	1757	1568
Grp Volume(v), veh/h	835	426	80	943	193	216
Grp Sat Flow(s),veh/h/ln	1679	1713	1757	1679	1757	1568
Q Serve(g_s), s	17.1	17.2	3.6	9.9	5.6	7.3
Cycle Q Clear(g_c), s	17.1	17.2	3.6	9.9	5.6	7.3
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1204	614	104	2353	762	680
V/C Ratio(X)	0.69	0.69	0.77	0.40	0.25	0.32
Avail Cap(c_a), veh/h	2287	1167	392	4804	762	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.1	37.4	14.1	14.5	15.0
Incr Delay (d2), s/veh	0.7	1.4	11.2	0.1	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	8.3	2.1	4.6	2.9	3.4
LnGrp Delay(d), s/veh	22.8	23.5	48.6	14.2	15.3	16.2
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	1261			1023	409	
Approach Delay, s/veh	23.1			16.9	15.8	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		39.0	8.8	32.9				41.7
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		35.0	18.0	55.0				77.0
Max Q Clear Time (g_c+I1), s		9.3	5.6	19.2				11.9
Green Ext Time (p_c), s		1.2	0.1	9.8				7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Future Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	260	21	63	156	115	31	135	52	156	167	31
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	21.5	26.2	13.8	15.3
HCM LOS	C	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	19%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	93%	47%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	7%	34%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	130	50	20	270	320	150	160	30
LT Vol	30	0	0	20	0	60	150	0	0
Through Vol	0	130	0	0	250	150	0	160	0
RT Vol	0	0	50	0	20	110	0	0	30
Lane Flow Rate	31	135	52	21	281	333	156	167	31
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.077	0.316	0.111	0.048	0.61	0.699	0.368	0.369	0.063
Departure Headway (Hd)	8.908	8.388	7.66	8.375	7.814	7.55	8.486	7.968	7.243
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	400	427	465	426	458	477	422	448	491
Service Time	6.708	6.187	5.458	6.166	5.604	5.333	6.279	5.76	5.034
HCM Lane V/C Ratio	0.078	0.316	0.112	0.049	0.614	0.698	0.37	0.373	0.063
HCM Control Delay, s/veh	12.5	15.1	11.4	11.6	22.2	26.2	16.2	15.4	10.5
HCM Lane LOS	B	C	B	B	C	D	C	C	B
HCM 95th-tile Q	0.2	1.3	0.4	0.2	4	5.4	1.7	1.7	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Future Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	83	1073	52	10	958	83	62	42	31	94	21	73
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	108	1469	641	18	1289	563	76	33	645	87	11	637
Arrive On Green	0.06	0.42	0.42	0.01	0.37	0.37	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1757	3505	1530	1757	3505	1531	0	81	1567	0	27	1547
Grp Volume(v), veh/h	83	1073	52	10	958	83	104	0	31	115	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1530	1757	1752	1531	81	0	1567	27	0	1547
Q Serve(g_s), s	3.5	19.3	1.5	0.4	17.9	2.7	0.0	0.0	0.9	0.0	0.0	2.2
Cycle Q Clear(g_c), s	3.5	19.3	1.5	0.4	17.9	2.7	31.0	0.0	0.9	31.0	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	0.60		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	108	1469	641	18	1289	563	109	0	645	98	0	637
V/C Ratio(X)	0.77	0.73	0.08	0.57	0.74	0.15	0.95	0.00	0.05	1.18	0.00	0.11
Avail Cap(c_a), veh/h	396	3303	1442	140	2791	1219	109	0	645	98	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.8	18.3	13.2	37.1	20.7	15.9	28.0	0.0	13.3	34.2	0.0	13.7
Incr Delay (d2), s/veh	10.8	0.7	0.1	25.6	0.9	0.1	73.4	0.0	0.1	146.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.4	0.7	0.3	8.8	1.2	4.4	0.0	0.4	6.0	0.0	1.0
LnGrp Delay(d), s/veh	45.7	19.0	13.2	62.8	21.6	16.0	101.4	0.0	13.5	180.2	0.0	14.1
LnGrp LOS	D	B	B	E	C	B	F		B	F		B
Approach Vol, veh/h		1208			1051			135			188	
Approach Delay, s/veh		20.6			21.5			81.2			115.7	
Approach LOS		C			C			F			F	

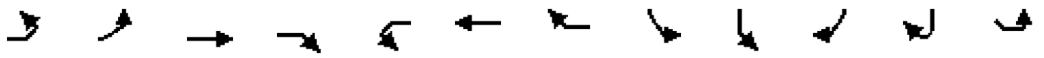
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	4.8	35.6		35.0	8.6	31.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	6.0	71.0		31.0	17.0	60.0
Max Q Clear Time (g_c+I1), s		33.0	2.4	21.3		33.0	5.5	19.9
Green Ext Time (p_c), s		0.0	0.0	9.2		0.0	0.1	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	20	120	0	90	10	1380	220	160	1150	10
Future Volume (veh/h)	10	10	20	120	0	90	10	1380	220	160	1150	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	11	11	22	132	0	99	11	1516	242	176	1264	11
Adj No. of Lanes	0	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	66	65	92	223	0	200	18	2270	990	207	2647	1156
Arrive On Green	0.13	0.13	0.13	0.13	0.00	0.13	0.01	0.65	0.65	0.12	0.76	0.76
Sat Flow, veh/h	205	511	717	1355	0	1564	1757	3505	1529	1757	3505	1530
Grp Volume(v), veh/h	44	0	0	132	0	99	11	1516	242	176	1264	11
Grp Sat Flow(s),veh/h/ln	1434	0	0	1355	0	1564	1757	1752	1529	1757	1752	1530
Q Serve(g_s), s	0.0	0.0	0.0	5.2	0.0	6.6	0.7	30.2	7.5	11.1	15.5	0.2
Cycle Q Clear(g_c), s	6.7	0.0	0.0	11.9	0.0	6.6	0.7	30.2	7.5	11.1	15.5	0.2
Prop In Lane	0.25		0.50	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	223	0	0	223	0	200	18	2270	990	207	2647	1156
V/C Ratio(X)	0.20	0.00	0.00	0.59	0.00	0.50	0.61	0.67	0.24	0.85	0.48	0.01
Avail Cap(c_a), veh/h	286	0	0	278	0	264	62	2270	990	328	2647	1156
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.0	0.0	0.0	48.3	0.0	45.7	55.5	12.3	8.3	48.7	5.3	3.4
Incr Delay (d2), s/veh	0.4	0.0	0.0	2.5	0.0	1.9	28.3	1.6	0.6	11.5	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	0.0	4.2	0.0	3.0	0.5	15.0	3.3	6.0	7.6	0.1
LnGrp Delay(d), s/veh	44.4	0.0	0.0	50.8	0.0	47.6	83.8	13.9	8.9	60.2	5.9	3.4
LnGrp LOS	D			D		D	F	B	A	E	A	A
Approach Vol, veh/h		44			231			1769			1451	
Approach Delay, s/veh		44.4			49.4			13.6			12.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	17.3	76.9		18.4	5.2	89.0		18.4
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	21.0	68.0		19.0	4.0	85.0		19.0
Max Q Clear Time (g_c+I1), s	13.1	32.2		8.7	2.7	17.5		13.9
Green Ext Time (p_c), s	0.3	15.8		0.1	0.0	12.0		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL2
Lane Configurations												
Traffic Volume (vph)	280	170	1400	280	10	520	10	10	10	10	10	10
Future Volume (vph)	280	170	1400	280	10	520	10	10	10	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%			15%			
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00	1.00		
Frpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	0.98		
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Frt		1.00	0.98		1.00	1.00			1.00	0.85		
Flt Protected		0.95	1.00		0.95	1.00			0.95	1.00		
Satd. Flow (prot)		1787	4997		1787	5121			1653	1453		
Flt Permitted		0.95	1.00		0.22	1.00			0.95	1.00		
Satd. Flow (perm)		1787	4997		409	5121			1653	1453		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	301	183	1505	301	11	559	11	11	11	11	11	11
RTOR Reduction (vph)	0	0	21	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	484	1785	0	11	570	0	0	22	22	0	0
Confl. Peds. (#/hr)									2	3		
Confl. Bikes (#/hr)				1								
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Prot	Perm		Perm
Protected Phases	7	7	4		3	8		9	9			
Permitted Phases					8					10		6
Actuated Green, G (s)		31.4	49.1		19.1	18.4			1.4	3.1		
Effective Green, g (s)		31.4	49.1		19.1	18.4			1.4	3.1		
Actuated g/C Ratio		0.29	0.46		0.18	0.17			0.01	0.03		
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0	3.0		
Lane Grp Cap (vph)		521	2278		81	874			21	41		
v/s Ratio Prot		c0.27	c0.36		0.00	0.11			c0.01			
v/s Ratio Perm					0.02					c0.02		
v/c Ratio		0.93	0.78		0.14	0.65			1.05	0.54		
Uniform Delay, d1		37.1	24.8		36.7	41.7			53.2	51.6		
Progression Factor		1.00	1.00		1.00	1.00			1.00	1.00		
Incremental Delay, d2		22.9	1.8		0.8	1.8			212.0	12.8		
Delay (s)		60.0	26.6		37.4	43.4			265.2	64.4		
Level of Service		E	C		D	D			F	E		
Approach Delay (s/veh)			33.7			43.3			164.8			
Approach LOS			C			D			F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	107.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	80.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NWR2
Lane Configurations							
Traffic Volume (vph)	60	260	70	190	260	20	20
Future Volume (vph)	60	260	70	190	260	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1787	1881	1599	1787	1881	1599	
Flt Permitted	0.42	1.00	1.00	0.42	1.00	1.00	
Satd. Flow (perm)	785	1881	1599	785	1881	1599	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	280	75	204	280	22	22
RTOR Reduction (vph)	0	0	52	0	0	30	0
Lane Group Flow (vph)	76	280	23	204	280	14	0
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		6			2		
Permitted Phases	6		6	2		2	
Actuated Green, G (s)	33.4	33.4	33.4	33.4	33.4	33.4	
Effective Green, g (s)	33.4	33.4	33.4	33.4	33.4	33.4	
Actuated g/C Ratio	0.31	0.31	0.31	0.31	0.31	0.31	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	243	583	495	243	583	495	
v/s Ratio Prot		0.15			0.15		
v/s Ratio Perm	0.10		0.01	c0.26		0.01	
v/c Ratio	0.31	0.48	0.05	0.84	0.48	0.03	
Uniform Delay, d1	28.4	30.1	26.0	34.7	30.1	25.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.6	0.0	27.9	2.8	0.1	
Delay (s)	29.1	30.7	26.0	62.6	32.9	26.0	
Level of Service	C	C	C	E	C	C	
Approach Delay (s/veh)		29.6			43.8		
Approach LOS		C			D		

Intersection Summary

HCM Unsignalized Intersection Capacity Analysis
147: Dodds Avenue (East) & Stage Road

04/21/2025

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	960	10	10	660	50	10	10	240	10	10	40
Future Volume (Veh/h)	10	960	10	10	660	50	10	10	240	10	10	40
Sign Control		Free			Free			Stop			Yield	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	11	1079	11	11	742	56	11	11	270	11	11	45
Pedestrians		1						3			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		4.0						4.0			4.0	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					499							
pX, platoon unblocked												
vC, conflicting volume	800			1093			1554	1932	548	1631	1909	402
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	800			1093			1554	1932	548	1631	1909	402
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			82	83	44	56	83	92
cM capacity (veh/h)	824			638			61	64	482	25	66	599

Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	NE 2	SW 1
Volume Total	551	551	382	427	112	180	67
Volume Left	11	0	11	0	11	0	11
Volume Right	0	11	0	56	90	180	45
cSH	824	1700	638	1700	207	482	99
Volume to Capacity	0.01	0.32	0.02	0.25	0.54	0.37	0.68
Queue Length 95th (ft)	1	0	1	0	71	43	85
Control Delay (s/veh)	0.4	0.0	0.5	0.0	41.1	16.9	97.1
Lane LOS	A		A		E	C	F
Approach Delay (s/veh)	0.2		0.3		26.2		97.1
Approach LOS					D		F

Intersection Summary				
Average Delay	6.4			
Intersection Capacity Utilization	Err%	ICU Level of Service	H	
Analysis Period (min)	15			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	370	2510	50	10	2090	240	460	10	620	220	30	10
Future Volume (vph)	370	2510	50	10	2090	240	460	10	620	220	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.85	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5066		1769	5085	1583	1766	1494	1485	1770	1863	1559
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.74	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	3433	5066		1769	5085	1583	1367	1494	1485	609	1863	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	402	2728	54	11	2272	261	500	11	674	239	33	11
RTOR Reduction (vph)	0	2	0	0	0	101	0	116	116	0	0	7
Lane Group Flow (vph)	402	2780	0	11	2272	160	500	225	228	239	33	4
Confl. Peds. (#/hr)			6	6			1					1
Confl. Bikes (#/hr)			1						1			2
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	14.0	69.4		0.8	56.2	56.2	41.0	41.0	41.0	41.0	41.0	41.0
Effective Green, g (s)	14.0	69.4		0.8	56.2	56.2	41.0	41.0	41.0	41.0	41.0	41.0
Actuated g/C Ratio	0.11	0.56		0.01	0.46	0.46	0.33	0.33	0.33	0.33	0.33	0.33
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	390	2853		11	2319	722	454	497	494	202	619	518
v/s Ratio Prot	c0.12	c0.55		0.01	0.45			0.15			0.02	
v/s Ratio Perm						0.10	0.37		0.15	c0.39		0.00
v/c Ratio	1.03	0.97		1.00	0.98	0.22	1.10	0.45	0.46	1.18	0.05	0.01
Uniform Delay, d1	54.6	26.0		61.2	32.9	20.3	41.1	32.3	32.4	41.1	27.9	27.5
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	53.7	11.9		271.4	14.5	0.7	72.6	0.7	0.7	121.5	0.0	0.0
Delay (s)	108.3	37.9		332.6	47.4	21.0	113.7	32.9	33.1	162.6	28.0	27.5
Level of Service	F	D		F	D	C	F	C	C	F	C	C
Approach Delay (s/veh)		46.8			46.0			67.1			141.6	
Approach LOS		D			D			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.4%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	200	380	40	50	10	280	1070	0	10	830	170
Future Volume (veh/h)	730	200	380	40	50	10	280	1070	0	10	830	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	760	208	396	42	52	10	292	1115	0	10	865	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	885	533	453	53	90	17	372	1833	820	17	1486	665
Arrive On Green	0.25	0.28	0.28	0.03	0.06	0.06	0.11	0.51	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3476	1881	1597	1792	1533	295	3476	3574	1599	1792	3574	1599
Grp Volume(v), veh/h	760	208	396	42	0	62	292	1115	0	10	865	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1597	1792	0	1827	1738	1787	1599	1792	1787	1599
Q Serve(g_s), s	20.3	8.7	23.0	2.3	0.0	3.2	8.0	21.5	0.0	0.5	18.2	0.0
Cycle Q Clear(g_c), s	20.3	8.7	23.0	2.3	0.0	3.2	8.0	21.5	0.0	0.5	18.2	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	885	533	453	53	0	107	372	1833	820	17	1486	665
V/C Ratio(X)	0.86	0.39	0.87	0.79	0.00	0.58	0.79	0.61	0.00	0.57	0.58	0.00
Avail Cap(c_a), veh/h	1212	830	704	129	0	300	535	1833	820	74	1486	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.7	28.1	33.3	47.0	0.0	44.7	42.4	16.8	0.0	48.1	22.0	0.0
Incr Delay (d2), s/veh	4.8	0.5	7.6	21.7	0.0	4.8	4.9	1.5	0.0	26.4	1.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	4.6	11.1	1.4	0.0	1.8	4.1	10.9	0.0	0.4	9.2	0.0
LnGrp Delay(d), s/veh	39.5	28.6	40.9	68.7	0.0	49.5	47.3	18.3	0.0	74.4	23.6	0.0
LnGrp LOS	D	C	D	E		D	D	B		E	C	
Approach Vol, veh/h		1364			104			1407			875	
Approach Delay, s/veh		38.2			57.3			24.3			24.2	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	54.0	6.9	31.6	14.4	44.5	28.8	9.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	50.0	7.0	43.0	15.0	39.0	34.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	23.5	4.3	25.0	10.0	20.2	22.3	5.2
Green Ext Time (p_c), s	0.0	8.6	0.0	2.6	0.4	5.5	2.5	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.3
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	700	1980	450	180	1440	100	290	570	340	330	670	140
Future Volume (veh/h)	700	1980	450	180	1440	100	290	570	340	330	670	140
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	745	2106	479	191	1532	106	309	606	362	351	713	149
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	782	2354	719	209	1797	714	363	655	646	377	795	164
Arrive On Green	0.22	0.46	0.46	0.12	0.35	0.35	0.10	0.18	0.18	0.11	0.19	0.19
Sat Flow, veh/h	3476	5136	1569	1792	5136	1561	3476	3574	1563	3476	4249	877
Grp Volume(v), veh/h	745	2106	479	191	1532	106	309	606	362	351	573	289
Grp Sat Flow(s),veh/h/ln	1738	1712	1569	1792	1712	1561	1738	1787	1563	1738	1712	1702
Q Serve(g_s), s	25.4	45.2	28.6	12.6	33.2	4.8	10.5	20.0	21.4	12.0	19.6	20.0
Cycle Q Clear(g_c), s	25.4	45.2	28.6	12.6	33.2	4.8	10.5	20.0	21.4	12.0	19.6	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	782	2354	719	209	1797	714	363	655	646	377	641	318
V/C Ratio(X)	0.95	0.89	0.67	0.91	0.85	0.15	0.85	0.92	0.56	0.93	0.89	0.91
Avail Cap(c_a), veh/h	782	2354	719	209	1797	714	377	655	646	377	641	318
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	29.8	25.3	52.4	36.1	19.2	52.8	48.2	27.3	53.1	47.6	47.8
Incr Delay (d2), s/veh	21.4	5.8	4.8	39.2	5.3	0.4	16.3	19.1	1.1	29.7	15.0	28.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	22.5	13.3	8.5	16.5	2.1	5.8	11.6	9.4	7.3	10.6	11.9
LnGrp Delay(d), s/veh	67.3	35.6	30.2	91.6	41.5	19.6	69.1	67.2	28.4	82.8	62.6	76.2
LnGrp LOS	E	D	C	F	D	B	E	E	C	F	E	E
Approach Vol, veh/h		3330			1829			1277			1213	
Approach Delay, s/veh		41.9			45.4			56.7			71.7	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	59.0	17.0	26.0	31.0	46.0	16.5	26.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	55.0	13.0	22.0	27.0	42.0	13.0	22.0
Max Q Clear Time (g_c+I1), s	14.6	47.2	14.0	23.4	27.4	35.2	12.5	22.0
Green Ext Time (p_c), s	0.0	6.9	0.0	0.0	0.0	5.0	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	20	30	20	20	110	20	2610	10	80	2260	140
Future Volume (veh/h)	140	20	30	20	20	110	20	2610	10	80	2260	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	146	21	31	21	21	115	21	2719	10	83	2354	146
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	58	0	318	46	32	322	30	3310	12	105	3304	203
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.02	0.63	0.63	0.06	0.68	0.68
Sat Flow, veh/h	0	0	1549	0	155	1569	1774	5230	19	1774	4892	300
Grp Volume(v), veh/h	167	0	31	42	0	115	21	1762	967	83	1623	877
Grp Sat Flow(s),veh/h/ln	0	0	1549	155	0	1569	1774	1695	1859	1774	1695	1802
Q Serve(g_s), s	0.0	0.0	1.9	0.0	0.0	7.4	1.4	46.4	46.6	5.4	34.9	36.0
Cycle Q Clear(g_c), s	24.0	0.0	1.9	24.0	0.0	7.4	1.4	46.4	46.6	5.4	34.9	36.0
Prop In Lane	0.87		1.00	0.50		1.00	1.00		0.01	1.00		0.17
Lane Grp Cap(c), veh/h	58	0	318	78	0	322	30	2146	1177	105	2290	1217
V/C Ratio(X)	2.90	0.00	0.10	0.54	0.00	0.36	0.70	0.82	0.82	0.79	0.71	0.72
Avail Cap(c_a), veh/h	58	0	318	78	0	322	76	2146	1177	152	2290	1217
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	0.0	37.7	41.1	0.0	39.9	57.2	16.4	16.4	54.3	11.8	12.0
Incr Delay (d2), s/veh	898.1	0.0	0.1	7.2	0.0	0.7	25.4	3.7	6.5	15.9	1.9	3.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.2	0.0	0.8	1.5	0.0	3.3	0.9	22.6	25.8	3.1	16.6	19.0
LnGrp Delay(d), s/veh	956.6	0.0	37.8	48.2	0.0	40.5	82.6	20.1	23.0	70.2	13.7	15.7
LnGrp LOS	F		D	D		D	F	C	C	E	B	B
Approach Vol, veh/h		198			157			2750			2583	
Approach Delay, s/veh		812.8			42.6			21.6			16.2	
Approach LOS		F			D			C			B	

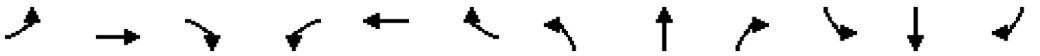
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.9	78.0		28.0	6.0	83.0		28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	74.0		24.0	5.0	79.0		24.0
Max Q Clear Time (g_c+I1), s	7.4	48.6		26.0	3.4	38.0		26.0
Green Ext Time (p_c), s	0.0	21.5		0.0	0.0	29.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	770	80	110	470	230	120	1780	50	160	1870	320
Future Volume (veh/h)	580	770	80	110	470	230	120	1780	50	160	1870	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	592	786	82	112	480	235	122	1816	51	163	1908	327
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	645	1029	456	164	534	232	144	2360	66	219	2123	358
Arrive On Green	0.19	0.29	0.29	0.05	0.15	0.15	0.04	0.46	0.46	0.06	0.49	0.49
Sat Flow, veh/h	3442	3539	1570	3442	3539	1537	3442	5084	143	3442	4370	736
Grp Volume(v), veh/h	592	786	82	112	480	235	122	1211	656	163	1473	762
Grp Sat Flow(s),veh/h/ln	1721	1770	1570	1721	1770	1537	1721	1695	1837	1721	1695	1715
Q Serve(g_s), s	20.2	24.2	4.7	3.8	15.9	18.0	4.2	35.5	35.6	5.6	47.2	49.1
Cycle Q Clear(g_c), s	20.2	24.2	4.7	3.8	15.9	18.0	4.2	35.5	35.6	5.6	47.2	49.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.43
Lane Grp Cap(c), veh/h	645	1029	456	164	534	232	144	1573	852	219	1647	833
V/C Ratio(X)	0.92	0.76	0.18	0.68	0.90	1.01	0.85	0.77	0.77	0.74	0.89	0.91
Avail Cap(c_a), veh/h	663	1038	460	173	534	232	144	1573	852	259	1647	833
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.6	38.6	31.7	56.0	49.8	50.7	56.8	26.7	26.7	54.9	27.9	28.4
Incr Delay (d2), s/veh	17.5	3.4	0.2	9.9	18.2	62.7	34.8	3.7	6.6	9.3	7.9	16.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	12.3	2.0	2.0	9.1	11.7	2.7	17.3	19.6	2.9	23.7	26.8
LnGrp Delay(d), s/veh	65.1	42.0	31.9	65.9	68.0	113.5	91.6	30.3	33.3	64.2	35.8	44.7
LnGrp LOS	E	D	C	E	E	F	F	C	C	E	D	D
Approach Vol, veh/h		1460			827			1989			2398	
Approach Delay, s/veh		50.8			80.6			35.1			40.6	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.6	59.4	9.7	38.7	9.0	62.0	26.4	22.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	54.0	6.0	35.0	5.0	58.0	23.0	18.0
Max Q Clear Time (g_c+I1), s	7.6	37.6	5.8	26.2	6.2	51.1	22.2	20.0
Green Ext Time (p_c), s	0.1	11.0	0.0	3.5	0.0	6.1	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.1
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	910	240	360	890	30	380	110	510	30	50	50
Future Volume (vph)	50	910	240	360	890	30	380	110	510	30	50	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.95	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00		0.99	
Satd. Flow (prot)	1787	3574	1571	3467	3557		1698	1738	1579		1755	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.65	0.75	1.00		0.89	
Satd. Flow (perm)	1787	3574	1571	3467	3557		1165	1343	1579		1583	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	53	958	253	379	937	32	400	116	537	32	53	53
RTOR Reduction (vph)	0	0	168	0	2	0	0	0	189	0	18	0
Lane Group Flow (vph)	53	958	85	379	967	0	252	264	348	0	120	0
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			2						1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	6.6	38.2	38.2	17.0	48.6		46.3	46.3	46.3		46.3	
Effective Green, g (s)	6.6	38.2	38.2	17.0	48.6		46.3	46.3	46.3		46.3	
Actuated g/C Ratio	0.06	0.34	0.34	0.15	0.43		0.41	0.41	0.41		0.41	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	103	1202	528	519	1523		475	547	644		645	
v/s Ratio Prot	0.03	c0.27		c0.11	0.27							
v/s Ratio Perm			0.05				0.22	0.20	c0.22		0.08	
v/c Ratio	0.51	0.80	0.16	0.73	0.63		0.53	0.48	0.54		0.19	
Uniform Delay, d1	51.9	34.1	26.4	46.1	25.5		25.4	24.8	25.5		21.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	4.3	3.8	0.1	5.2	0.9		4.2	3.0	3.2		0.6	
Delay (s)	56.2	37.9	26.6	51.3	26.4		29.6	27.8	28.7		22.2	
Level of Service	E	D	C	D	C		C	C	C		C	
Approach Delay (s/veh)		36.4			33.4			28.7			22.2	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	113.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	10	30	10	30	10	970	70	20	580	10
Future Volume (veh/h)	10	0	10	30	10	30	10	970	70	20	580	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	0	11	33	11	33	11	1054	76	22	630	11
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	188	0	125	93	29	53	19	2765	1210	32	2792	1221
Arrive On Green	0.08	0.00	0.08	0.08	0.08	0.08	0.01	0.78	0.78	0.02	0.79	0.79
Sat Flow, veh/h	1433	0	1548	513	361	656	1774	3539	1549	1774	3539	1548
Grp Volume(v), veh/h	11	0	11	77	0	0	11	1054	76	22	630	11
Grp Sat Flow(s),veh/h/ln	1433	0	1548	1530	0	0	1774	1770	1549	1774	1770	1548
Q Serve(g_s), s	0.0	0.0	0.7	3.2	0.0	0.0	0.6	9.3	1.1	1.2	4.6	0.2
Cycle Q Clear(g_c), s	0.7	0.0	0.7	4.8	0.0	0.0	0.6	9.3	1.1	1.2	4.6	0.2
Prop In Lane	1.00		1.00	0.43		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	188	0	125	175	0	0	19	2765	1210	32	2792	1221
V/C Ratio(X)	0.06	0.00	0.09	0.44	0.00	0.00	0.59	0.38	0.06	0.68	0.23	0.01
Avail Cap(c_a), veh/h	373	0	340	382	0	0	124	2765	1210	159	2792	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	0.0	42.6	44.4	0.0	0.0	49.3	3.4	2.5	48.9	2.7	2.2
Incr Delay (d2), s/veh	0.1	0.0	0.3	1.7	0.0	0.0	26.1	0.4	0.1	22.0	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	2.1	0.0	0.0	0.4	4.5	0.5	0.8	2.3	0.1
LnGrp Delay(d), s/veh	42.8	0.0	42.9	46.2	0.0	0.0	75.5	3.8	2.6	70.8	2.9	2.3
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		22			77			1141			663	
Approach Delay, s/veh		42.8			46.2			4.4			5.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.8	82.2		12.1	5.1	83.0		12.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	77.0		22.0	7.0	79.0		22.0
Max Q Clear Time (g_c+I1), s	3.2	11.3		2.7	2.6	6.6		6.8
Green Ext Time (p_c), s	0.0	9.7		0.0	0.0	4.6		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.8
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	350	110	50	230	40	100	580	40	20	300	310
Future Volume (veh/h)	450	350	110	50	230	40	100	580	40	20	300	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	495	385	121	55	253	44	110	637	44	22	330	341
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	609	942	292	261	371	64	405	1671	729	355	1671	736
Arrive On Green	0.27	0.35	0.35	0.04	0.12	0.12	0.47	0.47	0.47	0.47	0.47	0.47
Sat Flow, veh/h	1792	2676	830	1792	3050	523	770	3574	1559	763	3574	1574
Grp Volume(v), veh/h	495	255	251	55	147	150	110	637	44	22	330	341
Grp Sat Flow(s),veh/h/ln	1792	1787	1719	1792	1787	1786	770	1787	1559	763	1787	1574
Q Serve(g_s), s	18.7	9.0	9.2	2.2	6.6	6.7	8.2	9.6	1.3	1.6	4.5	12.3
Cycle Q Clear(g_c), s	18.7	9.0	9.2	2.2	6.6	6.7	12.7	9.6	1.3	11.2	4.5	12.3
Prop In Lane	1.00		0.48	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	609	629	605	261	218	217	405	1671	729	355	1671	736
V/C Ratio(X)	0.81	0.41	0.41	0.21	0.67	0.69	0.27	0.38	0.06	0.06	0.20	0.46
Avail Cap(c_a), veh/h	1183	1328	1278	346	428	428	405	1671	729	355	1671	736
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.6	20.4	20.5	30.5	35.1	35.1	16.8	14.4	12.2	18.0	13.0	15.1
Incr Delay (d2), s/veh	2.7	0.4	0.5	0.4	3.6	3.9	1.7	0.7	0.2	0.3	0.3	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.5	4.5	4.5	1.1	3.4	3.5	1.9	4.8	0.6	0.4	2.3	5.8
LnGrp Delay(d), s/veh	23.3	20.9	21.0	30.9	38.7	39.0	18.4	15.1	12.3	18.4	13.3	17.2
LnGrp LOS	C	C	C	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		1001			352			791			693	
Approach Delay, s/veh		22.1			37.6			15.4			15.4	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	7.1	33.4		43.0	26.3	14.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		39.0	7.0	62.0		39.0	49.0	20.0
Max Q Clear Time (g_c+I1), s		14.7	4.2	11.2		14.3	20.7	8.7
Green Ext Time (p_c), s		5.2	0.0	3.2		3.4	1.6	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	750	170	130	470	10	300	100	230	30	50	10
Future Volume (veh/h)	20	750	170	130	470	10	300	100	230	30	50	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	22	843	191	146	528	11	337	112	258	34	56	11
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	362	1006	228	241	1434	30	687	748	624	384	793	151
Arrive On Green	0.02	0.35	0.35	0.07	0.40	0.40	0.16	0.40	0.40	0.02	0.27	0.27
Sat Flow, veh/h	1792	2887	654	1792	3578	74	1792	1881	1571	1792	2985	568
Grp Volume(v), veh/h	22	522	512	146	263	276	337	112	258	34	33	34
Grp Sat Flow(s),veh/h/ln	1792	1787	1753	1792	1787	1866	1792	1881	1571	1792	1787	1766
Q Serve(g_s), s	0.8	27.0	27.0	5.0	10.4	10.4	13.0	3.8	11.9	1.4	1.4	1.5
Cycle Q Clear(g_c), s	0.8	27.0	27.0	5.0	10.4	10.4	13.0	3.8	11.9	1.4	1.4	1.5
Prop In Lane	1.00		0.37	1.00		0.04	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	362	623	611	241	716	748	687	748	624	384	475	469
V/C Ratio(X)	0.06	0.84	0.84	0.60	0.37	0.37	0.49	0.15	0.41	0.09	0.07	0.07
Avail Cap(c_a), veh/h	401	817	802	365	995	1038	852	748	624	412	475	469
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.5	30.1	30.1	22.9	21.2	21.2	19.4	19.4	21.8	25.8	27.6	27.7
Incr Delay (d2), s/veh	0.1	6.0	6.1	2.4	0.3	0.3	0.5	0.4	2.0	0.1	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	14.4	14.1	2.6	5.2	5.4	6.5	2.1	5.5	0.7	0.7	0.8
LnGrp Delay(d), s/veh	20.6	36.1	36.2	25.3	21.5	21.5	19.9	19.8	23.9	25.9	27.9	28.0
LnGrp LOS	C	D	D	C	C	C	B	B	C	C	C	C
Approach Vol, veh/h		1056			685			707			101	
Approach Delay, s/veh		35.8			22.3			21.3			27.3	
Approach LOS		D			C			C			C	

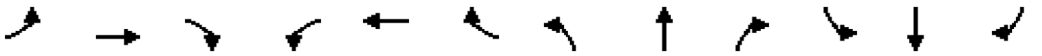
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	44.0	11.1	39.1	19.7	30.7	5.8	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	40.0	14.0	46.0	25.0	19.0	4.0	56.0
Max Q Clear Time (g_c+I1), s	3.4	13.9	7.0	29.0	15.0	3.5	2.8	12.4
Green Ext Time (p_c), s	0.0	1.4	0.2	6.0	0.7	0.2	0.0	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	390	140	70	470	250	80	370	50	140	270	80
Future Volume (veh/h)	130	390	140	70	470	250	80	370	50	140	270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	148	443	159	80	534	284	91	420	57	159	307	91
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	182	1188	520	103	646	343	117	1033	139	194	1007	293
Arrive On Green	0.10	0.34	0.34	0.06	0.29	0.29	0.07	0.33	0.33	0.11	0.37	0.37
Sat Flow, veh/h	1774	3539	1549	1774	2218	1176	1774	3127	422	1774	2693	783
Grp Volume(v), veh/h	148	443	159	80	426	392	91	236	241	159	200	198
Grp Sat Flow(s),veh/h/ln	1774	1770	1549	1774	1770	1624	1774	1770	1779	1774	1770	1707
Q Serve(g_s), s	7.9	9.1	7.3	4.3	21.6	21.7	4.9	9.9	10.1	8.4	7.7	7.9
Cycle Q Clear(g_c), s	7.9	9.1	7.3	4.3	21.6	21.7	4.9	9.9	10.1	8.4	7.7	7.9
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.24	1.00		0.46
Lane Grp Cap(c), veh/h	182	1188	520	103	515	473	117	585	588	194	662	638
V/C Ratio(X)	0.81	0.37	0.31	0.78	0.83	0.83	0.78	0.40	0.41	0.82	0.30	0.31
Avail Cap(c_a), veh/h	332	1618	708	221	699	641	221	585	588	350	662	638
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.3	24.3	23.7	44.7	31.8	31.9	44.3	24.9	24.9	41.9	21.2	21.3
Incr Delay (d2), s/veh	8.4	0.2	0.3	11.7	6.0	6.6	10.7	2.1	2.1	8.2	1.2	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	4.5	3.2	2.4	11.4	10.6	2.7	5.2	5.3	4.6	3.9	4.0
LnGrp Delay(d), s/veh	50.7	24.5	24.0	56.4	37.8	38.5	55.0	27.0	27.1	50.2	22.4	22.6
LnGrp LOS	D	C	C	E	D	D	D	C	C	D	C	C
Approach Vol, veh/h		750			898			568			557	
Approach Delay, s/veh		29.5			39.8			31.5			30.4	
Approach LOS		C			D			C			C	

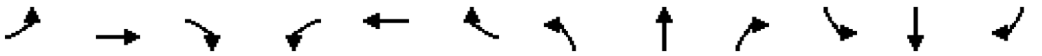
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.5	35.8	9.6	36.3	10.3	40.0	13.9	32.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	29.0	12.0	44.0	12.0	36.0	18.0	38.0
Max Q Clear Time (g_c+I1), s	10.4	12.1	6.3	11.1	6.9	9.9	9.9	23.7
Green Ext Time (p_c), s	0.2	2.4	0.1	3.5	0.1	2.2	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Future Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.98		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1626	3330		1787	3574	1584		3457		1698	1775	2745
Flt Permitted	0.95	0.55		0.95	1.00	1.00		0.88		0.95	0.91	1.00
Satd. Flow (perm)	1626	1856		1787	3574	1584		3067		1698	1629	2745
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	573	375	31	94	458	375	42	354	73	375	302	656
RTOR Reduction (vph)	0	3	0	0	0	49	0	13	0	0	0	19
Lane Group Flow (vph)	321	655	0	94	458	326	0	456	0	330	347	637
Confl. Peds. (#/hr)	3		2	2		3	5		7	7		5
Confl. Bikes (#/hr)			2			2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Effective Green, g (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Actuated g/C Ratio	0.24	0.47		0.06	0.20	0.41		0.21		0.21	0.46	0.70
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	392	1232		110	701	697		655		355	776	2015
v/s Ratio Prot	c0.20	0.13		0.05	c0.13	0.10				c0.19	0.09	0.08
v/s Ratio Perm		0.12				0.11		c0.15			0.11	0.16
v/c Ratio	0.82	0.53		0.85	0.65	0.47		0.70		0.93	0.45	0.32
Uniform Delay, d1	41.1	21.3		53.3	42.5	25.0		41.7		44.5	21.2	6.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	12.5	0.4		43.8	2.2	0.5		6.0		30.0	0.4	0.1
Delay (s)	53.7	21.8		97.1	44.7	25.5		47.7		74.5	21.6	6.8
Level of Service	D	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		32.2			42.3			47.7			27.4	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



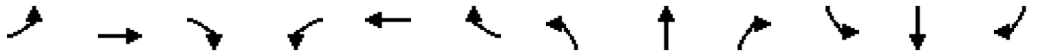
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Future Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1765	3574	1575	1785	3558		1698	1705	1562	1756	1740	
Flt Permitted	0.47	1.00	1.00	0.25	1.00		0.95	0.62	1.00	0.95	1.00	
Satd. Flow (perm)	867	3574	1575	460	3558		1698	1101	1562	1756	1740	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	433	433	485	495	10	464	10	423	10	10	10
RTOR Reduction (vph)	0	0	272	0	1	0	0	0	51	0	8	0
Lane Group Flow (vph)	10	433	161	485	504	0	237	237	372	10	12	0
Confl. Peds. (#/hr)	17		8	8		17			13	13		
Confl. Bikes (#/hr)			2			3			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Effective Green, g (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Actuated g/C Ratio	0.20	0.19	0.37	0.48	0.44		0.18	0.44	0.65	0.01	0.22	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	178	685	644	559	1563		304	593	1074	11	388	
v/s Ratio Prot	0.00	0.12	0.04	c0.22	0.14		c0.14	0.07	0.09	0.01	0.01	
v/s Ratio Perm	0.01		0.06	c0.20				c0.10	0.15			
v/c Ratio	0.06	0.63	0.25	0.87	0.32		0.78	0.40	0.35	0.91	0.03	
Uniform Delay, d1	34.2	39.3	23.0	21.7	19.4		41.4	20.1	8.3	52.5	32.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	1.9	0.2	13.4	0.1		11.9	0.4	0.2	217.6	0.2	
Delay (s)	34.3	41.2	23.2	35.1	19.5		53.3	20.5	8.5	270.1	32.3	
Level of Service	C	D	C	D	B		D	C	A	F	C	
Approach Delay (s/veh)		32.3			27.1			23.5			111.6	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Future Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	73	594	104	156	229	115	94	740	292	188	802	52
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	332	692	121	244	616	296	373	1189	469	337	1727	112
Arrive On Green	0.04	0.23	0.23	0.08	0.27	0.27	0.04	0.47	0.47	0.07	0.50	0.50
Sat Flow, veh/h	1810	3055	533	1810	2326	1115	1810	2514	992	1810	3437	223
Grp Volume(v), veh/h	73	350	348	156	175	169	94	531	501	188	421	433
Grp Sat Flow(s),veh/h/ln	1810	1805	1783	1810	1805	1636	1810	1805	1701	1810	1805	1855
Q Serve(g_s), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Cycle Q Clear(g_c), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Prop In Lane	1.00		0.30	1.00		0.68	1.00		0.58	1.00		0.12
Lane Grp Cap(c), veh/h	332	409	404	244	478	434	373	854	805	337	907	932
V/C Ratio(X)	0.22	0.86	0.86	0.64	0.37	0.39	0.25	0.62	0.62	0.56	0.46	0.46
Avail Cap(c_a), veh/h	336	478	473	310	610	553	412	854	805	454	907	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	40.6	40.7	30.0	32.7	33.0	14.5	21.5	21.5	16.4	17.7	17.7
Incr Delay (d2), s/veh	0.3	12.8	13.4	2.8	0.5	0.6	0.4	3.4	3.6	1.4	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	11.6	11.5	3.7	4.4	4.2	1.5	12.8	12.1	2.9	8.6	8.8
LnGrp Delay(d), s/veh	30.8	53.4	54.0	32.8	33.2	33.5	14.8	24.9	25.1	17.9	19.4	19.3
LnGrp LOS	C	D	D	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		771			500			1126			1042	
Approach Delay, s/veh		51.6			33.2			24.2			19.1	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	55.8	13.0	28.8	8.7	59.0	8.8	33.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	47.0	13.0	29.0	7.0	55.0	5.0	37.0
Max Q Clear Time (g_c+I1), s	7.6	26.1	8.9	22.5	4.9	18.6	5.4	11.2
Green Ext Time (p_c), s	0.3	7.0	0.1	2.3	0.0	6.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	730	110	220	980	200	250	1240	250	150	840	230
Future Volume (veh/h)	170	730	110	220	980	200	250	1240	250	150	840	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	172	737	111	222	990	202	253	1253	253	152	848	232
Adj No. of Lanes	2	3	0	2	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	228	1065	159	281	1073	218	282	1588	817	180	1385	703
Arrive On Green	0.07	0.24	0.24	0.08	0.25	0.25	0.16	0.44	0.44	0.10	0.39	0.39
Sat Flow, veh/h	3476	4482	668	3476	4245	864	1792	3574	1549	1792	3574	1544
Grp Volume(v), veh/h	172	561	287	222	798	394	253	1253	253	152	848	232
Grp Sat Flow(s),veh/h/ln	1738	1712	1726	1738	1712	1685	1792	1787	1549	1792	1787	1544
Q Serve(g_s), s	5.7	17.5	17.8	7.3	26.6	26.7	16.2	35.1	10.8	9.8	22.3	11.3
Cycle Q Clear(g_c), s	5.7	17.5	17.8	7.3	26.6	26.7	16.2	35.1	10.8	9.8	22.3	11.3
Prop In Lane	1.00		0.39	1.00		0.51	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	228	814	410	281	866	426	282	1588	817	180	1385	703
V/C Ratio(X)	0.75	0.69	0.70	0.79	0.92	0.92	0.90	0.79	0.31	0.84	0.61	0.33
Avail Cap(c_a), veh/h	238	814	410	327	878	432	322	1588	817	214	1385	703
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	40.7	40.8	52.8	42.6	42.6	48.4	27.8	15.8	51.7	28.8	20.6
Incr Delay (d2), s/veh	12.3	2.5	5.2	10.8	14.8	25.6	24.4	4.1	1.0	22.4	2.0	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	8.5	9.0	3.9	14.3	15.4	9.9	18.1	4.8	5.9	11.3	5.1
LnGrp Delay(d), s/veh	66.1	43.1	46.0	63.6	57.4	68.2	72.7	31.9	16.8	74.2	30.8	21.9
LnGrp LOS	E	D	D	E	E	E	E	C	B	E	C	C
Approach Vol, veh/h		1020			1414			1759			1232	
Approach Delay, s/veh		47.8			61.4			35.6			34.5	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	56.0	13.4	31.8	22.4	49.3	11.7	33.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	52.0	11.0	27.0	21.0	45.0	8.0	30.0
Max Q Clear Time (g_c+I1), s	11.8	37.1	9.3	19.8	18.2	24.3	7.7	28.7
Green Ext Time (p_c), s	0.1	8.5	0.1	2.9	0.2	6.8	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Future Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	412	979	113	577	979	144	206	990	536	93	526	216
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	580	2669	307	581	2939	899	151	1324	582	104	624	255
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.08	0.37	0.37	0.25	0.25	0.25
Sat Flow, veh/h	988	4709	542	1018	5187	1587	1810	3610	1587	347	2496	1021
Grp Volume(v), veh/h	412	718	374	577	979	144	206	990	536	93	380	362
Grp Sat Flow(s),veh/h/ln	494	1729	1793	509	1729	1587	1810	1805	1587	347	1805	1711
Q Serve(g_s), s	45.8	13.6	13.7	54.3	12.1	5.2	10.0	28.7	38.8	15.3	24.0	24.2
Cycle Q Clear(g_c), s	57.9	13.6	13.7	68.0	12.1	5.2	10.0	28.7	38.8	30.0	24.0	24.2
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
V/C Ratio(X)	0.71	0.37	0.37	0.99	0.33	0.16	1.37	0.75	0.92	0.89	0.84	0.85
Avail Cap(c_a), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	14.2	14.2	38.3	13.9	12.4	55.0	33.2	36.3	56.4	42.7	42.8
Incr Delay (d2), s/veh	4.0	0.1	0.2	35.7	0.1	0.1	201.2	3.9	22.2	62.7	17.1	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.5	6.8	12.4	5.7	2.3	13.4	15.0	20.6	4.9	14.1	13.5
LnGrp Delay(d), s/veh	33.4	14.3	14.5	74.0	14.0	12.5	256.2	37.1	58.6	119.0	59.9	61.1
LnGrp LOS	C	B	B	E	B	B	F	D	E	F	E	E
Approach Vol, veh/h		1504			1700			1732			835	
Approach Delay, s/veh		19.6			34.2			69.8			67.0	
Approach LOS		B			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		48.0		72.0	14.0	34.0		72.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		44.0		68.0	10.0	30.0		68.0
Max Q Clear Time (g_c+I1), s		40.8		59.9	12.0	32.0		70.0
Green Ext Time (p_c), s		2.3		6.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.8
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	260	80	70	1230	1270	210
Future Volume (veh/h)	260	80	70	1230	1270	210
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	260	80	70	1230	1270	210
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	300	268	90	2711	2054	337
Arrive On Green	0.17	0.17	0.05	0.76	0.67	0.67
Sat Flow, veh/h	1792	1599	1792	3668	3155	502
Grp Volume(v), veh/h	260	80	70	1230	737	743
Grp Sat Flow(s),veh/h/ln	1792	1599	1792	1787	1787	1776
Q Serve(g_s), s	15.3	4.7	4.2	13.7	24.9	25.6
Cycle Q Clear(g_c), s	15.3	4.7	4.2	13.7	24.9	25.6
Prop In Lane	1.00	1.00	1.00			0.28
Lane Grp Cap(c), veh/h	300	268	90	2711	1199	1192
V/C Ratio(X)	0.87	0.30	0.77	0.45	0.61	0.62
Avail Cap(c_a), veh/h	497	444	166	2711	1199	1192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	39.4	50.7	4.8	9.9	10.1
Incr Delay (d2), s/veh	8.6	0.6	13.1	0.5	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	4.4	2.4	6.9	12.9	13.2
LnGrp Delay(d), s/veh	52.4	40.1	63.8	5.4	12.3	12.5
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	340			1300	1480	
Approach Delay, s/veh	49.5			8.5	12.4	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		86.0		22.1	9.5	76.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		82.0		30.0	10.0	68.0		
Max Q Clear Time (g_c+I1), s		15.7		17.3	6.2	27.6		
Green Ext Time (p_c), s		11.9		0.8	0.0	13.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Future Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1900	1881	1900	1881	0	1881
Adj Flow Rate, veh/h	758	611	0	0	874	0	11	189	21	853	0	547
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1	1	0	1
Cap, veh/h	794	2512	0	0	977	437	19	323	36	0	0	0
Arrive On Green	0.38	0.70	0.00	0.00	0.27	0.00	0.21	0.21	0.21	0.00	0.00	0.00
Sat Flow, veh/h	1792	3668	0	0	3668	1599	91	1572	175		0	
Grp Volume(v), veh/h	758	611	0	0	874	0	221	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1792	1787	0	0	1787	1599	1838	0	0			
Q Serve(g_s), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Cycle Q Clear(g_c), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.05		0.10			
Lane Grp Cap(c), veh/h	794	2512	0	0	977	437	378	0	0			
V/C Ratio(X)	0.95	0.24	0.00	0.00	0.89	0.00	0.58	0.00	0.00			
Avail Cap(c_a), veh/h	844	2655	0	0	1021	457	378	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	19.9	4.7	0.0	0.0	30.6	0.0	31.4	0.0	0.0			
Incr Delay (d2), s/veh	20.1	0.0	0.0	0.0	10.0	0.0	6.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	21.9	2.6	0.0	0.0	11.4	0.0	5.5	0.0	0.0			
LnGrp Delay(d), s/veh	40.0	4.7	0.0	0.0	40.6	0.0	37.9	0.0	0.0			
LnGrp LOS	D	A			D		D					
Approach Vol, veh/h		1369			874			221				
Approach Delay, s/veh		24.2			40.6			37.9				
Approach LOS		C			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.0		65.5			37.6	27.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		18.0		65.0			36.0	25.0
Max Q Clear Time (g_c+I1), s		11.5		7.4			32.5	22.6
Green Ext Time (p_c), s		0.6		4.6			1.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Future Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	163	1245	255	173	755	122	306	959	163	173	827	122
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1343	275	201	1424	228	362	1295	565	228	1010	149
Arrive On Green	0.11	0.32	0.32	0.11	0.32	0.32	0.11	0.37	0.37	0.07	0.33	0.33
Sat Flow, veh/h	1774	4213	863	1774	4403	705	3442	3539	1544	3442	3089	456
Grp Volume(v), veh/h	163	1002	498	173	580	297	306	959	163	173	474	475
Grp Sat Flow(s),veh/h/ln	1774	1695	1686	1774	1695	1718	1721	1770	1544	1721	1770	1775
Q Serve(g_s), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Cycle Q Clear(g_c), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Prop In Lane	1.00		0.51	1.00		0.41	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	192	1080	537	201	1096	555	362	1295	565	228	579	581
V/C Ratio(X)	0.85	0.93	0.93	0.86	0.53	0.54	0.85	0.74	0.29	0.76	0.82	0.82
Avail Cap(c_a), veh/h	287	1096	545	226	1096	555	381	1295	565	234	579	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	38.7	38.7	51.2	32.5	32.5	51.7	32.4	26.4	53.9	36.3	36.3
Incr Delay (d2), s/veh	14.0	13.1	22.1	25.2	0.5	1.0	15.5	3.8	1.3	13.0	12.2	12.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	17.7	18.9	6.9	7.7	8.1	5.7	14.1	3.9	3.2	16.0	16.1
LnGrp Delay(d), s/veh	65.4	51.8	60.8	76.4	32.9	33.6	67.2	36.3	27.7	67.0	48.6	48.5
LnGrp LOS	E	D	E	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1663			1050			1428			1122	
Approach Delay, s/veh		55.9			40.3			41.9			51.4	
Approach LOS		E			D			D			D	

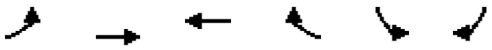
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	47.0	17.3	41.5	16.4	42.4	16.7	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	15.0	38.0	13.0	38.0	19.0	34.0
Max Q Clear Time (g_c+I1), s	7.8	29.7	13.3	35.6	12.3	30.9	12.6	18.7
Green Ext Time (p_c), s	0.0	5.6	0.1	1.9	0.1	3.1	0.2	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Future Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	226	1204	237	183	796	204	183	925	258	269	957	161
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	1332	577	211	950	241	211	1110	674	298	1282	797
Arrive On Green	0.14	0.26	0.26	0.12	0.24	0.24	0.12	0.31	0.31	0.17	0.36	0.36
Sat Flow, veh/h	1774	5085	1484	1774	4006	1016	1774	3539	1550	1774	3539	1572
Grp Volume(v), veh/h	226	1204	237	183	672	328	183	925	258	269	957	161
Grp Sat Flow(s),veh/h/ln	1774	1695	1484	1774	1695	1631	1774	1770	1550	1774	1770	1572
Q Serve(g_s), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Cycle Q Clear(g_c), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	1332	577	211	804	387	211	1110	674	298	1282	797
V/C Ratio(X)	0.89	0.90	0.41	0.87	0.84	0.85	0.87	0.83	0.38	0.90	0.75	0.20
Avail Cap(c_a), veh/h	291	1360	585	230	804	387	245	1110	674	337	1282	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	41.4	26.4	50.2	42.1	42.2	50.2	37.0	22.4	47.3	32.3	15.8
Incr Delay (d2), s/veh	24.5	8.7	0.5	26.5	7.7	15.9	23.8	7.4	1.6	24.7	4.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	13.4	5.7	7.3	11.1	11.7	7.1	14.9	5.9	10.5	14.1	3.0
LnGrp Delay(d), s/veh	73.2	50.1	26.9	76.7	49.8	58.1	74.0	44.4	24.1	72.0	36.3	16.3
LnGrp LOS	E	D	C	E	D	E	E	D	C	E	D	B
Approach Vol, veh/h		1667			1183			1366			1387	
Approach Delay, s/veh		49.9			56.3			44.5			40.9	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.5	40.4	17.8	34.4	17.8	46.0	20.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	36.0	15.0	31.0	16.0	42.0	19.0	27.0
Max Q Clear Time (g_c+I1), s	19.2	30.2	13.8	28.5	13.7	29.4	16.5	24.2
Green Ext Time (p_c), s	0.2	3.3	0.1	1.8	0.1	5.5	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.7
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	1020	1260	230	680	200
Future Volume (vph)	30	1020	1260	230	680	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1687	3374	3374	1459	3271	1374
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	169	3374	3374	1459	3271	1374
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	31	1041	1286	235	694	204
RTOR Reduction (vph)	0	0	0	90	2	32
Lane Group Flow (vph)	31	1041	1286	145	712	152
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				2		
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	47.4	47.4	47.4	47.4	42.5	42.5
Effective Green, g (s)	47.4	47.4	47.4	47.4	42.5	42.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	1633	1633	706	1419	596
v/s Ratio Prot		0.31	c0.38		c0.22	
v/s Ratio Perm	0.18			0.10		0.11
v/c Ratio	0.38	0.64	0.79	0.20	0.50	0.26
Uniform Delay, d1	16.0	18.8	21.1	14.5	20.0	17.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.8	2.6	0.1	1.3	1.0
Delay (s)	19.0	19.7	23.6	14.6	21.3	18.7
Level of Service	B	B	C	B	C	B
Approach Delay (s/veh)		19.6	22.2		20.8	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	5.9

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	30	20	30	1230	1550	30
Future Vol, veh/h	30	20	30	1230	1550	30
Conflicting Peds, #/hr	0	0	2	0	0	2
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	100	-	-	50
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	4	4	4	4	4	4
Mvmt Flow	32	22	32	1323	1667	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	2395	836	1701	0	-	0
Stage 1	1669	-	-	-	-	-
Stage 2	726	-	-	-	-	-
Critical Hdwy	6.88	6.98	4.18	-	-	-
Critical Hdwy Stg 1	5.88	-	-	-	-	-
Critical Hdwy Stg 2	5.88	-	-	-	-	-
Follow-up Hdwy	3.54	3.34	2.24	-	-	-
Pot Cap-1 Maneuver	~ 27	306	361	-	-	-
Stage 1	136	-	-	-	-	-
Stage 2	435	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 24	305	360	-	-	-
Mov Cap-2 Maneuver	~ 24	-	-	-	-	-
Stage 1	124	-	-	-	-	-
Stage 2	434	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s	$ 333.1	0.4	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	360	-	24	305	-	-
HCM Lane V/C Ratio	0.09	-	1.344	0.071	-	-
HCM Control Delay (s/veh)	16	-	$ 543.4	17.7	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.3	-	4	0.2	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Future Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	1444	91	71	1061	51	111	51	91	81	71	30
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	2646	167	212	2692	129	514	658	555	507	658	548
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	504	4880	307	337	4963	238	1281	1863	1571	1234	1863	1551
Grp Volume(v), veh/h	30	1003	532	71	724	388	111	51	91	81	71	30
Grp Sat Flow(s),veh/h/ln	504	1695	1797	337	1695	1811	1281	1863	1571	1234	1863	1551
Q Serve(g_s), s	2.8	14.7	14.7	13.3	9.5	9.5	4.9	1.4	3.0	3.6	2.0	1.0
Cycle Q Clear(g_c), s	12.3	14.7	14.7	28.0	9.5	9.5	6.8	1.4	3.0	5.0	2.0	1.0
Prop In Lane	1.00		0.17	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1838	974	212	1838	982	514	658	555	507	658	548
V/C Ratio(X)	0.10	0.55	0.55	0.33	0.39	0.39	0.22	0.08	0.16	0.16	0.11	0.05
Avail Cap(c_a), veh/h	592	3769	1997	404	3769	2014	514	658	555	507	658	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	11.4	11.4	20.5	10.2	10.2	18.9	16.4	17.0	18.1	16.6	16.3
Incr Delay (d2), s/veh	0.1	0.3	0.5	0.9	0.1	0.3	1.0	0.2	0.6	0.7	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.9	7.4	1.3	4.5	4.8	1.9	0.8	1.4	1.3	1.1	0.4
LnGrp Delay(d), s/veh	13.9	11.6	11.9	21.4	10.3	10.4	19.9	16.7	17.6	18.8	17.0	16.5
LnGrp LOS	B	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1565			1183			253			182	
Approach Delay, s/veh		11.8			11.0			18.4			17.7	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		45.5		31.0		45.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		27.0		85.0		27.0		85.0
Max Q Clear Time (g_c+I1), s		8.8		16.7		7.0		30.0
Green Ext Time (p_c), s		0.9		16.3		0.7		11.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	10	60	10	10	10	60	770	10	60	1000	80
Future Volume (veh/h)	50	10	60	10	10	10	60	770	10	60	1000	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1854	1845	1863	1845	1845	1845	1845	1863
Adj Flow Rate, veh/h	58	12	70	12	12	12	70	895	12	70	1163	93
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	2
Cap, veh/h	59	7	283	48	33	281	90	2321	1017	90	2322	1049
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.05	0.66	0.66	0.05	0.66	0.66
Sat Flow, veh/h	0	39	1583	0	185	1568	1774	3505	1535	1757	3505	1583
Grp Volume(v), veh/h	70	0	70	24	0	12	70	895	12	70	1163	93
Grp Sat Flow(s),veh/h/ln	39	0	1583	185	0	1568	1774	1752	1535	1757	1752	1583
Q Serve(g_s), s	0.0	0.0	4.2	0.0	0.0	0.7	4.4	12.9	0.3	4.4	18.7	2.4
Cycle Q Clear(g_c), s	20.0	0.0	4.2	20.0	0.0	0.7	4.4	12.9	0.3	4.4	18.7	2.4
Prop In Lane	0.83		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	66	0	283	81	0	281	90	2321	1017	90	2322	1049
V/C Ratio(X)	1.06	0.00	0.25	0.29	0.00	0.04	0.77	0.39	0.01	0.78	0.50	0.09
Avail Cap(c_a), veh/h	66	0	283	81	0	281	222	2321	1017	220	2322	1049
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.8	0.0	39.4	39.6	0.0	37.9	52.4	8.6	6.4	52.4	9.5	6.8
Incr Delay (d2), s/veh	129.6	0.0	0.4	2.0	0.0	0.1	13.1	0.5	0.0	13.3	0.8	0.2
Initial Q Delay(d3),s/veh	1.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	1.9	0.7	0.0	0.3	2.5	6.4	0.1	2.5	9.1	1.1
LnGrp Delay(d), s/veh	185.0	0.0	39.8	41.6	0.0	38.0	65.5	9.0	6.4	65.6	10.3	6.9
LnGrp LOS	F		D	D		D	E	A	A	E	B	A
Approach Vol, veh/h		140			36			977			1326	
Approach Delay, s/veh		112.4			40.4			13.1			13.0	
Approach LOS		F			D			B			B	

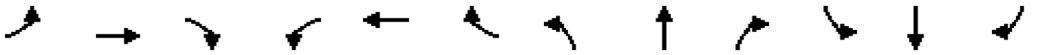
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.7	78.0		24.0	9.7	78.0		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	14.0	74.0		20.0	14.0	74.0		20.0
Max Q Clear Time (g_c+I1), s	6.4	14.9		22.0	6.4	20.7		22.0
Green Ext Time (p_c), s	0.1	7.7		0.0	0.1	11.8		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Future Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	0	61	41	10	10	71	398	71	10	439	10
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	301	54	8	289	195	1076	1150	42	1372	1152
Arrive On Green	0.19	0.00	0.19	0.19	0.19	0.19	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	0	0	1571	0	40	1507	217	1451	1550	15	1850	1553
Grp Volume(v), veh/h	10	0	61	51	0	10	469	0	71	449	0	10
Grp Sat Flow(s),veh/h/ln	0	0	1571	40	0	1507	1667	0	1550	1865	0	1553
Q Serve(g_s), s	0.0	0.0	3.9	0.0	0.0	0.6	0.0	0.0	1.5	0.0	0.0	0.2
Cycle Q Clear(g_c), s	23.0	0.0	3.9	23.0	0.0	0.6	10.3	0.0	1.5	9.7	0.0	0.2
Prop In Lane	1.00		1.00	0.80		1.00	0.15		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
V/C Ratio(X)	0.17	0.00	0.20	0.83	0.00	0.03	0.37	0.00	0.06	0.32	0.00	0.01
Avail Cap(c_a), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	40.8	56.6	0.0	39.5	5.3	0.0	4.2	5.3	0.0	4.0
Incr Delay (d2), s/veh	1.3	0.0	0.3	57.7	0.0	0.0	0.8	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.7	2.7	0.0	0.3	5.5	0.0	0.7	5.2	0.0	0.1
LnGrp Delay(d), s/veh	61.3	0.0	41.1	114.3	0.0	39.5	6.2	0.0	4.3	5.9	0.0	4.0
LnGrp LOS	E		D	F		D	A		A	A		A
Approach Vol, veh/h		71			61			540			459	
Approach Delay, s/veh		44.0			102.0			5.9			5.8	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		93.0		27.0		93.0		27.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		89.0		23.0		89.0		23.0
Max Q Clear Time (g_c+I1), s		12.3		25.0		11.7		25.0
Green Ext Time (p_c), s		4.2		0.0		3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Future Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	137	105	105	63	53	74	53	1200	84	84	1189	53
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	300	296	81	77	108	103	1953	137	107	2169	956
Arrive On Green	0.09	0.16	0.16	0.05	0.11	0.11	0.03	0.58	0.58	0.06	0.61	0.61
Sat Flow, veh/h	1774	1863	1548	1774	691	964	3442	3356	235	1774	3539	1560
Grp Volume(v), veh/h	137	105	105	63	0	127	53	632	652	84	1189	53
Grp Sat Flow(s),veh/h/ln	1774	1863	1548	1774	0	1655	1721	1770	1821	1774	1770	1560
Q Serve(g_s), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Cycle Q Clear(g_c), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Prop In Lane	1.00		1.00	1.00		0.58	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	168	300	296	81	0	185	103	1030	1060	107	2169	956
V/C Ratio(X)	0.82	0.35	0.35	0.78	0.00	0.68	0.52	0.61	0.62	0.78	0.55	0.06
Avail Cap(c_a), veh/h	284	421	397	151	0	250	195	1030	1060	201	2169	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	39.6	37.3	50.1	0.0	45.3	50.7	14.4	14.4	49.1	12.0	8.2
Incr Delay (d2), s/veh	9.3	0.7	0.7	14.5	0.0	4.7	4.0	2.7	2.7	11.6	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	2.8	2.7	2.1	0.0	3.8	0.8	12.7	13.1	2.8	10.4	0.6
LnGrp Delay(d), s/veh	56.4	40.3	38.0	64.6	0.0	50.0	54.7	17.2	17.1	60.7	13.0	8.3
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	A
Approach Vol, veh/h		347			190			1337			1326	
Approach Delay, s/veh		46.0			54.8			18.6			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	65.7	8.9	21.1	7.2	69.0	14.0	15.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	59.0	9.0	24.0	6.0	65.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	7.0	26.7	5.7	8.2	3.6	22.8	10.0	9.8
Green Ext Time (p_c), s	0.1	10.2	0.0	0.7	0.0	11.0	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Future Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	33	43	98	54	33	11	76	293	54	11	370	43
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	10.9	11.7	17.5	17.9
HCM LOS	B	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	21%	0%	43%	0%	63%	0%	3%	0%
Vol Thru, %	79%	0%	57%	0%	38%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	340	50	70	90	80	10	350	40
LT Vol	70	0	30	0	50	0	10	0
Through Vol	270	0	40	0	30	0	340	0
RT Vol	0	50	0	90	0	10	0	40
Lane Flow Rate	370	54	76	98	87	11	380	43
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.63	0.08	0.154	0.172	0.182	0.02	0.639	0.064
Departure Headway (Hd)	6.133	5.319	7.279	6.344	7.54	6.503	6.047	5.323
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	588	670	490	562	473	546	593	670
Service Time	3.892	3.078	5.061	4.126	5.329	4.291	3.807	3.083
HCM Lane V/C Ratio	0.629	0.081	0.155	0.174	0.184	0.02	0.641	0.064
HCM Control Delay, s/veh	18.8	8.5	11.4	10.5	12	9.4	19	8.5
HCM Lane LOS	C	A	B	B	B	A	C	A
HCM 95th-tile Q	4.4	0.3	0.5	0.6	0.7	0.1	4.5	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Future Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	211	937	179	53	726	221	168	905	63	284	663	221
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	188	1340	577	138	1340	586	349	1891	132	292	1996	878
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	596	3574	1540	508	3574	1563	632	3386	236	584	3574	1573
Grp Volume(v), veh/h	211	937	179	53	726	221	168	478	490	284	663	221
Grp Sat Flow(s),veh/h/ln	596	1787	1540	508	1787	1563	632	1787	1835	584	1787	1573
Q Serve(g_s), s	25.9	26.6	9.9	11.8	19.1	12.4	23.6	19.3	19.3	47.7	12.1	8.7
Cycle Q Clear(g_c), s	45.0	26.6	9.9	38.5	19.1	12.4	35.6	19.3	19.3	67.0	12.1	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
V/C Ratio(X)	1.12	0.70	0.31	0.39	0.54	0.38	0.48	0.48	0.48	0.97	0.33	0.25
Avail Cap(c_a), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	31.8	26.5	48.1	29.4	27.3	24.0	16.0	16.0	40.5	14.4	13.6
Incr Delay (d2), s/veh	101.3	1.6	0.3	1.8	0.4	0.4	4.7	1.6	1.6	46.2	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	13.4	4.2	1.7	9.5	5.4	4.6	9.9	10.1	13.1	6.0	3.9
LnGrp Delay(d), s/veh	152.5	33.4	26.8	49.8	29.9	27.7	28.7	17.6	17.6	86.7	14.8	14.3
LnGrp LOS	F	C	C	D	C	C	C	B	B	F	B	B
Approach Vol, veh/h		1327			1000			1136			1168	
Approach Delay, s/veh		51.4			30.4			19.2			32.2	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		49.0		71.0		49.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		45.0		67.0		45.0
Max Q Clear Time (g_c+I1), s		37.6		47.0		69.0		40.5
Green Ext Time (p_c), s		8.7		0.0		0.0		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	900	130	140	820	240	110	930	220	110	1090	330
Future Volume (veh/h)	230	900	130	140	820	240	110	930	220	110	1090	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	240	938	135	146	854	250	115	969	229	115	1135	344
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	266	1244	178	172	873	254	167	1154	272	133	1536	674
Arrive On Green	0.15	0.28	0.28	0.10	0.23	0.23	0.05	0.41	0.41	0.08	0.44	0.44
Sat Flow, veh/h	1757	4437	636	1757	3850	1120	3408	2803	661	1757	3505	1539
Grp Volume(v), veh/h	240	709	364	146	744	360	115	605	593	115	1135	344
Grp Sat Flow(s),veh/h/ln	1757	1679	1715	1757	1679	1612	1704	1752	1712	1757	1752	1539
Q Serve(g_s), s	16.0	22.9	23.1	9.7	26.2	26.5	4.0	36.9	37.1	7.7	32.0	19.3
Cycle Q Clear(g_c), s	16.0	22.9	23.1	9.7	26.2	26.5	4.0	36.9	37.1	7.7	32.0	19.3
Prop In Lane	1.00		0.37	1.00		0.69	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	266	941	481	172	761	366	167	721	705	133	1536	674
V/C Ratio(X)	0.90	0.75	0.76	0.85	0.98	0.98	0.69	0.84	0.84	0.87	0.74	0.51
Avail Cap(c_a), veh/h	280	941	481	192	761	366	172	721	705	133	1536	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	39.1	39.1	52.8	45.7	45.8	55.7	31.5	31.5	54.4	27.8	24.2
Incr Delay (d2), s/veh	28.9	3.5	6.8	26.2	26.9	42.8	10.7	11.2	11.7	41.1	3.2	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	11.1	11.8	6.0	15.0	16.1	2.1	20.1	19.8	5.3	16.1	8.6
LnGrp Delay(d), s/veh	78.5	42.6	45.9	79.0	72.6	88.6	66.5	42.7	43.2	95.5	31.0	26.9
LnGrp LOS	E	D	D	E	E	F	E	D	D	F	C	C
Approach Vol, veh/h		1313			1250			1313			1594	
Approach Delay, s/veh		50.1			78.0			45.0			34.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	53.0	15.7	37.4	9.8	56.2	22.0	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	49.0	13.0	33.0	6.0	52.0	19.0	27.0
Max Q Clear Time (g_c+I1), s	9.7	39.1	11.7	25.1	6.0	34.0	18.0	28.5
Green Ext Time (p_c), s	0.0	5.1	0.0	3.9	0.0	9.3	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Future Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	110	396	77	308	275	132	33	1769	231	154	1835	77
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	137	495	246	375	397	184	42	2325	302	184	2961	124
Arrive On Green	0.08	0.14	0.14	0.11	0.17	0.17	0.02	0.51	0.51	0.10	0.59	0.59
Sat Flow, veh/h	1792	3574	1506	3476	2337	1084	1792	4589	595	1792	5051	212
Grp Volume(v), veh/h	110	396	77	308	208	199	33	1317	683	154	1243	669
Grp Sat Flow(s),veh/h/ln	1792	1787	1506	1738	1787	1634	1792	1712	1761	1792	1712	1839
Q Serve(g_s), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Cycle Q Clear(g_c), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Prop In Lane	1.00		1.00	1.00		0.66	1.00		0.34	1.00		0.12
Lane Grp Cap(c), veh/h	137	495	246	375	303	277	42	1734	892	184	2007	1078
V/C Ratio(X)	0.80	0.80	0.31	0.82	0.69	0.72	0.79	0.76	0.77	0.84	0.62	0.62
Avail Cap(c_a), veh/h	210	580	282	470	322	295	97	1734	892	259	2007	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	46.3	41.1	48.4	43.2	43.5	53.9	21.9	22.1	48.8	14.9	14.9
Incr Delay (d2), s/veh	11.9	6.8	0.7	9.1	5.5	7.6	27.6	3.2	6.2	15.1	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	6.4	2.1	5.1	6.5	6.3	1.3	16.9	18.2	5.4	12.7	14.0
LnGrp Delay(d), s/veh	62.3	53.1	41.8	57.5	48.8	51.1	81.4	25.1	28.3	63.9	16.4	17.6
LnGrp LOS	E	D	D	E	D	D	F	C	C	E	B	B
Approach Vol, veh/h		583			715			2033			2066	
Approach Delay, s/veh		53.3			53.2			27.1			20.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	60.2	16.0	19.3	6.6	69.0	12.5	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	55.0	15.0	18.0	6.0	65.0	13.0	20.0
Max Q Clear Time (g_c+I1), s	11.4	36.7	11.6	13.9	4.0	28.2	8.7	14.8
Green Ext Time (p_c), s	0.1	13.2	0.3	1.0	0.0	19.5	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	1	0	-	0	1	1
Stage 1	-	-	-	-	1	-
Stage 2	-	-	-	-	0	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1622	-	-	-	1022	1084
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1622	-	-	-	1022	1084
Mov Cap-2 Maneuver	-	-	-	-	1022	-
Stage 1	-	-	-	-	1022	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0	0	0
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1622	-	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	-	-	-	0	0
HCM Lane LOS	A	-	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	-	-

Intersection	
Int Delay, s/veh	0

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Future Vol, veh/h	0	0	0	0	0	0	0	0	0	0	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	0	0	0	0	0	0	0	0	0	0	0	0

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	2	2	1	2	2	1	1	0	0	1	0	0
Stage 1	1	1	-	1	1	-	-	-	-	-	-	-
Stage 2	1	1	-	1	1	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	1019	893	1083	1019	893	1083	1620	-	-	1620	-	-
Stage 1	1021	895	-	1021	895	-	-	-	-	-	-	-
Stage 2	1021	895	-	1021	895	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	1019	893	1083	1019	893	1083	1620	-	-	1620	-	-
Mov Cap-2 Maneuver	1019	893	-	1019	893	-	-	-	-	-	-	-
Stage 1	1021	895	-	1021	895	-	-	-	-	-	-	-
Stage 2	1021	895	-	1021	895	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	0	0	0	0
HCM LOS	A	A		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	-	-	-	1620	-	-	1620	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-	-	-	-	-	-
HCM Control Delay (s/veh)	0	0	0	0	-	-	0	-	-	0
HCM Lane LOS	A	A	A	A	-	-	A	-	-	A
HCM 95th %tile Q(veh)	-	-	-	0	-	-	0	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1050	30	10	350	70	10	10	20	60	10	60
Future Volume (veh/h)	60	1050	30	10	350	70	10	10	20	60	10	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	65	1141	33	11	380	76	11	11	22	65	11	65
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1539	44	65	1353	265	372	347	640	331	75	282
Arrive On Green	0.48	0.48	0.48	0.48	0.48	0.48	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	122	3206	92	23	2819	551	726	859	1583	631	184	697
Grp Volume(v), veh/h	634	0	605	247	0	220	22	0	22	141	0	0
Grp Sat Flow(s),veh/h/ln	1741	0	1679	1795	0	1598	1585	0	1583	1513	0	0
Q Serve(g_s), s	10.2	0.0	20.3	0.0	0.0	5.8	0.0	0.0	0.6	1.6	0.0	0.0
Cycle Q Clear(g_c), s	20.0	0.0	20.3	5.5	0.0	5.8	0.5	0.0	0.6	3.9	0.0	0.0
Prop In Lane	0.10		0.05	0.04		0.34	0.50		1.00	0.46		0.46
Lane Grp Cap(c), veh/h	893	0	806	916	0	767	719	0	640	688	0	0
V/C Ratio(X)	0.71	0.00	0.75	0.27	0.00	0.29	0.03	0.00	0.03	0.20	0.00	0.00
Avail Cap(c_a), veh/h	2132	0	2037	2125	0	1939	719	0	640	688	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.4	0.0	14.6	10.8	0.0	10.9	12.4	0.0	12.5	13.4	0.0	0.0
Incr Delay (d2), s/veh	1.1	0.0	1.4	0.2	0.0	0.2	0.1	0.0	0.1	0.7	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	0.0	9.6	2.8	0.0	2.6	0.3	0.0	0.3	1.9	0.0	0.0
LnGrp Delay(d), s/veh	15.4	0.0	16.1	10.9	0.0	11.1	12.5	0.0	12.5	14.1	0.0	0.0
LnGrp LOS	B		B	B		B	B		B	B		
Approach Vol, veh/h		1239			467			44			141	
Approach Delay, s/veh		15.7			11.0			12.5			14.1	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		37.2		32.0		37.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		2.6		22.3		5.9		7.8
Green Ext Time (p_c), s		0.1		11.0		0.8		3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	760	10	10	440	10	10	10	10	20	10	10
Future Volume (veh/h)	10	760	10	10	440	10	10	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	826	11	11	478	11	11	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	75	1229	16	80	1203	27	313	310	266	452	225	192
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	14	3474	46	23	3401	77	448	627	538	706	456	387
Grp Volume(v), veh/h	444	0	404	261	0	239	33	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1848	0	1687	1820	0	1681	1613	0	0	1550	0	0
Q Serve(g_s), s	0.0	0.0	10.7	0.0	0.0	5.6	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	10.6	0.0	10.7	5.5	0.0	5.6	0.5	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.02		0.03	0.04		0.05	0.33		0.33	0.50		0.25
Lane Grp Cap(c), veh/h	724	0	597	715	0	595	888	0	0	869	0	0
V/C Ratio(X)	0.61	0.00	0.68	0.36	0.00	0.40	0.04	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	3049	0	2758	2929	0	2749	888	0	0	869	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	14.4	0.0	14.4	12.8	0.0	12.8	6.9	0.0	0.0	6.9	0.0	0.0
Incr Delay (d2), s/veh	0.8	0.0	1.4	0.3	0.0	0.4	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	0.0	5.2	2.9	0.0	2.7	0.3	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	15.3	0.0	15.8	13.1	0.0	13.2	6.9	0.0	0.0	7.0	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		848			500			33			44	
Approach Delay, s/veh		15.5			13.2			6.9			7.0	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		22.6		30.0		22.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		26.0		86.0		26.0		86.0
Max Q Clear Time (g_c+I1), s		2.5		12.7		2.7		7.6
Green Ext Time (p_c), s		0.1		5.9		0.2		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	730	90	10	440	20	40	10	10	20	10	10
Future Volume (veh/h)	10	730	90	10	440	20	40	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	793	98	11	478	22	43	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	68	1133	139	72	1217	55	571	146	125	446	222	192
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	13	3085	378	23	3313	151	944	295	252	712	449	387
Grp Volume(v), veh/h	480	0	422	267	0	244	65	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1848	0	1628	1818	0	1669	1491	0	0	1548	0	0
Q Serve(g_s), s	0.0	0.0	12.9	0.0	0.0	6.3	0.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	12.8	0.0	12.9	6.2	0.0	6.3	1.1	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.02		0.23	0.04		0.09	0.66		0.17	0.50		0.25
Lane Grp Cap(c), veh/h	742	0	598	732	0	613	842	0	0	860	0	0
V/C Ratio(X)	0.65	0.00	0.71	0.37	0.00	0.40	0.08	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	2654	0	2311	2542	0	2368	842	0	0	860	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	15.8	13.7	0.0	13.7	7.7	0.0	0.0	7.6	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	1.5	0.3	0.0	0.4	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.7	0.0	6.0	3.3	0.0	3.0	0.6	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	16.7	0.0	17.3	14.0	0.0	14.1	7.9	0.0	0.0	7.7	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		902			511			65			44	
Approach Delay, s/veh		17.0			14.0			7.9			7.7	
Approach LOS		B			B			A			A	

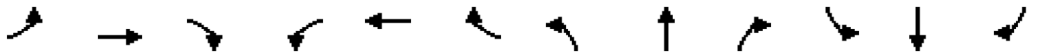
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.0		25.5		33.0		25.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		29.0		83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s		3.1		14.9		2.7		8.3
Green Ext Time (p_c), s		0.3		6.5		0.2		3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	710	30	50	460	10	20	10	40	30	10	10
Future Volume (veh/h)	10	710	30	50	460	10	20	10	40	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	772	33	54	500	11	22	11	43	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	1131	48	115	919	21	278	161	464	541	180	154
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	15	3358	142	111	2729	63	374	311	892	842	347	297
Grp Volume(v), veh/h	429	0	387	273	0	292	76	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1846	0	1670	1219	0	1684	1576	0	0	1486	0	0
Q Serve(g_s), s	0.0	0.0	11.2	1.1	0.0	7.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.1	0.0	11.2	12.3	0.0	7.8	1.3	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.03		0.09	0.20		0.04	0.29		0.57	0.60		0.20
Lane Grp Cap(c), veh/h	688	0	562	488	0	567	903	0	0	876	0	0
V/C Ratio(X)	0.62	0.00	0.69	0.56	0.00	0.51	0.08	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2773	0	2485	2078	0	2506	903	0	0	876	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.9	0.0	16.0	14.6	0.0	14.8	6.7	0.0	0.0	6.6	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5	1.0	0.0	0.7	0.2	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	0.0	5.3	3.4	0.0	3.7	0.6	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	16.9	0.0	17.5	15.6	0.0	15.6	6.9	0.0	0.0	6.8	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		816			565			76			55	
Approach Delay, s/veh		17.2			15.6			6.9			6.8	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.0		22.8		33.0		22.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		29.0		83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s		3.3		13.2		2.8		14.3
Green Ext Time (p_c), s		0.4		5.6		0.2		3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.7
HCM 2010 LOS	B

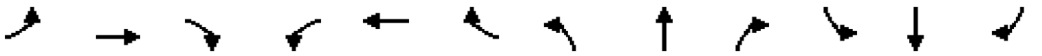


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	550	10	10	520	480	0	0	0	110	10	90
Future Volume (vph)	150	550	10	10	520	480	0	0	0	110	10	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					0.95	0.91	0.95
Frt		1.00		1.00	0.93					1.00	0.95	0.85
Flt Protected		0.99		0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3495		1770	3284					1681	1569	1504
Flt Permitted		0.53		0.95	1.00					0.95	0.90	1.00
Satd. Flow (perm)		1888		1770	3284					1681	1450	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	598	11	11	565	522	0	0	0	120	11	98
RTOR Reduction (vph)	0	1	0	0	198	0	0	0	0	0	10	42
Lane Group Flow (vph)	0	771	0	11	889	0	0	0	0	79	68	30
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		38.2		0.6	42.8					7.6	36.8	36.8
Effective Green, g (s)		38.2		0.6	42.8					7.6	36.8	36.8
Actuated g/C Ratio		0.44		0.01	0.49					0.09	0.42	0.42
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		823		12	1604					145	619	631
v/s Ratio Prot				0.01	c0.27					c0.05	0.01	0.02
v/s Ratio Perm		c0.41									c0.04	
v/c Ratio		1.07dl		0.92	0.55					0.54	0.11	0.05
Uniform Delay, d1		23.5		43.5	15.7					38.3	15.4	15.0
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		17.7		212.2	0.4					4.1	0.1	0.1
Delay (s)		41.3		255.6	16.1					42.5	15.5	15.2
Level of Service		D		F	B					D	B	B
Approach Delay (s/veh)		41.3			18.5			0.0			24.7	
Approach LOS		D			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	87.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.9%	ICU Level of Service	B
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	550	10	10	730	1330	10	10	10	180	10	90
Future Volume (vph)	190	550	10	10	730	1330	10	10	10	180	10	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.96		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		1750		1681	1607	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.90		0.81	0.79	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		1608		1436	1327	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	598	11	11	793	1446	11	11	11	196	11	98
RTOR Reduction (vph)	0	0	3	0	0	231	0	9	0	0	3	76
Lane Group Flow (vph)	207	598	8	11	793	1215	0	24	0	108	106	12
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	12.0	93.4	93.4	0.8	82.2	82.2		17.0		17.0	17.0	17.0
Effective Green, g (s)	12.0	93.4	93.4	0.8	82.2	82.2		17.0		17.0	17.0	17.0
Actuated g/C Ratio	0.10	0.76	0.76	0.01	0.67	0.67		0.14		0.14	0.14	0.14
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	172	2682	1200	11	2361	1056		221		198	183	207
v/s Ratio Prot	c0.12	0.17		0.01	0.22							
v/s Ratio Perm			0.01			c0.77		0.01		0.08	c0.08	0.01
v/c Ratio	1.20	0.22	0.01	1.00	0.34	1.15		0.11		0.55	0.58	0.06
Uniform Delay, d1	55.6	4.3	3.6	61.2	8.8	20.5		46.5		49.5	49.7	46.1
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	133.9	0.0	0.0	271.4	0.1	79.0		1.0		10.4	12.6	0.5
Delay (s)	189.5	4.4	3.6	332.6	8.9	99.5		47.4		59.9	62.3	46.7
Level of Service	F	A	A	F	A	F		D		E	E	D
Approach Delay (s/veh)		51.3			68.7			47.4			56.9	
Approach LOS		D			E			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	63.3	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	106.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	40	130	80	230	110	20	180	730	150	10	1270	80
Future Volume (veh/h)	40	130	80	230	110	20	180	730	150	10	1270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	43	141	87	250	120	22	196	793	163	11	1380	87
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	47	128	505	64	0	505	190	2108	943	357	2015	127
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	0	400	1583	0	0	1583	360	3539	1583	585	3382	213
Grp Volume(v), veh/h	184	0	87	370	0	22	196	793	163	11	720	747
Grp Sat Flow(s),veh/h/ln	400	0	1583	0	0	1583	360	1770	1583	585	1770	1825
Q Serve(g_s), s	0.0	0.0	3.7	0.0	0.0	0.9	29.7	11.0	4.4	0.9	26.1	26.3
Cycle Q Clear(g_c), s	30.0	0.0	3.7	30.0	0.0	0.9	56.0	11.0	4.4	11.9	26.1	26.3
Prop In Lane	0.23		1.00	0.68		1.00	1.00		1.00	1.00		0.12
Lane Grp Cap(c), veh/h	175	0	505	64	0	505	190	2108	943	357	1054	1087
V/C Ratio(X)	1.05	0.00	0.17	5.77	0.00	0.04	1.03	0.38	0.17	0.03	0.68	0.69
Avail Cap(c_a), veh/h	175	0	505	64	0	505	190	2108	943	357	1054	1087
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	23.1	47.0	0.0	22.1	38.1	9.9	8.6	13.0	13.0	13.0
Incr Delay (d2), s/veh	82.7	0.0	0.2	2177.9	0.0	0.0	73.4	0.5	0.4	0.2	3.6	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	0.0	1.6	40.5	0.0	0.4	8.8	5.4	2.0	0.2	13.7	14.1
LnGrp Delay(d), s/veh	110.1	0.0	23.2	2224.9	0.0	22.1	111.8	10.4	9.0	13.2	16.5	16.5
LnGrp LOS	F		C	F		C	F	B	A	B	B	B
Approach Vol, veh/h		271			392			1152			1478	
Approach Delay, s/veh		82.2			2101.3			27.5			16.5	
Approach LOS		F			F			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		34.0		60.0		34.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		30.0		56.0		22.0
Max Q Clear Time (g_c+I1), s		58.0		32.0		28.3		32.0
Green Ext Time (p_c), s		0.0		0.0		13.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	273.9
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	4.5

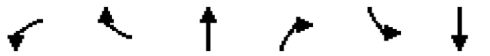
Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	30	1720	30	70	800
Future Vol, veh/h	20	30	1720	30	70	800
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	80	0	-	-	95	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	32	1849	32	75	860

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	2446	942	0	0	1882	0
Stage 1	1866	-	-	-	-	-
Stage 2	580	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	26	266	-	-	319	-
Stage 1	109	-	-	-	-	-
Stage 2	526	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	~ 20	266	-	-	319	-
Mov Cap-2 Maneuver	~ 20	-	-	-	-	-
Stage 1	109	-	-	-	-	-
Stage 2	402	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	211.2	0	1.6
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	20	266	319	-
HCM Lane V/C Ratio	-	-	1.075	0.121	0.236	-
HCM Control Delay (s/veh)	-	-	$ 497.5	20.4	19.7	-
HCM Lane LOS	-	-	F	C	C	-
HCM 95th %tile Q(veh)	-	-	2.9	0.4	0.9	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	150	250	1170	220	150	670
Future Volume (vph)	150	250	1170	220	150	670
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	0.95		1.00	0.95
Frpb, ped/bikes	1.00	1.00	0.99		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	1.00	0.85	0.98		1.00	1.00
Flt Protected	0.95	1.00	1.00		0.95	1.00
Satd. Flow (prot)	1787	1599	3466		1787	3574
Flt Permitted	0.95	1.00	1.00		0.11	1.00
Satd. Flow (perm)	1787	1599	3466		207	3574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	156	260	1219	229	156	698
RTOR Reduction (vph)	0	47	12	0	0	0
Lane Group Flow (vph)	156	213	1436	0	156	698
Confl. Peds. (#/hr)	12			6	6	
Confl. Bikes (#/hr)				3		
Turn Type	Prot	pm+ov	NA		pm+pt	NA
Protected Phases	4	1	2		1	2 1
Permitted Phases		4			1 2	
Actuated Green, G (s)	14.9	31.4	70.2		86.7	90.7
Effective Green, g (s)	14.9	31.4	70.2		86.7	90.7
Actuated g/C Ratio	0.13	0.28	0.62		0.76	0.80
Clearance Time (s)	4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	234	498	2141		387	2853
v/s Ratio Prot	c0.09	c0.06	c0.41		0.06	0.20
v/s Ratio Perm		0.07			0.25	
v/c Ratio	0.67	0.43	0.67		0.40	0.24
Uniform Delay, d1	47.0	33.7	14.2		23.6	2.9
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	7.0	0.6	1.7		0.7	0.0
Delay (s)	54.0	34.3	15.9		24.3	2.9
Level of Service	D	C	B		C	A
Approach Delay (s/veh)	41.7		15.9			6.8
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	113.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	10	30	0	0	10	40	1640	10	10	540	70
Future Vol, veh/h	20	10	30	0	0	10	40	1640	10	10	540	70
Conflicting Peds, #/hr	0	0	1	1	0	0	4	0	4	4	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	95	-	-	75	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	90	90	90	90	90	90	90	90	90	90	90	90
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	11	33	0	0	11	44	1822	11	11	600	78

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1482	2590	344	2189	2624	921	682	0	0	1837	0	0
Stage 1	665	665	-	1920	1920	-	-	-	-	-	-	-
Stage 2	817	1925	-	269	704	-	-	-	-	-	-	-
Critical Hdwy	6.44	6.54	7.14	6.44	6.54	7.14	5.34	-	-	5.34	-	-
Critical Hdwy Stg 1	7.34	5.54	-	7.34	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.74	5.54	-	6.74	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.82	4.02	3.92	3.82	4.02	3.92	3.12	-	-	3.12	-	-
Pot Cap-1 Maneuver	132	25	557	48	24	234	556	-	-	151	-	-
Stage 1	339	456	-	44	113	-	-	-	-	-	-	-
Stage 2	305	113	-	655	438	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	111	21	555	24	20	233	554	-	-	150	-	-
Mov Cap-2 Maneuver	111	21	-	24	20	-	-	-	-	-	-	-
Stage 1	311	421	-	40	104	-	-	-	-	-	-	-
Stage 2	267	104	-	555	405	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	133.6	21.2	0.3	0.5
HCM LOS	F	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	WBLn1	SBL	SBT	SBR
Capacity (veh/h)	554	-	-	84	233	150	-	-
HCM Lane V/C Ratio	0.08	-	-	0.794	0.048	0.074	-	-
HCM Control Delay (s/veh)	12.1	-	-	133.6	21.2	30.9	-	-
HCM Lane LOS	B	-	-	F	C	D	-	-
HCM 95th %tile Q(veh)	0.3	-	-	4	0.1	0.2	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	280	20	130	280	230	30	870	100	110	330	150
Future Volume (veh/h)	190	280	20	130	280	230	30	870	100	110	330	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.98		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	202	298	21	138	298	245	32	926	106	117	351	160
Adj No. of Lanes	1	1	0	1	1	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	646	46	447	330	272	372	1571	179	270	1300	543
Arrive On Green	0.09	0.38	0.38	0.07	0.35	0.35	0.02	0.34	0.34	0.06	0.38	0.38
Sat Flow, veh/h	1774	1716	121	1774	940	773	1774	4593	523	1774	3440	1436
Grp Volume(v), veh/h	202	0	319	138	0	543	32	682	350	117	345	166
Grp Sat Flow(s),veh/h/ln	1774	0	1837	1774	0	1712	1774	1695	1726	1774	1695	1487
Q Serve(g_s), s	7.3	0.0	13.5	5.1	0.0	31.1	1.2	17.1	17.2	4.2	7.3	8.0
Cycle Q Clear(g_c), s	7.3	0.0	13.5	5.1	0.0	31.1	1.2	17.1	17.2	4.2	7.3	8.0
Prop In Lane	1.00		0.07	1.00		0.45	1.00		0.30	1.00		0.97
Lane Grp Cap(c), veh/h	276	0	692	447	0	602	372	1160	590	270	1282	562
V/C Ratio(X)	0.73	0.00	0.46	0.31	0.00	0.90	0.09	0.59	0.59	0.43	0.27	0.29
Avail Cap(c_a), veh/h	354	0	962	449	0	780	400	1160	590	337	1282	562
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.7	0.0	24.3	19.6	0.0	31.8	21.3	28.0	28.0	20.9	22.2	22.5
Incr Delay (d2), s/veh	5.5	0.0	0.5	0.4	0.0	11.4	0.1	2.2	4.3	1.1	0.5	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	0.0	6.9	2.5	0.0	16.5	0.6	8.3	8.9	2.1	3.5	3.5
LnGrp Delay(d), s/veh	29.2	0.0	24.7	20.0	0.0	43.2	21.3	30.1	32.3	22.0	22.7	23.8
LnGrp LOS	C		C	B		D	C	C	C	C	C	C
Approach Vol, veh/h		521			681			1064			628	
Approach Delay, s/veh		26.5			38.5			30.6			22.9	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.1	39.3	10.9	42.8	6.4	43.0	13.5	40.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	33.0	7.0	54.0	4.0	39.0	14.0	47.0
Max Q Clear Time (g_c+I1), s	6.2	19.2	7.1	15.5	3.2	10.0	9.3	33.1
Green Ext Time (p_c), s	0.1	5.5	0.0	2.1	0.0	3.4	0.2	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	930	50	90	190	30	10
Future Vol, veh/h	930	50	90	190	30	10
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	969	52	94	198	31	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1022	0	1382	996
Stage 1	-	-	-	-	996	-
Stage 2	-	-	-	-	386	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	687	-	160	299
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	691	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	686	-	135	299
Mov Cap-2 Maneuver	-	-	-	-	135	-
Stage 1	-	-	-	-	360	-
Stage 2	-	-	-	-	585	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.6	34
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	135	299	-	-	686	-
HCM Lane V/C Ratio	0.231	0.035	-	-	0.137	-
HCM Control Delay (s/veh)	39.5	17.5	-	-	11.1	0
HCM Lane LOS	E	C	-	-	B	A
HCM 95th %tile Q(veh)	0.8	0.1	-	-	0.5	-

Intersection	
Int Delay, s/veh	8.4

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	70	930	20	30	930
Future Vol, veh/h	50	70	930	20	30	930
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	58	81	1081	23	35	1081

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1705	553	0	0	1105	0
Stage 1	1094	-	-	-	-	-
Stage 2	611	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	83	479	-	-	633	-
Stage 1	285	-	-	-	-	-
Stage 2	507	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	71	479	-	-	632	-
Mov Cap-2 Maneuver	71	-	-	-	-	-
Stage 1	285	-	-	-	-	-
Stage 2	437	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	134.9	0	1
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	141	632	-
HCM Lane V/C Ratio	-	-	0.99	0.055	-
HCM Control Delay (s/veh)	-	-	134.9	11	0.7
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	7.1	0.2	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	50	30	10	810	970	20
Future Volume (veh/h)	50	30	10	810	970	20
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	55	33	11	890	1066	22
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	388	346	371	2562	2565	53
Arrive On Green	0.22	0.22	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1792	1599	521	3668	3673	74
Grp Volume(v), veh/h	55	33	11	890	532	556
Grp Sat Flow(s),veh/h/ln	1792	1599	521	1787	1787	1866
Q Serve(g_s), s	3.0	2.0	1.0	11.3	14.4	14.4
Cycle Q Clear(g_c), s	3.0	2.0	15.5	11.3	14.4	14.4
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	388	346	371	2562	1281	1337
V/C Ratio(X)	0.14	0.10	0.03	0.35	0.42	0.42
Avail Cap(c_a), veh/h	388	346	371	2562	1281	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	37.6	10.0	6.4	6.9	6.9
Incr Delay (d2), s/veh	0.8	0.5	0.0	0.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.9	0.2	5.5	7.3	7.6
LnGrp Delay(d), s/veh	38.7	38.1	10.0	6.5	7.9	7.8
LnGrp LOS	D	D	B	A	A	A
Approach Vol, veh/h	88			901	1088	
Approach Delay, s/veh	38.5			6.5	7.8	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				90.0		30.0		90.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				86.0		26.0		86.0
Max Q Clear Time (g_c+I1), s				17.5		5.0		16.4
Green Ext Time (p_c), s				7.1		0.2		8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.6
HCM 2010 LOS	A

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	790	470	300	1260	0	20	0	540	60	200	10
Future Volume (veh/h)	0	790	470	300	1260	0	20	0	540	60	200	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1827	1827	1827	0	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	0	898	534	341	1432	0	15	0	622	68	227	11
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	4	4	4	4	0	4	4	4	4	4	4
Cap, veh/h	0	2124	652	427	3736	0	24	0	756	119	919	411
Arrive On Green	0.00	0.43	0.43	0.13	0.59	0.00	0.01	0.00	0.24	0.04	0.26	0.26
Sat Flow, veh/h	0	5152	1532	3375	6540	0	1740	0	3106	3375	3471	1553
Grp Volume(v), veh/h	0	898	534	341	1432	0	15	0	622	68	227	11
Grp Sat Flow(s),veh/h/ln	0	1663	1532	1688	1571	0	1740	0	1553	1688	1736	1553
Q Serve(g_s), s	0.0	11.9	29.0	9.3	11.3	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Cycle Q Clear(g_c), s	0.0	11.9	29.0	9.3	11.3	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2124	652	427	3736	0	24	0	756	119	919	411
V/C Ratio(X)	0.00	0.42	0.82	0.80	0.38	0.00	0.63	0.00	0.82	0.57	0.25	0.03
Avail Cap(c_a), veh/h	0	3060	940	643	5319	0	110	0	756	179	919	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.0	23.9	40.1	10.1	0.0	46.4	0.0	33.8	44.9	27.3	25.7
Incr Delay (d2), s/veh	0.0	0.1	3.8	4.2	0.1	0.0	23.8	0.0	9.9	4.3	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	12.9	4.6	4.9	0.0	0.5	0.0	8.7	0.9	2.4	0.2
LnGrp Delay(d), s/veh	0.0	19.1	27.7	44.4	10.1	0.0	70.1	0.0	43.7	49.2	28.0	25.9
LnGrp LOS		B	C	D	B		E		D	D	C	C
Approach Vol, veh/h		1432			1773			637			306	
Approach Delay, s/veh		22.3			16.7			44.3			32.6	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	27.0	15.9	44.2	5.3	29.0		60.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	23.0	18.0	58.0	6.0	22.0		80.0
Max Q Clear Time (g_c+I1), s	3.9	19.9	11.3	31.0	2.8	6.9		13.3
Green Ext Time (p_c), s	0.0	0.9	0.7	9.2	0.0	1.1		14.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	1450	0	0	1120	90	0	0	0	320	360	350
Future Volume (vph)	70	1450	0	0	1120	90	0	0	0	320	360	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	0.99				1.00	0.99	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.94	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3367	6285			5912	1240				1406	5472	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3367	6285			5912	1240				1406	5472	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	80	1667	0	0	1287	103	0	0	0	368	414	402
RTOR Reduction (vph)	0	0	0	0	1	62	0	0	0	0	6	0
Lane Group Flow (vph)	80	1667	0	0	1296	31	0	0	0	243	935	0
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	6.5	45.3			34.8	34.8				51.4	51.4	
Effective Green, g (s)	6.5	45.3			34.8	34.8				51.4	51.4	
Actuated g/C Ratio	0.06	0.43			0.33	0.33				0.49	0.49	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	209	2719			1965	412				690	2686	
v/s Ratio Prot	0.02	c0.27			c0.22					c0.17	0.17	
v/s Ratio Perm						0.02						
v/c Ratio	0.38	0.61			0.66	0.08				0.35	0.35	
Uniform Delay, d1	47.2	22.9			29.9	23.9				16.4	16.4	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	1.2	0.4			0.8	0.1				0.3	0.1	
Delay (s)	48.3	23.3			30.7	24.0				16.7	16.4	
Level of Service	D	C			C	C				B	B	
Approach Delay (s/veh)		24.5			30.3			0.0			16.5	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	104.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	440	1230	50	40	800	60	60	70	20	80	10	360
Future Volume (veh/h)	440	1230	50	40	800	60	60	70	20	80	10	360
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827
Adj Flow Rate, veh/h	518	1447	59	47	941	71	71	82	24	94	12	424
Adj No. of Lanes	1	3	1	1	3	1	1	1	0	1	1	1
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	565	2689	815	59	1239	378	350	404	118	395	546	456
Arrive On Green	0.32	0.54	0.54	0.03	0.25	0.25	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	1740	4988	1512	1740	4988	1521	930	1353	396	1256	1827	1528
Grp Volume(v), veh/h	518	1447	59	47	941	71	71	0	106	94	12	424
Grp Sat Flow(s),veh/h/ln	1740	1663	1512	1740	1663	1521	930	0	1749	1256	1827	1528
Q Serve(g_s), s	26.8	17.7	1.8	2.5	16.4	3.4	5.5	0.0	4.2	5.7	0.4	25.3
Cycle Q Clear(g_c), s	26.8	17.7	1.8	2.5	16.4	3.4	5.9	0.0	4.2	9.9	0.4	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	565	2689	815	59	1239	378	350	0	523	395	546	456
V/C Ratio(X)	0.92	0.54	0.07	0.79	0.76	0.19	0.20	0.00	0.20	0.24	0.02	0.93
Avail Cap(c_a), veh/h	928	3831	1161	148	1596	487	350	0	523	395	546	456
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.4	14.0	10.4	44.9	32.6	27.8	25.3	0.0	24.5	28.2	23.2	31.9
Incr Delay (d2), s/veh	8.7	0.2	0.0	20.4	1.6	0.2	1.3	0.0	0.9	1.4	0.1	27.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	8.1	0.7	1.5	7.7	1.5	1.5	0.0	2.2	2.1	0.2	14.1
LnGrp Delay(d), s/veh	39.2	14.2	10.4	65.4	34.2	28.0	26.6	0.0	25.4	29.6	23.3	59.6
LnGrp LOS	D	B	B	E	C	C	C		C	C	C	E
Approach Vol, veh/h		2024			1059			177			530	
Approach Delay, s/veh		20.5			35.2			25.9			53.5	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		32.0	7.2	54.5		32.0	34.4	27.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		28.0	8.0	72.0		28.0	50.0	30.0
Max Q Clear Time (g_c+I1), s		7.9	4.5	19.7		27.3	28.8	18.4
Green Ext Time (p_c), s		0.8	0.0	14.9		0.2	1.6	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Future Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.98		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1770	4932		3433	4956		1770		2787	1770		2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1770	4932		3433	4956		1770		2787	1770		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	43	204	43	22	129	22	183	0	97	43	0	11
RTOR Reduction (vph)	0	34	0	0	20	0	0	0	29	0	0	3
Lane Group Flow (vph)	43	213	0	22	131	0	183	0	68	43	0	8
Confl. Peds. (#/hr)	4		4	4		4						
Confl. Bikes (#/hr)			3			3						
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Effective Green, g (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Actuated g/C Ratio	0.06	0.13		0.03	0.10		0.70		0.70	0.70		0.70
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	100	639		99	504		1243		1957	1243		1957
v/s Ratio Prot	c0.02	c0.04		0.01	0.03							
v/s Ratio Perm							c0.10		0.02	0.02		0.00
v/c Ratio	0.43	0.33		0.22	0.26		0.15		0.03	0.03		0.00
Uniform Delay, d1	39.4	34.2		41.0	35.8		4.3		3.9	3.9		3.8
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0	0.3		1.1	0.3		0.2		0.0	0.1		0.0
Delay (s)	42.4	34.5		42.1	36.1		4.5		4.0	4.0		3.8
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		35.7			36.8			4.3			3.9	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Future Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	278	1072	464	392	948	134	124	557	134	320	1206	247
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1034	447	399	1574	222	143	1171	349	383	1260	258
Arrive On Green	0.17	0.30	0.30	0.22	0.35	0.35	0.04	0.23	0.23	0.11	0.30	0.30
Sat Flow, veh/h	1774	3448	1492	1774	4489	632	3442	5085	1513	3442	4199	860
Grp Volume(v), veh/h	278	1054	482	392	715	367	124	557	134	320	974	479
Grp Sat Flow(s),veh/h/ln	1774	1695	1549	1774	1695	1732	1721	1695	1513	1721	1695	1669
Q Serve(g_s), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Cycle Q Clear(g_c), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Prop In Lane	1.00		0.96	1.00		0.37	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	309	1017	465	399	1189	607	143	1171	349	383	1017	501
V/C Ratio(X)	0.90	1.04	1.04	0.98	0.60	0.60	0.86	0.48	0.38	0.84	0.96	0.96
Avail Cap(c_a), veh/h	429	1017	465	399	1189	607	143	1171	349	488	1017	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	42.0	42.0	46.3	32.1	32.1	57.2	39.9	39.0	52.2	41.2	41.2
Incr Delay (d2), s/veh	16.9	38.1	51.6	40.2	0.9	1.7	38.7	1.4	3.2	9.7	19.6	30.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.2	22.0	17.4	9.9	10.3	2.8	5.5	4.0	5.7	18.6	19.9
LnGrp Delay(d), s/veh	65.4	80.1	93.6	86.4	32.9	33.8	95.8	41.3	42.2	62.0	60.9	72.1
LnGrp LOS	E	F	F	F	C	C	F	D	D	E	E	E
Approach Vol, veh/h		1814			1474			815			1773	
Approach Delay, s/veh		81.4			47.4			49.7			64.1	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	31.6	31.0	40.0	9.0	40.0	24.9	46.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	24.0	27.0	36.0	5.0	36.0	29.0	34.0
Max Q Clear Time (g_c+I1), s	12.9	13.4	28.4	38.0	6.3	35.8	20.4	23.0
Green Ext Time (p_c), s	0.4	3.0	0.0	0.0	0.0	0.1	0.5	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Future Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	21	31	31	83	115	52	604	73	260	1438	312
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	136	201	299	143	198	222	3704	1127	587	3034	656
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1178	672	992	1339	705	977	274	5085	1547	759	4166	901
Grp Volume(v), veh/h	94	0	52	31	0	198	52	604	73	260	1169	581
Grp Sat Flow(s),veh/h/ln	1178	0	1664	1339	0	1682	274	1695	1547	759	1695	1677
Q Serve(g_s), s	9.1	0.0	3.0	2.3	0.0	12.4	11.4	4.3	1.6	18.8	16.7	16.8
Cycle Q Clear(g_c), s	21.6	0.0	3.0	5.3	0.0	12.4	28.2	4.3	1.6	23.0	16.7	16.8
Prop In Lane	1.00		0.60	1.00		0.58	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	176	0	338	299	0	342	222	3704	1127	587	2469	1221
V/C Ratio(X)	0.53	0.00	0.15	0.10	0.00	0.58	0.23	0.16	0.06	0.44	0.47	0.48
Avail Cap(c_a), veh/h	209	0	385	337	0	389	222	3704	1127	587	2469	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	38.2	40.4	0.0	42.0	12.4	4.9	4.5	8.4	6.6	6.6
Incr Delay (d2), s/veh	2.5	0.0	0.2	0.2	0.0	1.7	2.5	0.1	0.1	2.4	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.4	0.9	0.0	5.9	1.0	2.0	0.7	4.3	8.0	8.2
LnGrp Delay(d), s/veh	54.2	0.0	38.5	40.6	0.0	43.7	14.9	5.0	4.6	10.9	7.2	7.9
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		146			229			729			2010	
Approach Delay, s/veh		48.6			43.2			5.7			7.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		27.7		89.0		27.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		30.2		23.6		25.0		14.4
Green Ext Time (p_c), s		6.6		0.2		25.0		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Future Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	290	86	54	344	161	75	677	32	333	1247	215
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	933	271	336	811	372	97	1621	76	373	2097	362
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.05	0.33	0.33	0.21	0.48	0.48
Sat Flow, veh/h	890	2696	783	1002	2345	1076	1774	4973	234	1774	4354	751
Grp Volume(v), veh/h	172	188	188	54	258	247	75	461	248	333	971	491
Grp Sat Flow(s),veh/h/ln	890	1770	1710	1002	1770	1651	1774	1695	1816	1774	1695	1714
Q Serve(g_s), s	18.7	7.9	8.2	4.3	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Cycle Q Clear(g_c), s	30.5	7.9	8.2	12.5	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Prop In Lane	1.00		0.46	1.00		0.65	1.00		0.13	1.00		0.44
Lane Grp Cap(c), veh/h	276	612	591	336	612	571	97	1105	592	373	1633	826
V/C Ratio(X)	0.62	0.31	0.32	0.16	0.42	0.43	0.78	0.42	0.42	0.89	0.59	0.59
Avail Cap(c_a), veh/h	388	835	807	463	835	779	192	1105	592	593	1633	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	24.4	24.4	29.0	25.5	25.6	47.5	26.7	26.8	39.1	19.2	19.2
Incr Delay (d2), s/veh	2.3	0.3	0.3	0.2	0.5	0.5	12.4	1.2	2.2	10.4	1.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	3.9	3.9	1.2	5.6	5.4	2.4	5.2	5.8	10.1	10.2	10.7
LnGrp Delay(d), s/veh	39.6	24.6	24.8	29.2	25.9	26.1	59.9	27.9	29.0	49.4	20.8	22.3
LnGrp LOS	D	C	C	C	C	C	E	C	C	D	C	C
Approach Vol, veh/h		548			559			784			1795	
Approach Delay, s/veh		29.4			26.3			31.3			26.5	
Approach LOS		C			C			C			C	

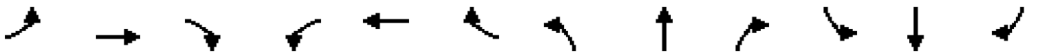
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.4	37.2		39.2	9.5	53.0		39.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	34.0	26.0		48.0	11.0	49.0		48.0
Max Q Clear Time (g_c+I1), s	20.6	12.9		32.5	6.2	23.2		14.5
Green Ext Time (p_c), s	0.8	3.5		2.7	0.0	11.2		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Future Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	11	0	622	11	100	56	722	478	122	1289	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	45	32	0	570	9	872	72	922	421	148	1637	14
Arrive On Green	0.55	0.55	0.00	0.55	0.55	0.55	0.04	0.27	0.27	0.08	0.31	0.31
Sat Flow, veh/h	0	58	0	932	16	1595	1792	3424	1562	1792	5252	45
Grp Volume(v), veh/h	22	0	0	633	0	100	56	722	478	122	840	460
Grp Sat Flow(s),veh/h/ln	58	0	0	949	0	1595	1792	1712	1562	1792	1712	1873
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Cycle Q Clear(g_c), s	65.0	0.0	0.0	65.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Prop In Lane	0.50		0.00	0.98		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	77	0	0	579	0	872	72	922	421	148	1067	584
V/C Ratio(X)	0.29	0.00	0.00	1.09	0.00	0.11	0.78	0.78	1.14	0.82	0.79	0.79
Avail Cap(c_a), veh/h	77	0	0	579	0	872	90	922	421	166	1067	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	30.3	0.0	13.0	56.5	40.2	43.4	53.7	37.3	37.3
Incr Delay (d2), s/veh	2.0	0.0	0.0	65.3	0.0	0.1	27.3	6.6	86.6	25.3	5.9	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	29.3	0.0	1.6	2.4	11.8	23.8	5.0	13.5	15.5
LnGrp Delay(d), s/veh	31.0	0.0	0.0	95.5	0.0	13.1	83.8	46.8	130.0	79.0	43.2	47.6
LnGrp LOS	C			F		B	F	D	F	E	D	D
Approach Vol, veh/h		22			733			1256			1422	
Approach Delay, s/veh		31.0			84.3			80.1			47.7	
Approach LOS		C			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	36.0		69.0	8.8	41.0		69.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	32.0		65.0	6.0	37.0		65.0
Max Q Clear Time (g_c+I1), s	10.0	34.0		67.0	5.7	28.6		67.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.3
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	520	200	710	600	40	160	650	520	140	1310	270
Future Volume (vph)	320	520	200	710	600	40	160	650	520	140	1310	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5898	1235	3433	5085	1541	3433	5085	1537	3433	5085	1548
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5898	1235	3433	5085	1541	3433	5085	1537	3433	5085	1548
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	337	547	211	747	632	42	168	684	547	147	1379	284
RTOR Reduction (vph)	0	20	116	0	0	31	0	0	334	0	0	175
Lane Group Flow (vph)	337	603	19	747	632	11	168	684	213	147	1379	109
Confl. Peds. (#/hr)	7		12	12		7	4		8	8		4
Confl. Bikes (#/hr)									1			3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	15.6	15.4	15.4	29.2	29.0	29.0	9.4	44.2	44.2	8.7	43.5	43.5
Effective Green, g (s)	15.6	15.4	15.4	29.2	29.0	29.0	9.4	44.2	44.2	8.7	43.5	43.5
Actuated g/C Ratio	0.14	0.14	0.14	0.26	0.26	0.26	0.08	0.39	0.39	0.08	0.38	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	471	800	167	883	1299	393	284	1980	598	263	1948	593
v/s Ratio Prot	0.10	c0.10		c0.22	0.12		c0.05	0.13		0.04	c0.27	
v/s Ratio Perm			0.02			0.01			0.14			0.07
v/c Ratio	0.72	0.75	0.11	0.85	0.49	0.03	0.59	0.35	0.36	0.56	0.71	0.18
Uniform Delay, d1	46.8	47.2	43.1	40.0	35.9	31.7	50.2	24.4	24.6	50.5	29.6	23.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.1	4.1	0.3	7.5	0.3	0.0	3.3	0.5	1.7	2.6	2.2	0.7
Delay (s)	51.9	51.3	43.4	47.5	36.2	31.7	53.5	24.9	26.2	53.1	31.8	23.9
Level of Service	D	D	D	D	D	C	D	C	C	D	C	C
Approach Delay (s/veh)		50.5			42.0			28.9			32.3	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	113.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	20	300	0	0	0	130	1070	10	10	1670	510
Future Volume (veh/h)	390	20	300	0	0	0	130	1070	10	10	1670	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	429	22	330	0	0	0	143	1176	11	11	1835	560
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	556	491	431	66	981	0	189	3131	29	36	2173	635
Arrive On Green	0.28	0.28	0.28	0.00	0.00	0.00	0.05	0.60	0.60	0.01	0.56	0.56
Sat Flow, veh/h	1768	1770	1554	1025	3632	0	3442	5196	49	3442	3894	1138
Grp Volume(v), veh/h	429	22	330	0	0	0	143	767	420	11	1587	808
Grp Sat Flow(s),veh/h/ln	1768	1770	1554	1025	1770	0	1721	1695	1854	1721	1695	1642
Q Serve(g_s), s	25.3	1.0	21.3	0.0	0.0	0.0	4.5	12.7	12.7	0.3	42.5	46.8
Cycle Q Clear(g_c), s	25.3	1.0	21.3	0.0	0.0	0.0	4.5	12.7	12.7	0.3	42.5	46.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.03	1.00		0.69
Lane Grp Cap(c), veh/h	556	491	431	66	981	0	189	2043	1117	36	1892	916
V/C Ratio(X)	0.77	0.04	0.77	0.00	0.00	0.00	0.76	0.38	0.38	0.31	0.84	0.88
Avail Cap(c_a), veh/h	729	664	583	166	1328	0	189	2043	1117	126	1892	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	28.9	36.2	0.0	0.0	0.0	50.9	11.2	11.2	53.7	20.1	21.0
Incr Delay (d2), s/veh	3.7	0.0	4.2	0.0	0.0	0.0	16.0	0.5	1.0	4.8	4.7	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	0.5	9.7	0.0	0.0	0.0	2.5	6.0	6.7	0.2	21.1	24.1
LnGrp Delay(d), s/veh	41.4	28.9	40.4	0.0	0.0	0.0	67.0	11.7	12.1	58.5	24.7	33.0
LnGrp LOS	D	C	D				E	B	B	E	C	C
Approach Vol, veh/h		781			0			1330			2406	
Approach Delay, s/veh		40.7			0.0			17.8			27.6	
Approach LOS		D						B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	69.9		34.3	10.0	65.0		34.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	63.0		41.0	6.0	61.0		41.0
Max Q Clear Time (g_c+I1), s	2.3	14.7		27.3	6.5	48.8		0.0
Green Ext Time (p_c), s	0.0	9.6		3.0	0.0	10.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		27.0
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1470	80	180	620	50	360	860	630	260	1550	280
Future Volume (veh/h)	210	1470	80	180	620	50	360	860	630	260	1550	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	1598	87	196	674	54	391	935	685	283	1685	304
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	288	1659	90	203	1495	119	406	1828	589	342	1984	358
Arrive On Green	0.08	0.33	0.33	0.06	0.31	0.31	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	3476	4980	271	3476	4843	385	3476	4853	1565	3476	5536	999
Grp Volume(v), veh/h	228	1098	587	196	475	253	391	935	685	283	1477	512
Grp Sat Flow(s),veh/h/ln	1738	1712	1827	1738	1712	1804	1738	1618	1565	1738	1618	1681
Q Serve(g_s), s	7.7	37.8	37.8	6.8	13.4	13.5	13.4	17.8	45.2	9.6	33.7	33.7
Cycle Q Clear(g_c), s	7.7	37.8	37.8	6.8	13.4	13.5	13.4	17.8	45.2	9.6	33.7	33.7
Prop In Lane	1.00		0.15	1.00		0.21	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	288	1141	609	203	1057	557	406	1828	589	342	1740	603
V/C Ratio(X)	0.79	0.96	0.96	0.97	0.45	0.45	0.96	0.51	1.16	0.83	0.85	0.85
Avail Cap(c_a), veh/h	377	1141	609	203	1057	557	406	1828	589	406	1740	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	39.3	39.3	56.4	33.3	33.3	52.7	28.9	37.4	53.1	35.5	35.5
Incr Delay (d2), s/veh	8.3	18.3	27.5	53.4	0.3	0.6	35.3	1.0	90.6	11.5	5.4	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	20.8	23.7	4.7	6.4	6.8	8.5	8.1	34.3	5.1	15.9	18.0
LnGrp Delay(d), s/veh	62.3	57.6	66.8	109.8	33.6	33.9	88.0	29.9	128.0	64.6	40.9	49.5
LnGrp LOS	E	E	E	F	C	C	F	C	F	E	D	D
Approach Vol, veh/h		1913			924			2011			2272	
Approach Delay, s/veh		61.0			49.8			74.6			45.8	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	49.2	11.0	44.0	18.0	47.0	13.9	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	43.0	7.0	40.0	14.0	43.0	13.0	34.0
Max Q Clear Time (g_c+I1), s	11.6	47.2	8.8	39.8	15.4	35.7	9.7	15.5
Green Ext Time (p_c), s	0.2	0.0	0.0	0.1	0.0	6.0	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1040	250	70	1150	70	250	0	170	100	0	30
Future Volume (vph)	10	1040	250	70	1150	70	250	0	170	100	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.98	1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3396	6144		3400	6285		1752	1453	1453	1752		1531
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3396	6144		3400	6285		1752	1453	1453	1752		1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1130	272	76	1250	76	272	0	185	109	0	33
RTOR Reduction (vph)	0	37	0	0	7	0	0	61	60	0	0	24
Lane Group Flow (vph)	11	1365	0	76	1319	0	272	32	32	109	0	9
Confl. Peds. (#/hr)	2		1	1		2	6		6	6		6
Confl. Bikes (#/hr)						3			1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	0.7	35.3		5.8	40.4		21.4	36.8	36.8	11.9		27.3
Effective Green, g (s)	0.7	35.3		5.8	40.4		21.4	36.8	36.8	11.9		27.3
Actuated g/C Ratio	0.01	0.33		0.05	0.38		0.20	0.35	0.35	0.11		0.26
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	22	2049		186	2399		354	505	505	197		395
v/s Ratio Prot	0.00	c0.22		c0.02	0.21		c0.16	c0.02		0.06		
v/s Ratio Perm									0.02			0.01
v/c Ratio	0.50	0.67		0.41	0.55		0.77	0.06	0.06	0.55		0.02
Uniform Delay, d1	52.4	30.2		48.3	25.6		39.9	23.0	23.0	44.4		29.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	16.8	0.8		1.5	0.3		9.6	0.2	0.2	3.3		0.1
Delay (s)	69.1	31.0		49.8	25.8		49.5	23.3	23.2	47.8		29.4
Level of Service	E	C		D	C		D	C	C	D		C
Approach Delay (s/veh)		31.3			27.1			38.9			43.5	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Future Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	1283	40	556	1424	182	40	91	152	859	556	222
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1224	38	488	1239	544	203	251	214	717	1120	446
Arrive On Green	0.03	0.24	0.24	0.14	0.35	0.35	0.03	0.14	0.14	0.34	0.46	0.46
Sat Flow, veh/h	3442	5063	158	3442	3539	1555	1774	1770	1510	1774	2452	976
Grp Volume(v), veh/h	91	859	464	556	1424	182	40	91	152	859	401	377
Grp Sat Flow(s),veh/h/ln	1721	1695	1831	1721	1770	1555	1774	1770	1510	1774	1770	1658
Q Serve(g_s), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Cycle Q Clear(g_c), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	115	819	443	488	1239	544	203	251	214	717	809	758
V/C Ratio(X)	0.79	1.05	1.05	1.14	1.15	0.33	0.20	0.36	0.71	1.20	0.50	0.50
Avail Cap(c_a), veh/h	115	819	443	488	1239	544	230	251	214	717	809	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	45.5	45.5	51.5	39.0	28.7	42.5	46.6	49.2	26.8	22.9	22.9
Incr Delay (d2), s/veh	30.6	44.9	56.1	85.4	77.1	0.4	0.5	4.0	18.2	102.2	2.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	18.6	21.5	13.8	33.7	4.5	1.1	3.0	5.9	44.1	9.7	9.3
LnGrp Delay(d), s/veh	88.2	90.4	101.6	136.9	116.1	29.1	43.0	50.6	67.3	129.0	25.0	25.2
LnGrp LOS	F	F	F	F	F	C	D	D	E	F	C	C
Approach Vol, veh/h		1414			2162			283			1637	
Approach Delay, s/veh		93.9			114.1			58.5			79.6	
Approach LOS		F			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	45.0	21.0	21.0	33.0	7.2	58.8	8.0	46.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	41.0	17.0	17.0	29.0	5.0	53.0	4.0	42.0
Max Q Clear Time (g_c+I1), s	43.0	13.5	19.0	31.0	4.3	21.2	5.2	44.0
Green Ext Time (p_c), s	0.0	0.4	0.0	0.0	0.0	5.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	95.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Future Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	77	505	44	11	330	44	22	99	55	626	473	264
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	171	669	58	112	638	84	426	1658	864	945	754	421
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1014	3324	289	863	3168	419	725	2274	1185	1211	1034	578
Grp Volume(v), veh/h	77	271	278	11	185	189	22	76	78	631	0	732
Grp Sat Flow(s),veh/h/ln	1014	1787	1826	863	1787	1800	725	1787	1672	1221	0	1601
Q Serve(g_s), s	8.4	16.4	16.5	1.4	10.6	10.8	1.8	1.4	1.5	33.7	0.0	26.2
Cycle Q Clear(g_c), s	19.3	16.4	16.5	17.9	10.6	10.8	28.0	1.4	1.5	35.2	0.0	26.2
Prop In Lane	1.00		0.16	1.00		0.23	1.00		0.71	0.99		0.36
Lane Grp Cap(c), veh/h	171	360	367	112	360	362	426	1303	1219	953	0	1168
V/C Ratio(X)	0.45	0.75	0.76	0.10	0.51	0.52	0.05	0.06	0.06	0.66	0.00	0.63
Avail Cap(c_a), veh/h	214	434	444	148	434	437	426	1303	1219	953	0	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.7	43.3	43.3	51.8	41.0	41.1	14.8	4.4	4.4	9.4	0.0	7.8
Incr Delay (d2), s/veh	1.8	5.9	6.0	0.4	1.1	1.2	0.2	0.1	0.1	3.6	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	8.7	9.0	0.3	5.3	5.5	0.4	0.7	0.7	12.4	0.0	12.2
LnGrp Delay(d), s/veh	51.5	49.2	49.4	52.2	42.1	42.2	15.0	4.5	4.5	13.1	0.0	10.3
LnGrp LOS	D	D	D	D	D	D	B	A	A	B		B
Approach Vol, veh/h		626			385			176			1363	
Approach Delay, s/veh		49.6			42.5			5.8			11.6	
Approach LOS		D			D			A			B	

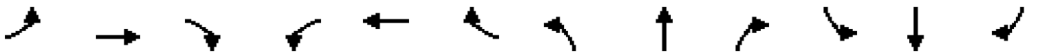
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		88.0		27.2		88.0		27.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		84.0		28.0		84.0		28.0
Max Q Clear Time (g_c+I1), s		30.0		21.3		37.2		19.9
Green Ext Time (p_c), s		1.1		1.9		13.6		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	280	940	90	150	940	550	570	100	350	10	20	20
Future Volume (vph)	280	940	90	150	940	550	570	100	350	10	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1568	3400	5036	1568	3400	1589	1469	1752	1845	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1568	3400	5036	1568	3400	1589	1469	1752	1845	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	295	989	95	158	989	579	600	105	368	11	21	21
RTOR Reduction (vph)	0	0	62	0	0	405	0	41	173	0	0	17
Lane Group Flow (vph)	295	989	33	158	989	174	600	204	55	11	21	4
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	13.9	37.0	37.0	9.3	32.4	32.4	26.0	26.0	26.0	19.3	19.3	19.3
Effective Green, g (s)	13.9	37.0	37.0	9.3	32.4	32.4	26.0	26.0	26.0	19.3	19.3	19.3
Actuated g/C Ratio	0.13	0.34	0.34	0.09	0.30	0.30	0.24	0.24	0.24	0.18	0.18	0.18
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	439	1731	539	293	1516	472	821	383	354	314	330	281
v/s Ratio Prot	c0.09	0.20		0.05	c0.20		c0.18	0.13		0.01	c0.01	
v/s Ratio Perm			0.02			0.11			0.04			0.00
v/c Ratio	0.67	0.57	0.06	0.54	0.65	0.37	0.73	0.53	0.16	0.04	0.06	0.01
Uniform Delay, d1	44.7	28.8	23.7	47.1	32.7	29.6	37.6	35.5	32.2	36.5	36.6	36.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.5	0.0	1.9	1.0	0.5	3.4	1.4	0.2	0.2	0.4	0.1
Delay (s)	48.7	29.3	23.7	49.0	33.7	30.1	40.9	36.9	32.4	36.7	37.0	36.4
Level of Service	D	C	C	D	C	C	D	D	C	D	D	D
Approach Delay (s/veh)		33.1			33.9			38.2			36.7	
Approach LOS		C			C			D			D	

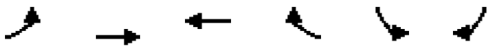
Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	107.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



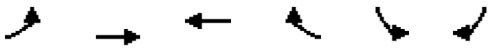
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Future Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frt		0.99		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3554		1787	3574		1626	2916				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3554		1787	3574		1626	2916				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1913	76	196	1000	0	22	0	120	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	102	0	0	0	0
Lane Group Flow (vph)	0	1987	0	196	1000	0	20	20	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		60.0		12.0	76.0		16.0	16.0				
Effective Green, g (s)		60.0		12.0	76.0		16.0	16.0				
Actuated g/C Ratio		0.60		0.12	0.76		0.16	0.16				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		2132		214	2716		260	466				
v/s Ratio Prot		c0.56		c0.11	0.28		c0.01	0.01				
v/s Ratio Perm												
v/c Ratio		0.93		0.92	0.37		0.08	0.04				
Uniform Delay, d1		18.1		43.5	4.0		35.7	35.5				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		8.1		38.7	0.1		0.6	0.2				
Delay (s)		26.3		82.2	4.1		36.3	35.7				
Level of Service		C		F	A		D	D				
Approach Delay (s/veh)		26.3			16.9			35.8			0.0	
Approach LOS		C			B			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



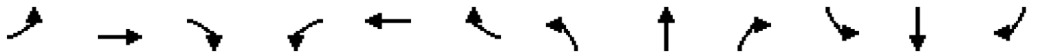
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1490	1030	0	980	750
Future Volume (vph)	0	1490	1030	0	980	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5036	5036		1744	1490
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5036	5036		1744	1490
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1536	1062	0	1010	773
RTOR Reduction (vph)	0	0	0	0	2	3
Lane Group Flow (vph)	0	1536	1062	0	1085	693
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		37.0	37.0		75.0	75.0
Effective Green, g (s)		37.0	37.0		75.0	75.0
Actuated g/C Ratio		0.31	0.31		0.63	0.63
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1552	1552		1090	931
v/s Ratio Prot		c0.31	0.21		c0.62	
v/s Ratio Perm						0.46
v/c Ratio		0.99	0.68		1.00	0.74
Uniform Delay, d1		41.3	36.4		22.3	15.8
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		20.2	1.3		26.1	5.4
Delay (s)		61.5	37.6		48.5	21.1
Level of Service		E	D		D	C
Approach Delay (s/veh)		61.5	37.6		37.8	
Approach LOS		E	D		D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	1210	1010	0	250	350
Future Volume (vph)	0	1210	1010	0	250	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.94	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5036	5036		3271	1427
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5036	5036		3271	1427
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1274	1063	0	263	368
RTOR Reduction (vph)	0	0	0	0	37	37
Lane Group Flow (vph)	0	1274	1063	0	392	165
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				7		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		30.8	30.8		46.2	46.2
Effective Green, g (s)		30.8	30.8		46.2	46.2
Actuated g/C Ratio		0.36	0.36		0.54	0.54
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1824	1824		1777	775
v/s Ratio Prot		c0.25	0.21		c0.12	
v/s Ratio Perm						0.12
v/c Ratio		0.70	0.58		0.22	0.21
Uniform Delay, d1		23.1	21.9		10.1	10.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.2	0.5		0.3	0.6
Delay (s)		24.3	22.4		10.3	10.6
Level of Service		C	C		B	B
Approach Delay (s/veh)		24.3	22.4		10.4	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Future Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.92	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3413	1436	1787	3574					1698	1558	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3413	1436	1787	3574					1698	1558	1519
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	2011	409	409	557	0	0	0	0	330	68	398
RTOR Reduction (vph)	0	1	148	0	0	0	0	0	0	0	35	215
Lane Group Flow (vph)	0	2051	220	409	557	0	0	0	0	274	232	40
Confl. Peds. (#/hr)	5					5						
Confl. Bikes (#/hr)			3			9						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Effective Green, g (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Actuated g/C Ratio		0.53	0.53	0.21	0.78					0.16	0.16	0.16
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1820	765	372	2769					268	246	240
v/s Ratio Prot		c0.60		c0.23	0.16							
v/s Ratio Perm			0.15							c0.16	0.15	0.03
v/c Ratio		1.13	0.29	1.10	0.20					1.02	0.95	0.17
Uniform Delay, d1		28.0	15.4	47.5	3.6					50.5	50.0	43.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		64.9	0.2	76.2	0.0					60.9	44.8	1.5
Delay (s)		92.9	15.6	123.7	3.6					111.4	94.8	45.2
Level of Service		F	B	F	A					F	F	D
Approach Delay (s/veh)		81.1			54.5			0.0			84.6	
Approach LOS		F			D			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Future Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	22	1587	174	87	685	0	22	11	11	174	54	185
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	34	2180	239	113	1821	0	153	76	200	224	70	254
Arrive On Green	0.02	0.47	0.47	0.06	0.51	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	1792	4683	512	1792	3668	0	1214	607	1584	1383	429	1564
Grp Volume(v), veh/h	22	1160	601	87	685	0	33	0	11	228	0	185
Grp Sat Flow(s),veh/h/ln	1792	1712	1771	1792	1787	0	1821	0	1584	1812	0	1564
Q Serve(g_s), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Cycle Q Clear(g_c), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Prop In Lane	1.00		0.29	1.00		0.00	0.67		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	34	1594	825	113	1821	0	229	0	200	294	0	254
V/C Ratio(X)	0.65	0.73	0.73	0.77	0.38	0.00	0.14	0.00	0.06	0.78	0.00	0.73
Avail Cap(c_a), veh/h	103	2117	1095	246	2497	0	229	0	200	560	0	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.5	18.9	18.9	40.3	13.0	0.0	34.0	0.0	33.6	35.0	0.0	34.7
Incr Delay (d2), s/veh	18.9	0.9	1.7	10.6	0.1	0.0	1.3	0.0	0.5	4.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	11.5	12.1	2.4	5.0	0.0	0.8	0.0	0.3	5.6	0.0	4.5
LnGrp Delay(d), s/veh	61.4	19.7	20.6	50.9	13.1	0.0	35.3	0.0	34.1	39.4	0.0	38.7
LnGrp LOS	E	B	C	D	B		D		C	D		D
Approach Vol, veh/h		1783			772			44			413	
Approach Delay, s/veh		20.5			17.4			35.0			39.1	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	9.5	44.7		18.2	5.7	48.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		11.0	12.0	54.0		27.0	5.0	61.0
Max Q Clear Time (g_c+I1), s		3.4	6.2	26.0		12.5	3.1	12.2
Green Ext Time (p_c), s		0.1	0.1	14.7		1.5	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1380	0	0	660	520	690
Future Volume (veh/h)	1380	0	0	660	520	690
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	0	0	1845	1845	1845
Adj Flow Rate, veh/h	1516	0	0	725	571	758
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	1713	0	0	1713	1040	929
Arrive On Green	0.34	0.00	0.00	0.34	0.59	0.59
Sat Flow, veh/h	5368	0	0	5368	1757	1568
Grp Volume(v), veh/h	1516	0	0	725	571	758
Grp Sat Flow(s),veh/h/ln	1679	0	0	1679	1757	1568
Q Serve(g_s), s	33.6	0.0	0.0	13.1	23.2	45.1
Cycle Q Clear(g_c), s	33.6	0.0	0.0	13.1	23.2	45.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1713	0	0	1713	1040	929
V/C Ratio(X)	0.89	0.00	0.00	0.42	0.55	0.82
Avail Cap(c_a), veh/h	1789	0	0	1789	1040	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	0.0	30.1	14.6	19.0
Incr Delay (d2), s/veh	5.6	0.0	0.0	0.2	2.1	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.5	0.0	0.0	6.1	11.7	21.4
LnGrp Delay(d), s/veh	42.4	0.0	0.0	30.2	16.6	26.9
LnGrp LOS	D			C	B	C
Approach Vol, veh/h	1516			725	1329	
Approach Delay, s/veh	42.4			30.2	22.5	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		44.2				44.2
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		47.1		35.6				15.1
Green Ext Time (p_c), s		5.3		4.6				5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑↑↑			↑↑↑↑	↰↰	↱
Traffic Volume (vph)	750	0	0	1190	790	1330
Future Volume (vph)	750	0	0	1190	790	1330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.93	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7471			6346	3247	1427
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7471			6346	3247	1427
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	806	0	0	1280	849	1430
RTOR Reduction (vph)	0	0	0	0	5	5
Lane Group Flow (vph)	806	0	0	1280	1545	724
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	30.2			30.2	81.0	81.0
Effective Green, g (s)	30.2			30.2	81.0	81.0
Actuated g/C Ratio	0.25			0.25	0.68	0.68
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1892			1607	2206	969
v/s Ratio Prot	0.11			c0.20	0.48	
v/s Ratio Perm						c0.51
v/c Ratio	0.43			0.80	0.70	0.75
Uniform Delay, d1	37.2			41.6	11.7	12.4
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.2			2.8	1.9	5.3
Delay (s)	37.4			44.5	13.6	17.7
Level of Service	D			D	B	B
Approach Delay (s/veh)	37.4			44.5	14.9	
Approach LOS	D			D	B	

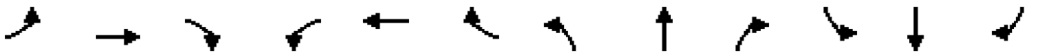
Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



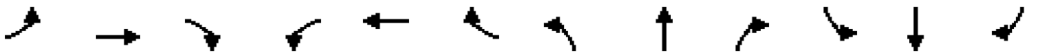
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1870	0	0	930	70	470
Future Volume (vph)	1870	0	0	930	70	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.88	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3574			3574	3191	1455
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3574			3574	3191	1455
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2101	0	0	1045	79	528
RTOR Reduction (vph)	0	0	0	0	11	11
Lane Group Flow (vph)	2101	0	0	1045	332	253
Confl. Peds. (#/hr)		1	1			
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	75.3			75.3	31.2	31.2
Effective Green, g (s)	75.3			75.3	31.2	31.2
Actuated g/C Ratio	0.66			0.66	0.27	0.27
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2350			2350	869	396
v/s Ratio Prot	c0.59			0.29	0.10	
v/s Ratio Perm						c0.17
v/c Ratio	0.89			0.44	0.38	0.64
Uniform Delay, d1	16.3			9.5	33.8	36.7
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	4.8			0.1	1.3	7.7
Delay (s)	21.1			9.6	35.1	44.4
Level of Service	C			A	D	D
Approach Delay (s/veh)	21.1			9.6	39.1	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	114.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Future Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00		0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			
Frt	1.00	1.00			0.97		1.00		0.85			
Flt Protected	0.95	1.00			1.00		0.95		1.00			
Satd. Flow (prot)	1787	3574			4966		1787		1579			
Flt Permitted	0.18	1.00			1.00		0.95		1.00			
Satd. Flow (perm)	346	3574			4966		1787		1579			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1380	0	0	957	228	76	0	163	0	0	0
RTOR Reduction (vph)	0	0	0	0	47	0	0	0	72	0	0	0
Lane Group Flow (vph)	11	1380	0	0	1138	0	76	0	91	0	0	0
Confl. Peds. (#/hr)	1		7	7		1						
Confl. Bikes (#/hr)			7			1			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			1
Actuated Green, G (s)	35.2	35.2			35.2		25.3		25.3			
Effective Green, g (s)	35.2	35.2			35.2		25.3		25.3			
Actuated g/C Ratio	0.51	0.51			0.51		0.37		0.37			
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	177	1836			2551		660		583			
v/s Ratio Prot		c0.39			0.23		0.04					
v/s Ratio Perm	0.03								c0.06			
v/c Ratio	0.06	0.75			0.45		0.12		0.16			
Uniform Delay, d1	8.4	13.2			10.5		14.2		14.5			
Progression Factor	1.00	1.00			1.00		1.00		1.00			
Incremental Delay, d2	0.1	1.8			0.1		0.4		0.6			
Delay (s)	8.5	15.0			10.6		14.6		15.0			
Level of Service	A	B			B		B		B			
Approach Delay (s/veh)		14.9			10.6			14.9			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



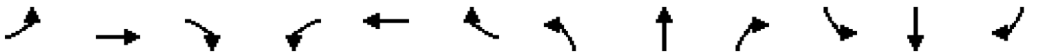
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	800	620	120	630	310	620	90	60	400	110	190
Future Volume (vph)	620	800	620	120	630	310	620	90	60	400	110	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1546	3400	5036	1542	3400	1845	1514	1752	1673	1490
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1546	3400	5036	1542	3400	1845	1514	1752	1673	1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	870	674	130	685	337	674	98	65	435	120	207
RTOR Reduction (vph)	0	0	470	0	0	289	0	0	49	0	13	24
Lane Group Flow (vph)	674	870	204	130	685	48	674	98	16	435	159	131
Confl. Peds. (#/hr)	2		1	1		2			9	9		
Confl. Bikes (#/hr)									3			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	24.8	35.8	35.8	6.0	17.0	17.0	29.0	29.0	29.0	31.6	31.6	56.4
Effective Green, g (s)	24.8	35.8	35.8	6.0	17.0	17.0	29.0	29.0	29.0	31.6	31.6	56.4
Actuated g/C Ratio	0.21	0.30	0.30	0.05	0.14	0.14	0.24	0.24	0.24	0.27	0.27	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	712	1522	467	172	723	221	832	451	370	467	446	760
v/s Ratio Prot	c0.20	0.17		0.04	c0.14		c0.20	0.05		c0.25	0.09	0.04
v/s Ratio Perm			0.13			0.03			0.01			0.05
v/c Ratio	0.95	0.57	0.44	0.76	0.95	0.22	0.81	0.22	0.04	0.93	0.36	0.17
Uniform Delay, d1	46.1	34.8	33.2	55.5	50.3	44.8	42.1	35.6	34.1	42.3	35.2	17.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.4	0.5	0.7	17.1	21.3	0.5	8.4	1.1	0.2	25.5	0.5	0.1
Delay (s)	67.6	35.4	33.8	72.6	71.6	45.3	50.5	36.8	34.3	67.8	35.6	17.8
Level of Service	E	D	C	E	E	D	D	D	C	E	D	B
Approach Delay (s/veh)		44.7			64.0			47.6			50.4	
Approach LOS		D			E			D			D	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	50.5	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.90				
Actuated Cycle Length (s)	118.4	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	78.8%	ICU Level of Service	D		
Analysis Period (min)	15				
c Critical Lane Group					



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	200	0	0	20	0	0
Future Volume (vph)	200	0	0	20	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.98		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3400			1536		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3400			1536		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	213	0	0	21	0	0
RTOR Reduction (vph)	0	0	0	19	0	0
Lane Group Flow (vph)	213	0	0	2	0	0
Confl. Peds. (#/hr)	4			1	1	
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	2.6			0.9		
Effective Green, g (s)	2.6			0.9		
Actuated g/C Ratio	0.23			0.08		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	768			120		
v/s Ratio Prot	c0.06					
v/s Ratio Perm				c0.00		
v/c Ratio	0.28			0.01		
Uniform Delay, d1	3.7			4.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	3.9			4.9		
Level of Service	A			A		
Approach Delay (s/veh)	3.9		4.9			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-1.47		
Actuated Cycle Length (s)	11.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	16.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Future Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (perm)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	103	1247	474	464	742	21	206	41	175	21	93	93
RTOR Reduction (vph)	0	0	193	0	0	10	0	0	150	0	31	0
Lane Group Flow (vph)	103	1247	281	464	742	11	122	125	25	21	155	0
Confl. Peds. (#/hr)	3		3	3		3			2	2		
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Effective Green, g (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Actuated g/C Ratio	0.09	0.35	0.35	0.25	0.51	0.51	0.14	0.14	0.14	0.12	0.12	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	164	1203	528	440	1756	761	237	241	219	208	203	
v/s Ratio Prot	0.06	c0.36		c0.27	0.21		0.07	c0.07		0.01	c0.09	
v/s Ratio Perm			0.18			0.01			0.02			
v/c Ratio	0.63	1.04	0.53	1.05	0.42	0.01	0.51	0.52	0.11	0.10	0.76	
Uniform Delay, d1	51.5	38.6	30.9	44.1	18.3	14.5	46.8	46.8	44.1	46.3	50.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.3	35.9	1.0	58.0	0.2	0.0	7.8	7.8	1.1	0.2	15.7	
Delay (s)	58.8	74.5	31.9	102.1	18.5	14.5	54.6	54.6	45.1	46.5	66.0	
Level of Service	E	E	C	F	B	B	D	D	D	D	E	
Approach Delay (s/veh)		62.6			50.1			50.7			64.1	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	118.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Future Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
Arrive On Green	0.10	0.18	0.18	0.18	0.27	0.27	0.06	0.42	0.42	0.05	0.42	0.42
Sat Flow, veh/h	1774	5085	1532	1774	5085	1542	3442	3539	1537	1774	3539	1535
Grp Volume(v), veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Grp Sat Flow(s),veh/h/ln	1774	1695	1532	1774	1695	1542	1721	1770	1537	1774	1770	1535
Q Serve(g_s), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Cycle Q Clear(g_c), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
V/C Ratio(X)	0.81	0.71	0.79	0.88	0.56	0.19	0.68	0.16	0.25	0.78	0.55	0.26
Avail Cap(c_a), veh/h	301	1115	336	548	1824	638	309	1500	651	177	1481	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	38.4	39.0	40.1	31.7	24.7	46.3	17.8	18.6	46.9	22.1	19.1
Incr Delay (d2), s/veh	8.9	1.8	10.1	7.9	0.4	0.2	4.0	0.2	0.9	12.6	1.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.0	6.7	8.2	6.1	1.9	2.0	2.0	3.0	2.4	8.8	3.3
LnGrp Delay(d), s/veh	53.4	40.2	49.1	48.0	32.1	24.9	50.3	18.1	19.5	59.5	23.6	20.1
LnGrp LOS	D	D	D	D	C	C	D	B	B	E	C	C
Approach Vol, veh/h		1031			1139			532			1063	
Approach Delay, s/veh		43.9			35.4			26.8			25.5	
Approach LOS		D			D			C			C	

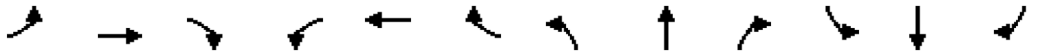
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	46.5	21.9	22.5	9.9	46.0	13.6	30.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	31.0	22.0	9.0	42.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	6.1	8.7	17.3	15.9	5.9	19.6	9.7	15.0
Green Ext Time (p_c), s	0.0	2.0	0.7	2.6	0.1	6.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Future Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.80	0.80	0.80	0.80	0.80	0.80
Sat Flow, veh/h	1325	1863	1530	1077	1863	1559	449	3539	1580	912	3539	1562
Grp Volume(v), veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Grp Sat Flow(s),veh/h/ln	1325	1863	1530	1077	1863	1559	449	1770	1580	912	1770	1562
Q Serve(g_s), s	1.7	6.4	13.3	2.2	1.8	1.4	19.0	3.5	0.3	1.8	11.9	0.9
Cycle Q Clear(g_c), s	3.6	6.4	13.3	8.6	1.8	1.4	30.8	3.5	0.3	5.3	11.9	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
V/C Ratio(X)	0.10	0.44	0.86	0.15	0.13	0.10	0.42	0.16	0.02	0.07	0.42	0.05
Avail Cap(c_a), veh/h	257	303	249	178	303	254	374	2818	1258	760	2818	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	46.4	49.4	50.4	44.5	44.3	8.3	2.8	2.5	3.4	3.6	2.5
Incr Delay (d2), s/veh	0.2	1.2	22.0	0.5	0.2	0.2	3.4	0.1	0.0	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.4	6.9	0.7	1.0	0.6	2.7	1.8	0.2	0.5	5.9	0.4
LnGrp Delay(d), s/veh	46.2	47.7	71.4	50.9	44.7	44.5	11.7	2.9	2.5	3.6	4.1	2.6
LnGrp LOS	D	D	E	D	D	D	B	A	A	A	A	A
Approach Vol, veh/h		311			77			634			1290	
Approach Delay, s/veh		61.1			46.4			5.1			4.0	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		19.8		97.0		19.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		19.0		93.0		19.0
Max Q Clear Time (g_c+I1), s		32.8		15.3		13.9		10.6
Green Ext Time (p_c), s		6.4		0.4		12.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Future Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	72	113	21	258	340	113	41	454	186	72	969	237
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	243	107	301	659	289	52	1307	531	93	1973	882
Arrive On Green	0.05	0.07	0.07	0.17	0.19	0.19	0.03	0.53	0.53	0.05	0.56	0.56
Sat Flow, veh/h	1774	3539	1556	1774	3539	1551	1774	2447	994	1774	3539	1582
Grp Volume(v), veh/h	72	113	21	258	340	113	41	327	313	72	969	237
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1774	1770	1551	1774	1770	1671	1774	1770	1582
Q Serve(g_s), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Cycle Q Clear(g_c), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	93	243	107	301	659	289	52	945	893	93	1973	882
V/C Ratio(X)	0.77	0.46	0.20	0.86	0.52	0.39	0.79	0.35	0.35	0.77	0.49	0.27
Avail Cap(c_a), veh/h	194	619	272	582	1393	610	136	945	893	194	1973	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	41.0	40.2	36.9	33.5	32.7	44.1	12.2	12.2	42.8	12.3	10.5
Incr Delay (d2), s/veh	12.8	1.4	0.9	7.0	0.6	0.9	23.2	1.0	1.1	12.8	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.4	0.5	6.9	3.9	2.6	1.4	5.0	4.8	2.1	7.6	3.2
LnGrp Delay(d), s/veh	55.6	42.3	41.1	43.9	34.1	33.5	67.4	13.2	13.3	55.6	13.2	11.3
LnGrp LOS	E	D	D	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		206			711			681			1278	
Approach Delay, s/veh		46.8			37.6			16.5			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	52.9	19.5	10.3	6.7	55.0	8.8	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	48.0	30.0	16.0	7.0	51.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	5.7	11.8	14.9	4.8	4.1	17.3	5.7	9.9
Green Ext Time (p_c), s	0.0	4.1	0.6	0.4	0.0	8.8	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Future Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	356	494	839	161	322	23	287	517	92	23	1080	218
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	413	434	641	275	266	19	317	1648	717	32	1081	481
Arrive On Green	0.23	0.23	0.23	0.15	0.15	0.15	0.18	0.46	0.46	0.02	0.30	0.30
Sat Flow, veh/h	1792	1881	1553	1792	1730	124	1792	3574	1556	1792	3574	1589
Grp Volume(v), veh/h	356	494	839	161	0	345	287	517	92	23	1080	218
Grp Sat Flow(s),veh/h/ln	1792	1881	1553	1792	0	1854	1792	1787	1556	1792	1787	1589
Q Serve(g_s), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Cycle Q Clear(g_c), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	434	641	275	0	285	317	1648	717	32	1081	481
V/C Ratio(X)	0.86	1.14	1.31	0.58	0.00	1.21	0.91	0.31	0.13	0.71	1.00	0.45
Avail Cap(c_a), veh/h	413	434	641	275	0	285	367	1648	717	76	1081	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	45.1	34.9	46.1	0.0	49.6	47.3	19.9	18.1	57.2	40.8	33.0
Incr Delay (d2), s/veh	16.8	87.0	150.5	3.2	0.0	122.9	23.4	0.5	0.4	25.1	27.2	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	24.5	47.5	5.1	0.0	18.9	11.1	5.4	1.8	1.0	21.5	6.1
LnGrp Delay(d), s/veh	60.0	132.0	185.3	49.2	0.0	172.4	70.6	20.4	18.4	82.3	68.0	36.1
LnGrp LOS	E	F	F	D		F	E	C	B	F	E	D
Approach Vol, veh/h		1689			506			896			1321	
Approach Delay, s/veh		143.3			133.2			36.3			63.0	
Approach LOS		F			F			D			E	

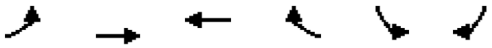
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	58.0		31.0	24.7	39.4		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	54.0		27.0	24.0	35.0		18.0
Max Q Clear Time (g_c+I1), s	3.5	12.7		29.0	20.4	37.4		20.0
Green Ext Time (p_c), s	0.0	4.1		0.0	0.3	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	96.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Future Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	184	1184	214	122	878	61	194	541	194	245	1082	194
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	218	1477	267	152	1555	463	263	1111	474	317	1677	497
Arrive On Green	0.12	0.35	0.35	0.09	0.31	0.31	0.08	0.32	0.32	0.09	0.33	0.33
Sat Flow, veh/h	1757	4260	770	1757	5036	1499	3408	3505	1495	3408	5036	1494
Grp Volume(v), veh/h	184	933	465	122	878	61	194	541	194	245	1082	194
Grp Sat Flow(s),veh/h/ln	1757	1679	1672	1757	1679	1499	1704	1752	1495	1704	1679	1494
Q Serve(g_s), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Cycle Q Clear(g_c), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	1164	580	152	1555	463	263	1111	474	317	1677	497
V/C Ratio(X)	0.84	0.80	0.80	0.80	0.56	0.13	0.74	0.49	0.41	0.77	0.65	0.39
Avail Cap(c_a), veh/h	361	1381	688	275	1825	543	401	1111	474	467	1677	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	30.2	30.2	45.8	29.5	25.4	46.1	28.2	27.4	45.2	28.9	26.1
Incr Delay (d2), s/veh	9.0	3.0	5.8	9.5	0.3	0.1	4.0	1.5	2.6	4.7	1.9	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	12.4	12.8	3.8	7.0	1.2	2.8	6.4	4.6	3.6	8.9	4.5
LnGrp Delay(d), s/veh	52.8	33.1	36.0	55.3	29.9	25.5	50.1	29.7	30.0	49.9	30.9	28.4
LnGrp LOS	D	C	D	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1582			1061			929			1521	
Approach Delay, s/veh		36.3			32.5			34.0			33.6	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	36.4	12.8	39.4	11.9	38.0	16.7	35.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	32.0	16.0	42.0	12.0	34.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	9.2	14.7	9.0	27.7	7.7	20.6	12.5	16.9
Green Ext Time (p_c), s	0.3	3.8	0.1	7.7	0.2	6.7	0.3	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.3
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	170	1150	1130	190	550	480
Future Volume (veh/h)	170	1150	1130	190	550	480
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	177	1198	1177	198	573	500
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	211	2518	1477	248	1442	663
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4489	727	3408	1568
Grp Volume(v), veh/h	177	1198	914	461	573	500
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1693	1704	1568
Q Serve(g_s), s	10.3	16.2	25.6	25.6	12.1	28.1
Cycle Q Clear(g_c), s	10.3	16.2	25.6	25.6	12.1	28.1
Prop In Lane	1.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	211	2518	1147	579	1442	663
V/C Ratio(X)	0.84	0.48	0.80	0.80	0.40	0.75
Avail Cap(c_a), veh/h	355	3292	1388	700	1442	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	17.1	31.0	31.0	20.8	25.4
Incr Delay (d2), s/veh	8.7	0.1	2.8	5.4	0.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	7.5	12.2	12.8	5.9	24.2
LnGrp Delay(d), s/veh	53.5	17.2	33.7	36.3	21.6	33.2
LnGrp LOS	D	B	C	D	C	C
Approach Vol, veh/h		1375	1375		1073	
Approach Delay, s/veh		21.9	34.6		27.0	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				56.0		48.0	16.5	39.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				68.0		44.0	21.0	43.0
Max Q Clear Time (g_c+I1), s				18.2		30.1	12.3	27.6
Green Ext Time (p_c), s				10.7		3.6	0.3	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1340	220	360	1100	120	50	130	140	10	30	10
Future Volume (veh/h)	110	1340	220	360	1100	120	50	130	140	10	30	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	117	1426	234	383	1170	128	53	138	149	11	32	11
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	150	2131	653	498	2223	243	447	530	442	333	377	129
Arrive On Green	0.09	0.42	0.42	0.15	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1757	5036	1544	3408	4595	502	1339	1845	1540	1074	1311	451
Grp Volume(v), veh/h	117	1426	234	383	855	443	53	138	149	11	0	43
Grp Sat Flow(s),veh/h/ln	1757	1679	1544	1704	1679	1740	1339	1845	1540	1074	0	1762
Q Serve(g_s), s	5.5	19.0	8.6	9.0	14.7	14.8	2.5	4.8	6.4	0.7	0.0	1.5
Cycle Q Clear(g_c), s	5.5	19.0	8.6	9.0	14.7	14.8	4.0	4.8	6.4	5.5	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	150	2131	653	498	1624	842	447	530	442	333	0	506
V/C Ratio(X)	0.78	0.67	0.36	0.77	0.53	0.53	0.12	0.26	0.34	0.03	0.00	0.08
Avail Cap(c_a), veh/h	441	3434	1053	1101	2531	1312	447	530	442	333	0	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.4	19.4	16.4	34.3	14.9	15.0	23.2	23.0	23.5	25.1	0.0	21.8
Incr Delay (d2), s/veh	8.3	0.4	0.3	2.5	0.3	0.5	0.5	1.2	2.1	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	8.8	3.7	4.4	6.8	7.1	1.0	2.6	3.0	0.2	0.0	0.8
LnGrp Delay(d), s/veh	45.8	19.8	16.7	36.9	15.2	15.5	23.8	24.1	25.6	25.3	0.0	22.1
LnGrp LOS	D	B	B	D	B	B	C	C	C	C		C
Approach Vol, veh/h		1777			1681			340			54	
Approach Delay, s/veh		21.1			20.2			24.7			22.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	16.2	39.4		28.0	11.2	44.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	27.0	57.0		24.0	21.0	63.0
Max Q Clear Time (g_c+I1), s		8.4	11.0	21.0		7.5	7.5	16.8
Green Ext Time (p_c), s		1.1	1.2	14.3		0.2	0.2	11.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Future Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	77	615	66	99	440	33	33	220	77	110	407	88
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1178	523	233	1178	518	46	1562	698	143	1756	775
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.03	0.44	0.44	0.08	0.50	0.50
Sat Flow, veh/h	916	3539	1571	756	3539	1555	1774	3539	1581	1774	3539	1561
Grp Volume(v), veh/h	77	615	66	99	440	33	33	220	77	110	407	88
Grp Sat Flow(s),veh/h/ln	916	1770	1571	756	1770	1555	1774	1770	1581	1774	1770	1561
Q Serve(g_s), s	5.8	11.6	2.4	10.1	7.8	1.2	1.5	3.1	2.4	5.0	5.4	2.5
Cycle Q Clear(g_c), s	13.6	11.6	2.4	21.7	7.8	1.2	1.5	3.1	2.4	5.0	5.4	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1178	523	233	1178	518	46	1562	698	143	1756	775
V/C Ratio(X)	0.25	0.52	0.13	0.43	0.37	0.06	0.72	0.14	0.11	0.77	0.23	0.11
Avail Cap(c_a), veh/h	621	2399	1065	493	2399	1054	236	1562	698	537	1756	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	22.3	19.2	31.0	21.0	18.8	40.0	13.7	13.6	37.2	11.8	11.1
Incr Delay (d2), s/veh	0.4	0.4	0.1	1.2	0.2	0.1	19.3	0.2	0.3	8.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.7	1.1	2.2	3.8	0.5	1.0	1.5	1.1	2.8	2.7	1.1
LnGrp Delay(d), s/veh	26.6	22.6	19.3	32.2	21.2	18.8	59.3	13.9	13.9	45.6	12.2	11.4
LnGrp LOS	C	C	B	C	C	B	E	B	B	D	B	B
Approach Vol, veh/h		758			572			330			605	
Approach Delay, s/veh		22.7			23.0			18.5			18.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	40.5		31.5	6.1	45.0		31.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	27.0		56.0	11.0	41.0		56.0
Max Q Clear Time (g_c+I1), s	7.0	5.1		15.6	3.5	7.4		23.7
Green Ext Time (p_c), s	0.2	1.4		5.1	0.0	2.8		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Future Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1699	140	462	430	0	140	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	2183	178	145	2336	0	456	0	412	0	2	0
Arrive On Green	0.00	0.66	0.66	0.66	0.66	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	954	3308	269	251	3632	0	1756	0	1583	0	1863	0
Grp Volume(v), veh/h	0	899	940	462	430	0	140	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	954	1770	1807	251	1770	0	1756	0	1583	0	1863	0
Q Serve(g_s), s	0.0	35.1	36.9	29.1	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.1	36.9	66.0	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1168	1193	145	2336	0	456	0	412	0	2	0
V/C Ratio(X)	0.00	0.77	0.79	3.18	0.18	0.00	0.31	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1168	1193	145	2336	0	456	0	412	0	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.7	12.0	42.7	6.6	0.0	29.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.2	3.6	1000.3	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.0	19.2	44.3	2.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	14.9	15.7	1043.0	6.6	0.0	31.5	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		B	B	F	A		C					
Approach Vol, veh/h		1839			892			140			0	
Approach Delay, s/veh		15.3			543.4			31.5			0.0	
Approach LOS		B			F			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		70.0		0.0		70.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		26.0		66.0		16.0		66.0
Max Q Clear Time (g_c+I1), s		8.4		38.9		0.0		68.0
Green Ext Time (p_c), s		0.6		16.4		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	180.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Future Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	206	1371	175	423	567	155	62	392	237	72	639	31
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1415	181	448	1522	671	80	469	387	89	884	43
Arrive On Green	0.13	0.31	0.31	0.25	0.43	0.43	0.04	0.25	0.25	0.05	0.26	0.26
Sat Flow, veh/h	1774	4553	581	1774	3539	1561	1774	1863	1537	1774	3431	166
Grp Volume(v), veh/h	206	1021	525	423	567	155	62	392	237	72	329	341
Grp Sat Flow(s),veh/h/ln	1774	1695	1743	1774	1770	1561	1774	1863	1537	1774	1770	1827
Q Serve(g_s), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Cycle Q Clear(g_c), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	236	1054	542	448	1522	671	80	469	387	89	456	471
V/C Ratio(X)	0.87	0.97	0.97	0.94	0.37	0.23	0.78	0.84	0.61	0.81	0.72	0.72
Avail Cap(c_a), veh/h	343	1054	542	462	1522	671	104	469	387	89	456	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	40.5	40.5	43.7	23.0	21.5	56.3	42.2	39.4	55.9	40.3	40.3
Incr Delay (d2), s/veh	15.3	20.5	30.8	28.0	0.2	0.2	23.5	16.0	7.0	39.8	9.6	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	19.6	21.7	17.1	6.3	3.3	2.5	14.3	7.7	3.3	11.1	11.4
LnGrp Delay(d), s/veh	65.9	61.0	71.3	71.7	23.2	21.6	79.8	58.2	46.4	95.7	49.9	49.7
LnGrp LOS	E	E	E	E	C	C	E	E	D	F	D	D
Approach Vol, veh/h		1752			1145			691			742	
Approach Delay, s/veh		64.7			40.9			56.1			54.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	34.0	34.1	41.0	9.3	34.7	19.9	55.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	30.0	31.0	37.0	7.0	29.0	23.0	45.0
Max Q Clear Time (g_c+I1), s	6.8	25.7	29.9	37.4	6.1	22.3	15.6	14.9
Green Ext Time (p_c), s	0.0	1.3	0.2	0.0	0.0	2.1	0.3	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Future Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1516	495	74	611	0	1095	1389	379			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2069	630	122	2432	0	1582	1829	497			
Arrive On Green	0.00	0.40	0.40	0.04	0.47	0.00	0.46	0.46	0.46			
Sat Flow, veh/h	0	5305	1563	3476	5305	0	3476	4020	1093			
Grp Volume(v), veh/h	0	1516	495	74	611	0	1095	1182	586			
Grp Sat Flow(s),veh/h/ln	0	1712	1563	1738	1712	0	1738	1712	1688			
Q Serve(g_s), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Cycle Q Clear(g_c), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.65			
Lane Grp Cap(c), veh/h	0	2069	630	122	2432	0	1582	1558	768			
V/C Ratio(X)	0.00	0.73	0.79	0.61	0.25	0.00	0.69	0.76	0.76			
Avail Cap(c_a), veh/h	0	2383	726	155	2796	0	1582	1558	768			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	28.4	29.2	53.3	17.6	0.0	24.3	25.4	25.5			
Incr Delay (d2), s/veh	0.0	1.0	5.0	4.8	0.1	0.0	2.5	3.5	7.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	13.4	14.2	1.2	3.7	0.0	13.9	15.9	16.6			
LnGrp Delay(d), s/veh	0.0	29.4	34.3	58.1	17.7	0.0	26.8	28.9	32.5			
LnGrp LOS		C	C	E	B		C	C	C			
Approach Vol, veh/h		2011			685			2863				
Approach Delay, s/veh		30.6			22.1			28.9				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			7.9	49.1		55.0		57.1
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			5.0	52.0		51.0		61.0
Max Q Clear Time (g_c+I1), s			4.4	33.0		34.4		10.0
Green Ext Time (p_c), s			0.0	12.1		13.6		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1670	290	340	710	80	100	750	380	240	1540	420
Future Volume (veh/h)	230	1670	290	340	710	80	100	750	380	240	1540	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.85	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	247	1796	312	366	763	86	108	806	409	258	1656	452
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
Arrive On Green	0.09	0.36	0.36	0.11	0.37	0.37	0.03	0.31	0.31	0.09	0.37	0.37
Sat Flow, veh/h	3442	5085	1475	3442	5085	1501	3442	5085	2381	3442	5085	1388
Grp Volume(v), veh/h	247	1796	312	366	763	86	108	806	409	258	1656	452
Grp Sat Flow(s),veh/h/ln	1721	1695	1475	1721	1695	1501	1721	1695	1190	1721	1695	1388
Q Serve(g_s), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	15.7	14.6	8.8	36.7	31.4
Cycle Q Clear(g_c), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	15.7	14.6	8.8	36.7	31.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
V/C Ratio(X)	0.78	0.99	0.54	0.98	0.40	0.15	0.94	0.52	0.40	0.81	0.89	0.69
Avail Cap(c_a), veh/h	631	1822	581	373	1905	562	115	1562	1033	430	1865	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	38.2	28.2	53.4	27.6	24.9	57.9	34.2	24.8	53.4	35.7	26.1
Incr Delay (d2), s/veh	4.2	17.7	1.0	41.6	0.1	0.1	65.6	1.2	1.1	8.0	6.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	22.6	8.1	8.2	6.2	1.9	2.8	7.5	4.9	4.5	18.3	13.0
LnGrp Delay(d), s/veh	57.5	55.9	29.1	94.9	27.7	25.0	123.5	35.5	25.9	61.4	42.4	32.0
LnGrp LOS	E	E	C	F	C	C	F	D	C	E	D	C
Approach Vol, veh/h		2355			1215			1323			2366	
Approach Delay, s/veh		52.5			47.8			39.7			42.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	40.9	17.0	47.0	8.0	48.0	15.0	49.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	33.0	13.0	43.0	4.0	44.0	22.0	34.0
Max Q Clear Time (g_c+I1), s	10.8	17.7	14.7	44.0	5.8	38.7	10.4	15.2
Green Ext Time (p_c), s	0.3	6.7	0.0	0.0	0.0	4.5	0.6	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Future Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	333	2280	0	0	667	237				86	86	43
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	479	4047	0	0	3022	926				159	205	97
Arrive On Green	0.14	0.79	0.00	0.00	0.59	0.59				0.09	0.09	0.09
Sat Flow, veh/h	3476	5305	0	0	5305	1573				1792	2308	1089
Grp Volume(v), veh/h	333	2280	0	0	667	237				86	62	67
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1573				1792	1712	1685
Q Serve(g_s), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Cycle Q Clear(g_c), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Prop In Lane	1.00		0.00	0.00		1.00				1.00		0.65
Lane Grp Cap(c), veh/h	479	4047	0	0	3022	926				159	152	149
V/C Ratio(X)	0.69	0.56	0.00	0.00	0.22	0.26				0.54	0.41	0.45
Avail Cap(c_a), veh/h	1393	7204	0	0	4829	1479				580	554	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	2.6	0.0	0.0	6.3	6.5				28.3	28.0	28.0
Incr Delay (d2), s/veh	1.8	0.1	0.0	0.0	0.0	0.1				2.8	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	5.1	0.0	0.0	1.9	2.1				1.6	1.1	1.2
LnGrp Delay(d), s/veh	28.5	2.7	0.0	0.0	6.3	6.6				31.1	29.7	30.1
LnGrp LOS	C	A			A	A				C	C	C
Approach Vol, veh/h		2613			904						215	
Approach Delay, s/veh		6.0			6.4						30.4	
Approach LOS		A			A						C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		9.8		55.1			12.9	42.2
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		91.0			26.0	61.0
Max Q Clear Time (g_c+I1), s		5.0		13.0			7.9	6.7
Green Ext Time (p_c), s		0.9		38.1			1.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Future Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	34	2079	67	663	1067	90	45	11	180	764	438	34
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1472	47	459	2038	600	251	264	747	532	997	77
Arrive On Green	0.02	0.29	0.29	0.13	0.40	0.40	0.14	0.14	0.14	0.30	0.30	0.30
Sat Flow, veh/h	1774	5048	162	3442	5085	1496	1774	1863	2651	1774	3323	257
Grp Volume(v), veh/h	34	1394	752	663	1067	90	45	11	180	764	232	240
Grp Sat Flow(s),veh/h/ln	1774	1695	1820	1721	1695	1496	1774	1863	1325	1774	1770	1810
Q Serve(g_s), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Cycle Q Clear(g_c), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	43	989	531	459	2038	600	251	264	747	532	531	543
V/C Ratio(X)	0.79	1.41	1.42	1.44	0.52	0.15	0.18	0.04	0.24	1.44	0.44	0.44
Avail Cap(c_a), veh/h	89	989	531	459	2038	600	251	264	747	532	531	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	42.5	42.5	52.0	27.3	22.9	45.4	44.5	33.8	42.0	33.8	33.9
Incr Delay (d2), s/veh	26.5	190.5	198.6	212.2	0.2	0.1	1.6	0.3	0.8	206.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	42.5	46.8	21.1	8.9	1.9	1.4	0.3	2.4	48.1	6.3	6.5
LnGrp Delay(d), s/veh	84.8	233.0	241.1	264.2	27.5	23.0	46.9	44.8	34.6	248.6	34.4	34.4
LnGrp LOS	F	F	F	F	C	C	D	D	C	F	C	C
Approach Vol, veh/h		2180			1820			236			1236	
Approach Delay, s/veh		233.4			113.5			37.4			166.8	
Approach LOS		F			F			D			F	

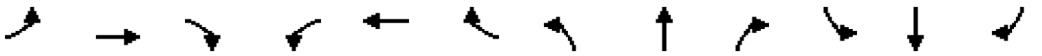
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.0	20.0	39.0		40.0	6.9	52.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		17.0	16.0	35.0		36.0	6.0	45.0
Max Q Clear Time (g_c+I1), s		8.3	18.0	37.0		38.0	4.3	21.1
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	170.0
HCM 2010 LOS	F



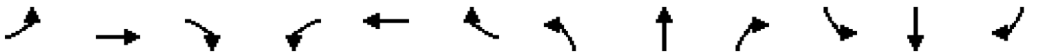
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	450	480	0	0	0	0	840	40	0	2260	0
Future Volume (vph)	40	450	480	0	0	0	0	840	40	0	2260	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1786	2814					7542			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1786	2814					7542			6471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	489	522	0	0	0	0	913	43	0	2457	0
RTOR Reduction (vph)	0	0	6	0	0	0	0	6	0	0	0	0
Lane Group Flow (vph)	39	493	516	0	0	0	0	950	0	0	2457	0
Confl. Peds. (#/hr)							6		16	16		6
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	36.3	36.3	36.3					61.5			61.5	
Effective Green, g (s)	36.3	36.3	36.3					61.5			61.5	
Actuated g/C Ratio	0.34	0.34	0.34					0.58			0.58	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	582	612	965					4384			3761	
v/s Ratio Prot	0.02	c0.28						0.13			c0.38	
v/s Ratio Perm			0.18									
v/c Ratio	0.07	0.81	0.53					0.22			0.65	
Uniform Delay, d1	23.4	31.5	28.0					10.6			15.0	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.0	7.6	0.6					0.1			0.9	
Delay (s)	23.4	39.2	28.5					10.7			15.8	
Level of Service	C	D	C					B			B	
Approach Delay (s/veh)		33.3			0.0			10.7			15.8	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



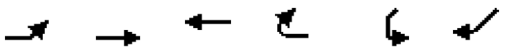
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Future Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.98	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5900	1229	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5900	1229	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1613	731	151	645	0	602	0	65	376	0	11
RTOR Reduction (vph)	0	29	226	0	0	0	0	0	43	0	0	7
Lane Group Flow (vph)	0	1891	198	151	645	0	602	0	22	376	0	4
Confl. Peds. (#/hr)			18	18								
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Effective Green, g (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Actuated g/C Ratio		0.47	0.47	0.09	0.59		0.34		0.34	0.34		0.34
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2760	574	304	3032		1178		543	1178		543
v/s Ratio Prot		c0.32		c0.04	0.13							
v/s Ratio Perm			0.16				c0.17		0.01	0.11		0.00
v/c Ratio		0.69	0.35	0.50	0.21		0.51		0.04	0.32		0.01
Uniform Delay, d1		24.0	19.4	50.0	11.0		30.3		25.4	28.1		25.1
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.7	0.4	1.3	0.0		1.6		0.1	0.7		0.0
Delay (s)		24.7	19.8	51.3	11.1		31.9		25.5	28.8		25.1
Level of Service		C	B	D	B		C		C	C		C
Approach Delay (s/veh)		23.8			18.7			31.3			28.7	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	120	840	40	750	0	60	2330	30
Future Volume (vph)	0	0	0	210	120	840	40	750	0	60	2330	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3346	2814	3467	6471		1787	6471	1552
Flt Permitted				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3346	2814	3467	6471		1787	6471	1552
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	228	130	913	43	815	0	65	2533	33
RTOR Reduction (vph)	0	0	0	0	0	238	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	0	116	242	675	43	815	0	65	2533	19
Confl. Peds. (#/hr)							8		15	15		8
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				32.2	32.2	32.2	2.2	58.0		7.1	62.9	62.9
Effective Green, g (s)				32.2	32.2	32.2	2.2	58.0		7.1	62.9	62.9
Actuated g/C Ratio				0.29	0.29	0.29	0.02	0.53		0.06	0.58	0.58
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				479	985	829	69	3433		116	3723	893
v/s Ratio Prot				0.07	0.07		0.01	0.13		c0.04	c0.39	
v/s Ratio Perm						c0.24						0.01
v/c Ratio				0.24	0.25	0.81	0.62	0.24		0.56	0.68	0.02
Uniform Delay, d1				29.3	29.3	35.8	53.1	13.8		49.6	16.2	10.0
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.3	0.1	6.2	16.2	0.2		6.1	1.0	0.0
Delay (s)				29.5	29.4	41.9	69.4	13.9		55.6	17.2	10.0
Level of Service				C	C	D	E	B		E	B	B
Approach Delay (s/veh)		0.0			38.4			16.7			18.1	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	109.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	160	1830	750	210	60	200
Future Volume (veh/h)	160	1830	750	210	60	200
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	176	2011	824	231	66	220
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	217	3363	1807	493	704	628
Arrive On Green	0.12	0.52	0.36	0.36	0.39	0.39
Sat Flow, veh/h	1792	6735	5352	1387	1792	1599
Grp Volume(v), veh/h	176	2011	785	270	66	220
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1622	1792	1599
Q Serve(g_s), s	8.8	19.8	11.4	11.8	2.1	8.9
Cycle Q Clear(g_c), s	8.8	19.8	11.4	11.8	2.1	8.9
Prop In Lane	1.00			0.86	1.00	1.00
Lane Grp Cap(c), veh/h	217	3363	1723	576	704	628
V/C Ratio(X)	0.81	0.60	0.46	0.47	0.09	0.35
Avail Cap(c_a), veh/h	626	5369	2119	709	704	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	15.3	22.7	22.9	17.5	19.6
Incr Delay (d2), s/veh	7.2	0.2	0.2	0.6	0.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	8.8	5.1	5.3	1.1	9.2
LnGrp Delay(d), s/veh	46.4	15.5	22.9	23.5	17.8	21.1
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		2187	1055		286	
Approach Delay, s/veh		18.0	23.1		20.3	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.6		40.0	15.1	36.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				76.0		36.0	32.0	40.0
Max Q Clear Time (g_c+I1), s				21.8		10.9	10.8	13.8
Green Ext Time (p_c), s				25.8		0.9	0.4	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.7
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	SBR	NWL2	NWR
Lane Configurations											
Traffic Volume (vph)	160	10	10	350	30	30	400	30	160	10	10
Future Volume (vph)	160	10	10	350	30	30	400	30	160	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.93		1.00	0.87		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1641	1468	1641	2584	3003		1641	2867		1641	1468
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1641	1468	1641	2584	3003		1641	2867		1641	1468
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	213	13	13	467	40	40	533	40	213	13	13
RTOR Reduction (vph)	0	11	0	0	0	0	0	83	0	0	0
Lane Group Flow (vph)	213	2	13	467	80	0	533	170	0	13	13
Confl. Peds. (#/hr)			2			5					
Confl. Bikes (#/hr)						1					
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA		Prot	Prot
Protected Phases	4	4	8	1	2		1	6		7	7
Permitted Phases				8							
Actuated Green, G (s)	16.2	16.2	1.3	37.7	16.2		36.4	56.6		2.7	2.7
Effective Green, g (s)	16.2	16.2	1.3	37.7	16.2		36.4	56.6		2.7	2.7
Actuated g/C Ratio	0.17	0.17	0.01	0.41	0.17		0.39	0.61		0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	286	256	22	1161	524		643	1748		47	42
v/s Ratio Prot	c0.13	0.00	0.01	c0.16	c0.03		c0.32	0.06		0.01	c0.01
v/s Ratio Perm				0.02							
v/c Ratio	0.74	0.01	0.59	0.40	0.15		0.83	0.10		0.28	0.31
Uniform Delay, d1	36.3	31.7	45.5	19.6	32.5		25.4	7.5		44.1	44.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	10.1	0.0	36.0	0.2	0.6		8.7	0.1		3.2	4.2
Delay (s)	46.4	31.7	81.5	19.8	33.1		34.1	7.6		47.3	48.3
Level of Service	D	C	F	B	C		C	A		D	D
Approach Delay (s/veh)					33.1			25.6			
Approach LOS					C			C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	92.8	Sum of lost time (s)	20.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	0	10	0	0	0	0	60	0	30	10	10
Future Volume (veh/h)	20	0	10	0	0	0	0	60	0	30	10	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	0	1681				0	1681	0	1681	1681	1900
Adj Flow Rate, veh/h	29	0	15				0	88	0	44	15	15
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.68	0.68	0.68				0.68	0.68	0.68	0.68	0.68	0.68
Percent Heavy Veh, %	13	0	13				0	13	0	13	13	13
Cap, veh/h	48	0	43				0	2559	0	54	1431	1233
Arrive On Green	0.03	0.00	0.03				0.00	0.80	0.00	0.03	0.88	0.88
Sat Flow, veh/h	1601	0	1429				0	3363	0	1601	1626	1402
Grp Volume(v), veh/h	29	0	15				0	88	0	44	15	15
Grp Sat Flow(s),veh/h/ln	1601	0	1429				0	1597	0	1601	1597	1430
Q Serve(g_s), s	1.6	0.0	0.9				0.0	0.5	0.0	2.4	0.1	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.9				0.0	0.5	0.0	2.4	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.98
Lane Grp Cap(c), veh/h	48	0	43				0	2559	0	54	1406	1259
V/C Ratio(X)	0.61	0.00	0.35				0.00	0.03	0.00	0.82	0.01	0.01
Avail Cap(c_a), veh/h	614	0	548				0	2559	0	650	1406	1259
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	42.2				0.0	1.8	0.0	42.6	0.6	0.6
Incr Delay (d2), s/veh	11.8	0.0	4.9				0.0	0.0	0.0	24.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4				0.0	0.2	0.0	1.4	0.0	0.0
LnGrp Delay(d), s/veh	54.3	0.0	47.0				0.0	1.8	0.0	67.2	0.7	0.7
LnGrp LOS	D		D					A		E	A	A
Approach Vol, veh/h		44						88			74	
Approach Delay, s/veh		51.8						1.8			40.2	
Approach LOS		D						A			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	7.0	75.0		6.6		82.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	36.0	38.0		34.0		78.0		
Max Q Clear Time (g_c+I1), s	4.4	2.5		3.6		2.1		
Green Ext Time (p_c), s	0.1	0.5		0.1		0.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	10	70	0	10	30
Future Vol, veh/h	0	10	70	0	10	30
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	14	99	0	14	42

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	149	52	0	0	100	0
Stage 1	100	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	834	1011	-	-	1505	-
Stage 1	919	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	825	1009	-	-	1504	-
Mov Cap-2 Maneuver	825	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	963	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.6	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	1009	1504	-
HCM Lane V/C Ratio	-	-	0.014	0.009	-
HCM Control Delay (s/veh)	-	-	8.6	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	1410	40	0	910	0	10
Future Vol, veh/h	1410	40	0	910	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1533	43	0	989	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	767
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	-	-	0	-	0	294
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	294
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	294	-	-	-
HCM Lane V/C Ratio	0.037	-	-	-
HCM Control Delay (s/veh)	17.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	400	250	1020	150	620	660	290	190	1010	420
Future Volume (veh/h)	190	1190	400	250	1020	150	620	660	290	190	1010	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	209	1308	440	275	1121	165	681	725	319	209	1110	462
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1405	429	317	1306	192	734	2136	656	268	1447	436
Arrive On Green	0.08	0.28	0.28	0.09	0.29	0.29	0.21	0.42	0.42	0.08	0.28	0.28
Sat Flow, veh/h	3442	5085	1554	3442	4458	656	3442	5085	1562	3442	5085	1531
Grp Volume(v), veh/h	209	1308	440	275	852	434	681	725	319	209	1110	462
Grp Sat Flow(s),veh/h/ln	1721	1695	1554	1721	1695	1723	1721	1695	1562	1721	1695	1531
Q Serve(g_s), s	7.1	29.9	33.0	9.4	28.4	28.4	23.2	11.5	17.8	7.1	23.9	34.0
Cycle Q Clear(g_c), s	7.1	29.9	33.0	9.4	28.4	28.4	23.2	11.5	17.8	7.1	23.9	34.0
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	1405	429	317	993	505	734	2136	656	268	1447	436
V/C Ratio(X)	0.81	0.93	1.02	0.87	0.86	0.86	0.93	0.34	0.49	0.78	0.77	1.06
Avail Cap(c_a), veh/h	259	1405	429	317	993	505	749	2136	656	346	1447	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	42.1	43.2	53.5	39.9	39.9	46.1	23.4	25.3	54.1	39.1	42.7
Incr Delay (d2), s/veh	16.8	11.3	49.9	21.7	7.6	13.9	17.6	0.4	2.6	8.4	3.9	60.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	15.5	20.1	5.4	14.3	15.4	12.8	5.5	8.1	3.7	11.7	21.6
LnGrp Delay(d), s/veh	71.2	53.4	93.2	75.2	47.5	53.8	63.7	23.9	27.8	62.5	43.1	102.8
LnGrp LOS	E	D	F	E	D	D	E	C	C	E	D	F
Approach Vol, veh/h		1957			1561			1725			1781	
Approach Delay, s/veh		64.3			54.1			40.3			60.8	
Approach LOS		E			D			D			E	

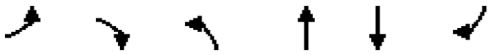
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	54.2	15.0	37.0	29.5	38.0	13.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	48.0	11.0	33.0	26.0	34.0	9.0	35.0
Max Q Clear Time (g_c+I1), s	9.1	19.8	11.4	35.0	25.2	36.0	9.1	30.4
Green Ext Time (p_c), s	0.2	7.3	0.0	0.0	0.3	0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.3
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	90	1360	690	0	30	1560
Future Volume (vph)	90	1360	690	0	30	1560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.87	0.85	1.00		1.00	1.00
Flt Protected	0.99	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3087	1427	5036		1752	6346
Flt Permitted	0.99	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3087	1427	5036		1752	6346
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	93	1402	711	0	31	1608
RTOR Reduction (vph)	105	105	0	0	0	0
Lane Group Flow (vph)	689	596	711	0	31	1608
Confl. Peds. (#/hr)				17	17	
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	45.1	45.1	35.7		3.3	43.0
Effective Green, g (s)	45.1	45.1	35.7		3.3	43.0
Actuated g/C Ratio	0.47	0.47	0.37		0.03	0.45
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1448	669	1870		60	2839
v/s Ratio Prot	0.22		0.14		0.02	c0.25
v/s Ratio Perm		c0.42				
v/c Ratio	0.48	0.89	0.38		0.52	0.57
Uniform Delay, d1	17.4	23.3	22.1		45.6	19.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	14.1	0.6		7.3	0.8
Delay (s)	17.7	37.4	22.7		52.9	20.5
Level of Service	B	D	C		D	C
Approach Delay (s/veh)	26.9		22.7			21.1
Approach LOS	C		C			C

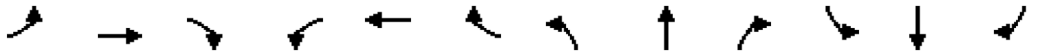
Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	96.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	480	40	640	1460	0
Future Volume (veh/h)	210	480	40	640	1460	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	221	505	42	674	1537	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	682	314	54	4653	3371	0
Arrive On Green	0.20	0.20	0.03	0.73	0.67	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	221	505	42	674	1537	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	6.7	24.0	2.8	3.8	17.4	0.0
Cycle Q Clear(g_c), s	6.7	24.0	2.8	3.8	17.4	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	682	314	54	4653	3371	0
V/C Ratio(X)	0.32	1.61	0.78	0.14	0.46	0.00
Avail Cap(c_a), veh/h	682	314	176	4653	3371	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.1	48.0	57.8	4.8	9.4	0.0
Incr Delay (d2), s/veh	0.3	289.1	21.2	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	43.9	1.7	1.7	8.1	0.0
LnGrp Delay(d), s/veh	41.3	337.1	78.9	4.8	9.9	0.0
LnGrp LOS	D	F	E	A	A	
Approach Vol, veh/h	726			716	1537	
Approach Delay, s/veh	247.0			9.2	9.9	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		92.0		28.0	7.7	84.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		88.0		24.0	12.0	72.0		
Max Q Clear Time (g_c+I1), s		5.8		26.0	4.8	19.4		
Green Ext Time (p_c), s		5.3		0.0	0.0	16.9		

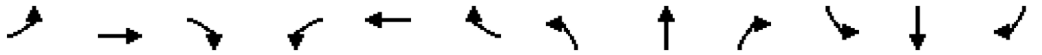
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.5
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	930	90	300	580	110	80	440	270	100	500	120
Future Volume (veh/h)	100	930	90	300	580	110	80	440	270	100	500	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.88	1.00		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	108	1000	97	323	624	118	86	473	290	108	538	129
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	166	1318	348	404	1670	456	138	1955	523	166	1996	536
Arrive On Green	0.05	0.27	0.27	0.12	0.34	0.34	0.04	0.40	0.40	0.05	0.41	0.41
Sat Flow, veh/h	3312	4893	1291	3312	4893	1337	3312	4893	1308	3312	4893	1314
Grp Volume(v), veh/h	108	1000	97	323	624	118	86	473	290	108	538	129
Grp Sat Flow(s),veh/h/ln	1656	1631	1291	1656	1631	1337	1656	1631	1308	1656	1631	1314
Q Serve(g_s), s	3.2	18.9	6.0	9.5	9.7	6.4	2.6	6.5	17.2	3.2	7.4	6.5
Cycle Q Clear(g_c), s	3.2	18.9	6.0	9.5	9.7	6.4	2.6	6.5	17.2	3.2	7.4	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	1318	348	404	1670	456	138	1955	523	166	1996	536
V/C Ratio(X)	0.65	0.76	0.28	0.80	0.37	0.26	0.62	0.24	0.55	0.65	0.27	0.24
Avail Cap(c_a), veh/h	264	1752	462	659	2336	638	231	1955	523	264	1996	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	33.7	29.0	42.9	25.0	23.9	47.4	20.1	23.3	46.9	19.8	19.5
Incr Delay (d2), s/veh	4.3	1.4	0.4	3.7	0.1	0.3	4.5	0.3	4.2	4.3	0.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.7	2.2	4.6	4.4	2.4	1.3	2.9	6.8	1.6	3.3	2.5
LnGrp Delay(d), s/veh	51.2	35.1	29.4	46.6	25.1	24.2	51.9	20.4	27.5	51.2	20.1	20.6
LnGrp LOS	D	D	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1205			1065			849			775	
Approach Delay, s/veh		36.1			31.6			26.0			24.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	44.2	16.3	31.1	8.2	45.0	9.0	38.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	20.0	36.0	7.0	41.0	8.0	48.0
Max Q Clear Time (g_c+I1), s	5.2	19.2	11.5	20.9	4.6	9.4	5.2	11.7
Green Ext Time (p_c), s	0.1	4.2	0.7	6.2	0.0	4.5	0.1	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Future Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	21	11	32	372	21	106	85	1000	574	223	1362	53
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	462	134	388	478	593	501	108	2024	615	259	2420	94
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.41	0.41	0.15	0.49	0.49
Sat Flow, veh/h	1228	411	1196	1325	1827	1543	1740	4988	1517	1740	4916	191
Grp Volume(v), veh/h	21	0	43	372	21	106	85	1000	574	223	921	494
Grp Sat Flow(s),veh/h/ln	1228	0	1607	1325	1827	1543	1740	1663	1517	1740	1663	1783
Q Serve(g_s), s	1.2	0.0	1.8	27.0	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Cycle Q Clear(g_c), s	2.0	0.0	1.8	28.8	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Prop In Lane	1.00		0.74	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	462	0	522	478	593	501	108	2024	615	259	1637	878
V/C Ratio(X)	0.05	0.00	0.08	0.78	0.04	0.21	0.78	0.49	0.93	0.86	0.56	0.56
Avail Cap(c_a), veh/h	642	0	759	673	863	729	210	2024	615	402	1637	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	23.3	33.3	23.0	24.4	46.0	22.0	28.3	41.4	17.7	17.7
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.8	0.0	0.2	11.6	0.9	23.0	11.0	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.8	10.3	0.4	2.1	2.7	6.9	18.9	6.8	9.1	10.1
LnGrp Delay(d), s/veh	23.7	0.0	23.4	37.1	23.0	24.6	57.6	22.8	51.3	52.4	19.2	20.4
LnGrp LOS	C		C	D	C	C	E	C	D	D	B	C
Approach Vol, veh/h		64			499			1659			1638	
Approach Delay, s/veh		23.5			33.8			34.5			24.0	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.8	44.4		36.3	10.2	53.0		36.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	23.0	38.0		47.0	12.0	49.0		47.0
Max Q Clear Time (g_c+I1), s	14.5	38.0		4.0	6.8	21.4		30.8
Green Ext Time (p_c), s	0.4	0.0		0.3	0.1	11.4		1.5

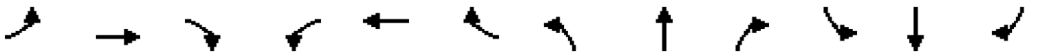
Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		29.8
HCM 2010 LOS		C



Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	90	0	0	420	1060	60
Future Volume (veh/h)	90	0	0	420	1060	60
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	93	0	0	433	1093	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2155	0	0	2155	1465	464
Arrive On Green	0.60	0.00	0.00	0.60	0.29	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	93	0	0	433	1093	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	0.8	0.0	0.0	4.1	14.6	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.1	14.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2155	0	0	2155	1465	464
V/C Ratio(X)	0.04	0.00	0.00	0.20	0.75	0.00
Avail Cap(c_a), veh/h	2155	0	0	2155	4534	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	0.0	6.7	24.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.0	6.9	0.0
LnGrp Delay(d), s/veh	6.1	0.0	0.0	6.9	24.8	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	93			433	1093	
Approach Delay, s/veh	6.1			6.9	24.8	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		49.0				49.0		25.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		45.0				45.0		67.0
Max Q Clear Time (g_c+I1), s		2.8				6.1		16.6
Green Ext Time (p_c), s		0.5				2.8		5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	1070	120	340	700	110	130	320	240	580	480	120
Future Volume (vph)	290	1070	120	340	700	110	130	320	240	580	480	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	0.99		1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	3433	5085	1366	3433	4942		1610	3107	1418	1522	4584	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.72	
Satd. Flow (perm)	3433	5085	1366	3433	4942		1610	2911	1418	1522	3377	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	299	1103	124	351	722	113	134	330	247	598	495	124
RTOR Reduction (vph)	0	0	94	0	17	0	0	12	50	0	16	0
Lane Group Flow (vph)	299	1103	30	351	818	0	121	398	130	305	896	0
Confl. Peds. (#/hr)	21		58	58		21	26		5	5		26
Confl. Bikes (#/hr)			1			3						
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	14.4	28.6	28.6	13.9	28.1		13.2	44.5	45.2	27.0	62.3	
Effective Green, g (s)	14.4	28.6	28.6	13.9	28.1		13.2	44.5	45.2	27.0	62.3	
Actuated g/C Ratio	0.12	0.24	0.24	0.12	0.24		0.11	0.38	0.39	0.23	0.53	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	423	1245	334	408	1188		181	1131	597	351	2080	
v/s Ratio Prot	0.09	c0.22		c0.10	0.17		0.08	0.04	0.03	c0.20	0.10	
v/s Ratio Perm			0.02					0.09	0.07		c0.13	
v/c Ratio	0.71	0.89	0.09	0.86	0.69		0.67	0.35	0.22	0.87	0.43	
Uniform Delay, d1	49.2	42.5	34.1	50.5	40.4		49.7	25.8	24.0	43.2	16.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.3	7.9	0.1	16.7	1.7		9.0	0.2	0.2	19.8	0.1	
Delay (s)	54.5	50.4	34.2	67.2	42.0		58.7	26.0	24.1	63.0	16.7	
Level of Service	D	D	C	E	D		E	C	C	E	B	
Approach Delay (s/veh)		49.9			49.5			31.1			28.3	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	116.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Future Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
Arrive On Green	0.12	0.27	0.27	0.20	0.35	0.35	0.07	0.27	0.27	0.13	0.32	0.32
Sat Flow, veh/h	1792	3574	1571	1792	3574	1550	3476	3574	1555	1792	3574	1553
Grp Volume(v), veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1550	1738	1787	1555	1792	1787	1553
Q Serve(g_s), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Cycle Q Clear(g_c), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
V/C Ratio(X)	0.85	0.91	0.63	0.92	0.61	0.17	0.76	0.70	0.16	0.87	0.79	0.34
Avail Cap(c_a), veh/h	312	995	551	405	1254	748	272	947	730	265	1150	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.6	31.8	45.1	30.9	17.0	52.5	38.1	17.9	49.2	35.4	29.6
Incr Delay (d2), s/veh	13.7	11.7	2.2	23.6	0.9	0.1	11.2	4.3	0.5	23.6	5.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	14.9	9.3	12.5	10.2	2.3	3.3	10.0	2.2	7.7	13.9	4.3
LnGrp Delay(d), s/veh	63.5	52.3	34.0	68.7	31.7	17.1	63.6	42.4	18.3	72.8	40.9	31.5
LnGrp LOS	E	D	C	E	C	B	E	D	B	E	D	C
Approach Vol, veh/h		1390			1220			968			1273	
Approach Delay, s/veh		49.3			40.1			43.7			44.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	34.5	26.8	35.0	12.2	41.0	17.5	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	26.0	32.0	9.0	37.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	14.6	21.2	22.5	29.2	8.1	28.4	13.3	22.4
Green Ext Time (p_c), s	0.1	2.9	0.3	1.8	0.1	4.1	0.2	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.6
HCM 2010 LOS	D

ANAHEIM - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	870	440	580	2720	0	30	0	310	80	70	10
Future Volume (veh/h)	0	870	440	580	2720	0	30	0	310	80	70	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	0	906	458	604	2833	0	21	0	334	83	73	10
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	0	2228	691	700	4351	0	31	0	566	135	709	317
Arrive On Green	0.00	0.43	0.43	0.20	0.67	0.00	0.02	0.00	0.18	0.04	0.20	0.20
Sat Flow, veh/h	0	5305	1592	3476	6735	0	1792	0	3198	3476	3574	1599
Grp Volume(v), veh/h	0	906	458	604	2833	0	21	0	334	83	73	10
Grp Sat Flow(s),veh/h/ln	0	1712	1592	1738	1618	0	1792	0	1599	1738	1787	1599
Q Serve(g_s), s	0.0	13.0	24.5	18.0	27.4	0.0	1.3	0.0	10.3	2.5	1.8	0.5
Cycle Q Clear(g_c), s	0.0	13.0	24.5	18.0	27.4	0.0	1.3	0.0	10.3	2.5	1.8	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2228	691	700	4351	0	31	0	566	135	709	317
V/C Ratio(X)	0.00	0.41	0.66	0.86	0.65	0.00	0.68	0.00	0.59	0.62	0.10	0.03
Avail Cap(c_a), veh/h	0	2393	742	939	5005	0	100	0	566	194	709	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.9	24.2	41.4	10.2	0.0	52.4	0.0	40.6	50.8	35.2	34.7
Incr Delay (d2), s/veh	0.0	0.1	2.0	6.5	0.2	0.0	22.6	0.0	4.5	4.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	11.2	9.3	12.1	0.0	0.8	0.0	4.9	1.3	0.9	0.3
LnGrp Delay(d), s/veh	0.0	21.0	26.2	47.9	10.5	0.0	75.0	0.0	45.0	55.3	35.5	34.9
LnGrp LOS		C	C	D	B		E		D	E	D	C
Approach Vol, veh/h		1364			3437			355			166	
Approach Delay, s/veh		22.7			17.1			46.8			45.3	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	23.0	25.6	50.6	5.9	25.3		76.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	19.0	29.0	50.0	6.0	19.0		83.0
Max Q Clear Time (g_c+I1), s	4.5	12.3	20.0	26.5	3.3	3.8		29.4
Green Ext Time (p_c), s	0.0	0.7	1.6	8.3	0.0	0.3		42.8

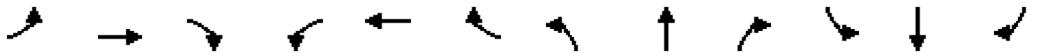
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.4
HCM 2010 LOS	C

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	60	1280	0	0	2410	160	0	0	0	830	1170	180
Future Volume (vph)	60	1280	0	0	2410	160	0	0	0	830	1170	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.98	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3467	6471			6089	1295				1448	5925	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3467	6471			6089	1295				1448	5925	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	66	1407	0	0	2648	176	0	0	0	912	1286	198
RTOR Reduction (vph)	0	0	0	0	1	24	0	0	0	0	15	0
Lane Group Flow (vph)	66	1407	0	0	2665	134	0	0	0	474	1907	0
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	3.2	62.2			55.0	55.0				49.0	49.0	
Effective Green, g (s)	3.2	62.2			55.0	55.0				49.0	49.0	
Actuated g/C Ratio	0.03	0.52			0.46	0.46				0.41	0.41	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	93	3376			2809	597				595	2435	
v/s Ratio Prot	c0.02	0.22			c0.44					c0.33	0.32	
v/s Ratio Perm						0.10						
v/c Ratio	0.71	0.42			0.95	0.22				0.80	0.78	
Uniform Delay, d1	57.5	17.4			30.8	19.3				30.7	30.5	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	21.9	0.1			8.0	0.2				7.3	1.7	
Delay (s)	79.4	17.5			38.7	19.5				38.0	32.2	
Level of Service	E	B			D	B				D	C	
Approach Delay (s/veh)		20.3			37.7			0.0			33.4	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1170	20	40	1900	60	150	180	30	70	10	660
Future Volume (vph)	180	1170	20	40	1900	60	150	180	30	70	10	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	5136	1529	1787	5136	1569	1787	1837		1785	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00		0.52	1.00	1.00
Satd. Flow (perm)	1787	5136	1529	1787	5136	1569	1412	1837		971	1881	1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	198	1286	22	44	2088	66	165	198	33	77	11	725
RTOR Reduction (vph)	0	0	11	0	0	39	0	5	0	0	0	117
Lane Group Flow (vph)	198	1286	11	44	2088	27	165	226	0	77	11	608
Confl. Peds. (#/hr)	3		6	6		3			1	1		
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Effective Green, g (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Actuated g/C Ratio	0.12	0.48	0.48	0.05	0.41	0.41	0.37	0.37		0.37	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	207	2474	736	82	2117	646	525	684		361	700	595
v/s Ratio Prot	c0.11	0.25		0.02	c0.41			0.12			0.01	
v/s Ratio Perm			0.01			0.02	0.12			0.08		c0.38
v/c Ratio	0.96	0.52	0.01	0.54	0.99	0.04	0.31	0.33		0.21	0.02	1.02
Uniform Delay, d1	53.1	21.6	16.3	56.3	35.2	21.2	26.9	27.1		25.8	23.9	37.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	49.7	0.2	0.0	6.6	16.3	0.0	1.6	1.3		1.3	0.0	42.7
Delay (s)	102.8	21.8	16.3	62.9	51.4	21.3	28.5	28.4		27.2	24.0	80.6
Level of Service	F	C	B	E	D	C	C	C		C	C	F
Approach Delay (s/veh)		32.4			50.8			28.4			74.7	
Approach LOS		C			D			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	47.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Future Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.93		1.00	0.97		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1805	4845		3502	5042		1805		2804	1802		2842
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1805	4845		3502	5042		1805		2804	1802		2842
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	80	102	80	34	386	80	23	0	91	284	0	23
RTOR Reduction (vph)	0	64	0	0	30	0	0	0	34	0	0	9
Lane Group Flow (vph)	80	118	0	34	436	0	23	0	57	284	0	14
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Effective Green, g (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Actuated g/C Ratio	0.09	0.20		0.04	0.15		0.63		0.63	0.63		0.63
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	157	959		151	775		1130		1755	1128		1779
v/s Ratio Prot	c0.04	c0.02		0.01	c0.09							
v/s Ratio Perm							0.01		0.02	c0.16		0.01
v/c Ratio	0.51	0.12		0.23	0.56		0.02		0.03	0.25		0.01
Uniform Delay, d1	39.4	29.8		41.8	35.4		6.4		6.4	7.5		6.4
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	2.6	0.1		0.8	0.9		0.0		0.0	0.5		0.0
Delay (s)	42.0	29.9		42.6	36.4		6.4		6.5	8.0		6.4
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		33.6			36.8			6.5			7.9	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Future Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	281	1198	271	198	1115	229	469	1312	219	292	760	240
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	311	1398	316	227	1227	252	531	1523	462	352	942	294
Arrive On Green	0.17	0.34	0.34	0.13	0.29	0.29	0.15	0.30	0.30	0.10	0.25	0.25
Sat Flow, veh/h	1792	4161	941	1792	4242	871	3476	5136	1557	3476	3843	1199
Grp Volume(v), veh/h	281	986	483	198	900	444	469	1312	219	292	676	324
Grp Sat Flow(s),veh/h/ln	1792	1712	1679	1792	1712	1689	1738	1712	1557	1738	1712	1618
Q Serve(g_s), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Cycle Q Clear(g_c), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Prop In Lane	1.00		0.56	1.00		0.52	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	311	1150	564	227	990	488	531	1523	462	352	839	396
V/C Ratio(X)	0.90	0.86	0.86	0.87	0.91	0.91	0.88	0.86	0.47	0.83	0.81	0.82
Avail Cap(c_a), veh/h	359	1194	586	266	1015	501	576	1523	462	394	839	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	35.5	35.5	49.2	39.3	39.3	47.6	38.1	33.0	50.6	40.7	40.9
Incr Delay (d2), s/veh	23.3	6.2	11.8	23.1	11.6	20.3	14.3	6.7	3.5	12.7	8.1	16.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	15.5	16.1	7.6	15.3	16.3	8.4	14.1	6.1	5.2	11.0	11.6
LnGrp Delay(d), s/veh	69.8	41.7	47.3	72.2	50.9	59.6	61.9	44.8	36.5	63.2	48.9	57.7
LnGrp LOS	E	D	D	E	D	E	E	D	D	E	D	E
Approach Vol, veh/h		1750			1542			2000			1292	
Approach Delay, s/veh		47.8			56.1			47.9			54.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	38.0	18.5	42.5	21.5	32.1	23.9	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	34.0	17.0	40.0	19.0	28.0	23.0	34.0
Max Q Clear Time (g_c+I1), s	11.5	29.7	14.4	32.8	17.2	23.7	19.6	31.1
Green Ext Time (p_c), s	0.2	3.1	0.1	4.9	0.4	2.4	0.3	2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Future Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	149	34	34	92	57	310	46	1529	46	138	1149	207
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	156	259	259	424	75	410	263	3253	989	216	2761	497
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1021	864	864	1340	251	1366	404	5136	1562	327	4360	785
Grp Volume(v), veh/h	149	0	68	92	0	367	46	1529	46	138	902	454
Grp Sat Flow(s),veh/h/ln	1021	0	1728	1340	0	1617	404	1712	1562	327	1712	1721
Q Serve(g_s), s	11.3	0.0	3.4	6.4	0.0	24.7	7.7	18.7	1.3	45.6	15.7	15.8
Cycle Q Clear(g_c), s	36.0	0.0	3.4	9.9	0.0	24.7	23.4	18.7	1.3	64.3	15.7	15.8
Prop In Lane	1.00		0.50	1.00		0.84	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
V/C Ratio(X)	0.95	0.00	0.13	0.22	0.00	0.76	0.17	0.47	0.05	0.64	0.42	0.42
Avail Cap(c_a), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	30.6	34.2	0.0	38.0	16.8	11.5	8.3	28.3	11.0	11.0
Incr Delay (d2), s/veh	57.8	0.0	0.1	0.3	0.0	6.7	1.4	0.5	0.1	13.5	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.7	2.4	0.0	11.9	1.0	8.9	0.6	4.9	7.6	7.8
LnGrp Delay(d), s/veh	114.1	0.0	30.7	34.5	0.0	44.8	18.2	12.0	8.4	41.8	11.5	12.1
LnGrp LOS	F		C	C		D	B	B	A	D	B	B
Approach Vol, veh/h		217			459			1621			1494	
Approach Delay, s/veh		88.0			42.7			12.1			14.5	
Approach LOS		F			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		25.4		38.0		66.3		26.7
Green Ext Time (p_c), s		17.6		0.0		6.9		1.8

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		21.1
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Future Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	667	871	151	86	484	366	108	1118	43	75	1043	118
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	422	2031	352	356	1287	971	75	1014	39	60	895	101
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.04	0.20	0.20	0.03	0.19	0.19
Sat Flow, veh/h	652	3046	528	555	1930	1456	1792	5070	195	1792	4668	527
Grp Volume(v), veh/h	667	511	511	86	448	402	108	755	406	75	764	397
Grp Sat Flow(s),veh/h/ln	652	1787	1787	555	1787	1599	1792	1712	1841	1792	1712	1772
Q Serve(g_s), s	66.6	16.0	16.0	10.3	13.4	13.4	5.0	24.0	24.0	4.0	23.0	23.0
Cycle Q Clear(g_c), s	80.0	16.0	16.0	26.3	13.4	13.4	5.0	24.0	24.0	4.0	23.0	23.0
Prop In Lane	1.00		0.30	1.00		0.91	1.00		0.11	1.00		0.30
Lane Grp Cap(c), veh/h	422	1191	1191	356	1191	1066	75	685	368	60	656	340
V/C Ratio(X)	1.58	0.43	0.43	0.24	0.38	0.38	1.45	1.10	1.10	1.26	1.16	1.17
Avail Cap(c_a), veh/h	422	1191	1191	356	1191	1066	75	685	368	60	656	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	9.3	9.3	15.5	8.9	8.9	57.5	48.0	48.0	58.0	48.5	48.5
Incr Delay (d2), s/veh	272.6	0.2	0.2	0.3	0.2	0.2	261.1	65.8	77.7	200.2	90.2	102.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	45.9	7.9	7.9	1.6	6.7	6.0	7.9	17.6	20.1	5.3	19.1	20.9
LnGrp Delay(d), s/veh	304.0	9.6	9.6	15.8	9.1	9.1	318.6	113.8	125.7	258.2	138.7	151.1
LnGrp LOS	F	A	A	B	A	A	F	F	F	F	F	F
Approach Vol, veh/h		1689			936			1269			1236	
Approach Delay, s/veh		125.9			9.7			135.1			149.9	
Approach LOS		F			A			F			F	

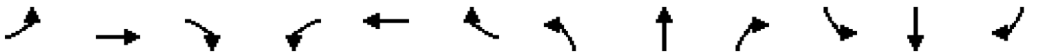
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	28.0		84.0	9.0	27.0		84.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	24.0		80.0	5.0	23.0		80.0
Max Q Clear Time (g_c+I1), s	6.0	26.0		82.0	7.0	25.0		28.3
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		7.7

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		112.7	
HCM 2010 LOS		F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Future Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	21	11	716	11	168	21	1168	358	74	1179	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	38	65	22	324	4	877	30	1195	366	75	1748	16
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.02	0.31	0.31	0.04	0.33	0.33
Sat Flow, veh/h	0	118	41	481	7	1594	1792	3877	1188	1792	5246	49
Grp Volume(v), veh/h	43	0	0	727	0	168	21	1031	495	74	769	421
Grp Sat Flow(s),veh/h/ln	159	0	0	489	0	1594	1792	1712	1641	1792	1712	1871
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Cycle Q Clear(g_c), s	66.0	0.0	0.0	66.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Prop In Lane	0.26		0.26	0.98		1.00	1.00		0.72	1.00		0.03
Lane Grp Cap(c), veh/h	125	0	0	328	0	877	30	1056	506	75	1141	624
V/C Ratio(X)	0.34	0.00	0.00	2.21	0.00	0.19	0.70	0.98	0.98	0.99	0.67	0.67
Avail Cap(c_a), veh/h	125	0	0	328	0	877	60	1056	506	75	1141	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	0.0	33.0	0.0	13.6	58.7	41.1	41.1	57.5	34.4	34.4
Incr Delay (d2), s/veh	1.6	0.0	0.0	555.9	0.0	0.1	25.3	22.7	34.8	101.1	3.2	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	61.6	0.0	2.8	0.9	20.2	21.1	4.5	11.5	13.0
LnGrp Delay(d), s/veh	29.2	0.0	0.0	588.9	0.0	13.7	84.0	63.8	75.9	158.5	37.6	40.2
LnGrp LOS	C			F		B	F	E	E	F	D	D
Approach Vol, veh/h		43			895			1547			1264	
Approach Delay, s/veh		29.2			480.9			67.9			45.5	
Approach LOS		C			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	41.0		70.0	6.0	44.0		70.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0		66.0	4.0	38.0		66.0
Max Q Clear Time (g_c+I1), s	7.0	37.8		68.0	3.4	25.2		68.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		158.5
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	520	100	660	990	70	290	680	490	160	1020	520
Future Volume (vph)	290	520	100	660	990	70	290	680	490	160	1020	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.93	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	6069	1206	3467	5136	1558	3467	5136	1495	3467	5136	1556
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	6069	1206	3467	5136	1558	3467	5136	1495	3467	5136	1556
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	547	105	695	1042	74	305	716	516	168	1074	547
RTOR Reduction (vph)	0	2	81	0	0	55	0	0	307	0	0	199
Lane Group Flow (vph)	305	556	13	695	1042	19	305	716	209	168	1074	348
Confl. Peds. (#/hr)	6		26	26		6	7		25	25		7
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	13.9	16.1	16.1	27.4	29.6	29.6	13.9	47.1	47.1	9.5	42.7	42.7
Effective Green, g (s)	13.9	16.1	16.1	27.4	29.6	29.6	13.9	47.1	47.1	9.5	42.7	42.7
Actuated g/C Ratio	0.12	0.14	0.14	0.24	0.25	0.25	0.12	0.41	0.41	0.08	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	415	841	167	818	1309	397	415	2083	606	283	1888	572
v/s Ratio Prot	0.09	0.09		c0.20	c0.20		c0.09	0.14		0.05	0.21	
v/s Ratio Perm			0.01			0.01			0.14			c0.22
v/c Ratio	0.73	0.66	0.08	0.85	0.80	0.05	0.73	0.34	0.35	0.59	0.57	0.61
Uniform Delay, d1	49.3	47.4	43.5	42.4	40.4	32.6	49.3	23.8	23.8	51.4	29.3	29.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.6	2.0	0.2	8.2	3.4	0.0	6.6	0.5	1.6	3.3	1.2	4.8
Delay (s)	56.0	49.4	43.7	50.6	43.9	32.7	56.0	24.3	25.4	54.8	30.6	34.7
Level of Service	E	D	D	D	D	C	E	C	C	D	C	C
Approach Delay (s/veh)		50.9			46.0			30.9			34.1	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	116.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	71.3%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	0	240	10	10	10	420	1220	10	10	1410	970
Future Volume (veh/h)	340	0	240	10	10	10	420	1220	10	10	1410	970
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	347	0	245	10	10	10	429	1245	10	10	1439	990
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	425	476	424	212	485	416	435	3281	26	33	1742	798
Arrive On Green	0.27	0.00	0.27	0.27	0.27	0.27	0.13	0.62	0.62	0.01	0.51	0.51
Sat Flow, veh/h	1396	1787	1594	1141	1822	1564	3476	5255	42	3476	3424	1568
Grp Volume(v), veh/h	347	0	245	10	10	10	429	811	444	10	1439	990
Grp Sat Flow(s),veh/h/ln	1396	1787	1594	1141	1787	1599	1738	1712	1873	1738	1712	1568
Q Serve(g_s), s	29.3	0.0	16.0	0.9	0.5	0.6	14.8	14.0	14.0	0.3	42.7	61.0
Cycle Q Clear(g_c), s	29.9	0.0	16.0	16.9	0.5	0.6	14.8	14.0	14.0	0.3	42.7	61.0
Prop In Lane	1.00		1.00	1.00		0.98	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	425	476	424	212	476	425	435	2138	1170	33	1742	798
V/C Ratio(X)	0.82	0.00	0.58	0.05	0.02	0.02	0.99	0.38	0.38	0.30	0.83	1.24
Avail Cap(c_a), veh/h	426	477	425	212	477	427	435	2138	1170	116	1742	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	0.0	38.2	45.5	32.5	32.5	52.4	11.1	11.1	59.0	25.0	29.5
Incr Delay (d2), s/veh	11.7	0.0	1.9	0.1	0.0	0.0	39.5	0.5	0.9	5.1	4.6	119.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	7.2	0.3	0.2	0.3	9.5	6.7	7.5	0.2	21.3	52.8
LnGrp Delay(d), s/veh	55.3	0.0	40.1	45.6	32.5	32.5	91.9	11.6	12.0	64.1	29.6	148.5
LnGrp LOS	E		D	D	C	C	F	B	B	E	C	F
Approach Vol, veh/h		592			30			1684			2439	
Approach Delay, s/veh		49.0			36.9			32.2			78.0	
Approach LOS		D			D			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	78.9		35.9	19.0	65.0		35.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	72.0		32.0	15.0	61.0		32.0
Max Q Clear Time (g_c+I1), s	2.3	16.0		31.9	16.8	63.0		18.9
Green Ext Time (p_c), s	0.0	10.6		0.0	0.0	0.0		0.1

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		57.9	
HCM 2010 LOS		E	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	730	430	870	1560	170	280	1010	210	140	1350	210
Future Volume (veh/h)	230	730	430	870	1560	170	280	1010	210	140	1350	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	256	811	478	967	1733	189	311	1122	233	156	1500	233
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	310	799	367	956	1967	214	319	1603	330	213	1516	235
Arrive On Green	0.09	0.23	0.23	0.28	0.42	0.42	0.09	0.30	0.30	0.06	0.27	0.27
Sat Flow, veh/h	3476	3424	1571	3476	4694	510	3476	5398	1110	3476	5684	882
Grp Volume(v), veh/h	256	811	478	967	1262	660	311	1008	347	156	1281	452
Grp Sat Flow(s),veh/h/ln	1738	1712	1571	1738	1712	1780	1738	1618	1654	1738	1618	1713
Q Serve(g_s), s	8.7	28.0	28.0	33.0	40.7	41.1	10.7	22.1	22.4	5.3	31.5	31.6
Cycle Q Clear(g_c), s	8.7	28.0	28.0	33.0	40.7	41.1	10.7	22.1	22.4	5.3	31.5	31.6
Prop In Lane	1.00		1.00	1.00		0.29	1.00		0.67	1.00		0.52
Lane Grp Cap(c), veh/h	310	799	367	956	1435	746	319	1441	491	213	1294	457
V/C Ratio(X)	0.82	1.02	1.30	1.01	0.88	0.88	0.98	0.70	0.71	0.73	0.99	0.99
Avail Cap(c_a), veh/h	319	799	367	956	1435	746	319	1441	491	290	1294	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	46.0	46.0	43.5	32.1	32.2	54.4	37.4	37.5	55.3	43.8	43.8
Incr Delay (d2), s/veh	15.7	35.7	155.4	32.0	6.6	12.2	43.8	2.8	8.3	6.1	22.6	39.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	17.2	27.9	20.0	20.4	22.7	7.1	10.3	11.4	2.7	16.8	20.0
LnGrp Delay(d), s/veh	69.5	81.7	201.4	75.5	38.7	44.4	98.2	40.3	45.9	61.4	66.5	83.7
LnGrp LOS	E	F	F	F	D	D	F	D	D	E	E	F
Approach Vol, veh/h		1545			2889			1666			1889	
Approach Delay, s/veh		116.7			52.3			52.2			70.2	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	39.6	37.0	32.0	15.0	36.0	14.7	54.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	33.0	33.0	28.0	11.0	32.0	11.0	50.0
Max Q Clear Time (g_c+I1), s	7.3	24.4	35.0	30.0	12.7	33.6	10.7	43.1
Green Ext Time (p_c), s	0.1	5.2	0.0	0.0	0.0	0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	69.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	880	260	170	1670	130	260	0	100	80	0	30
Future Volume (vph)	20	880	260	170	1670	130	260	0	100	80	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97	0.97	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3467	6230		3467	6386		1787	1466	1466	1787		1547
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3467	6230		3467	6386		1787	1466	1466	1787		1547
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	22	978	289	189	1856	144	289	0	111	89	0	33
RTOR Reduction (vph)	0	45	0	0	10	0	0	36	35	0	0	26
Lane Group Flow (vph)	22	1222	0	189	1990	0	289	20	20	89	0	7
Confl. Peds. (#/hr)	10		1	1		10	8		11	11		8
Confl. Bikes (#/hr)						2						4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	2.2	37.2		10.2	45.2		23.2	39.8	39.8	8.7		25.3
Effective Green, g (s)	2.2	37.2		10.2	45.2		23.2	39.8	39.8	8.7		25.3
Actuated g/C Ratio	0.02	0.33		0.09	0.40		0.21	0.36	0.36	0.08		0.23
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	68	2071		316	2579		370	521	521	138		349
v/s Ratio Prot	0.01	0.20		c0.05	c0.31		c0.16	c0.01		0.05		
v/s Ratio Perm									0.01			0.00
v/c Ratio	0.32	0.59		0.60	0.77		0.78	0.04	0.04	0.64		0.02
Uniform Delay, d1	54.1	31.0		48.9	28.9		41.9	23.5	23.5	50.1		33.7
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.8	0.4		3.0	1.5		10.3	0.1	0.1	9.9		0.1
Delay (s)	56.9	31.4		51.9	30.4		52.2	23.7	23.7	60.0		33.8
Level of Service	E	C		D	C		D	C	C	E		C
Approach Delay (s/veh)		31.9			32.2			44.3			52.9	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	111.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	64.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Future Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	232	1379	32	453	1421	1116	105	484	442	368	295	189
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	174	1865	43	511	1638	721	324	402	350	299	647	402
Arrive On Green	0.05	0.36	0.36	0.15	0.46	0.46	0.05	0.22	0.22	0.13	0.31	0.31
Sat Flow, veh/h	3476	5162	120	3476	3574	1574	1792	1787	1556	1792	2099	1304
Grp Volume(v), veh/h	232	915	496	453	1421	1116	105	484	442	368	250	234
Grp Sat Flow(s),veh/h/ln	1738	1712	1858	1738	1787	1574	1792	1787	1556	1792	1787	1616
Q Serve(g_s), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Cycle Q Clear(g_c), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	174	1237	671	511	1638	721	324	402	350	299	551	498
V/C Ratio(X)	1.33	0.74	0.74	0.89	0.87	1.55	0.32	1.20	1.26	1.23	0.45	0.47
Avail Cap(c_a), veh/h	174	1237	671	550	1638	721	324	402	350	299	551	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	33.4	33.4	50.2	29.2	32.5	33.6	46.5	46.5	35.3	33.4	33.6
Incr Delay (d2), s/veh	184.5	2.4	4.3	15.2	5.2	253.0	0.6	113.1	139.0	129.8	2.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	13.6	15.1	8.4	22.3	74.5	2.7	25.9	25.1	20.7	7.1	6.7
LnGrp Delay(d), s/veh	241.5	35.8	37.8	65.4	34.5	285.5	34.2	159.6	185.5	165.1	36.0	36.7
LnGrp LOS	F	D	D	E	C	F	C	F	F	F	D	D
Approach Vol, veh/h		1643			2990			1031			852	
Approach Delay, s/veh		65.4			132.9			157.9			92.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	31.0	21.7	47.3	10.0	41.0	10.0	59.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	27.0	19.0	42.0	6.0	37.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	18.0	29.0	17.3	29.9	7.4	16.1	8.0	57.0
Green Ext Time (p_c), s	0.0	0.0	0.3	6.8	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	114.5
HCM 2010 LOS	F

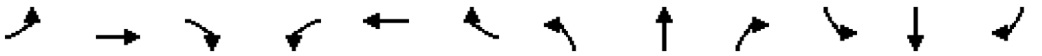
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Future Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	217	735	36	120	1313	795	36	277	241	458	277	157
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	60	2219	109	440	1422	776	102	555	467	214	310	175
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	197	3503	172	709	2246	1225	970	1851	1556	514	1032	585
Grp Volume(v), veh/h	217	379	392	120	1027	1081	36	270	248	458	0	434
Grp Sat Flow(s),veh/h/ln	197	1805	1870	709	1805	1665	970	1805	1602	514	0	1616
Q Serve(g_s), s	0.0	11.7	11.7	11.3	58.1	76.0	4.4	14.8	15.4	20.6	0.0	30.8
Cycle Q Clear(g_c), s	76.0	11.7	11.7	23.0	58.1	76.0	35.3	14.8	15.4	36.0	0.0	30.8
Prop In Lane	1.00		0.09	1.00		0.74	1.00		0.97	1.00		0.36
Lane Grp Cap(c), veh/h	60	1143	1184	440	1143	1055	102	542	481	214	0	485
V/C Ratio(X)	3.62	0.33	0.33	0.27	0.90	1.03	0.35	0.50	0.52	2.14	0.00	0.89
Avail Cap(c_a), veh/h	60	1143	1184	440	1143	1055	102	542	481	214	0	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	10.2	10.2	15.6	18.7	22.0	57.1	34.6	34.8	52.6	0.0	40.2
Incr Delay (d2), s/veh	1217.6	0.2	0.2	0.3	9.7	34.3	9.4	3.3	3.9	528.0	0.0	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.3	5.8	6.0	2.2	31.6	44.6	1.5	7.8	7.3	38.5	0.0	16.7
LnGrp Delay(d), s/veh	1277.6	10.4	10.4	15.9	28.4	56.3	66.4	37.8	38.7	580.6	0.0	61.9
LnGrp LOS	F	B	B	B	C	F	E	D	D	F		E
Approach Vol, veh/h		988			2228			554			892	
Approach Delay, s/veh		288.7			41.2			40.1			328.2	
Approach LOS		F			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.0		80.0		40.0		80.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		36.0		76.0		36.0		76.0
Max Q Clear Time (g_c+I1), s		37.3		78.0		38.0		78.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		148.4
HCM 2010 LOS		F

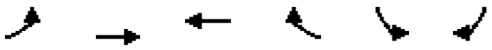
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	400	940	40	80	1170	710	1560	110	1570	110	170	190
Future Volume (vph)	400	940	40	80	1170	710	1560	110	1570	110	170	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5136	1599	3467	5136	1599	3467	1531	1493	1787	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5136	1599	3467	5136	1599	3467	1531	1493	1787	1881	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	1022	43	87	1272	772	1696	120	1707	120	185	207
RTOR Reduction (vph)	0	0	32	0	0	606	0	182	182	0	0	100
Lane Group Flow (vph)	435	1022	11	87	1272	166	1696	740	723	120	185	107
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	12.0	31.0	31.0	6.0	25.0	25.0	49.0	49.0	49.0	18.0	18.0	18.0
Effective Green, g (s)	12.0	31.0	31.0	6.0	25.0	25.0	49.0	49.0	49.0	18.0	18.0	18.0
Actuated g/C Ratio	0.10	0.26	0.26	0.05	0.21	0.21	0.41	0.41	0.41	0.15	0.15	0.15
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	346	1326	413	173	1070	333	1415	625	609	268	282	239
v/s Ratio Prot	c0.13	0.20		0.03	c0.25		c0.49	0.48		0.07	c0.10	
v/s Ratio Perm			0.01			0.10			0.48			0.07
v/c Ratio	1.26	0.77	0.03	0.50	1.19	0.50	1.20	1.18	1.19	0.45	0.66	0.45
Uniform Delay, d1	54.0	41.2	33.2	55.5	47.5	42.0	35.5	35.5	35.5	46.5	48.1	46.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	137.2	2.8	0.0	2.3	94.5	1.2	96.5	98.2	99.9	5.3	11.3	5.9
Delay (s)	191.2	44.0	33.3	57.8	142.0	43.2	132.0	133.7	135.4	51.8	59.4	52.4
Level of Service	F	D	C	E	F	D	F	F	F	D	E	D
Approach Delay (s/veh)		86.4			102.7			133.3			54.8	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	110.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



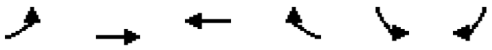
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Future Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Frt		0.99		1.00	1.00		1.00	0.86				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3567		1805	3610		1643	2953				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3567		1805	3610		1643	2953				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	978	67	191	2360	0	79	0	213	0	0	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	176	0	0	0	0
Lane Group Flow (vph)	0	1042	0	191	2360	0	71	45	0	0	0	0
Confl. Peds. (#/hr)			5	5								
Confl. Bikes (#/hr)			3									
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		49.1		14.9	68.0		16.0	16.0				
Effective Green, g (s)		49.1		14.9	68.0		16.0	16.0				
Actuated g/C Ratio		0.53		0.16	0.74		0.17	0.17				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1903		292	2668		285	513				
v/s Ratio Prot		0.29		0.11	c0.65		c0.04	0.02				
v/s Ratio Perm												
v/c Ratio		0.55		0.65	0.88		0.25	0.09				
Uniform Delay, d1		14.1		36.1	9.0		32.8	31.9				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.3		5.2	3.9		2.1	0.3				
Delay (s)		14.5		41.3	12.9		34.9	32.2				
Level of Service		B		D	B		C	C				
Approach Delay (s/veh)		14.5			15.1			32.9			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	92.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1890	1460	0	900	730
Future Volume (vph)	0	1890	1460	0	900	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5136	5136		1778	1519
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5136	5136		1778	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1969	1521	0	938	760
RTOR Reduction (vph)	0	0	0	0	2	2
Lane Group Flow (vph)	0	1969	1521	0	1012	682
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		45.0	45.0		67.0	67.0
Effective Green, g (s)		45.0	45.0		67.0	67.0
Actuated g/C Ratio		0.38	0.38		0.56	0.56
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1926	1926		992	848
v/s Ratio Prot		c0.38	0.30		c0.57	
v/s Ratio Perm						0.45
v/c Ratio		1.02	0.79		1.02	0.80
Uniform Delay, d1		37.5	33.3		26.5	21.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		26.4	2.2		33.8	8.0
Delay (s)		63.9	35.5		60.3	29.3
Level of Service		E	D		E	C
Approach Delay (s/veh)		63.9	35.5		47.8	
Approach LOS		E	D		D	

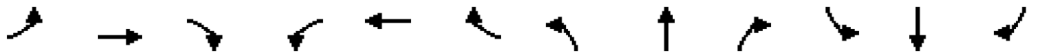
Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	1050	1330	0	190	610
Future Volume (vph)	0	1050	1330	0	190	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.91	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5136	5136		3250	1455
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5136	5136		3250	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1129	1430	0	204	656
RTOR Reduction (vph)	0	0	0	0	8	8
Lane Group Flow (vph)	0	1129	1430	0	524	320
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		38.6	38.6		55.3	55.3
Effective Green, g (s)		38.6	38.6		55.3	55.3
Actuated g/C Ratio		0.38	0.38		0.54	0.54
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1945	1945		1763	789
v/s Ratio Prot		0.22	c0.28		0.16	
v/s Ratio Perm						c0.22
v/c Ratio		0.58	0.74		0.30	0.41
Uniform Delay, d1		25.2	27.3		12.7	13.7
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.4	1.5		0.4	1.5
Delay (s)		25.6	28.7		13.1	15.2
Level of Service		C	C		B	B
Approach Delay (s/veh)		25.6	28.7		13.9	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	101.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Future Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.89	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3409	1436	1787	3574					1698	1511	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3409	1436	1787	3574					1698	1511	1519
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	912	253	1066	1527	0	0	0	0	253	77	747
RTOR Reduction (vph)	0	2	177	0	0	0	0	0	0	0	52	52
Lane Group Flow (vph)	0	935	51	1066	1527	0	0	0	0	228	379	366
Confl. Bikes (#/hr)			1			14						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Effective Green, g (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Actuated g/C Ratio		0.23	0.23	0.47	0.73					0.21	0.21	0.21
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		767	323	833	2591					353	314	316
v/s Ratio Prot		c0.27		c0.60	0.43							
v/s Ratio Perm			0.04							0.13	0.25	0.24
v/c Ratio		1.22	0.16	1.28	0.59					0.65	1.21	1.16
Uniform Delay, d1		46.5	37.4	32.0	7.9					43.5	47.5	47.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		110.5	0.2	135.1	0.3					8.8	119.0	100.4
Delay (s)		157.0	37.6	167.1	8.3					52.3	166.5	147.9
Level of Service		F	D	F	A					D	F	F
Approach Delay (s/veh)		133.6			73.6			0.0			135.1	
Approach LOS		F			E			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	101.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Future Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	1464	41	31	1216	0	165	31	103	134	10	258
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	17	2020	57	41	1455	0	379	71	398	301	22	287
Arrive On Green	0.01	0.39	0.39	0.02	0.41	0.00	0.25	0.25	0.25	0.18	0.18	0.18
Sat Flow, veh/h	1792	5126	144	1792	3668	0	1520	286	1595	1673	125	1594
Grp Volume(v), veh/h	10	978	527	31	1216	0	196	0	103	144	0	258
Grp Sat Flow(s),veh/h/ln	1792	1712	1845	1792	1787	0	1805	0	1595	1798	0	1594
Q Serve(g_s), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Cycle Q Clear(g_c), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Prop In Lane	1.00		0.08	1.00		0.00	0.84		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	17	1349	727	41	1455	0	450	0	398	324	0	287
V/C Ratio(X)	0.58	0.72	0.72	0.76	0.84	0.00	0.44	0.00	0.26	0.44	0.00	0.90
Avail Cap(c_a), veh/h	69	1709	921	103	1852	0	450	0	398	345	0	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	26.8	26.8	50.6	27.8	0.0	32.9	0.0	31.4	38.1	0.0	41.8
Incr Delay (d2), s/veh	27.0	1.1	2.1	24.7	2.8	0.0	3.0	0.0	1.6	1.0	0.0	26.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	12.2	13.3	1.2	16.3	0.0	5.1	0.0	2.6	3.8	0.0	9.4
LnGrp Delay(d), s/veh	78.4	27.9	28.9	75.3	30.6	0.0	36.0	0.0	32.9	39.0	0.0	68.3
LnGrp LOS	E	C	C	E	C		D		C	D		E
Approach Vol, veh/h		1515			1247			299			402	
Approach Delay, s/veh		28.6			31.7			34.9			57.8	
Approach LOS		C			C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.4	45.1		22.8	5.0	46.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	52.0		20.0	4.0	54.0
Max Q Clear Time (g_c+I1), s		11.5	3.8	27.2		18.5	2.6	33.9
Green Ext Time (p_c), s		1.2	0.0	11.2		0.3	0.0	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.6
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1140	0	0	1530	860	360
Future Volume (veh/h)	1140	0	0	1530	860	360
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863
Adj Flow Rate, veh/h	1239	0	0	1663	935	391
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1770	0	0	1770	1038	926
Arrive On Green	0.35	0.00	0.00	0.35	0.59	0.59
Sat Flow, veh/h	5421	0	0	5421	1774	1583
Grp Volume(v), veh/h	1239	0	0	1663	935	391
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1774	1583
Q Serve(g_s), s	25.1	0.0	0.0	37.9	55.3	16.3
Cycle Q Clear(g_c), s	25.1	0.0	0.0	37.9	55.3	16.3
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1770	0	0	1770	1038	926
V/C Ratio(X)	0.70	0.00	0.00	0.94	0.90	0.42
Avail Cap(c_a), veh/h	1785	0	0	1785	1038	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	0.0	37.8	21.8	13.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	10.2	12.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	0.0	0.0	19.4	30.3	7.4
LnGrp Delay(d), s/veh	34.8	0.0	0.0	48.0	34.1	15.1
LnGrp LOS	C			D	C	B
Approach Vol, veh/h	1239			1663	1326	
Approach Delay, s/veh	34.8			48.0	28.5	
Approach LOS	C			D	C	

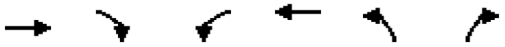
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		45.7				45.7
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		57.3		27.1				39.9
Green Ext Time (p_c), s		4.4		7.2				1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.0
HCM 2010 LOS	D



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	670	0	0	1700	1000	1130
Future Volume (vph)	670	0	0	1700	1000	1130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.95	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7544			6408	3330	1441
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7544			6408	3330	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	713	0	0	1809	1064	1202
RTOR Reduction (vph)	0	0	0	0	23	23
Lane Group Flow (vph)	713	0	0	1809	1522	698
Confl. Bikes (#/hr)		1				
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	39.0			39.0	73.0	73.0
Effective Green, g (s)	39.0			39.0	73.0	73.0
Actuated g/C Ratio	0.33			0.33	0.61	0.61
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2451			2082	2025	876
v/s Ratio Prot	0.09			c0.28	0.46	
v/s Ratio Perm						c0.48
v/c Ratio	0.29			0.87	0.75	0.80
Uniform Delay, d1	30.2			38.1	17.0	17.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			4.2	2.6	7.5
Delay (s)	30.3			42.2	19.6	25.3
Level of Service	C			D	B	C
Approach Delay (s/veh)	30.3			42.2	21.4	
Approach LOS	C			D	C	

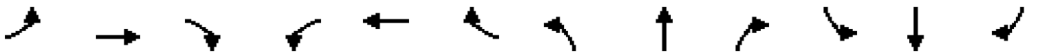
Intersection Summary			
HCM 2000 Control Delay (s/veh)	30.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	71.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	940	0	0	2000	230	470
Future Volume (vph)	940	0	0	2000	230	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.92	0.85
Flt Protected	1.00			1.00	0.98	1.00
Satd. Flow (prot)	3574			3574	3291	1455
Flt Permitted	1.00			1.00	0.98	1.00
Satd. Flow (perm)	3574			3574	3291	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1011	0	0	2151	247	505
RTOR Reduction (vph)	0	0	0	0	135	135
Lane Group Flow (vph)	1011	0	0	2151	365	117
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	76.2			76.2	25.3	25.3
Effective Green, g (s)	76.2			76.2	25.3	25.3
Actuated g/C Ratio	0.70			0.70	0.23	0.23
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2487			2487	760	336
v/s Ratio Prot	0.28			c0.60	c0.11	
v/s Ratio Perm						0.08
v/c Ratio	0.41			0.86	0.48	0.35
Uniform Delay, d1	7.1			12.7	36.4	35.2
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			3.4	2.2	2.9
Delay (s)	7.2			16.1	38.6	38.1
Level of Service	A			B	D	D
Approach Delay (s/veh)	7.2			16.1	38.4	
Approach LOS	A			B	D	

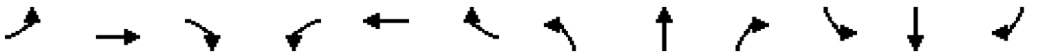
Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	109.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Future Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Frt	1.00	1.00			0.97		1.00		0.85			0.87
Flt Protected	0.95	1.00			1.00		0.95		1.00			1.00
Satd. Flow (prot)	1787	3574			4983		1787		1599			1627
Flt Permitted	0.09	1.00			1.00		0.95		1.00			1.00
Satd. Flow (perm)	175	3574			4983		1787		1599			1627
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	1165	0	0	1629	330	41	0	113	0	0	10
RTOR Reduction (vph)	0	0	0	0	28	0	0	0	85	0	0	10
Lane Group Flow (vph)	10	1165	0	0	1931	0	41	0	28	0	0	0
Confl. Peds. (#/hr)	3		17	17		3						
Confl. Bikes (#/hr)			22			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			6
Actuated Green, G (s)	43.0	43.0			43.0		18.7		18.7			0.8
Effective Green, g (s)	43.0	43.0			43.0		18.7		18.7			0.8
Actuated g/C Ratio	0.58	0.58			0.58		0.25		0.25			0.01
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	101	2062			2876		448		401			17
v/s Ratio Prot		0.33			c0.39		c0.02					
v/s Ratio Perm	0.06								0.02			c0.00
v/c Ratio	0.10	0.56			0.67		0.09		0.07			0.01
Uniform Delay, d1	7.1	9.9			10.9		21.4		21.3			36.5
Progression Factor	1.00	1.00			1.00		1.00		1.00			1.00
Incremental Delay, d2	0.4	0.4			0.6		0.4		0.3			0.1
Delay (s)	7.5	10.2			11.5		21.8		21.6			36.6
Level of Service	A	B			B		C		C			D
Approach Delay (s/veh)		10.2			11.5			21.7			36.6	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	720	540	80	830	580	710	580	170	1070	560	1590
Future Volume (vph)	350	720	540	80	830	580	710	580	170	1070	560	1590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1527	3433	5085	1562	3433	1863	1539	1770	1637	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1527	3433	5085	1562	3433	1863	1539	1770	1637	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	365	750	562	83	865	604	740	604	177	1115	583	1656
RTOR Reduction (vph)	0	0	404	0	0	518	0	0	89	0	30	24
Lane Group Flow (vph)	365	750	159	83	865	86	740	604	89	1115	1133	1052
Confl. Peds. (#/hr)			9	9					7	7		
Confl. Bikes (#/hr)			3			1			1			
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.0	22.0	22.0	4.0	17.0	17.0	30.0	30.0	30.0	48.0	48.0	57.0
Effective Green, g (s)	9.0	22.0	22.0	4.0	17.0	17.0	30.0	30.0	30.0	48.0	48.0	57.0
Actuated g/C Ratio	0.08	0.18	0.18	0.03	0.14	0.14	0.25	0.25	0.25	0.40	0.40	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	257	932	279	114	720	221	858	465	384	708	654	764
v/s Ratio Prot	c0.11	0.15		0.02	c0.17		0.22	c0.32		0.63	c0.69	c0.10
v/s Ratio Perm			0.10			0.05			0.06			0.60
v/c Ratio	1.42	0.80	0.57	0.73	1.20	0.39	0.86	1.30	0.23	1.57	1.73	1.38
Uniform Delay, d1	55.5	46.9	44.7	57.5	51.5	46.8	43.0	45.0	35.8	36.0	36.0	31.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	210.4	5.1	2.7	20.6	103.7	1.1	11.1	149.6	1.4	265.5	336.0	178.1
Delay (s)	265.9	52.1	47.3	78.0	155.2	47.9	54.2	194.6	37.2	301.5	372.0	209.6
Level of Service	F	D	D	E	F	D	D	F	D	F	F	F
Approach Delay (s/veh)		97.0			109.3			108.0			296.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	183.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	129.2%	ICU Level of Service	H
Analysis Period (min)	15		

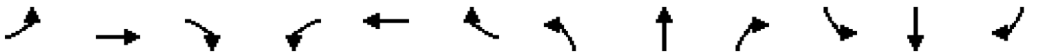
c Critical Lane Group



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	310	0	0	1330	0	0
Future Volume (vph)	310	0	0	1330	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.97		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3433			1529		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3433			1529		
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	352	0	0	1511	0	0
RTOR Reduction (vph)	0	0	0	227	0	0
Lane Group Flow (vph)	352	0	0	1284	0	0
Confl. Peds. (#/hr)	5			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	15.1			88.0		
Effective Green, g (s)	15.1			88.0		
Actuated g/C Ratio	0.14			0.79		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	466			1211		
v/s Ratio Prot	c0.10					
v/s Ratio Perm				c0.84		
v/c Ratio	0.76			1.06		
Uniform Delay, d1	46.2			11.5		
Progression Factor	1.00			1.00		
Incremental Delay, d2	6.8			43.5		
Delay (s)	53.1			55.0		
Level of Service	D			E		
Approach Delay (s/veh)	53.1		55.0			0.0
Approach LOS	D		E			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Future Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	77	1176	330	253	1341	11	396	33	264	22	44	165
RTOR Reduction (vph)	0	0	141	0	0	6	0	0	211	0	117	0
Lane Group Flow (vph)	77	1176	189	253	1341	5	214	215	53	22	92	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Confl. Bikes (#/hr)			3									1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Effective Green, g (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Actuated g/C Ratio	0.06	0.39	0.39	0.17	0.50	0.50	0.20	0.20	0.20	0.10	0.10	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	107	1374	603	303	1764	770	334	338	310	173	158	
v/s Ratio Prot	0.04	c0.33		c0.14	0.38		c0.13	0.13		0.01	c0.06	
v/s Ratio Perm			0.12			0.00			0.03			
v/c Ratio	0.72	0.86	0.31	0.83	0.76	0.01	0.64	0.64	0.17	0.13	0.58	
Uniform Delay, d1	51.4	31.2	23.8	44.7	22.6	14.1	41.0	40.9	37.0	46.0	48.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	20.6	5.5	0.3	17.7	2.0	0.0	9.1	8.8	1.2	0.3	5.3	
Delay (s)	72.0	36.7	24.1	62.4	24.5	14.1	50.1	49.8	38.2	46.3	53.4	
Level of Service	E	D	C	E	C	B	D	D	D	D	D	
Approach Delay (s/veh)		35.8			30.4			45.5			52.8	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	111.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Future Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
Arrive On Green	0.07	0.27	0.27	0.17	0.37	0.37	0.12	0.32	0.32	0.07	0.26	0.26
Sat Flow, veh/h	1774	5085	1538	1774	5085	1567	3442	3539	1544	1774	3539	1532
Grp Volume(v), veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Grp Sat Flow(s),veh/h/ln	1774	1695	1538	1774	1695	1567	1721	1770	1544	1774	1770	1532
Q Serve(g_s), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Cycle Q Clear(g_c), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
V/C Ratio(X)	0.78	0.73	0.24	0.86	0.49	0.20	0.78	0.35	0.66	0.78	0.40	0.39
Avail Cap(c_a), veh/h	235	1852	560	587	2862	985	684	1133	494	235	934	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	30.2	26.0	36.5	21.8	15.7	38.6	23.6	26.6	41.7	27.4	27.4
Incr Delay (d2), s/veh	10.6	1.0	0.3	6.9	0.2	0.1	3.2	0.8	6.8	10.6	1.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.7	2.0	6.8	5.9	2.1	4.1	3.9	8.0	2.6	4.0	3.5
LnGrp Delay(d), s/veh	52.3	31.2	26.3	43.4	22.0	15.8	41.8	24.4	33.3	52.3	28.7	30.2
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1191			1314			1045			618	
Approach Delay, s/veh		32.4			25.5			32.6			32.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	33.0	19.4	28.3	15.0	27.9	9.9	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	29.0	30.0	33.0	18.0	23.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	6.5	18.5	14.8	18.2	10.3	9.8	6.5	14.6
Green Ext Time (p_c), s	0.1	2.7	0.6	6.1	0.7	2.3	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Future Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1227	1863	1560	907	1863	1558	697	3539	1580	603	3539	1560
Grp Volume(v), veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Grp Sat Flow(s),veh/h/ln	1227	1863	1560	907	1863	1558	697	1770	1580	603	1770	1560
Q Serve(g_s), s	4.0	2.9	29.3	2.1	5.0	2.3	18.7	14.1	0.3	3.2	10.3	1.5
Cycle Q Clear(g_c), s	9.0	2.9	29.3	5.0	5.0	2.3	29.0	14.1	0.3	17.3	10.3	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
V/C Ratio(X)	0.15	0.12	0.92	0.07	0.20	0.10	0.42	0.40	0.01	0.09	0.32	0.06
Avail Cap(c_a), veh/h	444	661	553	362	661	553	445	2260	1009	373	2260	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	29.4	38.8	31.3	30.2	29.2	15.8	9.9	7.4	14.1	9.2	7.6
Incr Delay (d2), s/veh	0.2	0.1	18.9	0.1	0.2	0.1	2.9	0.5	0.0	0.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.5	14.9	0.5	2.6	1.0	3.9	7.0	0.1	0.6	5.1	0.7
LnGrp Delay(d), s/veh	33.8	29.5	57.7	31.4	30.3	29.3	18.7	10.5	7.4	14.6	9.6	7.7
LnGrp LOS	C	C	E	C	C	C	B	B	A	B	A	A
Approach Vol, veh/h		539			176			1110			802	
Approach Delay, s/veh		51.8			30.2			11.8			9.7	
Approach LOS		D			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		36.7		76.0		36.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		31.0		31.3		19.3		7.0
Green Ext Time (p_c), s		9.7		1.5		6.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Future Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	109	239	43	228	196	141	33	815	283	152	978	109
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	340	149	263	592	260	42	1254	435	183	2011	886
Arrive On Green	0.08	0.10	0.10	0.15	0.17	0.17	0.02	0.49	0.49	0.10	0.57	0.57
Sat Flow, veh/h	1757	3505	1533	1757	3505	1542	1757	2542	882	1757	3505	1545
Grp Volume(v), veh/h	109	239	43	228	196	141	33	561	537	152	978	109
Grp Sat Flow(s),veh/h/ln	1757	1752	1533	1757	1752	1542	1757	1752	1672	1757	1752	1545
Q Serve(g_s), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Cycle Q Clear(g_c), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	137	340	149	263	592	260	42	864	824	183	2011	886
V/C Ratio(X)	0.80	0.70	0.29	0.87	0.33	0.54	0.79	0.65	0.65	0.83	0.49	0.12
Avail Cap(c_a), veh/h	256	545	238	393	818	360	103	864	824	273	2011	886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	45.0	43.1	42.7	37.6	39.1	49.9	19.4	19.5	45.1	13.0	10.0
Incr Delay (d2), s/veh	10.0	2.6	1.1	12.6	0.3	1.8	27.3	3.8	4.0	12.4	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.4	1.2	7.3	2.5	3.8	1.2	12.8	12.2	4.9	8.4	1.5
LnGrp Delay(d), s/veh	56.6	47.6	44.2	55.3	37.9	40.8	77.3	23.2	23.4	57.5	13.8	10.3
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	B	B
Approach Vol, veh/h		391			565			1131			1239	
Approach Delay, s/veh		49.7			45.7			24.9			18.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	54.7	19.4	14.0	6.4	63.0	12.0	21.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	49.0	23.0	16.0	6.0	59.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	10.7	26.6	15.0	8.8	3.9	19.0	8.3	10.6
Green Ext Time (p_c), s	0.2	7.4	0.4	0.8	0.0	8.5	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Future Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	216	320	567	82	464	21	443	845	82	31	918	309
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	284	298	604	418	416	19	403	1620	706	39	894	391
Arrive On Green	0.16	0.16	0.16	0.23	0.23	0.23	0.22	0.45	0.45	0.02	0.25	0.25
Sat Flow, veh/h	1792	1881	1541	1792	1784	81	1792	3574	1559	1792	3574	1565
Grp Volume(v), veh/h	216	320	567	82	0	485	443	845	82	31	918	309
Grp Sat Flow(s),veh/h/ln	1792	1881	1541	1792	0	1864	1792	1787	1559	1792	1787	1565
Q Serve(g_s), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Cycle Q Clear(g_c), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	298	604	418	0	435	403	1620	706	39	894	391
V/C Ratio(X)	0.76	1.07	0.94	0.20	0.00	1.11	1.10	0.52	0.12	0.79	1.03	0.79
Avail Cap(c_a), veh/h	284	298	604	418	0	435	403	1620	706	90	894	391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	50.5	35.9	37.0	0.0	46.0	46.5	23.5	18.9	58.4	45.0	42.1
Incr Delay (d2), s/veh	11.5	73.3	22.7	0.2	0.0	78.2	74.3	1.2	0.3	28.9	37.3	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	15.9	21.9	2.2	0.0	23.8	21.6	10.2	1.6	1.3	19.4	11.1
LnGrp Delay(d), s/veh	59.8	123.8	58.6	37.2	0.0	124.2	120.8	24.7	19.3	87.3	82.3	57.0
LnGrp LOS	E	F	E	D		F	F	C	B	F	F	E
Approach Vol, veh/h		1103			567			1370			1258	
Approach Delay, s/veh		77.7			111.6			55.4			76.2	
Approach LOS		E			F			E			E	

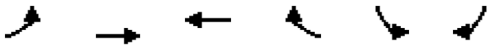
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	58.4		23.0	31.0	34.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	51.0		19.0	27.0	30.0		28.0
Max Q Clear Time (g_c+I1), s	4.1	22.3		21.0	29.0	32.0		30.0
Green Ext Time (p_c), s	0.0	6.8		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	74.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Future Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.94	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	264	1121	154	231	1813	231	374	1209	132	110	956	242
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1553	213	259	1737	513	430	1209	510	115	1272	365
Arrive On Green	0.15	0.35	0.35	0.15	0.34	0.34	0.12	0.34	0.34	0.03	0.25	0.25
Sat Flow, veh/h	1774	4490	616	1774	5085	1501	3442	3539	1493	3442	5085	1460
Grp Volume(v), veh/h	264	846	429	231	1813	231	374	1209	132	110	956	242
Grp Sat Flow(s),veh/h/ln	1774	1695	1717	1774	1695	1501	1721	1770	1493	1721	1695	1460
Q Serve(g_s), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Cycle Q Clear(g_c), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1172	594	259	1737	513	430	1209	510	115	1272	365
V/C Ratio(X)	0.99	0.72	0.72	0.89	1.04	0.45	0.87	1.00	0.26	0.96	0.75	0.66
Avail Cap(c_a), veh/h	266	1172	594	296	1737	513	459	1209	510	115	1272	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	34.2	34.2	50.3	39.5	30.7	51.6	39.5	28.5	57.9	41.5	40.4
Incr Delay (d2), s/veh	52.9	2.2	4.3	25.0	33.9	0.6	15.7	25.8	1.2	70.9	4.1	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	12.6	13.1	9.3	24.6	6.1	7.0	24.3	3.3	2.9	10.2	8.1
LnGrp Delay(d), s/veh	103.8	36.4	38.5	75.4	73.4	31.4	67.3	65.3	29.8	128.8	45.7	49.6
LnGrp LOS	F	D	D	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1539			2275			1715			1308	
Approach Delay, s/veh		48.6			69.3			63.0			53.4	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	45.0	21.5	45.5	19.0	34.0	22.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	41.0	20.0	39.0	16.0	29.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	5.8	43.0	17.3	28.2	14.8	22.8	19.8	43.0
Green Ext Time (p_c), s	0.0	0.0	0.2	5.9	0.2	3.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.0
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	1290	1280	410	400	270
Future Volume (veh/h)	390	1290	1280	410	400	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	411	1358	1347	432	421	284
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	451	3659	1618	516	733	337
Arrive On Green	0.25	0.71	0.42	0.42	0.21	0.21
Sat Flow, veh/h	1792	5305	4001	1222	3476	1599
Grp Volume(v), veh/h	411	1358	1203	576	421	284
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1630	1738	1599
Q Serve(g_s), s	23.2	10.8	32.6	33.0	11.3	17.8
Cycle Q Clear(g_c), s	23.2	10.8	32.6	33.0	11.3	17.8
Prop In Lane	1.00			0.75	1.00	1.00
Lane Grp Cap(c), veh/h	451	3659	1446	688	733	337
V/C Ratio(X)	0.91	0.37	0.83	0.84	0.57	0.84
Avail Cap(c_a), veh/h	653	4431	1575	750	733	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	5.9	26.8	26.9	37.0	39.5
Incr Delay (d2), s/veh	12.9	0.1	3.7	7.8	3.3	21.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	5.1	16.1	16.2	5.8	16.7
LnGrp Delay(d), s/veh	50.8	5.9	30.5	34.7	40.2	61.3
LnGrp LOS	D	A	C	C	D	E
Approach Vol, veh/h		1769	1779		705	
Approach Delay, s/veh		16.4	31.9		48.7	
Approach LOS		B	C		D	

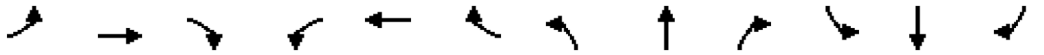
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				78.3		26.0	30.3	48.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	38.0	48.0
Max Q Clear Time (g_c+I1), s				12.8		19.8	25.2	35.0
Green Ext Time (p_c), s				13.5		0.7	1.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Future Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	77	1703	264	297	1505	44	209	55	286	77	198	110
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	99	1985	608	359	2227	65	364	765	648	468	459	255
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1792	5136	1573	3476	5124	150	1077	1881	1593	1043	1130	628
Grp Volume(v), veh/h	77	1703	264	297	1006	543	209	55	286	77	0	308
Grp Sat Flow(s),veh/h/ln	1792	1712	1573	1738	1712	1850	1077	1881	1593	1043	0	1757
Q Serve(g_s), s	4.9	35.2	14.3	9.7	27.2	27.2	20.0	2.1	15.0	5.6	0.0	14.6
Cycle Q Clear(g_c), s	4.9	35.2	14.3	9.7	27.2	27.2	34.6	2.1	15.0	7.7	0.0	14.6
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	99	1985	608	359	1488	804	364	765	648	468	0	714
V/C Ratio(X)	0.78	0.86	0.43	0.83	0.68	0.68	0.57	0.07	0.44	0.16	0.00	0.43
Avail Cap(c_a), veh/h	170	2088	640	421	1488	804	364	765	648	468	0	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.9	32.6	26.1	50.8	26.2	26.2	37.1	21.0	24.8	23.3	0.0	24.7
Incr Delay (d2), s/veh	12.5	3.7	0.5	11.4	1.2	2.3	6.4	0.2	2.2	0.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	17.2	6.3	5.2	13.1	14.4	6.6	1.1	7.0	1.7	0.0	7.5
LnGrp Delay(d), s/veh	66.4	36.2	26.6	62.2	27.4	28.4	43.6	21.2	27.0	24.1	0.0	26.6
LnGrp LOS	E	D	C	E	C	C	D	C	C	C		C
Approach Vol, veh/h		2044			1846			550			385	
Approach Delay, s/veh		36.1			33.3			32.7			26.1	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	15.9	48.7		51.0	10.4	54.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	14.0	47.0		47.0	11.0	50.0
Max Q Clear Time (g_c+I1), s		36.6	11.7	37.2		16.6	6.9	29.2
Green Ext Time (p_c), s		1.6	0.2	7.5		2.4	0.0	10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Future Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	202	1483	112	90	629	56	45	315	11	135	629	101
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	2162	946	171	2162	954	57	662	292	164	874	386
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.03	0.19	0.19	0.09	0.25	0.25
Sat Flow, veh/h	753	3539	1548	318	3539	1562	1774	3539	1560	1774	3539	1561
Grp Volume(v), veh/h	202	1483	112	90	629	56	45	315	11	135	629	101
Grp Sat Flow(s),veh/h/ln	753	1770	1548	318	1770	1562	1774	1770	1560	1774	1770	1561
Q Serve(g_s), s	19.0	30.7	3.3	28.9	9.2	1.6	2.8	8.7	0.6	8.2	17.8	5.7
Cycle Q Clear(g_c), s	28.1	30.7	3.3	59.6	9.2	1.6	2.8	8.7	0.6	8.2	17.8	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	2162	946	171	2162	954	57	662	292	164	874	386
V/C Ratio(X)	0.44	0.69	0.12	0.53	0.29	0.06	0.78	0.48	0.04	0.83	0.72	0.26
Avail Cap(c_a), veh/h	526	2460	1076	198	2460	1086	81	662	292	211	874	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	14.2	8.9	34.2	10.1	8.6	52.5	39.6	36.4	48.8	37.7	33.1
Incr Delay (d2), s/veh	0.6	0.7	0.1	2.5	0.1	0.0	26.7	2.4	0.2	18.3	5.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	15.0	1.4	2.6	4.5	0.7	1.8	4.5	0.3	4.8	9.3	2.6
LnGrp Delay(d), s/veh	17.4	14.9	9.0	36.7	10.1	8.6	79.3	42.1	36.6	67.1	42.8	34.8
LnGrp LOS	B	B	A	D	B	A	E	D	D	E	D	C
Approach Vol, veh/h		1797			775			371			865	
Approach Delay, s/veh		14.8			13.1			46.4			45.6	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.1	24.5		70.8	7.5	31.0		70.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	19.0		76.0	5.0	27.0		76.0
Max Q Clear Time (g_c+I1), s	10.2	10.7		32.7	4.8	19.8		61.6
Green Ext Time (p_c), s	0.1	1.1		19.1	0.0	2.4		5.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		24.6
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Future Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	0	854	202	607	1000	0	326	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	72	1911	452	356	2395	0	441	0	400	0	2	0
Arrive On Green	0.00	0.67	0.67	0.67	0.67	0.00	0.25	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	567	2852	674	537	3668	0	1764	0	1599	0	1881	0
Grp Volume(v), veh/h	0	535	521	607	1000	0	326	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	567	1787	1739	537	1787	0	1764	0	1599	0	1881	0
Q Serve(g_s), s	0.0	14.1	14.1	52.9	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.1	14.1	67.0	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.39	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1197	1165	356	2395	0	441	0	400	0	2	0
V/C Ratio(X)	0.00	0.45	0.45	1.70	0.42	0.00	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1197	1165	356	2395	0	441	0	400	0	301	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.8	7.8	28.9	7.6	0.0	34.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	328.6	0.1	0.0	10.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.9	6.7	42.3	6.3	0.0	9.5	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	8.0	8.0	357.5	7.7	0.0	45.1	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	F	A		D					
Approach Vol, veh/h		1056			1607			326			0	
Approach Delay, s/veh		8.0			139.8			45.1			0.0	
Approach LOS		A			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		71.0		0.0		71.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		67.0		16.0		67.0
Max Q Clear Time (g_c+I1), s		19.0		16.1		0.0		69.0
Green Ext Time (p_c), s		0.9		8.3		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	82.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Future Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	206	990	124	299	1371	258	206	598	412	144	567	186
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	1306	163	328	1281	541	234	611	507	134	708	231
Arrive On Green	0.11	0.28	0.28	0.18	0.36	0.36	0.13	0.32	0.32	0.08	0.27	0.27
Sat Flow, veh/h	1792	4602	575	1792	3574	1510	1792	1881	1559	1792	2627	859
Grp Volume(v), veh/h	206	736	378	299	1371	258	206	598	412	144	385	368
Grp Sat Flow(s),veh/h/ln	1792	1712	1754	1792	1787	1510	1792	1881	1559	1792	1787	1698
Q Serve(g_s), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Cycle Q Clear(g_c), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	194	972	498	328	1281	541	234	611	507	134	481	458
V/C Ratio(X)	1.06	0.76	0.76	0.91	1.07	0.48	0.88	0.98	0.81	1.07	0.80	0.80
Avail Cap(c_a), veh/h	194	972	498	373	1281	541	269	611	507	134	481	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.2	39.2	48.1	38.5	29.8	51.2	40.1	37.2	55.5	40.8	40.9
Incr Delay (d2), s/veh	81.8	3.5	6.7	24.4	46.3	0.7	24.7	31.4	13.3	98.1	13.1	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	11.6	12.4	11.9	29.4	6.7	8.3	24.9	14.4	8.1	13.6	13.1
LnGrp Delay(d), s/veh	135.3	42.7	46.0	72.5	84.8	30.4	75.9	71.5	50.5	153.6	53.9	54.8
LnGrp LOS	F	D	D	E	F	C	E	E	D	F	D	D
Approach Vol, veh/h		1320			1928			1216			897	
Approach Delay, s/veh		58.1			75.6			65.1			70.3	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	43.0	25.9	38.1	19.7	36.3	17.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.0	25.0	31.0	18.0	30.0	13.0	43.0
Max Q Clear Time (g_c+I1), s	11.0	39.7	21.6	25.6	15.6	26.2	15.0	45.0
Green Ext Time (p_c), s	0.0	0.0	0.3	3.1	0.1	1.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Future Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1425	345	253	1448	0	460	161	241			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2099	642	344	2832	0	1255	1236	577			
Arrive On Green	0.00	0.41	0.41	0.10	0.55	0.00	0.36	0.36	0.36			
Sat Flow, veh/h	0	5305	1572	3476	5305	0	3476	3424	1599			
Grp Volume(v), veh/h	0	1425	345	253	1448	0	460	161	241			
Grp Sat Flow(s),veh/h/ln	0	1712	1572	1738	1712	0	1738	1712	1599			
Q Serve(g_s), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Cycle Q Clear(g_c), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2099	642	344	2832	0	1255	1236	577			
V/C Ratio(X)	0.00	0.68	0.54	0.74	0.51	0.00	0.37	0.13	0.42			
Avail Cap(c_a), veh/h	0	3147	963	723	4439	0	1255	1236	577			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	22.1	20.5	40.0	12.8	0.0	21.5	19.6	22.0			
Incr Delay (d2), s/veh	0.0	0.4	0.7	3.1	0.1	0.0	0.8	0.2	2.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	9.8	6.7	3.2	7.5	0.0	4.4	1.4	4.9			
LnGrp Delay(d), s/veh	0.0	22.5	21.2	43.1	13.0	0.0	22.3	19.8	24.2			
LnGrp LOS		C	C	D	B		C	B	C			
Approach Vol, veh/h		1770			1701			862				
Approach Delay, s/veh		22.2			17.4			22.4				
Approach LOS		C			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	41.3		37.0		54.4
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			19.0	56.0		33.0		79.0
Max Q Clear Time (g_c+I1), s			8.5	22.8		12.4		18.1
Green Ext Time (p_c), s			0.6	14.6		4.1		14.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	1450	100	310	1120	130	170	1260	830	190	1540	450
Future Volume (veh/h)	420	1450	100	310	1120	130	170	1260	830	190	1540	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	457	1576	109	337	1217	141	185	1370	902	207	1674	489
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	515	1626	574	377	1422	419	203	1883	1264	261	1969	807
Arrive On Green	0.15	0.32	0.32	0.11	0.28	0.28	0.06	0.37	0.37	0.08	0.38	0.38
Sat Flow, veh/h	3476	5136	1518	3476	5136	1513	3476	5136	2616	3476	5136	1488
Grp Volume(v), veh/h	457	1576	109	337	1217	141	185	1370	902	207	1674	489
Grp Sat Flow(s),veh/h/ln	1738	1712	1518	1738	1712	1513	1738	1712	1308	1738	1712	1488
Q Serve(g_s), s	15.5	36.3	5.8	11.5	26.9	8.9	6.4	27.6	33.1	7.0	35.8	27.5
Cycle Q Clear(g_c), s	15.5	36.3	5.8	11.5	26.9	8.9	6.4	27.6	33.1	7.0	35.8	27.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	1626	574	377	1422	419	203	1883	1264	261	1969	807
V/C Ratio(X)	0.89	0.97	0.19	0.89	0.86	0.34	0.91	0.73	0.71	0.79	0.85	0.61
Avail Cap(c_a), veh/h	550	1626	574	377	1422	419	203	1883	1264	261	1969	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	40.4	25.3	52.8	41.1	34.6	56.2	32.8	25.2	54.6	33.9	19.6
Incr Delay (d2), s/veh	15.5	15.6	0.2	22.9	5.4	0.5	39.7	2.5	3.5	15.5	4.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	19.4	2.4	6.7	13.4	3.8	4.2	13.5	12.5	3.9	17.8	12.1
LnGrp Delay(d), s/veh	65.7	56.0	25.4	75.7	46.5	35.1	95.9	35.3	28.7	70.0	38.7	23.0
LnGrp LOS	E	E	C	E	D	D	F	D	C	E	D	C
Approach Vol, veh/h		2142			1695			2457			2370	
Approach Delay, s/veh		56.5			51.4			37.5			38.2	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	48.0	17.0	42.0	11.0	50.0	21.8	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	44.0	13.0	38.0	7.0	46.0	19.0	32.0
Max Q Clear Time (g_c+I1), s	9.0	35.1	13.5	38.3	8.4	37.8	17.5	28.9
Green Ext Time (p_c), s	0.0	7.2	0.0	0.0	0.0	6.7	0.3	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Future Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	506	1333	0	0	1586	816				218	897	23
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	521	3552	0	0	2611	802				235	1043	27
Arrive On Green	0.15	0.69	0.00	0.00	0.51	0.51				0.24	0.24	0.24
Sat Flow, veh/h	3476	5305	0	0	5305	1578				973	4318	113
Grp Volume(v), veh/h	506	1333	0	0	1586	816				411	349	379
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1578				1833	1712	1859
Q Serve(g_s), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Cycle Q Clear(g_c), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Prop In Lane	1.00		0.00	0.00		1.00				0.53		0.06
Lane Grp Cap(c), veh/h	521	3552	0	0	2611	802				443	414	449
V/C Ratio(X)	0.97	0.38	0.00	0.00	0.61	1.02				0.93	0.84	0.84
Avail Cap(c_a), veh/h	521	3552	0	0	2611	802				443	414	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	7.7	0.0	0.0	21.0	29.5				44.5	43.3	43.3
Incr Delay (d2), s/veh	31.9	0.1	0.0	0.0	0.4	36.3				27.9	18.5	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	6.1	0.0	0.0	12.4	34.4				16.7	13.2	14.2
LnGrp Delay(d), s/veh	82.6	7.8	0.0	0.0	21.4	65.8				72.4	61.8	60.6
LnGrp LOS	F	A			C	F				E	E	E
Approach Vol, veh/h		1839			2402						1138	
Approach Delay, s/veh		28.4			36.5						65.2	
Approach LOS		C			D						E	

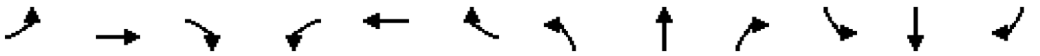
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.0		87.0			22.0	65.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		29.0		83.0			18.0	61.0
Max Q Clear Time (g_c+I1), s		28.3		15.0			19.4	63.0
Green Ext Time (p_c), s		0.5		13.0			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Future Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	93	1330	72	165	1598	72	155	41	505	175	93	93
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	119	2056	111	240	2135	639	388	408	777	244	243	206
Arrive On Green	0.07	0.41	0.41	0.07	0.42	0.42	0.22	0.22	0.22	0.14	0.14	0.14
Sat Flow, veh/h	1792	4976	269	3476	5136	1538	1792	1881	2690	1792	1787	1518
Grp Volume(v), veh/h	93	915	487	165	1598	72	155	41	505	175	93	93
Grp Sat Flow(s),veh/h/ln	1792	1712	1821	1738	1712	1538	1792	1881	1345	1792	1787	1518
Q Serve(g_s), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Cycle Q Clear(g_c), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	1415	752	240	2135	639	388	408	777	244	243	206
V/C Ratio(X)	0.78	0.65	0.65	0.69	0.75	0.11	0.40	0.10	0.65	0.72	0.38	0.45
Avail Cap(c_a), veh/h	222	1696	902	502	2649	793	388	408	777	388	387	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	22.8	22.8	44.1	24.0	17.4	32.6	30.4	30.4	40.1	38.2	38.5
Incr Delay (d2), s/veh	10.4	0.6	1.2	3.5	0.9	0.1	3.0	0.5	4.2	3.9	1.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.9	10.7	2.3	12.2	1.2	3.9	0.9	6.4	4.7	2.3	2.4
LnGrp Delay(d), s/veh	55.0	23.4	24.0	47.6	25.0	17.4	35.6	30.9	34.6	44.0	39.1	40.1
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	D	D
Approach Vol, veh/h		1495			1835			701			361	
Approach Delay, s/veh		25.6			26.7			34.6			41.8	
Approach LOS		C			C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.0	10.7	44.0		17.2	10.5	44.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	14.0	48.0		21.0	12.0	50.0
Max Q Clear Time (g_c+I1), s		18.0	6.5	22.8		11.1	7.0	27.6
Green Ext Time (p_c), s		0.9	0.3	10.8		1.1	0.1	12.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.8
HCM 2010 LOS	C

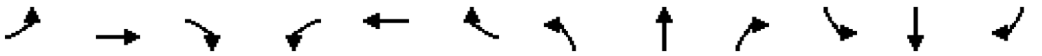


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	290	240	0	0	0	0	1680	70	0	2470	0
Future Volume (vph)	60	290	240	0	0	0	0	1680	70	0	2470	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1785	2814					7560			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1785	2814					7560			6471	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	322	267	0	0	0	0	1867	78	0	2744	0
RTOR Reduction (vph)	0	0	7	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	60	329	260	0	0	0	0	1940	0	0	2744	0
Confl. Peds. (#/hr)							5		6	6		5
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	25.7	25.7	25.7					73.3			73.3	
Effective Green, g (s)	25.7	25.7	25.7					73.3			73.3	
Actuated g/C Ratio	0.24	0.24	0.24					0.69			0.69	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	407	428	675					5178			4432	
v/s Ratio Prot	0.04	c0.18						0.26			c0.42	
v/s Ratio Perm			0.09									
v/c Ratio	0.15	0.77	0.39					0.37			0.62	
Uniform Delay, d1	32.0	37.9	34.0					7.1			9.2	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.2	8.1	0.4					0.2			0.7	
Delay (s)	32.2	46.0	34.4					7.3			9.9	
Level of Service	C	D	C					A			A	
Approach Delay (s/veh)		40.0			0.0			7.3			9.9	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Future Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.96	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5772	1236	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5772	1236	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1429	1071	214	1296	0	449	0	61	357	0	31
RTOR Reduction (vph)	0	58	256	0	0	0	0	0	45	0	0	23
Lane Group Flow (vph)	0	1907	279	214	1296	0	449	0	16	357	0	8
Confl. Peds. (#/hr)	2		16	16		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Effective Green, g (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Actuated g/C Ratio		0.52	0.52	0.11	0.66		0.27		0.27	0.27		0.27
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		3006	643	365	3398		927		427	927		427
v/s Ratio Prot		c0.33		c0.06	0.25							
v/s Ratio Perm			0.23				c0.13		0.01	0.10		0.01
v/c Ratio		0.63	0.43	0.59	0.38		0.48		0.04	0.39		0.02
Uniform Delay, d1		19.4	16.7	48.2	8.6		34.8		30.6	33.8		30.4
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.4	0.5	2.4	0.1		1.8		0.2	1.2		0.1
Delay (s)		19.8	17.2	50.6	8.7		36.6		30.8	35.0		30.5
Level of Service		B	B	D	A		D		C	C		C
Approach Delay (s/veh)		19.2			14.6			35.9			34.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	112.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	100	1030	670	230	1390	0	40	2690	30
Future Volume (vph)	0	0	0	100	1030	670	230	1390	0	40	2690	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3422	2814	3467	6471		1787	6471	1567
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3422	2814	3467	6471		1787	6471	1567
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	112	1157	753	258	1562	0	45	3022	34
RTOR Reduction (vph)	0	0	0	0	0	167	0	0	0	0	0	18
Lane Group Flow (vph)	0	0	0	101	1168	586	258	1562	0	45	3022	16
Confl. Peds. (#/hr)							3		5	5		3
Confl. Bikes (#/hr)									4			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				42.0	42.0	42.0	9.0	60.6		6.2	57.8	57.8
Effective Green, g (s)				42.0	42.0	42.0	9.0	60.6		6.2	57.8	57.8
Actuated g/C Ratio				0.35	0.35	0.35	0.07	0.50		0.05	0.48	0.48
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				565	1189	978	258	3246		91	3096	749
v/s Ratio Prot				0.06	c0.34		c0.07	c0.24		0.03	c0.47	
v/s Ratio Perm						0.21						0.01
v/c Ratio				0.18	0.98	0.60	1.00	0.48		0.49	0.98	0.02
Uniform Delay, d1				27.4	39.0	32.5	55.9	19.8		55.8	30.8	16.6
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.2	21.8	1.0	56.0	0.5		4.2	11.5	0.1
Delay (s)				27.6	60.8	33.5	111.9	20.3		60.0	42.3	16.7
Level of Service				C	E	C	F	C		E	D	B
Approach Delay (s/veh)		0.0			49.0			33.3			42.3	
Approach LOS		A			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	210	1620	1780	360	60	180
Future Volume (veh/h)	210	1620	1780	360	60	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	221	1705	1874	379	63	189
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	261	4447	2708	546	411	367
Arrive On Green	0.15	0.69	0.50	0.50	0.23	0.23
Sat Flow, veh/h	1792	6735	5683	1093	1792	1599
Grp Volume(v), veh/h	221	1705	1678	575	63	189
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1659	1792	1599
Q Serve(g_s), s	11.5	10.7	25.4	25.5	2.7	9.9
Cycle Q Clear(g_c), s	11.5	10.7	25.4	25.5	2.7	9.9
Prop In Lane	1.00			0.66	1.00	1.00
Lane Grp Cap(c), veh/h	261	4447	2425	829	411	367
V/C Ratio(X)	0.85	0.38	0.69	0.69	0.15	0.52
Avail Cap(c_a), veh/h	523	6073	2935	1003	411	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	6.4	18.3	18.4	29.5	32.3
Incr Delay (d2), s/veh	7.4	0.1	0.5	1.6	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	4.8	11.3	11.9	1.4	9.4
LnGrp Delay(d), s/veh	47.3	6.4	18.9	20.0	30.3	37.4
LnGrp LOS	D	A	B	B	C	D
Approach Vol, veh/h		1926	2253		252	
Approach Delay, s/veh		11.1	19.2		35.6	
Approach LOS		B	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				69.9		26.0	18.0	51.9
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	28.0	58.0
Max Q Clear Time (g_c+I1), s				12.7		11.9	13.5	27.5
Green Ext Time (p_c), s				20.7		0.6	0.5	20.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.6
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	SBR	NWL2	NWR
Lane Configurations											
Traffic Volume (vph)	180	10	20	440	80	10	350	40	150	10	10
Future Volume (vph)	180	10	20	440	80	10	350	40	150	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.98		1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1671	1495	1671	2632	3280		1671	2946		1671	1495
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1671	1495	1671	2632	3280		1671	2946		1671	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	11	22	478	87	11	380	43	163	11	11
RTOR Reduction (vph)	0	9	0	0	0	0	0	64	0	0	0
Lane Group Flow (vph)	196	2	22	478	98	0	380	142	0	11	11
Confl. Peds. (#/hr)			12			2					
Confl. Bikes (#/hr)						1					
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA		Prot	Prot
Protected Phases	4	4	8	1	2		1	6		7	7
Permitted Phases				8							
Actuated Green, G (s)	14.8	14.8	2.7	27.2	26.9		24.5	55.4		2.4	2.4
Effective Green, g (s)	14.8	14.8	2.7	27.2	26.9		24.5	55.4		2.4	2.4
Actuated g/C Ratio	0.16	0.16	0.03	0.30	0.29		0.27	0.61		0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	270	242	49	899	966		448	1787		43	39
v/s Ratio Prot	c0.12	0.00	0.01	c0.14	c0.03		c0.23	0.05		0.01	c0.01
v/s Ratio Perm				0.04							
v/c Ratio	0.73	0.01	0.45	0.53	0.10		0.85	0.08		0.26	0.28
Uniform Delay, d1	36.3	32.1	43.6	26.7	23.4		31.6	7.4		43.6	43.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	9.3	0.0	6.4	0.6	0.2		13.9	0.1		3.1	3.9
Delay (s)	45.6	32.1	50.0	27.3	23.6		45.5	7.5		46.7	47.5
Level of Service	D	C	D	C	C		D	A		D	D
Approach Delay (s/veh)					23.6			32.2			
Approach LOS					C			C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	0	0	0	0	0	0	90	0	20	20	10
Future Volume (veh/h)	10	0	0	0	0	0	0	90	0	20	20	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	0	1712				0	1712	0	1712	1712	1900
Adj Flow Rate, veh/h	11	0	0				0	99	0	22	22	11
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	0	11				0	11	0	11	11	11
Cap, veh/h	17	0	15				0	2747	0	30	1955	906
Arrive On Green	0.01	0.00	0.00				0.00	0.84	0.00	0.02	0.91	0.91
Sat Flow, veh/h	1630	0	1455				0	3423	0	1630	2159	1001
Grp Volume(v), veh/h	11	0	0				0	99	0	22	16	17
Grp Sat Flow(s),veh/h/ln	1630	0	1455				0	1626	0	1630	1626	1534
Q Serve(g_s), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.1	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.65
Lane Grp Cap(c), veh/h	17	0	15				0	2747	0	30	1472	1389
V/C Ratio(X)	0.64	0.00	0.00				0.00	0.04	0.00	0.73	0.01	0.01
Avail Cap(c_a), veh/h	446	0	398				0	2747	0	635	1472	1389
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	0.0	0.0				0.0	1.2	0.0	46.4	0.4	0.4
Incr Delay (d2), s/veh	32.8	0.0	0.0				0.0	0.0	0.0	28.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0				0.0	0.2	0.0	0.8	0.0	0.0
LnGrp Delay(d), s/veh	79.6	0.0	0.0				0.0	1.2	0.0	74.4	0.4	0.4
LnGrp LOS	E							A		E	A	A
Approach Vol, veh/h		11						99			55	
Approach Delay, s/veh		79.6						1.2			30.0	
Approach LOS		E						A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.8	84.2		5.0		90.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	37.0	45.0		26.0		86.0		
Max Q Clear Time (g_c+I1), s	3.3	2.5		2.6		2.1		
Green Ext Time (p_c), s	0.0	0.6		0.0		0.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	10	110	0	10	30
Future Vol, veh/h	0	10	110	0	10	30
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	124	0	11	34

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	164	62	0	0	124	0
Stage 1	124	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	811	990	-	-	1461	-
Stage 1	888	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	804	990	-	-	1461	-
Mov Cap-2 Maneuver	804	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	968	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.7	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	990	1461	-
HCM Lane V/C Ratio	-	-	0.011	0.008	-
HCM Control Delay (s/veh)	-	-	8.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	1090	30	0	1410	0	20
Future Vol, veh/h	1090	30	0	1410	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1160	32	0	1500	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	580
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	392
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	392
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	392	-	-	-
HCM Lane V/C Ratio	0.054	-	-	-
HCM Control Delay (s/veh)	14.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	870	440	250	1990	180	670	1110	400	150	830	310
Future Volume (veh/h)	320	870	440	250	1990	180	670	1110	400	150	830	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	333	906	458	260	2073	188	698	1156	417	156	865	323
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	2067	613	322	1931	173	660	1554	468	210	890	261
Arrive On Green	0.09	0.41	0.41	0.09	0.41	0.41	0.19	0.31	0.31	0.06	0.17	0.17
Sat Flow, veh/h	3442	5085	1509	3442	4730	424	3442	5085	1532	3442	5085	1490
Grp Volume(v), veh/h	333	906	458	260	1479	782	698	1156	417	156	865	323
Grp Sat Flow(s),veh/h/ln	1721	1695	1509	1721	1695	1764	1721	1695	1532	1721	1695	1490
Q Serve(g_s), s	11.0	15.4	31.0	8.9	49.0	49.0	23.0	24.5	31.2	5.3	20.3	21.0
Cycle Q Clear(g_c), s	11.0	15.4	31.0	8.9	49.0	49.0	23.0	24.5	31.2	5.3	20.3	21.0
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	2067	613	322	1384	720	660	1554	468	210	890	261
V/C Ratio(X)	1.06	0.44	0.75	0.81	1.07	1.09	1.06	0.74	0.89	0.74	0.97	1.24
Avail Cap(c_a), veh/h	315	2067	613	430	1384	720	660	1554	468	229	890	261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	25.7	30.3	53.3	35.5	35.5	48.5	37.5	39.8	55.4	49.2	49.5
Incr Delay (d2), s/veh	66.0	0.1	5.0	8.2	44.8	59.2	51.4	3.3	21.7	11.1	24.1	135.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	7.2	13.7	4.6	31.5	35.7	15.6	11.9	16.0	2.9	11.5	18.5
LnGrp Delay(d), s/veh	120.5	25.9	35.3	61.5	80.3	94.7	99.9	40.7	61.5	66.5	73.3	185.4
LnGrp LOS	F	C	D	E	F	F	F	D	E	E	E	F
Approach Vol, veh/h		1697			2521			2271			1344	
Approach Delay, s/veh		47.0			82.8			62.7			99.5	
Approach LOS		D			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	40.7	15.2	52.8	27.0	25.0	15.0	53.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	36.0	15.0	45.0	23.0	21.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	7.3	33.2	10.9	33.0	25.0	23.0	13.0	51.0
Green Ext Time (p_c), s	0.0	2.2	0.3	6.0	0.0	0.0	0.0	0.0

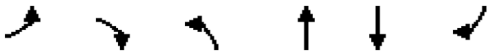
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.1
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	810	1310	0	60	1440
Future Volume (vph)	40	810	1310	0	60	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.86	0.85	1.00		1.00	1.00
Flt Protected	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3107	1441	5085		1770	6408
Flt Permitted	1.00	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3107	1441	5085		1770	6408
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	42	844	1365	0	62	1500
RTOR Reduction (vph)	158	158	0	0	0	0
Lane Group Flow (vph)	306	264	1365	0	63	1500
Confl. Peds. (#/hr)				13	13	
Confl. Bikes (#/hr)				4		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	22.6	22.6	55.4		7.2	66.6
Effective Green, g (s)	22.6	22.6	55.4		7.2	66.6
Actuated g/C Ratio	0.23	0.23	0.57		0.07	0.69
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	722	335	2898		131	4390
v/s Ratio Prot	0.10		c0.27		c0.04	0.23
v/s Ratio Perm		c0.18				
v/c Ratio	0.42	0.79	0.47		0.48	0.34
Uniform Delay, d1	31.8	35.0	12.3		43.2	6.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	11.6	0.6		2.8	0.2
Delay (s)	32.2	46.6	12.8		46.0	6.5
Level of Service	C	D	B		D	A
Approach Delay (s/veh)	39.1		12.8			8.1
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	97.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	270	270	70	1510	700	0
Future Volume (veh/h)	270	270	70	1510	700	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	290	290	75	1624	753	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	726	334	97	4530	3132	0
Arrive On Green	0.21	0.21	0.06	0.71	0.62	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	290	290	75	1624	753	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	8.0	19.5	4.6	10.8	7.3	0.0
Cycle Q Clear(g_c), s	8.0	19.5	4.6	10.8	7.3	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	726	334	97	4530	3132	0
V/C Ratio(X)	0.40	0.87	0.77	0.36	0.24	0.00
Avail Cap(c_a), veh/h	1061	488	386	4530	3132	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	41.5	50.9	6.0	9.2	0.0
Incr Delay (d2), s/veh	0.4	11.0	12.1	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	16.7	2.6	4.7	3.4	0.0
LnGrp Delay(d), s/veh	37.3	52.5	63.0	6.2	9.4	0.0
LnGrp LOS	D	D	E	A	A	
Approach Vol, veh/h	580			1699	753	
Approach Delay, s/veh	44.9			8.7	9.4	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		82.0		27.3	10.0	72.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		78.0		34.0	24.0	50.0		
Max Q Clear Time (g_c+I1), s		12.8		21.5	6.6	9.3		
Green Ext Time (p_c), s		19.5		1.7	0.1	5.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1050	80	310	1750	140	160	780	370	120	730	190
Future Volume (veh/h)	180	1050	80	310	1750	140	160	780	370	120	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	194	1129	86	333	1882	151	172	839	398	129	785	204
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	248	1824	499	398	2045	566	230	1693	442	172	1608	422
Arrive On Green	0.07	0.36	0.36	0.12	0.41	0.41	0.07	0.34	0.34	0.05	0.32	0.32
Sat Flow, veh/h	3408	5036	1376	3408	5036	1393	3408	5036	1314	3408	5036	1321
Grp Volume(v), veh/h	194	1129	86	333	1882	151	172	839	398	129	785	204
Grp Sat Flow(s),veh/h/ln	1704	1679	1376	1704	1679	1393	1704	1679	1314	1704	1679	1321
Q Serve(g_s), s	6.7	21.9	5.1	11.4	42.2	8.6	5.9	15.8	34.3	4.4	15.0	14.8
Cycle Q Clear(g_c), s	6.7	21.9	5.1	11.4	42.2	8.6	5.9	15.8	34.3	4.4	15.0	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1824	499	398	2045	566	230	1693	442	172	1608	422
V/C Ratio(X)	0.78	0.62	0.17	0.84	0.92	0.27	0.75	0.50	0.90	0.75	0.49	0.48
Avail Cap(c_a), veh/h	258	1824	499	516	2074	574	315	1693	442	172	1608	422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	31.2	25.8	51.4	33.5	23.5	54.5	31.5	37.6	55.8	32.7	32.6
Incr Delay (d2), s/veh	13.9	0.6	0.2	9.2	7.2	0.3	6.4	1.0	24.1	16.7	1.1	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	10.2	1.9	5.9	20.9	3.3	3.0	7.5	15.3	2.5	7.1	5.8
LnGrp Delay(d), s/veh	68.1	31.8	26.0	60.7	40.7	23.8	60.9	32.5	61.7	72.5	33.7	36.5
LnGrp LOS	E	C	C	E	D	C	E	C	E	E	C	D
Approach Vol, veh/h		1409			2366			1409			1118	
Approach Delay, s/veh		36.5			42.5			44.2			38.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	44.0	17.9	47.1	12.0	42.0	12.7	52.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	40.0	18.0	40.0	11.0	35.0	9.0	49.0
Max Q Clear Time (g_c+I1), s	6.4	36.3	13.4	23.9	7.9	17.0	8.7	44.2
Green Ext Time (p_c), s	0.0	2.3	0.5	7.2	0.1	5.9	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Future Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	62	115	583	52	250	62	1208	906	375	1146	31
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	262	487	521	838	699	80	1356	409	325	2059	56
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.04	0.27	0.27	0.18	0.41	0.41
Sat Flow, veh/h	1069	583	1081	1200	1863	1554	1774	5085	1533	1774	5084	137
Grp Volume(v), veh/h	31	0	177	583	52	250	62	1208	906	375	764	413
Grp Sat Flow(s),veh/h/ln	1069	0	1664	1200	1863	1554	1774	1695	1533	1774	1695	1831
Q Serve(g_s), s	2.0	0.0	7.9	46.1	1.9	12.7	4.2	27.4	32.0	22.0	20.8	20.8
Cycle Q Clear(g_c), s	3.9	0.0	7.9	54.0	1.9	12.7	4.2	27.4	32.0	22.0	20.8	20.8
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	524	0	749	521	838	699	80	1356	409	325	1373	742
V/C Ratio(X)	0.06	0.00	0.24	1.12	0.06	0.36	0.78	0.89	2.22	1.15	0.56	0.56
Avail Cap(c_a), veh/h	524	0	749	521	838	699	133	1356	409	325	1373	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	20.3	39.6	18.7	21.6	56.7	42.3	44.0	49.0	27.4	27.4
Incr Delay (d2), s/veh	0.0	0.0	0.2	76.0	0.0	0.3	14.9	9.1	555.0	98.1	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.6	28.2	1.0	5.5	2.4	14.0	76.6	19.6	10.0	11.1
LnGrp Delay(d), s/veh	19.8	0.0	20.5	115.6	18.7	21.9	71.6	51.5	599.0	147.1	29.0	30.4
LnGrp LOS	B		C	F	B	C	E	D	F	F	C	C
Approach Vol, veh/h		208			885			2176			1552	
Approach Delay, s/veh		20.4			83.4			280.0			57.9	
Approach LOS		C			F			F			E	

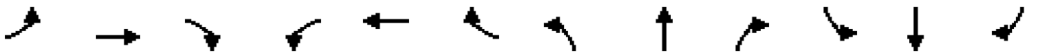
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.0	36.0		58.0	9.4	52.6		58.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	22.0	32.0		54.0	9.0	45.0		54.0
Max Q Clear Time (g_c+I1), s	24.0	34.0		9.9	6.2	22.8		56.0
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	8.2		0.0

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		161.2	
HCM 2010 LOS		F	

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	230	0	0	170	770	40
Future Volume (veh/h)	230	0	0	170	770	40
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	240	0	0	177	802	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2302	0	0	2302	1164	368
Arrive On Green	0.64	0.00	0.00	0.64	0.23	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	240	0	0	177	802	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	1.6	0.0	0.0	1.2	9.2	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.2	9.2	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2302	0	0	2302	1164	368
V/C Ratio(X)	0.10	0.00	0.00	0.08	0.69	0.00
Avail Cap(c_a), veh/h	2302	0	0	2302	5635	1783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	4.2	22.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.6	4.4	0.0
LnGrp Delay(d), s/veh	4.4	0.0	0.0	4.3	23.2	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	240			177	802	
Approach Delay, s/veh	4.4			4.3	23.2	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.0				45.0		18.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		41.0				41.0		71.0
Max Q Clear Time (g_c+I1), s		3.6				3.2		11.2
Green Ext Time (p_c), s		1.4				1.0		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	780	120	510	1290	270	200	840	410	290	590	70
Future Volume (vph)	280	780	120	510	1290	270	200	840	410	290	590	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.99		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3467	5136	1496	3467	4954		1626	3209	1455	1537	4734	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.80	
Satd. Flow (perm)	3467	5136	1496	3467	4954		1626	3015	1455	1537	3813	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	298	830	128	543	1372	287	213	894	436	309	628	74
RTOR Reduction (vph)	0	0	99	0	27	0	0	3	26	0	9	0
Lane Group Flow (vph)	298	830	29	543	1632	0	192	956	366	247	755	0
Confl. Peds. (#/hr)	18		23	23		18	23					23
Confl. Bikes (#/hr)			2			6						1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pt+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	2 3	1	6	
Permitted Phases			4									
Actuated Green, G (s)	11.0	26.9	26.9	23.1	39.0		18.7	52.7	61.1	20.0	55.3	
Effective Green, g (s)	11.0	26.9	26.9	23.1	39.0		18.7	52.7	61.1	20.0	55.3	
Actuated g/C Ratio	0.09	0.22	0.22	0.19	0.33		0.16	0.44	0.51	0.17	0.46	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	317	1151	335	667	1610		253	1354	740	256	1910	
v/s Ratio Prot	c0.09	0.16		0.16	c0.33		0.12	0.11	0.25	c0.16	0.07	
v/s Ratio Perm			0.02					c0.20			0.12	
v/c Ratio	0.94	0.72	0.09	0.81	1.01		0.76	0.71	0.50	0.96	0.40	
Uniform Delay, d1	54.2	43.1	36.8	46.4	40.5		48.5	27.4	19.3	49.7	21.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	35.0	2.3	0.1	7.5	25.9		12.3	1.7	0.5	46.1	0.1	
Delay (s)	89.2	45.3	36.9	53.9	66.4		60.8	29.1	19.9	95.8	21.5	
Level of Service	F	D	D	D	E		E	C	B	F	C	
Approach Delay (s/veh)		54.9			63.3			30.7			39.6	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Future Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
Arrive On Green	0.13	0.37	0.37	0.13	0.37	0.37	0.13	0.28	0.28	0.08	0.24	0.24
Sat Flow, veh/h	1792	3574	1543	1792	3574	1539	3476	3574	1536	1792	3574	1497
Grp Volume(v), veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Grp Sat Flow(s),veh/h/ln	1792	1787	1543	1792	1787	1539	1738	1787	1536	1792	1787	1497
Q Serve(g_s), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Cycle Q Clear(g_c), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
V/C Ratio(X)	1.01	0.56	0.26	0.87	1.01	0.28	0.89	0.91	0.37	1.03	0.80	0.64
Avail Cap(c_a), veh/h	239	1310	765	343	1311	698	434	1013	649	149	864	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	30.3	17.8	51.0	38.0	20.8	51.7	41.5	24.2	55.0	42.8	40.8
Incr Delay (d2), s/veh	61.6	0.6	0.2	15.7	26.4	0.2	19.3	13.6	1.6	82.2	7.7	8.4
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	9.8	3.8	7.8	26.5	4.2	7.4	16.7	5.8	8.3	11.7	7.7
LnGrp Delay(d), s/veh	113.7	30.9	18.0	66.7	64.4	21.1	70.9	55.2	25.9	137.6	50.5	49.2
LnGrp LOS	F	C	B	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1176			1726			1550			1077	
Approach Delay, s/veh		45.8			59.7			54.5			62.7	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	38.0	20.0	48.0	19.0	33.0	20.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	34.0	23.0	37.0	15.0	29.0	16.0	44.0
Max Q Clear Time (g_c+I1), s	12.0	31.9	15.7	21.7	15.1	23.8	18.0	46.0
Green Ext Time (p_c), s	0.0	1.3	0.3	4.9	0.0	2.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.9
HCM 2010 LOS	E

Fullerton - 2040 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	720	170	170	500	80	0	1020	120	240	1340	30
Future Volume (veh/h)	50	720	170	170	500	80	0	1020	120	240	1340	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	52	742	175	175	515	82	0	1052	124	247	1381	31
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	293	833	196	240	1061	168	149	1236	146	284	1855	42
Arrive On Green	0.03	0.29	0.29	0.08	0.34	0.34	0.00	0.38	0.38	0.10	0.52	0.52
Sat Flow, veh/h	1792	2872	677	1792	3092	490	1792	3221	379	1792	3573	80
Grp Volume(v), veh/h	52	462	455	175	297	300	0	583	593	247	690	722
Grp Sat Flow(s),veh/h/ln	1792	1787	1762	1792	1787	1795	1792	1787	1813	1792	1787	1866
Q Serve(g_s), s	2.3	27.7	27.7	7.4	14.7	14.8	0.0	33.5	33.5	8.9	33.9	34.0
Cycle Q Clear(g_c), s	2.3	27.7	27.7	7.4	14.7	14.8	0.0	33.5	33.5	8.9	33.9	34.0
Prop In Lane	1.00		0.38	1.00		0.27	1.00		0.21	1.00		0.04
Lane Grp Cap(c), veh/h	293	518	511	240	613	616	149	686	696	284	928	969
V/C Ratio(X)	0.18	0.89	0.89	0.73	0.48	0.49	0.00	0.85	0.85	0.87	0.74	0.75
Avail Cap(c_a), veh/h	303	574	566	250	670	673	211	686	696	345	928	969
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.0	38.1	38.1	28.0	29.0	29.0	0.0	31.6	31.6	24.4	21.1	21.1
Incr Delay (d2), s/veh	0.3	15.0	15.2	9.8	0.6	0.6	0.0	12.6	12.5	18.1	5.4	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	15.8	15.6	4.3	7.4	7.4	0.0	18.9	19.2	5.8	18.1	18.8
LnGrp Delay(d), s/veh	27.3	53.1	53.3	37.8	29.6	29.6	0.0	44.2	44.2	42.5	26.5	26.3
LnGrp LOS	C	D	D	D	C	C		D	D	D	C	C
Approach Vol, veh/h		969			772			1176			1659	
Approach Delay, s/veh		51.8			31.5			44.2			28.8	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	47.0	13.4	36.5	0.0	62.2	7.4	42.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	43.0	10.0	36.0	4.0	54.0	4.0	42.0
Max Q Clear Time (g_c+I1), s	10.9	35.5	9.4	29.7	0.0	36.0	4.3	16.8
Green Ext Time (p_c), s	0.3	4.2	0.0	2.8	0.0	9.3	0.0	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	640	80	200	360	60	60	1020	250	180	1370	160
Future Volume (veh/h)	170	640	80	200	360	60	60	1020	250	180	1370	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	674	84	211	379	63	63	1074	263	189	1442	168
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	713	89	249	703	116	146	1659	730	284	1627	188
Arrive On Green	0.09	0.23	0.23	0.10	0.23	0.23	0.03	0.47	0.47	0.07	0.51	0.51
Sat Flow, veh/h	1774	3161	393	1774	3032	499	1774	3539	1557	1774	3192	368
Grp Volume(v), veh/h	179	377	381	211	220	222	63	1074	263	189	793	817
Grp Sat Flow(s),veh/h/ln	1774	1770	1785	1774	1770	1762	1774	1770	1557	1774	1770	1791
Q Serve(g_s), s	9.1	25.1	25.2	10.9	13.0	13.3	2.2	27.7	12.9	6.3	47.7	49.2
Cycle Q Clear(g_c), s	9.1	25.1	25.2	10.9	13.0	13.3	2.2	27.7	12.9	6.3	47.7	49.2
Prop In Lane	1.00		0.22	1.00		0.28	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	341	399	403	249	411	409	146	1659	730	284	902	913
V/C Ratio(X)	0.53	0.94	0.95	0.85	0.54	0.54	0.43	0.65	0.36	0.67	0.88	0.89
Avail Cap(c_a), veh/h	382	399	403	249	411	409	150	1659	730	379	902	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	45.6	45.6	33.9	40.3	40.4	25.8	24.2	20.3	20.0	26.1	26.4
Incr Delay (d2), s/veh	1.3	31.1	31.4	23.0	1.4	1.5	2.0	2.0	1.4	2.7	12.0	13.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	15.7	15.9	6.9	6.5	6.7	1.1	13.9	5.8	3.3	26.1	27.6
LnGrp Delay(d), s/veh	32.9	76.7	77.0	56.8	41.7	41.9	27.8	26.2	21.7	22.7	38.0	39.6
LnGrp LOS	C	E	E	E	D	D	C	C	C	C	D	D
Approach Vol, veh/h		937			653			1400			1799	
Approach Delay, s/veh		68.5			46.6			25.4			37.1	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	60.1	16.0	31.0	7.7	65.0	15.2	31.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	12.0	27.0	4.0	61.0	14.0	25.0
Max Q Clear Time (g_c+I1), s	8.3	29.7	12.9	27.2	4.2	51.2	11.1	15.3
Green Ext Time (p_c), s	0.3	8.7	0.0	0.0	0.0	7.0	0.1	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Future Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	65	1140	108	129	667	11	97	97	86	32	172	75
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	457	1918	181	245	2096	35	359	611	504	106	521	517
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	765	3292	311	448	3598	59	1137	1881	1553	177	1605	1592
Grp Volume(v), veh/h	65	618	630	129	331	347	97	97	86	204	0	75
Grp Sat Flow(s),veh/h/ln	765	1787	1817	448	1787	1870	1137	1881	1553	1781	0	1592
Q Serve(g_s), s	4.1	19.0	19.1	22.3	8.2	8.2	6.1	3.2	3.4	0.0	0.0	2.9
Cycle Q Clear(g_c), s	12.3	19.0	19.1	41.4	8.2	8.2	13.2	3.2	3.4	7.1	0.0	2.9
Prop In Lane	1.00		0.17	1.00		0.03	1.00		1.00	0.16		1.00
Lane Grp Cap(c), veh/h	457	1041	1058	245	1041	1090	359	611	504	627	0	517
V/C Ratio(X)	0.14	0.59	0.60	0.53	0.32	0.32	0.27	0.16	0.17	0.33	0.00	0.15
Avail Cap(c_a), veh/h	756	1741	1769	421	1741	1822	359	611	504	627	0	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	11.5	11.5	24.7	9.2	9.2	27.0	20.7	20.8	22.1	0.0	20.6
Incr Delay (d2), s/veh	0.1	0.5	0.5	1.7	0.2	0.2	1.8	0.6	0.7	1.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.4	9.6	2.9	4.0	4.2	2.1	1.7	1.6	3.9	0.0	1.4
LnGrp Delay(d), s/veh	12.5	12.0	12.0	26.5	9.4	9.4	28.9	21.3	21.5	23.4	0.0	21.2
LnGrp LOS	B	B	B	C	A	A	C	C	C	C		C
Approach Vol, veh/h		1313			807			280			279	
Approach Delay, s/veh		12.1			12.1			24.0			22.8	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		54.2		32.0		54.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		15.2		21.1		9.1		43.4
Green Ext Time (p_c), s		1.0		11.7		1.4		6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	940	180	110	430	20	200	230	140	40	240	50
Future Volume (veh/h)	100	940	180	110	430	20	200	230	140	40	240	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	109	1022	196	120	467	22	217	250	152	43	261	54
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	459	1803	781	208	1803	779	417	791	657	395	791	657
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	910	3574	1547	461	3574	1544	1068	1881	1562	987	1881	1562
Grp Volume(v), veh/h	109	1022	196	120	467	22	217	250	152	43	261	54
Grp Sat Flow(s),veh/h/ln	910	1787	1547	461	1787	1544	1068	1881	1562	987	1881	1562
Q Serve(g_s), s	8.3	21.2	7.7	26.1	8.0	0.8	18.3	9.5	6.7	3.3	10.0	2.2
Cycle Q Clear(g_c), s	16.3	21.2	7.7	47.3	8.0	0.8	28.3	9.5	6.7	12.8	10.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	459	1803	781	208	1803	779	417	791	657	395	791	657
V/C Ratio(X)	0.24	0.57	0.25	0.58	0.26	0.03	0.52	0.32	0.23	0.11	0.33	0.08
Avail Cap(c_a), veh/h	570	2239	969	265	2239	967	417	791	657	395	791	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	18.4	15.0	34.8	15.1	13.3	30.4	20.7	19.9	25.0	20.8	18.6
Incr Delay (d2), s/veh	0.3	0.3	0.2	2.5	0.1	0.0	4.6	1.0	0.8	0.6	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	10.4	3.3	3.5	3.9	0.3	6.0	5.2	3.0	0.9	5.4	1.0
LnGrp Delay(d), s/veh	20.0	18.7	15.2	37.3	15.2	13.3	34.9	21.7	20.7	25.5	22.0	18.8
LnGrp LOS	C	B	B	D	B	B	C	C	C	C	C	B
Approach Vol, veh/h		1327			609			619			358	
Approach Delay, s/veh		18.3			19.5			26.1			21.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		58.0		49.0		58.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0		45.0		67.0
Max Q Clear Time (g_c+I1), s		30.3		23.2		14.8		49.3
Green Ext Time (p_c), s		2.6		11.2		2.1		4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	10	560	40	10	380
Future Vol, veh/h	20	10	560	40	10	380
Conflicting Peds, #/hr	0	0	0	22	22	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	24	12	659	47	12	447

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1152	681	0	0	728	0
Stage 1	681	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	220	452	-	-	880	-
Stage 1	504	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	213	444	-	-	864	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	621	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	213	444	864	-
HCM Lane V/C Ratio	-	-	0.11	0.026	0.014	-
HCM Control Delay (s/veh)	-	-	24	13.3	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.1	0	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	20	30	20	10	40	400	20	20	260	10
Future Vol, veh/h	10	10	20	30	20	10	40	400	20	20	260	10
Conflicting Peds, #/hr	3	0	1	1	0	3	22	0	22	22	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	11	22	33	22	11	44	440	22	22	286	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	911	924	309	903	913	465	319	0	0	484	0	0
Stage 1	352	352	-	550	550	-	-	-	-	-	-	-
Stage 2	559	572	-	353	363	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	254	268	729	257	272	595	1235	-	-	1074	-	-
Stage 1	663	630	-	518	514	-	-	-	-	-	-	-
Stage 2	512	503	-	662	623	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	218	244	715	226	248	583	1212	-	-	1054	-	-
Mov Cap-2 Maneuver	218	244	-	226	248	-	-	-	-	-	-	-
Stage 1	627	605	-	490	487	-	-	-	-	-	-	-
Stage 2	461	476	-	616	599	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.3	22.7	0.7	0.6
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1212	-	-	230	715	234	583	1054	-	-
HCM Lane V/C Ratio	0.036	-	-	0.096	0.031	0.235	0.019	0.021	-	-
HCM Control Delay (s/veh)	8.1	-	-	22.3	10.2	25	11.3	8.5	-	-
HCM Lane LOS	A	-	-	C	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0.9	0.1	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Future Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
Arrive On Green	0.21	0.21	0.00	0.00	0.21	0.21	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Grp Volume(v), veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Grp Sat Flow(s),veh/h/ln	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Q Serve(g_s), s	5.9	13.6	0.0	0.0	5.1	4.6	0.3	4.2	0.6	3.8	1.4	7.2
Cycle Q Clear(g_c), s	11.0	13.6	0.0	0.0	5.1	4.6	1.7	4.2	0.6	8.0	1.4	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
V/C Ratio(X)	0.33	0.80	0.00	0.00	0.34	0.30	0.02	0.20	0.03	0.15	0.07	0.31
Avail Cap(c_a), veh/h	694	1129	959	508	1129	913	733	1302	1070	780	1302	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	32.3	0.0	0.0	29.0	28.7	4.4	4.5	4.0	5.9	4.1	5.0
Incr Delay (d2), s/veh	0.8	3.9	0.0	0.0	0.5	0.5	0.0	0.3	0.1	0.4	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.4	0.0	0.0	2.7	1.9	0.1	2.2	0.3	1.2	0.8	3.2
LnGrp Delay(d), s/veh	34.4	36.2	0.0	0.0	29.5	29.3	4.4	4.9	4.0	6.3	4.2	5.7
LnGrp LOS	C	D			C	C	A	A	A	A	A	A
Approach Vol, veh/h		393			226			310			547	
Approach Delay, s/veh		35.8			29.4			4.8			5.6	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		21.8		64.0		21.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		6.2		15.6		10.0		7.1
Green Ext Time (p_c), s		1.9		2.3		2.4		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Future Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	129	1452	32	54	839	75	65	86	140	86	43	86
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	2146	47	221	1839	164	561	732	604	505	732	603
Arrive On Green	0.07	0.42	0.42	0.04	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1774	5114	113	1774	4734	421	1240	1863	1537	1138	1863	1534
Grp Volume(v), veh/h	129	963	521	54	600	314	65	86	140	86	43	86
Grp Sat Flow(s),veh/h/ln	1774	1695	1837	1774	1695	1765	1240	1863	1537	1138	1863	1534
Q Serve(g_s), s	3.3	18.1	18.1	1.4	10.4	10.5	2.7	2.3	4.8	4.1	1.1	2.8
Cycle Q Clear(g_c), s	3.3	18.1	18.1	1.4	10.4	10.5	3.8	2.3	4.8	6.4	1.1	2.8
Prop In Lane	1.00		0.06	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	1423	771	221	1317	685	561	732	604	505	732	603
V/C Ratio(X)	0.35	0.68	0.68	0.24	0.46	0.46	0.12	0.12	0.23	0.17	0.06	0.14
Avail Cap(c_a), veh/h	652	2880	1560	383	2536	1320	561	732	604	505	732	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	18.5	18.5	15.4	17.9	17.9	16.1	15.2	16.0	17.3	14.9	15.4
Incr Delay (d2), s/veh	0.6	0.6	1.0	0.6	0.2	0.5	0.4	0.3	0.9	0.7	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.5	9.3	0.7	4.9	5.2	1.0	1.3	2.2	1.4	0.6	1.3
LnGrp Delay(d), s/veh	13.9	19.1	19.6	15.9	18.2	18.4	16.5	15.6	16.9	18.0	15.0	15.9
LnGrp LOS	B	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1613			968			291			215	
Approach Delay, s/veh		18.9			18.1			16.4			16.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	6.8	37.1		35.0	9.2	34.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	18.0	59.0
Max Q Clear Time (g_c+I1), s		6.8	3.4	20.1		8.4	5.3	12.5
Green Ext Time (p_c), s		1.1	0.0	12.9		0.8	0.2	6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	46.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	990	100	150	690	10	30	10	190	10	20	110
Future Vol, veh/h	60	990	100	150	690	10	30	10	190	10	20	110
Conflicting Peds, #/hr	1	0	5	5	0	1	2	0	3	3	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	62	1021	103	155	711	10	31	10	196	10	21	113

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	722	0	0	1129	0	0	1880	2234	570	1670	2280	364
Stage 1	-	-	-	-	-	-	1202	1202	-	1027	1027	-
Stage 2	-	-	-	-	-	-	678	1032	-	643	1253	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	883	-	-	620	-	-	44	43	467	63	40	636
Stage 1	-	-	-	-	-	-	197	258	-	253	312	-
Stage 2	-	-	-	-	-	-	411	310	-	431	244	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	882	-	-	617	-	-	~ 11	30	464	21	28	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 11	30	-	21	28	-
Stage 1	-	-	-	-	-	-	182	239	-	235	233	-
Stage 2	-	-	-	-	-	-	230	232	-	221	226	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.5	2.3	287.6	$ 304
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	13	464	882	-	-	617	-	-	103
HCM Lane V/C Ratio	3.172	0.422	0.07	-	-	0.251	-	-	1.401
HCM Control Delay (s/veh)	$ 1567	18.3	9.4	-	-	12.8	-	-	$ 304
HCM Lane LOS	F	C	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	6.1	2.1	0.2	-	-	1	-	-	10.4

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	990	120	30	460	20	40	150	20	30	150	70
Future Volume (veh/h)	110	990	120	30	460	20	40	150	20	30	150	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	120	1076	130	33	500	22	43	163	22	33	163	76
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	429	1448	642	199	1322	585	56	182	686	53	227	686
Arrive On Green	0.06	0.41	0.41	0.03	0.37	0.37	0.43	0.43	0.43	0.43	0.43	0.43
Sat Flow, veh/h	1792	3574	1583	1792	3574	1582	11	424	1596	8	528	1596
Grp Volume(v), veh/h	120	1076	130	33	500	22	206	0	22	196	0	76
Grp Sat Flow(s),veh/h/ln	1792	1787	1583	1792	1787	1582	435	0	1596	536	0	1596
Q Serve(g_s), s	3.4	22.0	4.6	1.0	8.8	0.8	1.2	0.0	0.7	1.1	0.0	2.5
Cycle Q Clear(g_c), s	3.4	22.0	4.6	1.0	8.8	0.8	37.0	0.0	0.7	37.0	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	0.21		1.00	0.17		1.00
Lane Grp Cap(c), veh/h	429	1448	642	199	1322	585	238	0	686	279	0	686
V/C Ratio(X)	0.28	0.74	0.20	0.17	0.38	0.04	0.87	0.00	0.03	0.70	0.00	0.11
Avail Cap(c_a), veh/h	528	2700	1196	278	2534	1121	238	0	686	279	0	686
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.0	21.8	16.6	18.3	19.9	17.3	20.7	0.0	14.2	19.9	0.0	14.7
Incr Delay (d2), s/veh	0.4	0.8	0.2	0.4	0.2	0.0	32.0	0.0	0.1	13.7	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	10.9	2.0	0.5	4.3	0.3	5.3	0.0	0.3	4.0	0.0	1.1
LnGrp Delay(d), s/veh	15.3	22.5	16.7	18.7	20.0	17.4	52.7	0.0	14.3	33.7	0.0	15.0
LnGrp LOS	B	C	B	B	C	B	D		B	C		B
Approach Vol, veh/h		1326			555			228			272	
Approach Delay, s/veh		21.3			19.9			49.0			28.5	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		41.0	6.2	38.9		41.0	9.2	35.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		37.0	6.0	65.0		37.0	10.0	61.0
Max Q Clear Time (g_c+I1), s		39.0	3.0	24.0		39.0	5.4	10.8
Green Ext Time (p_c), s		0.0	0.0	10.8		0.0	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1450	850	480	1470	110	510	630	310	170	1260	190
Future Volume (veh/h)	200	1450	850	480	1470	110	510	630	310	170	1260	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	208	1510	885	500	1531	115	531	656	323	177	1312	198
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1300	597	402	2151	667	430	1518	470	235	1229	380
Arrive On Green	0.08	0.38	0.38	0.12	0.42	0.42	0.13	0.30	0.30	0.07	0.24	0.24
Sat Flow, veh/h	3442	3390	1556	3442	5085	1578	3442	5085	1575	3442	5085	1574
Grp Volume(v), veh/h	208	1510	885	500	1531	115	531	656	323	177	1312	198
Grp Sat Flow(s),veh/h/ln	1721	1695	1556	1721	1695	1578	1721	1695	1575	1721	1695	1574
Q Serve(g_s), s	7.1	46.0	46.0	14.0	29.8	5.4	15.0	12.5	21.7	6.1	29.0	13.1
Cycle Q Clear(g_c), s	7.1	46.0	46.0	14.0	29.8	5.4	15.0	12.5	21.7	6.1	29.0	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1300	597	402	2151	667	430	1518	470	235	1229	380
V/C Ratio(X)	0.79	1.16	1.48	1.25	0.71	0.17	1.23	0.43	0.69	0.75	1.07	0.52
Avail Cap(c_a), veh/h	315	1300	597	402	2151	667	430	1518	470	315	1229	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	37.0	37.0	53.0	28.6	21.5	52.5	33.9	37.1	54.9	45.5	39.5
Incr Delay (d2), s/veh	10.4	81.7	226.4	129.7	1.1	0.1	124.2	0.9	7.9	6.9	45.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	36.2	57.2	13.9	14.1	2.4	14.5	6.0	10.5	3.1	18.8	6.2
LnGrp Delay(d), s/veh	64.9	118.7	263.4	182.7	29.7	21.7	176.7	34.8	45.1	61.8	91.3	44.5
LnGrp LOS	E	F	F	F	C	C	F	C	D	E	F	D
Approach Vol, veh/h		2603			2146			1510			1687	
Approach Delay, s/veh		163.6			64.9			86.9			82.7	
Approach LOS		F			E			F			F	

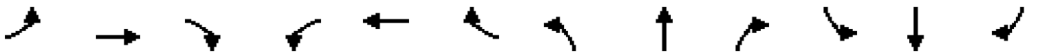
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	39.8	18.0	50.0	19.0	33.0	13.2	54.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	33.0	14.0	46.0	15.0	29.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	8.1	23.7	16.0	48.0	17.0	31.0	9.1	31.8
Green Ext Time (p_c), s	0.1	3.6	0.0	0.0	0.0	0.0	0.1	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	105.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	1200	250	450	1130	200	310	1310	190	440	1790	290
Future Volume (veh/h)	320	1200	250	450	1130	200	310	1310	190	440	1790	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	333	1250	260	469	1177	208	323	1365	198	458	1865	302
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	314	1131	235	434	1113	338	319	1685	512	511	1706	272
Arrive On Green	0.17	0.27	0.27	0.13	0.22	0.22	0.09	0.33	0.33	0.15	0.38	0.38
Sat Flow, veh/h	1792	4242	882	3476	5136	1559	3476	5136	1560	3476	4450	711
Grp Volume(v), veh/h	333	1009	501	469	1177	208	323	1365	198	458	1429	738
Grp Sat Flow(s),veh/h/ln	1792	1712	1700	1738	1712	1559	1738	1712	1560	1738	1712	1737
Q Serve(g_s), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	29.2	11.7	15.5	46.0	46.0
Cycle Q Clear(g_c), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	29.2	11.7	15.5	46.0	46.0
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	314	913	453	434	1113	338	319	1685	512	511	1312	666
V/C Ratio(X)	1.06	1.11	1.11	1.08	1.06	0.62	1.01	0.81	0.39	0.90	1.09	1.11
Avail Cap(c_a), veh/h	314	913	453	434	1113	338	319	1685	512	521	1312	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	44.0	44.0	52.5	47.0	42.5	54.5	36.9	31.0	50.3	37.0	37.0
Incr Delay (d2), s/veh	68.2	62.9	74.0	66.2	43.6	3.3	54.0	4.3	2.2	17.9	52.7	68.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	23.1	24.3	11.2	16.8	6.6	7.7	14.5	5.4	8.7	31.3	34.7
LnGrp Delay(d), s/veh	117.7	106.9	118.0	118.7	90.6	45.8	108.5	41.2	33.2	68.2	89.7	105.6
LnGrp LOS	F	F	F	F	F	D	F	D	C	E	F	F
Approach Vol, veh/h		1843			1854			1886			2625	
Approach Delay, s/veh		111.8			92.7			51.9			90.4	
Approach LOS		F			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	43.4	19.0	36.0	15.0	50.0	25.0	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	39.0	15.0	32.0	11.0	46.0	21.0	26.0
Max Q Clear Time (g_c+I1), s	17.5	31.2	17.0	34.0	13.0	48.0	23.0	28.0
Green Ext Time (p_c), s	0.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	86.9
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	90	30	740	150	210	40	1070	510	90	1710	90
Future Volume (vph)	50	90	30	740	150	210	40	1070	510	90	1710	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1881	1599	1698	1730	1564	1787	5136	1571	1787	5089	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1881	1599	1698	1730	1564	1787	5136	1571	1787	5089	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	52	94	31	771	156	219	42	1115	531	94	1781	94
RTOR Reduction (vph)	0	0	28	0	0	151	0	0	322	0	4	0
Lane Group Flow (vph)	52	94	3	463	464	68	42	1115	209	94	1871	0
Confl. Peds. (#/hr)	3					3	2		2	2		2
Confl. Bikes (#/hr)						5			3			4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	10.8	10.8	10.8	30.3	30.3	30.3	5.3	43.2	43.2	9.4	47.3	
Effective Green, g (s)	10.8	10.8	10.8	30.3	30.3	30.3	5.3	43.2	43.2	9.4	47.3	
Actuated g/C Ratio	0.10	0.10	0.10	0.28	0.28	0.28	0.05	0.39	0.39	0.09	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	175	185	157	469	477	431	86	2022	618	153	2194	
v/s Ratio Prot	0.03	c0.05		c0.27	0.27		0.02	0.22		c0.05	c0.37	
v/s Ratio Perm			0.00			0.04			0.13			
v/c Ratio	0.30	0.51	0.02	0.99	0.97	0.16	0.49	0.55	0.34	0.61	0.85	
Uniform Delay, d1	45.9	46.9	44.7	39.5	39.3	30.1	50.9	25.7	23.3	48.4	28.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	2.2	0.0	37.8	34.0	0.2	4.3	1.1	1.5	7.1	3.4	
Delay (s)	46.9	49.1	44.7	77.4	73.3	30.2	55.2	26.8	24.7	55.5	31.5	
Level of Service	D	D	D	E	E	C	E	C	C	E	C	
Approach Delay (s/veh)		47.7			66.7			26.9			32.6	
Approach LOS		D			E			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.86		
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	200	80	70	160	450	130	960	100	840	1610	70
Future Volume (veh/h)	70	200	80	70	160	450	130	960	100	840	1610	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	78	222	89	78	178	500	144	1067	111	933	1789	78
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	138	350	283	143	350	753	171	1369	142	1017	2205	953
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.42	0.42	0.29	0.62	0.62
Sat Flow, veh/h	762	1881	1523	1070	1881	1532	1792	3260	339	3476	3574	1544
Grp Volume(v), veh/h	78	222	89	78	178	500	144	585	593	933	1789	78
Grp Sat Flow(s),veh/h/ln	762	1881	1523	1070	1881	1532	1792	1787	1811	1738	1787	1544
Q Serve(g_s), s	11.9	12.9	6.0	8.6	10.1	22.0	9.4	33.3	33.4	30.7	45.4	2.4
Cycle Q Clear(g_c), s	22.0	12.9	6.0	21.5	10.1	22.0	9.4	33.3	33.4	30.7	45.4	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.19	1.00		1.00
Lane Grp Cap(c), veh/h	138	350	283	143	350	753	171	751	761	1017	2205	953
V/C Ratio(X)	0.57	0.63	0.31	0.54	0.51	0.66	0.84	0.78	0.78	0.92	0.81	0.08
Avail Cap(c_a), veh/h	138	350	283	143	350	753	197	751	761	1116	2205	953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	44.4	41.6	54.4	43.3	23.8	52.6	29.6	29.6	40.5	17.4	9.1
Incr Delay (d2), s/veh	5.3	3.7	0.6	4.2	1.2	2.2	24.1	7.8	7.8	11.2	3.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.1	2.6	2.7	5.4	12.9	5.8	18.0	18.3	16.4	23.1	1.1
LnGrp Delay(d), s/veh	58.6	48.2	42.3	58.6	44.5	26.1	76.7	37.4	37.4	51.7	20.7	9.3
LnGrp LOS	E	D	D	E	D	C	E	D	D	D	C	A
Approach Vol, veh/h		389			756			1322			2800	
Approach Delay, s/veh		48.9			33.8			41.7			30.7	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.6	53.7		26.0	15.3	77.0		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	38.0	48.0		22.0	13.0	73.0		22.0
Max Q Clear Time (g_c+I1), s	32.7	35.4		24.0	11.4	47.4		24.0
Green Ext Time (p_c), s	1.9	6.1		0.0	0.1	16.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	970	70	270	700	220	40	870	430	330	1460	90
Future Volume (veh/h)	150	970	70	270	700	220	40	870	430	330	1460	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	158	1021	74	284	737	232	42	916	453	347	1537	95
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	262	897	65	239	1025	431	117	841	409	299	1617	99
Arrive On Green	0.08	0.27	0.27	0.10	0.29	0.29	0.03	0.37	0.37	0.13	0.47	0.47
Sat Flow, veh/h	1792	3363	244	1792	3574	1502	1792	2294	1114	1792	3405	209
Grp Volume(v), veh/h	158	542	553	284	737	232	42	710	659	347	802	830
Grp Sat Flow(s),veh/h/ln	1792	1787	1819	1792	1787	1502	1792	1787	1621	1792	1787	1827
Q Serve(g_s), s	7.6	32.0	32.0	12.0	22.2	15.6	1.8	44.0	44.0	16.0	51.3	52.5
Cycle Q Clear(g_c), s	7.6	32.0	32.0	12.0	22.2	15.6	1.8	44.0	44.0	16.0	51.3	52.5
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.69	1.00		0.11
Lane Grp Cap(c), veh/h	262	477	485	239	1025	431	117	655	594	299	849	867
V/C Ratio(X)	0.60	1.14	1.14	1.19	0.72	0.54	0.36	1.08	1.11	1.16	0.94	0.96
Avail Cap(c_a), veh/h	283	477	485	239	1025	431	131	655	594	299	849	867
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.3	44.0	44.0	33.5	38.4	36.1	30.2	38.0	38.0	38.8	30.0	30.3
Incr Delay (d2), s/veh	3.1	85.0	84.9	118.4	2.5	1.3	1.9	59.9	70.5	103.0	20.0	21.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	27.0	27.5	15.8	11.3	6.6	0.9	32.6	31.3	18.4	29.9	31.5
LnGrp Delay(d), s/veh	33.5	129.0	128.9	151.9	40.9	37.4	32.1	97.9	108.5	141.7	50.0	52.1
LnGrp LOS	C	F	F	F	D	D	C	F	F	F	D	D
Approach Vol, veh/h		1253			1253			1411			1979	
Approach Delay, s/veh		116.9			65.4			100.9			67.0	
Approach LOS		F			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	48.0	16.0	36.0	7.0	61.0	13.6	38.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	44.0	12.0	32.0	4.0	56.0	11.0	33.0
Max Q Clear Time (g_c+I1), s	18.0	46.0	14.0	34.0	3.8	54.5	9.6	24.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.2	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	85.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1100	100	310	440	60	60	880	540	200	1330	50
Future Volume (veh/h)	150	1100	100	310	440	60	60	880	540	200	1330	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	163	1196	109	337	478	65	65	957	587	217	1446	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	427	1102	480	299	1311	573	120	1221	525	243	1374	51
Arrive On Green	0.08	0.31	0.31	0.13	0.37	0.37	0.03	0.34	0.34	0.08	0.39	0.39
Sat Flow, veh/h	1792	3574	1557	1792	3574	1562	1792	3574	1535	1792	3509	131
Grp Volume(v), veh/h	163	1196	109	337	478	65	65	957	587	217	735	765
Grp Sat Flow(s),veh/h/ln	1792	1787	1557	1792	1787	1562	1792	1787	1535	1792	1787	1853
Q Serve(g_s), s	7.4	37.0	6.2	16.0	11.7	3.3	2.8	28.9	41.0	9.2	47.0	47.0
Cycle Q Clear(g_c), s	7.4	37.0	6.2	16.0	11.7	3.3	2.8	28.9	41.0	9.2	47.0	47.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	427	1102	480	299	1311	573	120	1221	525	243	700	726
V/C Ratio(X)	0.38	1.09	0.23	1.13	0.36	0.11	0.54	0.78	1.12	0.89	1.05	1.05
Avail Cap(c_a), veh/h	427	1102	480	299	1311	573	120	1221	525	243	700	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	41.5	30.9	37.3	27.8	25.1	31.3	35.5	39.5	28.0	36.5	36.5
Incr Delay (d2), s/veh	0.6	53.3	0.2	91.0	0.2	0.1	4.9	5.1	76.2	30.9	47.8	48.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	26.4	2.7	17.4	5.8	1.4	1.5	15.1	28.4	6.6	32.4	33.8
LnGrp Delay(d), s/veh	25.8	94.8	31.1	128.3	28.0	25.2	36.3	40.6	115.7	59.0	84.3	85.2
LnGrp LOS	C	F	C	F	C	C	D	D	F	E	F	F
Approach Vol, veh/h		1468			880			1609			1717	
Approach Delay, s/veh		82.4			66.2			67.8			81.5	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	45.0	20.0	41.0	8.0	51.0	13.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	16.0	37.0	4.0	47.0	9.0	44.0
Max Q Clear Time (g_c+I1), s	11.2	43.0	18.0	39.0	4.8	49.0	9.4	13.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	240	110	50	300	130	90	1050	130	170	1550	90
Future Volume (veh/h)	110	240	110	50	300	130	90	1050	130	170	1550	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	118	258	118	54	323	140	97	1129	140	183	1667	97
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	39	36	600	34	153	600	133	1627	722	274	1757	764
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.03	0.46	0.46	0.07	0.49	0.49
Sat Flow, veh/h	0	95	1599	0	407	1599	1792	3574	1587	1792	3574	1553
Grp Volume(v), veh/h	376	0	118	377	0	140	97	1129	140	183	1667	97
Grp Sat Flow(s),veh/h/ln	95	0	1599	407	0	1599	1792	1787	1587	1792	1787	1553
Q Serve(g_s), s	0.0	0.0	6.0	0.0	0.0	7.2	3.5	30.2	6.3	6.3	53.3	4.1
Cycle Q Clear(g_c), s	45.0	0.0	6.0	45.0	0.0	7.2	3.5	30.2	6.3	6.3	53.3	4.1
Prop In Lane	0.31		1.00	0.14		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	600	187	0	600	133	1627	722	274	1757	764
V/C Ratio(X)	5.01	0.00	0.20	2.02	0.00	0.23	0.73	0.69	0.19	0.67	0.95	0.13
Avail Cap(c_a), veh/h	75	0	600	187	0	600	133	1627	722	314	1757	764
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	0.0	25.3	40.5	0.0	25.7	28.6	26.0	19.5	21.4	29.1	16.5
Incr Delay (d2), s/veh	1834.5	0.0	0.2	476.2	0.0	0.2	18.5	2.5	0.6	4.4	12.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	40.7	0.0	2.6	29.8	0.0	3.2	2.4	15.5	2.9	3.4	29.2	1.8
LnGrp Delay(d), s/veh	1873.7	0.0	25.5	516.7	0.0	25.9	47.2	28.5	20.1	25.9	41.4	16.9
LnGrp LOS	F		C	F		C	D	C	C	C	D	B
Approach Vol, veh/h		494			517			1366			1947	
Approach Delay, s/veh		1432.2			383.8			29.0			38.7	
Approach LOS		F			F			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	58.6		49.0	8.0	63.0		49.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	52.0		45.0	4.0	59.0		45.0
Max Q Clear Time (g_c+I1), s	8.3	32.2		47.0	5.5	55.3		47.0
Green Ext Time (p_c), s	0.1	8.6		0.0	0.0	3.1		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		236.1
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	40	0	0	60	0	1240	10	0	1680	10
Future Vol, veh/h	0	0	40	0	0	60	0	1240	10	0	1680	10
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	5	5	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	43	0	0	65	0	1333	11	0	1806	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	903	-	-	667	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	282	0	0	404	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	282	-	-	404	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

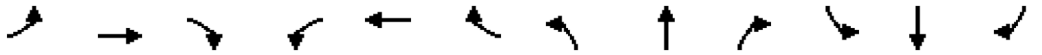
Approach	EB	WB	NB	SB
HCM Control Delay, s/v	20.1	15.6	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	282	404	-
HCM Lane V/C Ratio	-	0.153	0.16	-
HCM Control Delay (s/veh)	-	20.1	15.6	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.5	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1140	300	130	420	130	100	1080	210	230	1690	120
Future Volume (veh/h)	240	1140	300	130	420	130	100	1080	210	230	1690	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1226	323	140	452	140	108	1161	226	247	1817	129
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	320	1417	423	195	858	368	161	1585	689	306	2371	168
Arrive On Green	0.09	0.28	0.28	0.06	0.24	0.24	0.05	0.44	0.44	0.09	0.49	0.49
Sat Flow, veh/h	3476	5136	1534	3476	3574	1531	3476	3574	1553	3476	4886	346
Grp Volume(v), veh/h	258	1226	323	140	452	140	108	1161	226	247	1272	674
Grp Sat Flow(s),veh/h/ln	1738	1712	1534	1738	1787	1531	1738	1787	1553	1738	1712	1808
Q Serve(g_s), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	31.4	11.1	8.2	35.7	36.0
Cycle Q Clear(g_c), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	31.4	11.1	8.2	35.7	36.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	320	1417	423	195	858	368	161	1585	689	306	1662	877
V/C Ratio(X)	0.81	0.86	0.76	0.72	0.53	0.38	0.67	0.73	0.33	0.81	0.77	0.77
Avail Cap(c_a), veh/h	414	1487	444	207	858	368	178	1585	689	355	1662	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	40.4	39.0	54.5	38.8	37.3	55.1	26.9	21.3	52.6	24.7	24.8
Incr Delay (d2), s/veh	8.6	5.4	7.3	10.6	0.6	0.6	8.3	3.0	1.3	11.4	3.4	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	13.3	10.5	2.5	6.5	3.8	1.9	16.1	5.0	4.4	17.6	19.4
LnGrp Delay(d), s/veh	60.9	45.9	46.3	65.1	39.4	38.0	63.5	30.0	22.5	64.0	28.2	31.2
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1807			732			1495			2193	
Approach Delay, s/veh		48.1			44.1			31.3			33.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	56.1	10.6	36.4	9.4	61.0	14.8	32.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	51.0	7.0	34.0	6.0	57.0	14.0	27.0
Max Q Clear Time (g_c+I1), s	10.2	33.4	6.7	28.7	5.6	38.0	10.5	14.9
Green Ext Time (p_c), s	0.1	8.4	0.0	3.8	0.0	12.8	0.3	2.6

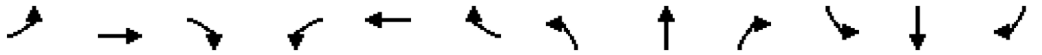
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	160	400	130	150	1280	0	0	1560	790
Future Volume (veh/h)	0	0	0	160	400	130	150	1280	0	0	1560	790
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				168	421	137	158	1347	0	0	1642	832
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				262	523	234	217	3984	0	0	2326	1068
Arrive On Green				0.15	0.15	0.15	0.06	0.78	0.00	0.00	0.69	0.69
Sat Flow, veh/h				1774	3539	1583	3442	5253	0	0	3558	1557
Grp Volume(v), veh/h				168	421	137	158	1347	0	0	1642	832
Grp Sat Flow(s),veh/h/ln				1774	1770	1583	1721	1695	0	0	1695	1557
Q Serve(g_s), s				10.4	13.4	9.4	5.2	9.1	0.0	0.0	34.3	41.9
Cycle Q Clear(g_c), s				10.4	13.4	9.4	5.2	9.1	0.0	0.0	34.3	41.9
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				262	523	234	217	3984	0	0	2326	1068
V/C Ratio(X)				0.64	0.81	0.59	0.73	0.34	0.00	0.00	0.71	0.78
Avail Cap(c_a), veh/h				321	640	286	296	3984	0	0	2326	1068
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.6	47.9	46.2	53.5	3.7	0.0	0.0	11.1	12.3
Incr Delay (d2), s/veh				3.1	6.2	2.3	5.8	0.2	0.0	0.0	1.8	5.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	7.0	4.3	2.7	4.2	0.0	0.0	16.3	19.5
LnGrp Delay(d), s/veh				49.7	54.1	48.5	59.2	3.9	0.0	0.0	12.9	17.9
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					726			1505			2474	
Approach Delay, s/veh					52.0			9.7			14.6	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		95.0			11.3	83.7		21.2
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		91.0			10.0	77.0		21.0
Max Q Clear Time (g_c+I1), s		11.1			7.2	43.9		15.4
Green Ext Time (p_c), s		13.4			0.1	25.1		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	630	280	130	0	0	0	0	850	280	370	1300	0
Future Volume (veh/h)	630	280	130	0	0	0	0	850	280	370	1300	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	700	311	144				0	944	311	411	1444	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	875	473	402				0	2465	752	503	3404	0
Arrive On Green	0.25	0.25	0.25				0.00	0.48	0.48	0.15	0.67	0.00
Sat Flow, veh/h	3442	1863	1583				0	5253	1550	3442	5253	0
Grp Volume(v), veh/h	700	311	144				0	944	311	411	1444	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583				0	1695	1550	1721	1695	0
Q Serve(g_s), s	19.9	15.6	7.8				0.0	12.3	13.5	12.1	13.7	0.0
Cycle Q Clear(g_c), s	19.9	15.6	7.8				0.0	12.3	13.5	12.1	13.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	875	473	402				0	2465	752	503	3404	0
V/C Ratio(X)	0.80	0.66	0.36				0.00	0.38	0.41	0.82	0.42	0.00
Avail Cap(c_a), veh/h	1382	748	636				0	2465	752	889	3404	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.5	34.9	32.0				0.0	17.0	17.4	43.3	8.0	0.0
Incr Delay (d2), s/veh	1.8	1.6	0.5				0.0	0.5	1.7	3.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	8.2	3.5				0.0	5.8	6.1	6.0	6.4	0.0
LnGrp Delay(d), s/veh	38.3	36.5	32.5				0.0	17.5	19.0	46.6	8.4	0.0
LnGrp LOS	D	D	C					B	B	D	A	
Approach Vol, veh/h		1155						1255			1855	
Approach Delay, s/veh		37.1						17.9			16.8	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	19.3	54.7		30.6		74.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	27.0	39.0		42.0		70.0		
Max Q Clear Time (g_c+I1), s	14.1	15.5		21.9		15.7		
Green Ext Time (p_c), s	1.2	8.2		4.7		14.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1750	230	470	1100	130	160	490	250	280	1220	380
Future Volume (veh/h)	240	1750	230	470	1100	130	160	490	250	280	1220	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	270	1966	258	528	1236	146	180	551	281	315	1371	427
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
Arrive On Green	0.10	0.32	0.32	0.13	0.35	0.35	0.08	0.32	0.32	0.11	0.34	0.34
Sat Flow, veh/h	3476	5136	1591	3476	5136	1592	1792	3574	1565	3476	3574	1564
Grp Volume(v), veh/h	270	1966	258	528	1236	146	180	551	281	315	1371	427
Grp Sat Flow(s),veh/h/ln	1738	1712	1591	1738	1712	1592	1792	1787	1565	1738	1787	1564
Q Serve(g_s), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	15.0	14.7	10.7	41.0	25.3
Cycle Q Clear(g_c), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	15.0	14.7	10.7	41.0	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
V/C Ratio(X)	0.81	1.21	0.51	1.22	0.70	0.27	1.21	0.49	0.40	0.83	1.12	0.62
Avail Cap(c_a), veh/h	492	1626	504	434	1773	550	149	1129	694	492	1221	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	41.0	33.4	52.5	33.9	28.3	55.0	33.2	22.9	52.4	39.5	26.1
Incr Delay (d2), s/veh	6.1	100.0	0.9	116.4	1.2	0.3	139.4	1.5	1.8	9.1	66.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	33.0	7.1	14.2	12.0	3.5	10.7	7.6	6.7	5.6	31.4	11.6
LnGrp Delay(d), s/veh	59.2	141.0	34.3	168.9	35.1	28.6	194.4	34.7	24.6	61.4	105.9	30.2
LnGrp LOS	E	F	C	F	D	C	F	C	C	E	F	C
Approach Vol, veh/h		2494			1910			1012			2113	
Approach Delay, s/veh		121.1			71.6			60.3			84.0	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	41.9	19.0	42.0	14.0	45.0	15.6	45.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	34.0	15.0	38.0	10.0	41.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	12.7	17.0	17.0	40.0	12.0	43.0	11.1	26.9
Green Ext Time (p_c), s	0.4	4.0	0.0	0.0	0.0	0.0	0.4	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	90.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1140	180	360	740	150	110	520	280	70	590	90
Future Volume (veh/h)	280	1140	180	360	740	150	110	520	280	70	590	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.86	1.00		0.80	0.99		0.79
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	295	1200	189	379	779	158	116	547	295	74	621	95
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	329	1330	207	434	1358	521	191	949	340	209	743	113
Arrive On Green	0.18	0.44	0.44	0.12	0.38	0.38	0.05	0.27	0.27	0.03	0.25	0.25
Sat Flow, veh/h	1792	3033	473	3476	3574	1372	1792	3574	1282	1792	2991	455
Grp Volume(v), veh/h	295	703	686	379	779	158	116	547	295	74	370	346
Grp Sat Flow(s),veh/h/ln	1792	1787	1719	1738	1787	1372	1792	1787	1282	1792	1787	1659
Q Serve(g_s), s	18.8	42.5	43.6	12.5	20.2	9.4	5.7	15.5	25.7	3.6	22.9	23.2
Cycle Q Clear(g_c), s	18.8	42.5	43.6	12.5	20.2	9.4	5.7	15.5	25.7	3.6	22.9	23.2
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	329	784	754	434	1358	521	191	949	340	209	444	412
V/C Ratio(X)	0.90	0.90	0.91	0.87	0.57	0.30	0.61	0.58	0.87	0.35	0.83	0.84
Avail Cap(c_a), veh/h	475	826	795	446	1358	521	191	949	340	209	444	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	30.3	30.7	50.2	28.7	25.4	33.4	37.2	40.9	32.2	41.6	41.7
Incr Delay (d2), s/veh	14.7	12.1	14.2	16.8	0.6	0.3	5.5	2.6	24.5	1.0	16.6	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	23.5	23.6	7.0	10.1	3.6	3.0	8.0	11.4	1.8	13.3	12.7
LnGrp Delay(d), s/veh	61.3	42.4	44.9	67.0	29.3	25.7	38.8	39.8	65.5	33.3	58.2	60.0
LnGrp LOS	E	D	D	E	C	C	D	D	E	C	E	E
Approach Vol, veh/h		1684			1316			958			790	
Approach Delay, s/veh		46.7			39.7			47.6			56.7	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	35.0	18.6	55.2	10.0	33.0	25.4	48.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	31.0	15.0	54.0	6.0	29.0	31.0	38.0
Max Q Clear Time (g_c+I1), s	5.6	27.7	14.5	45.6	7.7	25.2	20.8	22.2
Green Ext Time (p_c), s	0.0	1.6	0.1	5.6	0.0	1.6	0.6	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1190	430	190	500	80	320	910	190	70	1090	120
Future Volume (veh/h)	130	1190	430	190	500	80	320	910	190	70	1090	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	138	1266	457	202	532	85	340	968	202	74	1160	128
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	166	1162	497	203	1039	452	299	1587	706	245	1134	125
Arrive On Green	0.09	0.32	0.32	0.06	0.29	0.29	0.13	0.44	0.44	0.04	0.35	0.35
Sat Flow, veh/h	1792	3574	1530	3476	3574	1555	1792	3574	1590	1792	3240	357
Grp Volume(v), veh/h	138	1266	457	202	532	85	340	968	202	74	639	649
Grp Sat Flow(s),veh/h/ln	1792	1787	1530	1738	1787	1555	1792	1787	1590	1792	1787	1810
Q Serve(g_s), s	9.1	39.0	34.5	7.0	14.9	4.9	16.0	24.8	9.7	3.2	42.0	42.0
Cycle Q Clear(g_c), s	9.1	39.0	34.5	7.0	14.9	4.9	16.0	24.8	9.7	3.2	42.0	42.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	166	1162	497	203	1039	452	299	1587	706	245	625	633
V/C Ratio(X)	0.83	1.09	0.92	1.00	0.51	0.19	1.14	0.61	0.29	0.30	1.02	1.03
Avail Cap(c_a), veh/h	254	1162	497	203	1039	452	299	1587	706	249	625	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	40.5	39.0	56.5	35.5	31.9	38.3	25.4	21.2	24.2	39.0	39.0
Incr Delay (d2), s/veh	12.9	54.4	22.3	62.1	0.4	0.2	94.5	1.8	1.0	0.7	41.4	42.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	28.0	17.7	5.1	7.4	2.1	17.7	12.6	4.4	1.6	27.9	28.4
LnGrp Delay(d), s/veh	66.4	94.9	61.3	118.6	35.9	32.1	132.9	27.2	22.3	24.9	80.4	81.3
LnGrp LOS	E	F	E	F	D	C	F	C	C	C	F	F
Approach Vol, veh/h		1861			819			1510			1362	
Approach Delay, s/veh		84.5			55.9			50.3			77.8	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	57.3	11.0	43.0	20.0	46.0	15.1	38.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	7.0	39.0	16.0	42.0	17.0	29.0
Max Q Clear Time (g_c+I1), s	5.2	26.8	9.0	41.0	18.0	44.0	11.1	16.9
Green Ext Time (p_c), s	0.0	8.0	0.0	0.0	0.0	0.0	0.2	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	69.4
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1341.2

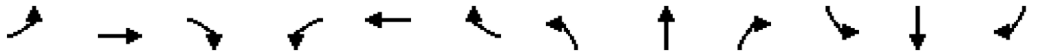
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	100	0	280	10	0	10	290	1580	140	10	1500	130
Future Vol, veh/h	100	0	280	10	0	10	290	1580	140	10	1500	130
Conflicting Peds, #/hr	0	0	1	1	0	0	11	0	29	29	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	150	-	50	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	105	0	295	11	0	11	305	1663	147	11	1579	137

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3123	4130	870	3115	4051	861	1727	0	0	1839	0	0
Stage 1	1681	1681	-	2302	2302	-	-	-	-	-	-	-
Stage 2	1442	2449	-	813	1749	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	6.52	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	4.01	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 5	2	297	~ 5	3	301	366	-	-	331	-	-
Stage 1	~ 99	151	-	40	73	-	-	-	-	-	-	-
Stage 2	140	61	-	341	140	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 1	0	~ 294	-	0	294	363	-	-	323	-	-
Mov Cap-2 Maneuver	~ 1	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 16	145	-	~ 6	11	-	-	-	-	-	-	-
Stage 2	~ 22	10	-	-	134	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	$ 4255.5		7.2	0.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	363	-	-	1	294	-	294	323	-	-
HCM Lane V/C Ratio	0.841	-	-	105.263	1.003	-	0.036	0.033	-	-
HCM Control Delay (s/veh)	50.1	-	-	$ 53913.1	92.1	-	17.7	16.5	-	-
HCM Lane LOS	F	-	-	F	F	-	C	C	-	-
HCM 95th %tile Q(veh)	7.7	-	-	15.6	10.6	-	0.1	0.1	-	-

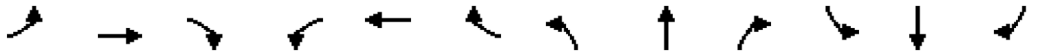
Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1090	200	90	430	270	110	1190	120	360	1250	100
Future Volume (veh/h)	260	1090	200	90	430	270	110	1190	120	360	1250	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	271	1135	208	94	448	281	115	1240	125	375	1302	104
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	284	1340	245	144	399	248	219	1251	546	360	1645	722
Arrive On Green	0.16	0.31	0.31	0.04	0.19	0.19	0.06	0.35	0.35	0.17	0.46	0.46
Sat Flow, veh/h	1792	4342	795	3476	2080	1294	1792	3574	1561	1792	3574	1568
Grp Volume(v), veh/h	271	895	448	94	384	345	115	1240	125	375	1302	104
Grp Sat Flow(s),veh/h/ln	1792	1712	1714	1738	1787	1587	1792	1787	1561	1792	1787	1568
Q Serve(g_s), s	18.0	29.4	29.4	3.2	23.0	23.0	4.9	41.4	6.8	20.0	37.1	4.6
Cycle Q Clear(g_c), s	18.0	29.4	29.4	3.2	23.0	23.0	4.9	41.4	6.8	20.0	37.1	4.6
Prop In Lane	1.00		0.46	1.00		0.82	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	1056	529	144	343	304	219	1251	546	360	1645	722
V/C Ratio(X)	0.96	0.85	0.85	0.65	1.12	1.13	0.52	0.99	0.23	1.04	0.79	0.14
Avail Cap(c_a), veh/h	284	1056	529	145	343	304	238	1251	546	360	1645	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	38.8	38.8	56.7	48.5	48.5	26.0	38.8	27.6	38.7	27.5	18.7
Incr Delay (d2), s/veh	41.3	6.5	12.2	9.9	85.9	92.6	1.9	23.4	1.0	58.2	4.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	14.9	15.7	1.7	19.5	17.9	2.5	24.4	3.1	17.7	19.2	2.1
LnGrp Delay(d), s/veh	91.4	45.4	51.0	66.6	134.4	141.1	27.9	62.3	28.5	96.9	31.5	19.1
LnGrp LOS	F	D	D	E	F	F	C	E	C	F	C	B
Approach Vol, veh/h		1614			823			1480			1781	
Approach Delay, s/veh		54.7			129.4			56.7			44.5	
Approach LOS		D			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	46.0	9.0	41.0	10.8	59.2	23.0	27.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	42.0	5.0	37.0	8.0	54.0	19.0	23.0
Max Q Clear Time (g_c+I1), s	22.0	43.4	5.2	31.4	6.9	39.1	20.0	25.0
Green Ext Time (p_c), s	0.0	0.0	0.0	3.7	0.0	8.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.8
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	250	300	690	60	780	0	0	1430	340
Future Volume (veh/h)	0	0	0	250	300	690	60	780	0	0	1430	340
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				266	319	734	64	830	0	0	1521	362
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				693	907	712	74	2458	0	0	1672	395
Arrive On Green				0.45	0.45	0.45	0.04	0.48	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1540	2015	1583	1774	5253	0	0	4263	968
Grp Volume(v), veh/h				308	277	734	64	830	0	0	1257	626
Grp Sat Flow(s),veh/h/ln				1786	1770	1583	1774	1695	0	0	1695	1673
Q Serve(g_s), s				13.8	12.2	54.0	4.3	12.1	0.0	0.0	41.8	42.4
Cycle Q Clear(g_c), s				13.8	12.2	54.0	4.3	12.1	0.0	0.0	41.8	42.4
Prop In Lane				0.86		1.00	1.00		0.00	0.00		0.58
Lane Grp Cap(c), veh/h				804	796	712	74	2458	0	0	1384	683
V/C Ratio(X)				0.38	0.35	1.03	0.87	0.34	0.00	0.00	0.91	0.92
Avail Cap(c_a), veh/h				804	796	712	74	2458	0	0	1384	683
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.9	21.5	33.0	57.2	19.1	0.0	0.0	33.4	33.6
Incr Delay (d2), s/veh				0.3	0.3	41.7	61.5	0.4	0.0	0.0	10.3	19.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.8	6.1	31.8	3.4	5.7	0.0	0.0	21.5	23.1
LnGrp Delay(d), s/veh				22.2	21.8	74.7	118.6	19.5	0.0	0.0	43.7	52.6
LnGrp LOS				C	C	F	F	B			D	D
Approach Vol, veh/h					1319			894			1883	
Approach Delay, s/veh					51.3			26.6			46.7	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		62.0			9.0	53.0		58.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		58.0			5.0	49.0		54.0
Max Q Clear Time (g_c+I1), s		14.1			6.3	44.4		56.0
Green Ext Time (p_c), s		6.4			0.0	3.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		43.8
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	560	150	0	0	0	0	790	740	680	1050	0
Future Volume (veh/h)	210	560	150	0	0	0	0	790	740	680	1050	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	233	622	167				0	878	822	756	1167	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	247	703	419				0	1353	620	811	2365	0
Arrive On Green	0.26	0.26	0.26				0.00	0.40	0.40	0.24	0.67	0.00
Sat Flow, veh/h	934	2652	1583				0	3558	1554	3442	3632	0
Grp Volume(v), veh/h	453	402	167				0	878	822	756	1167	0
Grp Sat Flow(s),veh/h/ln	1816	1770	1583				0	1695	1554	1721	1770	0
Q Serve(g_s), s	29.3	25.9	10.4				0.0	25.1	47.8	25.8	19.5	0.0
Cycle Q Clear(g_c), s	29.3	25.9	10.4				0.0	25.1	47.8	25.8	19.5	0.0
Prop In Lane	0.51		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	481	469	419				0	1353	620	811	2365	0
V/C Ratio(X)	0.94	0.86	0.40				0.00	0.65	1.32	0.93	0.49	0.00
Avail Cap(c_a), veh/h	485	473	423				0	1353	620	834	2365	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.1	41.8	36.2				0.0	29.2	36.0	44.8	9.8	0.0
Incr Delay (d2), s/veh	26.8	14.4	0.6				0.0	2.4	157.2	16.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	14.5	4.6				0.0	12.2	47.4	14.2	9.6	0.0
LnGrp Delay(d), s/veh	69.9	56.2	36.8				0.0	31.6	193.2	61.6	10.6	0.0
LnGrp LOS	E	E	D					C	F	E	B	
Approach Vol, veh/h		1022						1700			1923	
Approach Delay, s/veh		59.1						109.7			30.7	
Approach LOS		E						F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	32.2	51.8		35.7		84.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	29.0	47.0		32.0		80.0		
Max Q Clear Time (g_c+I1), s	27.8	49.8		31.3		21.5		
Green Ext Time (p_c), s	0.4	0.0		0.5		10.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	65.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1380	70	180	1640	60	60	140	140	150	270	70
Future Volume (veh/h)	50	1380	70	180	1640	60	60	140	140	150	270	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.93	0.92		0.79	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	60	1643	83	214	1952	71	71	167	167	179	321	83
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	135	1914	96	245	2120	76	199	289	194	270	531	133
Arrive On Green	0.03	0.55	0.55	0.08	0.60	0.60	0.03	0.15	0.15	0.08	0.20	0.20
Sat Flow, veh/h	1792	3455	173	1792	3509	127	1792	1881	1261	1792	2707	676
Grp Volume(v), veh/h	60	845	881	214	986	1037	71	167	167	179	208	196
Grp Sat Flow(s),veh/h/ln	1792	1787	1841	1792	1787	1848	1792	1881	1261	1792	1787	1596
Q Serve(g_s), s	1.7	46.9	48.0	7.0	57.1	59.4	3.9	9.7	15.2	9.0	12.4	13.2
Cycle Q Clear(g_c), s	1.7	46.9	48.0	7.0	57.1	59.4	3.9	9.7	15.2	9.0	12.4	13.2
Prop In Lane	1.00		0.09	1.00		0.07	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	135	990	1020	245	1080	1117	199	289	194	270	350	313
V/C Ratio(X)	0.45	0.85	0.86	0.87	0.91	0.93	0.36	0.58	0.86	0.66	0.59	0.63
Avail Cap(c_a), veh/h	143	990	1020	331	1112	1150	199	289	194	270	350	313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	22.1	22.4	30.1	20.5	20.9	40.6	46.1	48.4	38.5	42.9	43.2
Incr Delay (d2), s/veh	2.3	7.3	7.8	17.5	11.2	12.8	1.1	8.2	36.7	5.9	7.2	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	25.0	26.5	8.0	31.3	33.9	2.0	5.7	7.3	5.2	6.8	6.6
LnGrp Delay(d), s/veh	28.9	29.4	30.2	47.5	31.7	33.7	41.7	54.3	85.2	44.5	50.1	52.3
LnGrp LOS	C	C	C	D	C	C	D	D	F	D	D	D
Approach Vol, veh/h		1786			2237			405			583	
Approach Delay, s/veh		29.8			34.1			64.8			49.1	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	22.0	13.3	69.0	8.0	27.0	7.4	74.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	18.0	15.0	62.0	4.0	23.0	4.0	73.0
Max Q Clear Time (g_c+I1), s	11.0	17.2	9.0	50.0	5.9	15.2	3.7	61.4
Green Ext Time (p_c), s	0.0	0.1	0.3	8.5	0.0	1.4	0.0	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Future Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	1563	46	34	724	46	57	126	46	184	138	230
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	1858	55	160	1646	105	257	484	168	422	449	389
Arrive On Green	0.07	0.53	0.53	0.02	0.49	0.49	0.04	0.19	0.19	0.10	0.25	0.25
Sat Flow, veh/h	1774	3508	103	1774	3378	215	1774	2551	885	1774	1770	1534
Grp Volume(v), veh/h	172	786	823	34	379	391	57	85	87	184	138	230
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1823	1774	1770	1666	1774	1770	1534
Q Serve(g_s), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Cycle Q Clear(g_c), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Prop In Lane	1.00		0.06	1.00		0.12	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	430	937	975	160	862	888	257	336	316	422	449	389
V/C Ratio(X)	0.40	0.84	0.84	0.21	0.44	0.44	0.22	0.25	0.27	0.44	0.31	0.59
Avail Cap(c_a), veh/h	503	1175	1222	204	1071	1103	279	336	316	469	449	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	20.4	20.5	19.0	17.1	17.1	31.9	35.3	35.5	27.5	30.9	33.6
Incr Delay (d2), s/veh	0.6	4.5	4.5	0.7	0.4	0.3	0.4	1.8	2.1	0.7	1.8	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	19.8	20.9	0.5	7.0	7.3	1.3	2.2	2.3	4.1	3.4	6.4
LnGrp Delay(d), s/veh	12.7	25.0	25.0	19.7	17.5	17.5	32.4	37.1	37.6	28.2	32.7	40.0
LnGrp LOS	B	C	C	B	B	B	C	D	D	C	C	D
Approach Vol, veh/h		1781			804			229			552	
Approach Delay, s/veh		23.8			17.6			36.1			34.2	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	23.5	6.5	58.3	7.7	30.0	10.8	53.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	18.0	5.0	68.0	5.0	26.0	11.0	62.0
Max Q Clear Time (g_c+I1), s	10.2	6.6	3.0	40.9	4.6	15.5	6.7	16.3
Green Ext Time (p_c), s	0.1	0.6	0.0	13.4	0.0	1.6	0.2	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	930	270	240	560	50	250	300	250	40	110	60
Future Volume (veh/h)	120	930	270	240	560	50	250	300	250	40	110	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	136	1057	307	273	636	57	284	341	284	45	125	68
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	167	1337	388	349	1661	148	581	673	550	292	909	394
Arrive On Green	0.10	0.35	0.35	0.10	0.35	0.35	0.14	0.37	0.37	0.03	0.26	0.26
Sat Flow, veh/h	1757	3861	1121	3408	4701	418	1757	1826	1493	1757	3505	1519
Grp Volume(v), veh/h	136	919	445	273	453	240	284	327	298	45	125	68
Grp Sat Flow(s),veh/h/ln	1757	1679	1624	1704	1679	1761	1757	1752	1567	1757	1752	1519
Q Serve(g_s), s	7.8	25.4	25.4	8.1	10.4	10.5	11.6	15.0	15.3	1.9	2.8	3.6
Cycle Q Clear(g_c), s	7.8	25.4	25.4	8.1	10.4	10.5	11.6	15.0	15.3	1.9	2.8	3.6
Prop In Lane	1.00		0.69	1.00		0.24	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	167	1162	562	349	1186	622	581	645	577	292	909	394
V/C Ratio(X)	0.81	0.79	0.79	0.78	0.38	0.39	0.49	0.51	0.52	0.15	0.14	0.17
Avail Cap(c_a), veh/h	323	1432	693	561	1366	717	715	645	577	328	909	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	30.4	30.4	45.2	24.9	25.0	21.2	25.3	25.4	27.0	29.4	29.6
Incr Delay (d2), s/veh	9.1	2.5	5.1	3.9	0.2	0.4	0.6	2.8	3.3	0.2	0.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	12.1	12.2	4.0	4.9	5.2	5.7	7.7	7.1	1.0	1.4	1.6
LnGrp Delay(d), s/veh	54.9	32.9	35.4	49.0	25.1	25.4	21.8	28.1	28.7	27.2	29.7	30.6
LnGrp LOS	D	C	D	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1500			966			909			238	
Approach Delay, s/veh		35.6			32.0			26.3			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	42.0	14.6	39.7	18.1	30.7	13.8	40.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	38.0	17.0	44.0	22.0	21.0	19.0	42.0
Max Q Clear Time (g_c+I1), s	3.9	17.3	10.1	27.4	13.6	5.6	9.8	12.5
Green Ext Time (p_c), s	0.0	3.7	0.5	8.3	0.5	0.7	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1150	80	120	1440	350	50	440	110	280	410	510
Future Volume (veh/h)	520	1150	80	120	1440	350	50	440	110	280	410	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	553	1223	85	128	1532	372	53	468	117	298	436	543
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	611	1908	837	156	1590	695	68	542	223	322	737	590
Arrive On Green	0.18	0.53	0.53	0.09	0.44	0.44	0.04	0.15	0.15	0.09	0.21	0.21
Sat Flow, veh/h	3476	3574	1568	1792	3574	1562	1792	3574	1470	3476	3574	1498
Grp Volume(v), veh/h	553	1223	85	128	1532	372	53	468	117	298	436	543
Grp Sat Flow(s),veh/h/ln	1738	1787	1568	1792	1787	1562	1792	1787	1470	1738	1787	1498
Q Serve(g_s), s	18.5	28.8	3.2	8.3	49.4	20.6	3.5	15.2	8.7	10.1	13.1	24.5
Cycle Q Clear(g_c), s	18.5	28.8	3.2	8.3	49.4	20.6	3.5	15.2	8.7	10.1	13.1	24.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	611	1908	837	156	1590	695	68	542	223	322	737	590
V/C Ratio(X)	0.90	0.64	0.10	0.82	0.96	0.54	0.78	0.86	0.52	0.92	0.59	0.92
Avail Cap(c_a), veh/h	644	1908	837	242	1596	698	91	542	223	322	737	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	19.6	13.6	53.3	32.0	24.0	56.6	49.1	46.4	53.4	42.6	35.3
Incr Delay (d2), s/veh	15.9	0.7	0.1	12.2	14.7	0.8	25.4	16.5	8.6	31.4	3.5	21.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	14.3	1.4	4.7	27.5	9.0	2.2	8.7	4.1	6.2	6.8	20.5
LnGrp Delay(d), s/veh	63.8	20.3	13.7	65.5	46.7	24.8	82.0	65.6	55.0	84.9	46.0	57.2
LnGrp LOS	E	C	B	E	D	C	F	E	D	F	D	E
Approach Vol, veh/h		1861			2032			638			1277	
Approach Delay, s/veh		32.9			43.9			65.0			59.8	
Approach LOS		C			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	22.0	14.3	67.4	8.5	28.5	24.9	56.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	18.0	16.0	59.0	6.0	23.0	22.0	53.0
Max Q Clear Time (g_c+I1), s	12.1	17.2	10.3	30.8	5.5	26.5	20.5	51.4
Green Ext Time (p_c), s	0.0	0.3	0.1	10.4	0.0	0.0	0.4	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Future Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	1.00		0.91	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	304	293	152	217	33	348	783	152	22	1174	196
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	236	192	119	406	60	282	2015	391	429	1071	889
Arrive On Green	0.03	0.13	0.13	0.03	0.13	0.13	0.13	0.68	0.68	0.02	0.57	0.57
Sat Flow, veh/h	1774	1770	1436	1774	3045	452	1774	2952	573	1774	1863	1547
Grp Volume(v), veh/h	207	304	293	152	124	126	348	469	466	22	1174	196
Grp Sat Flow(s),veh/h/ln	1774	1770	1436	1774	1770	1728	1774	1770	1755	1774	1863	1547
Q Serve(g_s), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Cycle Q Clear(g_c), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	189	236	192	119	236	230	282	1208	1198	429	1071	889
V/C Ratio(X)	1.09	1.29	1.53	1.28	0.53	0.55	1.24	0.39	0.39	0.05	1.10	0.22
Avail Cap(c_a), veh/h	189	236	192	119	236	230	282	1208	1198	457	1071	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	52.0	52.0	51.1	48.5	48.6	43.7	8.2	8.2	10.1	25.5	12.4
Incr Delay (d2), s/veh	92.6	157.8	263.1	174.0	2.1	2.7	132.6	0.9	1.0	0.0	57.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	18.1	20.3	9.1	4.0	4.1	19.7	7.0	6.9	0.3	52.3	3.3
LnGrp Delay(d), s/veh	145.6	209.8	315.1	225.1	50.6	51.3	176.2	9.2	9.2	10.1	83.1	13.0
LnGrp LOS	F	F	F	F	D	D	F	A	A	B	F	B
Approach Vol, veh/h		804			402			1283			1392	
Approach Delay, s/veh		231.6			116.8			54.5			72.1	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	85.9	8.0	20.0	19.0	73.0	8.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	80.0	4.0	16.0	15.0	69.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	2.6	15.7	6.0	18.0	17.0	71.0	6.0	10.2
Green Ext Time (p_c), s	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	720	320	370	710	50	370	280	240	60	160	20
Future Volume (veh/h)	80	720	320	370	710	50	370	280	240	60	160	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	85	766	340	394	755	53	394	298	255	64	170	21
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	325	882	387	430	1945	136	597	1223	534	301	887	106
Arrive On Green	0.05	0.26	0.26	0.20	0.41	0.41	0.20	0.35	0.35	0.04	0.20	0.20
Sat Flow, veh/h	1740	3367	1480	1740	4753	332	1740	3471	1517	1740	4501	536
Grp Volume(v), veh/h	85	756	350	394	527	281	394	298	255	64	124	67
Grp Sat Flow(s),veh/h/ln	1740	1663	1521	1740	1663	1760	1740	1736	1517	1740	1663	1712
Q Serve(g_s), s	3.8	23.5	23.8	18.3	12.0	12.1	18.6	6.6	14.1	3.1	3.4	3.5
Cycle Q Clear(g_c), s	3.8	23.5	23.8	18.3	12.0	12.1	18.6	6.6	14.1	3.1	3.4	3.5
Prop In Lane	1.00		0.97	1.00		0.19	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	325	871	398	430	1360	720	597	1223	534	301	655	337
V/C Ratio(X)	0.26	0.87	0.88	0.92	0.39	0.39	0.66	0.24	0.48	0.21	0.19	0.20
Avail Cap(c_a), veh/h	335	925	423	587	1695	897	660	1223	534	311	655	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	38.0	38.2	27.5	22.4	22.4	24.4	24.8	27.2	32.5	36.1	36.2
Incr Delay (d2), s/veh	0.4	8.6	17.8	15.6	0.2	0.3	2.1	0.5	3.0	0.3	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	11.8	12.0	13.2	5.5	5.9	9.2	3.2	6.3	1.5	1.6	1.8
LnGrp Delay(d), s/veh	27.3	46.6	56.0	43.1	22.6	22.8	26.5	25.2	30.2	32.9	36.8	37.5
LnGrp LOS	C	D	E	D	C	C	C	C	C	C	D	D
Approach Vol, veh/h		1191			1202			947			255	
Approach Delay, s/veh		48.0			29.3			27.1			36.0	
Approach LOS		D			C			C			D	

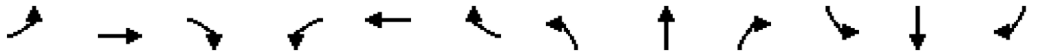
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	42.0	25.3	32.3	25.1	25.3	9.4	48.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	38.0	31.0	30.0	25.0	18.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	5.1	16.1	20.3	25.8	20.6	5.5	5.8	14.1
Green Ext Time (p_c), s	0.0	2.6	0.9	2.5	0.5	0.8	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1290	60	150	1880	410	20	220	170	40	80	80
Future Volume (veh/h)	200	1290	60	150	1880	410	20	220	170	40	80	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.91		0.84	0.99		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	213	1372	64	160	2000	436	21	234	181	43	85	85
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	243	2316	108	322	2248	978	217	326	230	106	333	238
Arrive On Green	0.09	0.67	0.67	0.05	0.63	0.63	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1792	3476	162	1792	3574	1555	1109	1843	1298	967	1881	1342
Grp Volume(v), veh/h	213	704	732	160	2000	436	21	226	189	43	85	85
Grp Sat Flow(s),veh/h/ln	1792	1787	1850	1792	1787	1555	1109	1787	1354	967	1881	1342
Q Serve(g_s), s	7.8	24.5	24.7	3.6	53.3	16.3	1.9	13.5	15.1	4.9	4.4	6.3
Cycle Q Clear(g_c), s	7.8	24.5	24.7	3.6	53.3	16.3	6.3	13.5	15.1	20.0	4.4	6.3
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	243	1191	1233	322	2248	978	217	316	240	106	333	238
V/C Ratio(X)	0.88	0.59	0.59	0.50	0.89	0.45	0.10	0.72	0.79	0.41	0.26	0.36
Avail Cap(c_a), veh/h	292	1218	1261	406	2372	1032	217	316	240	106	333	238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	10.4	10.4	9.6	17.7	10.8	42.8	43.8	44.5	54.1	40.1	40.9
Incr Delay (d2), s/veh	21.6	0.7	0.7	1.2	4.5	0.3	0.9	13.0	22.6	11.1	1.8	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	12.2	12.6	1.8	27.5	7.0	0.6	7.8	7.1	1.7	2.5	2.6
LnGrp Delay(d), s/veh	57.6	11.1	11.1	10.8	22.1	11.1	43.7	56.8	67.0	65.2	41.9	45.0
LnGrp LOS	E	B	B	B	C	B	D	E	E	E	D	D
Approach Vol, veh/h		1649			2596			436			213	
Approach Delay, s/veh		17.1			19.6			60.6			47.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	9.7	79.3		24.0	13.9	75.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	11.0	77.0		20.0	13.0	75.0
Max Q Clear Time (g_c+I1), s		17.1	5.6	26.7		22.0	9.8	55.3
Green Ext Time (p_c), s		0.7	0.2	13.6		0.0	0.2	15.8

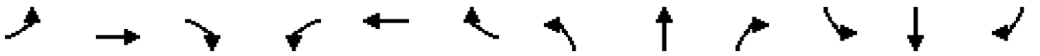
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	630	580	310	2140	0	0	0	0	70	50	140
Future Volume (veh/h)	0	630	580	310	2140	0	0	0	0	70	50	140
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	643	592	316	2184	0				71	51	143
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1721	788	357	2651	0				190	137	286
Arrive On Green	0.00	0.50	0.50	0.20	0.74	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	3593	1568	1792	3668	0				1064	764	1599
Grp Volume(v), veh/h	0	643	592	316	2184	0				122	0	143
Grp Sat Flow(s),veh/h/ln	0	1712	1568	1792	1787	0				1828	0	1599
Q Serve(g_s), s	0.0	11.6	30.3	17.3	40.8	0.0				5.9	0.0	8.1
Cycle Q Clear(g_c), s	0.0	11.6	30.3	17.3	40.8	0.0				5.9	0.0	8.1
Prop In Lane	0.00		1.00	1.00		0.00				0.58		1.00
Lane Grp Cap(c), veh/h	0	1721	788	357	2651	0				327	0	286
V/C Ratio(X)	0.00	0.37	0.75	0.89	0.82	0.00				0.37	0.00	0.50
Avail Cap(c_a), veh/h	0	1905	873	605	3339	0				327	0	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.3	20.0	39.2	8.6	0.0				36.3	0.0	37.3
Incr Delay (d2), s/veh	0.0	0.1	3.3	8.4	1.4	0.0				3.2	0.0	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	13.7	9.3	20.2	0.0				3.3	0.0	4.1
LnGrp Delay(d), s/veh	0.0	15.5	23.3	47.6	10.1	0.0				39.6	0.0	43.4
LnGrp LOS		B	C	D	B					D		D
Approach Vol, veh/h		1235			2500						265	
Approach Delay, s/veh		19.2			14.8						41.6	
Approach LOS		B			B						D	

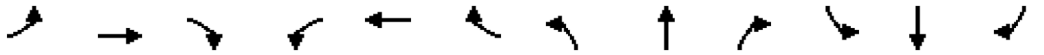
Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			24.0	54.6		22.0		78.6
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			34.0	56.0		18.0		94.0
Max Q Clear Time (g_c+I1), s			19.3	32.3		10.1		42.8
Green Ext Time (p_c), s			0.8	9.2		0.6		31.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	480	0	0	1130	160	1060	0	500	0	0	0
Future Volume (vph)	110	480	0	0	1130	160	1060	0	500	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (prot)	1787	3574			3482		1698	1615	1519			
Flt Permitted	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (perm)	1787	3574			3482		1698	1615	1519			
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	111	485	0	0	1141	162	1071	0	505	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	26	180	0	0	0
Lane Group Flow (vph)	111	485	0	0	1294	0	568	528	274	0	0	0
Confl. Peds. (#/hr)	8		14	14		8						
Confl. Bikes (#/hr)			10			11						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	10.4	61.3			46.9		49.0	49.0	49.0			
Effective Green, g (s)	10.4	61.3			46.9		49.0	49.0	49.0			
Actuated g/C Ratio	0.09	0.52			0.40		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	157	1851			1380		703	668	629			
v/s Ratio Prot	c0.06	0.14			c0.37		c0.33	0.33	0.18			
v/s Ratio Perm												
v/c Ratio	0.71	0.26			0.94		0.81	0.79	0.44			
Uniform Delay, d1	52.5	15.9			34.3		30.5	30.2	24.8			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	13.5	0.1			12.2		9.7	9.2	2.2			
Delay (s)	66.0	16.0			46.4		40.2	39.4	27.0			
Level of Service	E	B			D		D	D	C			
Approach Delay (s/veh)		25.3			46.4			36.1			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	118.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	730	160	120	890	90	340	420	170	350	650	210
Future Volume (veh/h)	150	730	160	120	890	90	340	420	170	350	650	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	167	811	178	133	989	100	378	467	189	389	722	233
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	223	997	631	160	1086	469	437	642	257	419	974	314
Arrive On Green	0.06	0.28	0.28	0.09	0.30	0.30	0.13	0.26	0.26	0.23	0.37	0.37
Sat Flow, veh/h	3476	3574	1542	1792	3574	1544	3476	2461	987	1792	2641	852
Grp Volume(v), veh/h	167	811	178	133	989	100	378	338	318	389	489	466
Grp Sat Flow(s),veh/h/ln	1738	1787	1542	1792	1787	1544	1738	1787	1661	1792	1787	1706
Q Serve(g_s), s	5.5	24.7	9.1	8.5	31.1	5.6	12.4	20.1	20.4	24.8	27.7	27.7
Cycle Q Clear(g_c), s	5.5	24.7	9.1	8.5	31.1	5.6	12.4	20.1	20.4	24.8	27.7	27.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		0.50
Lane Grp Cap(c), veh/h	223	997	631	160	1086	469	437	466	433	419	659	629
V/C Ratio(X)	0.75	0.81	0.28	0.83	0.91	0.21	0.86	0.73	0.73	0.93	0.74	0.74
Avail Cap(c_a), veh/h	238	1012	638	184	1134	490	477	466	433	476	659	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	39.2	23.4	52.2	39.1	30.2	50.0	39.3	39.4	43.7	32.0	32.0
Incr Delay (d2), s/veh	11.5	5.1	0.2	23.7	10.7	0.2	14.3	9.5	10.6	23.1	7.4	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	12.9	3.9	5.3	16.9	2.4	6.9	11.2	10.6	14.9	15.1	14.4
LnGrp Delay(d), s/veh	65.1	44.3	23.6	76.0	49.7	30.4	64.3	48.8	50.0	66.8	39.3	39.7
LnGrp LOS	E	D	C	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1156			1222			1034			1344	
Approach Delay, s/veh		44.1			51.0			54.8			47.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.3	34.4	14.4	36.5	18.7	47.0	11.5	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	28.0	12.0	33.0	16.0	43.0	8.0	37.0
Max Q Clear Time (g_c+I1), s	26.8	22.4	10.5	26.7	14.4	29.7	7.5	33.1
Green Ext Time (p_c), s	0.5	1.9	0.0	3.0	0.2	4.9	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Future Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	247	258	86	118	409	86	527	1151	151	129	1409	753
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	357	294	212	326	268	356	1788	234	292	1051	507
Arrive On Green	0.07	0.19	0.19	0.05	0.17	0.17	0.17	0.57	0.57	0.05	0.46	0.46
Sat Flow, veh/h	1774	1863	1535	1774	1863	1529	1774	3136	410	1774	2293	1107
Grp Volume(v), veh/h	247	258	86	118	409	86	527	648	654	129	1053	1109
Grp Sat Flow(s),veh/h/ln	1774	1863	1535	1774	1863	1529	1774	1770	1777	1774	1770	1630
Q Serve(g_s), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Cycle Q Clear(g_c), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.68
Lane Grp Cap(c), veh/h	178	357	294	212	326	268	356	1009	1013	292	811	747
V/C Ratio(X)	1.39	0.72	0.29	0.56	1.25	0.32	1.48	0.64	0.65	0.44	1.30	1.48
Avail Cap(c_a), veh/h	178	357	294	212	326	268	356	1009	1013	343	811	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	45.5	41.5	40.6	49.5	43.3	41.1	17.5	17.5	17.0	32.5	32.5
Incr Delay (d2), s/veh	204.3	7.0	0.5	3.2	137.3	0.7	231.3	3.1	3.2	1.0	143.4	225.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	8.7	2.5	3.4	23.2	2.5	34.6	15.3	15.6	2.3	59.1	71.4
LnGrp Delay(d), s/veh	247.7	52.5	42.1	43.8	186.8	44.0	272.4	20.6	20.7	18.0	175.9	257.5
LnGrp LOS	F	D	D	D	F	D	F	C	C	B	F	F
Approach Vol, veh/h		591			613			1829			2291	
Approach Delay, s/veh		132.6			139.2			93.2			206.5	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	72.4	10.0	27.0	24.0	59.0	12.0	25.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	65.0	6.0	23.0	20.0	55.0	8.0	21.0
Max Q Clear Time (g_c+I1), s	6.6	32.0	8.0	17.6	22.0	57.0	10.0	23.0
Green Ext Time (p_c), s	0.1	11.1	0.0	0.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	151.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Future Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	0.99		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	131	24	24	24	24	36	24	476	24	71	357	71
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	236	132	132	247	104	156	752	1438	1171	688	1438	1172
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1322	852	852	1335	669	1004	959	1881	1532	899	1881	1533
Grp Volume(v), veh/h	131	0	48	24	0	60	24	476	24	71	357	71
Grp Sat Flow(s),veh/h/ln	1322	0	1704	1335	0	1673	959	1881	1532	899	1881	1533
Q Serve(g_s), s	9.6	0.0	2.4	1.6	0.0	3.1	0.7	7.9	0.4	2.7	5.5	1.1
Cycle Q Clear(g_c), s	12.7	0.0	2.4	4.0	0.0	3.1	6.2	7.9	0.4	10.6	5.5	1.1
Prop In Lane	1.00		0.50	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	0	265	247	0	260	752	1438	1171	688	1438	1172
V/C Ratio(X)	0.55	0.00	0.18	0.10	0.00	0.23	0.03	0.33	0.02	0.10	0.25	0.06
Avail Cap(c_a), veh/h	509	0	617	523	0	606	752	1438	1171	688	1438	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	0.0	36.5	38.3	0.0	36.8	4.3	3.7	2.8	5.4	3.4	2.9
Incr Delay (d2), s/veh	2.0	0.0	0.3	0.2	0.0	0.4	0.1	0.6	0.0	0.3	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.2	0.6	0.0	1.5	0.2	4.3	0.2	0.7	2.9	0.5
LnGrp Delay(d), s/veh	44.4	0.0	36.8	38.4	0.0	37.2	4.4	4.3	2.8	5.7	3.8	3.0
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		179			84			524			499	
Approach Delay, s/veh		42.4			37.6			4.3			4.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		19.4		80.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		9.9		14.7		12.6		6.0
Green Ext Time (p_c), s		3.7		0.6		3.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	11.8
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	30	20	20	20	150	10	10	20	170	60	10
Future Vol, veh/h	20	30	20	20	20	150	10	10	20	170	60	10
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	27	41	27	27	27	205	14	14	27	233	82	14
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	9.4	9.8	9.4	14.5
HCM LOS	A	A	A	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	25%	40%	0%	50%	0%	74%	0%
Vol Thru, %	25%	60%	0%	50%	0%	26%	0%
Vol Right, %	50%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	50	20	40	150	230	10
LT Vol	10	20	0	20	0	170	0
Through Vol	10	30	0	20	0	60	0
RT Vol	20	0	20	0	150	0	10
Lane Flow Rate	55	68	27	55	205	315	14
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.088	0.119	0.041	0.091	0.288	0.519	0.018
Departure Headway (Hd)	5.781	6.247	5.334	6.109	5.148	5.93	4.854
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	622	575	672	590	703	611	742
Service Time	3.797	3.97	3.057	3.809	2.848	3.63	2.554
HCM Lane V/C Ratio	0.088	0.118	0.04	0.093	0.292	0.516	0.019
HCM Control Delay, s/veh	9.4	9.8	8.3	9.4	9.9	14.8	7.6
HCM Lane LOS	A	A	A	A	A	B	A
HCM 95th-tile Q	0.3	0.4	0.1	0.3	1.2	3	0.1

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	10	10	30	20
Future Vol, veh/h	20	10	10	10	30	20
Conflicting Peds, #/hr	0	2	2	0	3	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	30	15	15	15	45	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	47	0	88	42
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	-	-	4.16	-	6.46	6.26
Critical Hdwy Stg 1	-	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.254	-	3.554	3.354
Pot Cap-1 Maneuver	-	-	1535	-	903	1017
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	964	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1532	-	890	1014
Mov Cap-2 Maneuver	-	-	-	-	890	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	952	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.7	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	890	1014	-	-	1532	-
HCM Lane V/C Ratio	0.051	0.03	-	-	0.01	-
HCM Control Delay (s/veh)	9.3	8.7	-	-	7.4	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	270	100	20	130	10	30	30	60	10	10	10
Future Vol, veh/h	20	270	100	20	130	10	30	30	60	10	10	10
Conflicting Peds, #/hr	4	0	19	19	0	4	5	0	2	2	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	303	112	22	146	11	34	34	67	11	11	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	161	0	0	434	0	0	634	627	380	656	678	161
Stage 1	-	-	-	-	-	-	422	422	-	200	200	-
Stage 2	-	-	-	-	-	-	212	205	-	456	478	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1418	-	-	1126	-	-	392	400	667	379	374	884
Stage 1	-	-	-	-	-	-	609	588	-	802	736	-
Stage 2	-	-	-	-	-	-	790	732	-	584	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1413	-	-	1108	-	-	358	376	655	305	351	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	376	-	305	351	-
Stage 1	-	-	-	-	-	-	586	566	-	783	718	-
Stage 2	-	-	-	-	-	-	748	714	-	482	535	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	1	15.7	14.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	470	1413	-	-	1108	-	-	413
HCM Lane V/C Ratio	0.287	0.016	-	-	0.02	-	-	0.082
HCM Control Delay (s/veh)	15.7	7.6	0	-	8.3	0	-	14.5
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.2	0	-	-	0.1	-	-	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	150	60	120	130	80	30	1140	40	30	1650	50
Future Volume (veh/h)	110	150	60	120	130	80	30	1140	40	30	1650	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	115	156	62	125	135	83	31	1188	42	31	1719	52
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	185	222	494	150	342	210	124	2140	76	246	2153	65
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	438	684	1521	1170	1051	646	271	3517	124	456	3539	107
Grp Volume(v), veh/h	271	0	62	125	0	218	31	603	627	31	865	906
Grp Sat Flow(s),veh/h/ln	1122	0	1521	1170	0	1697	271	1787	1854	456	1787	1858
Q Serve(g_s), s	17.8	0.0	3.4	9.2	0.0	11.9	11.9	24.0	24.0	5.2	44.0	44.8
Cycle Q Clear(g_c), s	29.8	0.0	3.4	39.0	0.0	11.9	56.6	24.0	24.0	29.2	44.0	44.8
Prop In Lane	0.42		1.00	1.00		0.38	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	407	0	494	150	0	552	124	1087	1128	246	1087	1130
V/C Ratio(X)	0.67	0.00	0.13	0.83	0.00	0.40	0.25	0.55	0.56	0.13	0.80	0.80
Avail Cap(c_a), veh/h	407	0	494	150	0	552	124	1087	1128	246	1087	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	28.5	56.7	0.0	31.4	39.6	13.9	13.9	22.5	17.8	18.0
Incr Delay (d2), s/veh	4.1	0.0	0.1	31.3	0.0	0.5	4.8	2.0	2.0	1.1	6.0	6.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	1.5	5.4	0.0	5.6	1.1	12.3	12.8	0.7	23.4	24.6
LnGrp Delay(d), s/veh	44.8	0.0	28.6	87.9	0.0	31.8	44.4	15.9	15.9	23.6	23.9	24.0
LnGrp LOS	D		C	F		C	D	B	B	C	C	C
Approach Vol, veh/h		333			343			1261			1802	
Approach Delay, s/veh		41.8			52.3			16.6			23.9	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		43.0		77.0		43.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		58.6		31.8		46.8		41.0
Green Ext Time (p_c), s		7.2		1.1		16.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.7
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	17.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	30	50	1990	1760	30
Future Vol, veh/h	30	30	50	1990	1760	30
Conflicting Peds, #/hr	1	1	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	32	32	53	2095	1853	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3020	940	1897	0	-	0
Stage 1	1865	-	-	-	-	-
Stage 2	1155	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	~ 10	267	315	-	-	-
Stage 1	109	-	-	-	-	-
Stage 2	264	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	264	312	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	90	-	-	-	-	-
Stage 2	261	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $/¢	125.9	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	312	-	8	264	-	-
HCM Lane V/C Ratio	0.169	-	3.947	0.12	-	-
HCM Control Delay (s/veh)	18.9	-	$ 2231.3	20.5	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.6	-	5.2	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	50	80	80	130	170	30	1650	20	30	1570	190
Future Volume (veh/h)	140	50	80	80	130	170	30	1650	20	30	1570	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.76	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	149	53	85	85	138	181	32	1755	21	32	1670	202
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	4	411	41	51	365	112	2289	27	137	2025	239
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	0	12	1369	0	170	1217	245	3614	43	269	3197	378
Grp Volume(v), veh/h	202	0	85	223	0	181	32	866	910	32	916	956
Grp Sat Flow(s),veh/h/ln	12	0	1369	170	0	1217	245	1787	1870	269	1787	1788
Q Serve(g_s), s	0.0	0.0	5.6	0.0	0.0	14.7	14.2	41.4	41.7	11.5	46.2	50.6
Cycle Q Clear(g_c), s	36.0	0.0	5.6	36.0	0.0	14.7	64.8	41.4	41.7	53.2	46.2	50.6
Prop In Lane	0.74		1.00	0.38		1.00	1.00		0.02	1.00		0.21
Lane Grp Cap(c), veh/h	56	0	411	92	0	365	112	1132	1185	137	1132	1132
V/C Ratio(X)	3.63	0.00	0.21	2.42	0.00	0.50	0.29	0.77	0.77	0.23	0.81	0.84
Avail Cap(c_a), veh/h	56	0	411	92	0	365	112	1132	1185	137	1132	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	31.3	41.1	0.0	34.5	42.9	15.7	15.7	34.7	16.5	17.3
Incr Delay (d2), s/veh	1225.8	0.0	0.2	668.6	0.0	1.0	6.3	4.9	4.8	4.0	6.3	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	0.0	2.1	20.2	0.0	5.0	1.2	21.8	22.8	1.0	24.6	27.2
LnGrp Delay(d), s/veh	1283.5	0.0	31.6	709.6	0.0	35.6	49.2	20.6	20.5	38.7	22.8	25.1
LnGrp LOS	F		C	F		D	D	C	C	D	C	C
Approach Vol, veh/h		287			404			1808			1904	
Approach Delay, s/veh		912.7			407.6			21.1			24.2	
Approach LOS		F			F			C			C	

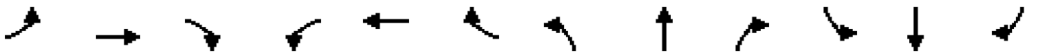
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		66.8		38.0		55.2		38.0
Green Ext Time (p_c), s		7.2		0.0		14.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	116.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	630	40	120	860	180	60	340	80	160	500	380
Future Volume (veh/h)	280	630	40	120	860	180	60	340	80	160	500	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	298	670	43	128	915	0	64	362	85	170	532	404
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	335	1565	100	158	1125	350	82	1271	557	236	724	550
Arrive On Green	0.19	0.32	0.32	0.09	0.22	0.00	0.05	0.36	0.36	0.07	0.39	0.39
Sat Flow, veh/h	1757	4832	308	1757	5036	1568	1757	3505	1534	3408	1880	1427
Grp Volume(v), veh/h	298	464	249	128	915	0	64	362	85	170	496	440
Grp Sat Flow(s),veh/h/ln	1757	1679	1783	1757	1679	1568	1757	1752	1534	1704	1752	1555
Q Serve(g_s), s	17.2	11.3	11.4	7.4	17.9	0.0	3.7	7.6	3.9	5.1	25.2	25.2
Cycle Q Clear(g_c), s	17.2	11.3	11.4	7.4	17.9	0.0	3.7	7.6	3.9	5.1	25.2	25.2
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	335	1088	578	158	1125	350	82	1271	557	236	675	599
V/C Ratio(X)	0.89	0.43	0.43	0.81	0.81	0.00	0.78	0.28	0.15	0.72	0.73	0.73
Avail Cap(c_a), veh/h	491	1293	687	271	1310	408	135	1271	557	361	675	599
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.0	27.5	27.6	46.4	38.3	0.0	49.0	23.5	22.3	47.3	27.4	27.4
Incr Delay (d2), s/veh	13.3	0.3	0.5	9.5	3.5	0.0	14.6	0.6	0.6	4.1	7.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	5.3	5.7	4.0	8.7	0.0	2.1	3.8	1.7	2.5	13.4	12.1
LnGrp Delay(d), s/veh	54.3	27.8	28.1	55.8	41.8	0.0	63.6	24.1	22.9	51.4	34.3	35.2
LnGrp LOS	D	C	C	E	D		E	C	C	D	C	D
Approach Vol, veh/h		1011			1043			511			1106	
Approach Delay, s/veh		35.7			43.5			28.8			37.3	
Approach LOS		D			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	41.7	13.3	37.6	8.9	44.0	23.8	27.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	37.0	16.0	40.0	8.0	40.0	29.0	27.0
Max Q Clear Time (g_c+I1), s	7.1	9.6	9.4	13.4	5.7	27.2	19.2	19.9
Green Ext Time (p_c), s	0.2	2.5	0.1	4.4	0.0	4.8	0.6	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.4
HCM 2010 LOS	D

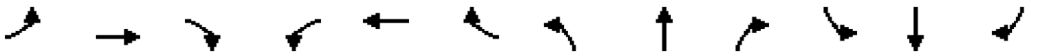


Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	370	300	2340	0	0	0	0	80	180	750
Future Volume (vph)	0	330	370	300	2340	0	0	0	0	80	180	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.99	0.96	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.95	0.85	1.00	1.00					1.00	0.91	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3255	1413	3502	3610					1715	1570	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3255	1413	3502	3610					1715	1570	1534
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	344	385	312	2438	0	0	0	0	83	188	781
RTOR Reduction (vph)	0	39	120	0	0	0	0	0	0	0	1	32
Lane Group Flow (vph)	0	463	107	313	2438	0	0	0	0	75	500	445
Confl. Peds. (#/hr)	182		12	12		182						
Confl. Bikes (#/hr)						77						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		56.8	56.8	15.2	76.0					36.0	36.0	36.0
Effective Green, g (s)		56.8	56.8	15.2	76.0					36.0	36.0	36.0
Actuated g/C Ratio		0.47	0.47	0.13	0.63					0.30	0.30	0.30
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1540	668	443	2286					514	471	460
v/s Ratio Prot		0.14		0.09	c0.68					0.04	c0.32	0.29
v/s Ratio Perm			0.08									
v/c Ratio		0.30	0.16	0.71	1.07					0.15	1.06	0.97
Uniform Delay, d1		19.4	18.0	50.3	22.0					30.7	42.0	41.4
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.1	39.5					0.6	58.5	34.4
Delay (s)		19.5	18.1	55.3	61.5					31.3	100.5	75.8
Level of Service		B	B	E	E					C	F	E
Approach Delay (s/veh)		19.1			60.8			0.0			84.4	
Approach LOS		B			E			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	59.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	710	10	10	1000	300	10	10	20	270	10	270
Future Volume (vph)	220	710	10	10	1000	300	10	10	20	270	10	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	237	763	11	11	1075	323	11	11	22	290	11	290
RTOR Reduction (vph)	0	1	0	0	0	142	0	0	18	0	227	0
Lane Group Flow (vph)	237	773	0	11	1075	181	0	22	4	261	103	0
Confl. Peds. (#/hr)	2		11	11		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	12.4	46.3		0.7	34.6	34.6		18.5	18.5	22.4	22.4	
Effective Green, g (s)	12.4	46.3		0.7	34.6	34.6		18.5	18.5	22.4	22.4	
Actuated g/C Ratio	0.12	0.45		0.01	0.33	0.33		0.18	0.18	0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	401	2216		11	1661	507		317	276	355	323	
v/s Ratio Prot	c0.07	0.16		0.01	c0.22			c0.01		c0.16	0.07	
v/s Ratio Perm						0.12			0.00			
v/c Ratio	0.59	0.35		1.00	0.65	0.36		0.07	0.01	0.74	0.32	
Uniform Delay, d1	43.3	18.9		51.6	29.5	26.2		35.5	35.2	38.0	34.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.3	0.1		271.4	0.9	0.4		0.4	0.1	7.7	0.6	
Delay (s)	45.7	19.0		323.0	30.3	26.7		36.0	35.3	45.7	34.9	
Level of Service	D	B		F	C	C		D	D	D	C	
Approach Delay (s/veh)		25.3			31.8			35.6			39.7	
Approach LOS		C			C			D			D	

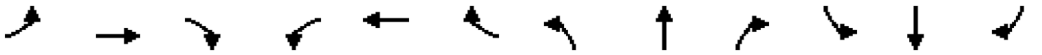
Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	103.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.3%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	230	0	0	1240	90	1440	250	250	0	0	0
Future Volume (vph)	160	230	0	0	1240	90	1440	250	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.98		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3500		1643	3142	1470			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3500		1643	3142	1470			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	242	0	0	1305	95	1516	263	263	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	86	0	0	0
Lane Group Flow (vph)	168	242	0	0	1400	0	758	1046	151	0	0	0
Confl. Peds. (#/hr)	124		12	12		124						
Confl. Bikes (#/hr)			3			49						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	6.0	57.0			47.0		55.0	55.0	55.0			
Effective Green, g (s)	6.0	57.0			47.0		55.0	55.0	55.0			
Actuated g/C Ratio	0.05	0.48			0.39		0.46	0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	175	1714			1370		753	1440	673			
v/s Ratio Prot	c0.05	0.07			c0.40		c0.46	0.33				
v/s Ratio Perm									0.10			
v/c Ratio	0.96	0.14			1.02		1.01	1.01dl	0.22			
Uniform Delay, d1	56.9	17.7			36.5		32.5	26.4	19.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	56.1	0.0			30.0		34.4	3.2	0.8			
Delay (s)	113.0	17.8			66.5		66.9	29.6	20.4			
Level of Service	F	B			E		E	C	C			
Approach Delay (s/veh)		56.8			66.5			42.4			0.0	
Approach LOS		E			E			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	830	0	0	950	190	360	0	710	0	0	0
Future Volume (veh/h)	130	830	0	0	950	190	360	0	710	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1827	0	0	1827	1900	1827	0	1827			
Adj Flow Rate, veh/h	140	892	0	0	1022	204	387	0	763			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	4	4	4	0	4			
Cap, veh/h	193	1772	0	0	1100	219	1950	0	897			
Arrive On Green	0.06	0.36	0.00	0.00	0.26	0.26	0.58	0.00	0.58			
Sat Flow, veh/h	3375	5152	0	0	4318	827	3375	0	1553			
Grp Volume(v), veh/h	140	892	0	0	818	408	387	0	763			
Grp Sat Flow(s),veh/h/ln	1688	1663	0	0	1663	1656	1688	0	1553			
Q Serve(g_s), s	4.9	16.8	0.0	0.0	28.6	28.7	6.5	0.0	48.7			
Cycle Q Clear(g_c), s	4.9	16.8	0.0	0.0	28.6	28.7	6.5	0.0	48.7			
Prop In Lane	1.00		0.00	0.00		0.50	1.00		1.00			
Lane Grp Cap(c), veh/h	193	1772	0	0	881	438	1950	0	897			
V/C Ratio(X)	0.73	0.50	0.00	0.00	0.93	0.93	0.20	0.00	0.85			
Avail Cap(c_a), veh/h	198	1796	0	0	891	444	1950	0	897			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	55.4	30.2	0.0	0.0	42.8	42.8	12.0	0.0	20.9			
Incr Delay (d2), s/veh	12.3	0.2	0.0	0.0	15.6	26.3	0.2	0.0	9.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	7.7	0.0	0.0	15.1	16.4	3.1	0.0	23.2			
LnGrp Delay(d), s/veh	67.7	30.4	0.0	0.0	58.4	69.1	12.3	0.0	30.9			
LnGrp LOS	E	C			E	E	B		C			
Approach Vol, veh/h		1032			1226			1150				
Approach Delay, s/veh		35.5			62.0			24.6				
Approach LOS		D			E			C				

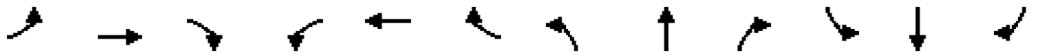
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		73.0		46.4			10.8	35.6
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		69.0		43.0			7.0	32.0
Max Q Clear Time (g_c+I1), s		50.7		18.8			6.9	30.7
Green Ext Time (p_c), s		4.7		6.3			0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1570	420	250	1550	80	420	510	170	220	1030	320
Future Volume (veh/h)	230	1570	420	250	1550	80	420	510	170	220	1030	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	245	1670	447	266	1649	85	447	543	181	234	1096	340
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1695	517	287	1737	537	459	1855	567	293	1121	484
Arrive On Green	0.08	0.33	0.33	0.08	0.34	0.34	0.13	0.36	0.36	0.09	0.32	0.32
Sat Flow, veh/h	3442	5085	1551	3442	5085	1571	3442	5085	1553	3442	3539	1529
Grp Volume(v), veh/h	245	1670	447	266	1649	85	447	543	181	234	1096	340
Grp Sat Flow(s),veh/h/ln	1721	1695	1551	1721	1695	1571	1721	1695	1553	1721	1770	1529
Q Serve(g_s), s	8.5	39.1	32.4	9.2	37.9	4.5	15.5	9.1	10.1	8.0	36.8	23.4
Cycle Q Clear(g_c), s	8.5	39.1	32.4	9.2	37.9	4.5	15.5	9.1	10.1	8.0	36.8	23.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	1695	517	287	1737	537	459	1855	567	293	1121	484
V/C Ratio(X)	0.95	0.99	0.86	0.93	0.95	0.16	0.97	0.29	0.32	0.80	0.98	0.70
Avail Cap(c_a), veh/h	258	1695	517	287	1737	537	459	1855	567	373	1121	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	39.7	37.5	54.6	38.5	27.5	51.8	27.1	27.4	53.9	40.6	36.0
Incr Delay (d2), s/veh	42.2	18.4	14.2	34.6	11.7	0.1	35.2	0.4	1.5	9.2	22.1	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	21.1	15.8	5.8	19.6	2.0	9.6	4.3	4.5	4.2	21.4	11.0
LnGrp Delay(d), s/veh	97.4	58.1	51.7	89.2	50.2	27.6	87.0	27.5	28.9	63.0	62.7	44.3
LnGrp LOS	F	E	D	F	D	C	F	C	C	E	E	D
Approach Vol, veh/h		2362			2000			1171			1670	
Approach Delay, s/veh		60.9			54.5			50.4			59.0	
Approach LOS		E			D			D			E	

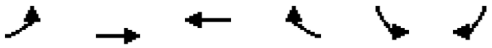
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	47.8	14.0	44.0	20.0	42.0	13.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	41.0	10.0	40.0	16.0	38.0	9.0	41.0
Max Q Clear Time (g_c+I1), s	10.0	12.1	11.2	41.1	17.5	38.8	10.5	39.9
Green Ext Time (p_c), s	0.2	4.2	0.0	0.0	0.0	0.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	380	40	900	310	140	50	310	360	450	1420	250
Future Volume (vph)	90	380	40	900	310	140	50	310	360	450	1420	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.98	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4983		3253	1686	1575	1787	3574	1575	3467	4991	
Flt Permitted		0.78		0.95	0.46	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3929		3253	781	1575	1787	3574	1575	3467	4991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	422	44	1000	344	156	56	344	400	500	1578	278
RTOR Reduction (vph)	0	8	0	0	0	83	0	0	38	0	21	0
Lane Group Flow (vph)	0	558	0	890	454	73	56	344	362	500	1835	0
Confl. Peds. (#/hr)	1		47	47		1	5		9	9		5
Confl. Bikes (#/hr)			5			2			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.4		34.6	56.0	56.0	4.0	30.4	65.0	21.6	48.0	
Effective Green, g (s)		17.4		34.6	56.0	56.0	4.0	30.4	65.0	21.6	48.0	
Actuated g/C Ratio		0.14		0.29	0.47	0.47	0.03	0.25	0.54	0.18	0.40	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		569		937	625	735	59	905	905	624	1996	
v/s Ratio Prot				c0.27	0.21		0.03	0.10	0.12	c0.14	c0.37	
v/s Ratio Perm		c0.14			0.13	0.05			0.11			
v/c Ratio		0.98		0.95	0.73	0.10	0.95	0.38	0.40	0.80	0.92	
Uniform Delay, d1		51.1		41.8	25.8	17.9	57.9	37.0	16.1	47.1	34.2	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		32.8		18.2	4.2	0.1	97.7	1.2	0.3	7.3	8.4	
Delay (s)		83.9		60.1	30.0	18.0	155.6	38.2	16.4	54.5	42.5	
Level of Service		F		E	C	B	F	D	B	D	D	
Approach Delay (s/veh)		83.9			46.6			35.5			45.1	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	580	1690	0	130	470
Future Volume (veh/h)	0	580	1690	0	130	470
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	598	1742	0	134	485
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2160	2160	0	928	828
Arrive On Green	0.00	0.42	0.42	0.00	0.51	0.51
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	598	1742	0	134	485
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	8.6	33.4	0.0	4.4	23.7
Cycle Q Clear(g_c), s	0.0	8.6	33.4	0.0	4.4	23.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2160	2160	0	928	828
V/C Ratio(X)	0.00	0.28	0.81	0.00	0.14	0.59
Avail Cap(c_a), veh/h	0	2476	2476	0	928	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.8	29.0	0.0	14.5	19.2
Incr Delay (d2), s/veh	0.0	0.1	1.8	0.0	0.3	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.1	16.2	0.0	2.3	11.2
LnGrp Delay(d), s/veh	0.0	21.8	30.8	0.0	14.8	22.2
LnGrp LOS		C	C		B	C
Approach Vol, veh/h		598	1742		619	
Approach Delay, s/veh		21.8	30.8		20.6	
Approach LOS		C	C		C	

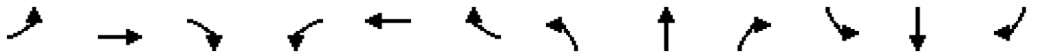
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				51.1		62.0		51.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				54.0		58.0		54.0
Max Q Clear Time (g_c+I1), s				10.6		25.7		35.4
Green Ext Time (p_c), s				4.3		2.3		11.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.9
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	480	0	0	1830	630	1040
Future Volume (vph)	480	0	0	1830	630	1040
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	0.99	0.97
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5136			5136	1724	1466
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5136			5136	1724	1466
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	516	0	0	1968	677	1118
RTOR Reduction (vph)	0	0	0	0	11	89
Lane Group Flow (vph)	516	0	0	1968	923	772
Confl. Peds. (#/hr)						10
Confl. Bikes (#/hr)						2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	47.0			47.0	65.0	65.0
Effective Green, g (s)	47.0			47.0	65.0	65.0
Actuated g/C Ratio	0.39			0.39	0.54	0.54
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2011			2011	933	794
v/s Ratio Prot	0.10			c0.38	c0.54	
v/s Ratio Perm						0.53
v/c Ratio	0.26			0.98	0.99	0.97
Uniform Delay, d1	24.7			36.0	27.1	26.6
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			15.1	26.9	25.9
Delay (s)	24.8			51.2	54.0	52.5
Level of Service	C			D	D	D
Approach Delay (s/veh)	24.8			51.2	53.3	
Approach LOS	C			D	D	

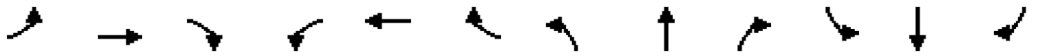
Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Future Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.89						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1645	1544						5036	1539	1752	3505	
Flt Permitted	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1645	1544						5036	1539	1752	3505	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	526	0	268	0	0	0	0	887	412	247	392	0
RTOR Reduction (vph)	0	82	0	0	0	0	0	0	228	0	0	0
Lane Group Flow (vph)	416	296	0	0	0	0	0	887	184	247	392	0
Confl. Peds. (#/hr)							5		3	3		5
Confl. Bikes (#/hr)									1			7
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	3	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA						NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Effective Green, g (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Actuated g/C Ratio	0.31	0.31						0.39	0.39	0.18	0.61	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	513	482						1982	605	320	2150	
v/s Ratio Prot								c0.18		c0.14	0.11	
v/s Ratio Perm	c0.25	0.19							0.12			
v/c Ratio	0.81	0.61						0.45	0.30	0.77	0.18	
Uniform Delay, d1	34.3	31.7						24.1	22.6	42.1	9.1	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.4	2.3						0.7	1.3	11.0	0.2	
Delay (s)	43.7	34.0						24.9	23.9	53.0	9.3	
Level of Service	D	C						C	C	D	A	
Approach Delay (s/veh)		39.1			0.0			24.6			26.2	
Approach LOS		D			A			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	108.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



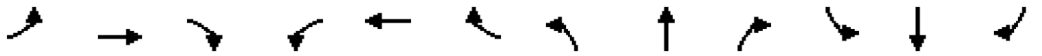
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Future Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1752		1568	1752	3505			5036	1517
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1752		1568	1752	3505			5036	1517
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	219	0	312	583	1021	0	0	500	292
RTOR Reduction (vph)	0	0	0	0	0	132	0	0	0	0	0	194
Lane Group Flow (vph)	0	0	0	219	0	181	583	1021	0	0	500	98
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												5
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm		Perm	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases				8		8						6
Actuated Green, G (s)				19.2		19.2	42.9	84.2			37.3	37.3
Effective Green, g (s)				19.2		19.2	42.9	84.2			37.3	37.3
Actuated g/C Ratio				0.17		0.17	0.39	0.76			0.33	0.33
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				301		270	674	2649			1686	507
v/s Ratio Prot							c0.33	c0.29			0.10	
v/s Ratio Perm				c0.12		0.12						0.06
v/c Ratio				0.73		0.67	0.86	0.39			0.30	0.19
Uniform Delay, d1				43.6		43.1	31.6	4.7			27.4	26.3
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				8.5		6.2	11.2	0.4			0.4	0.8
Delay (s)				52.1		49.3	42.8	5.1			27.8	27.2
Level of Service				D		D	D	A			C	C
Approach Delay (s/veh)		0.0			50.4			18.8			27.6	
Approach LOS		A			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	111.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Future Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				489	0	245	117	1160	0	0	1660	351
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				546	0	858	178	2209	0	0	2712	819
Arrive On Green				0.30	0.00	0.30	0.05	0.62	0.00	0.00	0.53	0.53
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1551
Grp Volume(v), veh/h				489	0	245	117	1160	0	0	1660	351
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1551
Q Serve(g_s), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Cycle Q Clear(g_c), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				546	0	858	178	2209	0	0	2712	819
V/C Ratio(X)				0.90	0.00	0.29	0.66	0.53	0.00	0.00	0.61	0.43
Avail Cap(c_a), veh/h				830	0	1304	268	2209	0	0	2712	819
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.4	0.0	27.4	48.2	11.2	0.0	0.0	17.0	14.9
Incr Delay (d2), s/veh				8.5	0.0	0.2	4.1	0.9	0.0	0.0	1.0	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.6	0.0	2.7	1.7	9.6	0.0	0.0	11.2	6.4
LnGrp Delay(d), s/veh				42.9	0.0	27.6	52.3	12.1	0.0	0.0	18.1	16.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					734			1277			2011	
Approach Delay, s/veh					37.8			15.8			17.8	
Approach LOS					D			B			B	

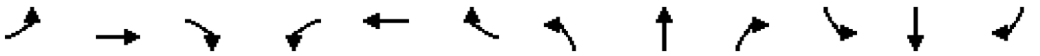
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		68.0			9.3	58.7		35.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			8.0	52.0		48.0
Max Q Clear Time (g_c+I1), s		21.0			5.4	25.3		29.0
Green Ext Time (p_c), s		10.9			0.1	16.1		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.8
HCM 2010 LOS	C



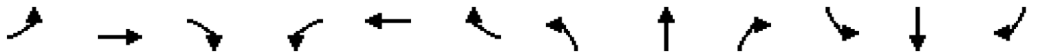
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Future Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.93	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1555	1519					5136	1557	3467	3574	
Flt Permitted	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1555	1519					5136	1557	3467	3574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	0	147	0	0	0	0	1084	737	379	1758	0
RTOR Reduction (vph)	0	40	48	0	0	0	0	0	187	0	0	0
Lane Group Flow (vph)	109	66	52	0	0	0	0	1084	550	379	1758	0
Confl. Peds. (#/hr)							6		6	6		6
Confl. Bikes (#/hr)									5			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Effective Green, g (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Actuated g/C Ratio	0.11	0.11	0.11					0.64	0.64	0.15	0.82	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	183	168	164					3265	989	527	2940	
v/s Ratio Prot								0.21		c0.11	c0.49	
v/s Ratio Perm	c0.06	0.04	0.03						0.35			
v/c Ratio	0.60	0.39	0.32					0.33	0.56	0.72	0.60	
Uniform Delay, d1	49.1	48.0	47.6					9.7	11.9	46.6	3.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	1.5	1.1					0.3	2.3	4.7	0.9	
Delay (s)	54.3	49.5	48.7					10.0	14.1	51.3	4.5	
Level of Service	D	D	D					A	B	D	A	
Approach Delay (s/veh)		50.9			0.0			11.7			12.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Future Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.93	0.85					0.94		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1649	1502	1475					4661		3367	4988	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1649	1502	1475					4661		3367	4988	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	323	0	301	0	0	0	0	742	462	226	473	0
RTOR Reduction (vph)	0	36	161	0	0	0	0	71	0	0	0	0
Lane Group Flow (vph)	216	173	38	0	0	0	0	1133	0	226	473	0
Confl. Peds. (#/hr)							6		4	4		6
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Effective Green, g (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Actuated g/C Ratio	0.19	0.19	0.19					0.58		0.12	0.73	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	316	288	282					2685		393	3648	
v/s Ratio Prot								c0.24		c0.07	0.09	
v/s Ratio Perm	c0.13	0.11	0.03									
v/c Ratio	0.68	0.60	0.14					0.42		0.58	0.13	
Uniform Delay, d1	39.2	38.5	35.0					12.4		43.6	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	6.0	3.3	0.2					0.5		2.0	0.1	
Delay (s)	45.2	41.8	35.2					12.9		45.6	4.2	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.9			0.0			12.9			17.6	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	104.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Future Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.87	0.85	1.00	1.00			0.94	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1431	1475	3367	4988			4653	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1649	1431	1475	3367	4988			4653	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	180	0	337	326	730	0	0	562	337
RTOR Reduction (vph)	0	0	0	0	137	148	0	0	0	0	62	0
Lane Group Flow (vph)	0	0	0	162	43	27	326	730	0	0	837	0
Confl. Peds. (#/hr)							3		4	4		3
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm	NA	Perm	Prot	NA			NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Effective Green, g (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Actuated g/C Ratio				0.16	0.16	0.16	0.15	0.77			0.58	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				258	224	231	491	3820			2704	
v/s Ratio Prot							c0.10	0.15			c0.18	
v/s Ratio Perm				c0.10	0.03	0.02						
v/c Ratio				0.63	0.19	0.12	0.66	0.19			0.31	
Uniform Delay, d1				40.8	37.9	37.5	41.8	3.3			11.1	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				4.7	0.4	0.2	3.4	0.1			0.3	
Delay (s)				45.5	38.3	37.7	45.1	3.4			11.4	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			40.4			16.3			11.4	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	103.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

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Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	740	180	160	730	200	220	1360	130	110	930	30
Future Volume (veh/h)	50	740	180	160	730	200	220	1360	130	110	930	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	56	822	200	178	811	222	244	1511	144	122	1033	33
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	861	209	207	955	261	314	1502	142	136	1418	45
Arrive On Green	0.03	0.30	0.30	0.08	0.34	0.34	0.10	0.45	0.45	0.04	0.40	0.40
Sat Flow, veh/h	1810	2879	700	1810	2792	764	1810	3333	315	1810	3570	114
Grp Volume(v), veh/h	56	515	507	178	524	509	244	813	842	122	522	544
Grp Sat Flow(s),veh/h/ln	1810	1805	1774	1810	1805	1751	1810	1805	1843	1810	1805	1879
Q Serve(g_s), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.9	54.0	4.9	29.4	29.4
Cycle Q Clear(g_c), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.9	54.0	4.9	29.4	29.4
Prop In Lane	1.00		0.39	1.00		0.44	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	159	540	531	207	617	599	314	813	830	136	717	746
V/C Ratio(X)	0.35	0.95	0.95	0.86	0.85	0.85	0.78	1.00	1.01	0.90	0.73	0.73
Avail Cap(c_a), veh/h	161	542	533	207	618	599	368	813	830	136	717	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	41.2	41.2	30.6	36.6	36.6	23.9	32.9	32.9	29.7	30.7	30.7
Incr Delay (d2), s/veh	1.3	27.6	27.9	29.0	10.8	11.1	8.7	31.4	34.8	48.5	6.4	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	20.9	20.6	5.6	17.9	17.4	5.3	33.7	35.3	4.2	15.9	16.5
LnGrp Delay(d), s/veh	32.4	68.8	69.1	59.6	47.4	47.7	32.6	64.3	67.7	78.1	37.1	36.8
LnGrp LOS	C	E	E	E	D	D	C	E	F	E	D	D
Approach Vol, veh/h		1078			1211			1899			1188	
Approach Delay, s/veh		67.0			49.3			61.8			41.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	58.0	13.0	39.8	15.4	51.6	7.9	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	54.0	9.0	36.0	15.0	44.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	6.9	56.0	10.0	35.6	11.2	31.4	4.6	34.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.2	5.4	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	490	80	330	670	210	100	1330	230	120	960	190
Future Volume (veh/h)	180	490	80	330	670	210	100	1330	230	120	960	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	189	516	84	347	705	221	105	1400	242	126	1011	200
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	243	643	104	399	753	236	222	1583	698	184	1336	264
Arrive On Green	0.09	0.21	0.21	0.17	0.28	0.28	0.05	0.44	0.44	0.05	0.45	0.45
Sat Flow, veh/h	1810	3096	502	1810	2687	842	1810	3610	1591	1810	2998	592
Grp Volume(v), veh/h	189	300	300	347	474	452	105	1400	242	126	608	603
Grp Sat Flow(s),veh/h/ln	1810	1805	1793	1810	1805	1724	1810	1805	1591	1810	1805	1785
Q Serve(g_s), s	9.7	18.8	19.0	17.2	30.4	30.5	3.8	42.3	12.0	4.5	33.5	33.7
Cycle Q Clear(g_c), s	9.7	18.8	19.0	17.2	30.4	30.5	3.8	42.3	12.0	4.5	33.5	33.7
Prop In Lane	1.00		0.28	1.00		0.49	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	243	375	373	399	506	483	222	1583	698	184	804	796
V/C Ratio(X)	0.78	0.80	0.81	0.87	0.94	0.94	0.47	0.88	0.35	0.68	0.76	0.76
Avail Cap(c_a), veh/h	243	375	373	451	516	493	228	1583	698	193	804	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	44.8	44.8	30.1	41.8	41.8	22.5	30.6	22.1	26.9	27.6	27.6
Incr Delay (d2), s/veh	14.8	11.6	12.2	15.2	24.5	25.3	1.6	7.6	1.4	9.1	6.5	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	10.5	10.7	10.3	18.6	17.8	2.0	22.7	5.5	2.7	18.0	18.1
LnGrp Delay(d), s/veh	49.8	56.3	57.1	45.2	66.2	67.1	24.1	38.2	23.5	36.0	34.1	34.3
LnGrp LOS	D	E	E	D	E	E	C	D	C	D	C	C
Approach Vol, veh/h		789			1273			1747			1337	
Approach Delay, s/veh		55.0			60.8			35.3			34.4	
Approach LOS		E			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	56.2	23.6	28.7	9.6	57.0	15.0	37.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	52.0	23.0	22.0	6.0	53.0	11.0	34.0
Max Q Clear Time (g_c+I1), s	6.5	44.3	19.2	21.0	5.8	35.7	11.7	32.5
Green Ext Time (p_c), s	0.0	5.6	0.4	0.4	0.0	7.7	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Future Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	41	856	144	124	1082	21	196	134	134	21	124	52
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	226	1556	262	254	1825	35	521	786	646	117	660	663
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	519	3089	520	572	3622	70	1223	1900	1561	179	1596	1604
Grp Volume(v), veh/h	41	500	500	124	539	564	196	134	134	145	0	52
Grp Sat Flow(s),veh/h/ln	519	1805	1804	572	1805	1887	1223	1900	1561	1776	0	1604
Q Serve(g_s), s	5.9	18.4	18.4	18.4	20.4	20.5	11.7	4.3	5.3	0.0	0.0	1.9
Cycle Q Clear(g_c), s	26.3	18.4	18.4	36.8	20.4	20.5	16.4	4.3	5.3	4.7	0.0	1.9
Prop In Lane	1.00		0.29	1.00		0.04	1.00		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	226	909	909	254	909	951	521	786	646	777	0	663
V/C Ratio(X)	0.18	0.55	0.55	0.49	0.59	0.59	0.38	0.17	0.21	0.19	0.00	0.08
Avail Cap(c_a), veh/h	351	1343	1343	392	1343	1405	521	786	646	777	0	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.3	16.5	16.5	29.1	17.0	17.0	23.2	17.9	18.2	18.0	0.0	17.2
Incr Delay (d2), s/veh	0.4	0.5	0.5	1.5	0.6	0.6	2.1	0.5	0.7	0.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.3	9.3	3.0	10.3	10.8	4.3	2.4	2.4	2.6	0.0	0.9
LnGrp Delay(d), s/veh	26.7	17.0	17.0	30.5	17.6	17.6	25.3	18.4	18.9	18.5	0.0	17.4
LnGrp LOS	C	B	B	C	B	B	C	B	B	B		B
Approach Vol, veh/h		1041			1227			464			197	
Approach Delay, s/veh		17.4			18.9			21.5			18.2	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.0		52.7		44.0		52.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s		18.4		28.3		6.7		38.8
Green Ext Time (p_c), s		2.0		8.1		1.1		10.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	630	230	140	650	40	250	290	110	40	330	70
Future Volume (veh/h)	80	630	230	140	650	40	250	290	110	40	330	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	677	247	151	699	43	269	312	118	43	355	75
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	266	1513	641	238	1513	642	451	972	808	466	972	807
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	729	3610	1530	615	3610	1531	972	1900	1579	972	1900	1577
Grp Volume(v), veh/h	86	677	247	151	699	43	269	312	118	43	355	75
Grp Sat Flow(s),veh/h/ln	729	1805	1530	615	1805	1531	972	1900	1579	972	1900	1577
Q Serve(g_s), s	11.1	15.5	12.9	26.9	16.1	1.9	26.5	11.1	4.6	3.1	12.9	2.8
Cycle Q Clear(g_c), s	27.2	15.5	12.9	42.3	16.1	1.9	39.4	11.1	4.6	14.2	12.9	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1513	641	238	1513	642	451	972	808	466	972	807
V/C Ratio(X)	0.32	0.45	0.39	0.64	0.46	0.07	0.60	0.32	0.15	0.09	0.37	0.09
Avail Cap(c_a), veh/h	296	1659	703	262	1659	703	451	972	808	466	972	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	24.0	23.2	39.1	24.1	20.0	28.8	16.5	14.9	20.6	16.9	14.4
Incr Delay (d2), s/veh	0.7	0.2	0.4	4.3	0.2	0.0	5.7	0.9	0.4	0.4	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.8	5.5	4.9	8.0	0.8	7.8	6.0	2.1	0.9	7.1	1.3
LnGrp Delay(d), s/veh	34.6	24.2	23.6	43.4	24.4	20.1	34.5	17.3	15.3	21.0	18.0	14.7
LnGrp LOS	C	C	C	D	C	C	C	B	B	C	B	B
Approach Vol, veh/h		1010			893			699			473	
Approach Delay, s/veh		24.9			27.4			23.6			17.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		63.0		52.3		63.0		52.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		59.0		53.0		59.0		53.0
Max Q Clear Time (g_c+I1), s		41.4		29.2		16.2		44.3
Green Ext Time (p_c), s		3.5		6.5		3.0		4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	40	570	30	20	630
Future Vol, veh/h	50	40	570	30	20	630
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	57	45	648	34	23	716

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1413	651	0	0	685	0
Stage 1	651	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	153	472	-	-	918	-
Stage 1	523	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	149	471	-	-	916	-
Mov Cap-2 Maneuver	149	-	-	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	30.1	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	149	471	916	-
HCM Lane V/C Ratio	-	-	0.381	0.097	0.025	-
HCM Control Delay (s/veh)	-	-	43.3	13.5	9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Future Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Conflicting Peds, #/hr	5	0	0	0	0	5	4	0	18	18	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	11	23	23	11	34	23	580	23	11	534	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1225	1227	538	1223	1215	603	549	0	0	621	0	0
Stage 1	560	560	-	644	644	-	-	-	-	-	-	-
Stage 2	665	667	-	579	571	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	157	180	547	158	183	503	1031	-	-	969	-	-
Stage 1	516	514	-	465	471	-	-	-	-	-	-	-
Stage 2	453	460	-	504	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	171	545	138	174	493	1028	-	-	954	-	-
Mov Cap-2 Maneuver	134	171	-	138	174	-	-	-	-	-	-	-
Stage 1	503	506	-	448	454	-	-	-	-	-	-	-
Stage 2	400	443	-	467	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22.6	24.7	0.3	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	150	545	148	493	954	-	-
HCM Lane V/C Ratio	0.022	-	-	0.152	0.042	0.23	0.069	0.012	-	-
HCM Control Delay (s/veh)	8.6	-	-	33.2	11.9	36.5	12.8	8.8	-	-
HCM Lane LOS	A	-	-	D	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0.8	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Future Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.98		0.95	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Grp Volume(v), veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Grp Sat Flow(s),veh/h/ln	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Q Serve(g_s), s	10.9	6.3	2.7	3.0	6.8	3.2	2.6	6.4	0.6	3.2	7.6	5.2
Cycle Q Clear(g_c), s	17.7	6.3	2.7	9.3	6.8	3.2	10.2	6.4	0.6	9.6	7.6	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
V/C Ratio(X)	0.55	0.35	0.16	0.16	0.38	0.19	0.09	0.26	0.03	0.12	0.30	0.22
Avail Cap(c_a), veh/h	552	918	738	568	918	738	571	1317	1077	715	1317	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	31.2	29.8	35.1	31.4	30.0	7.6	5.5	4.6	7.3	5.7	5.3
Incr Delay (d2), s/veh	1.9	0.5	0.2	0.3	0.6	0.3	0.3	0.5	0.1	0.3	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.4	1.1	1.0	3.6	1.4	0.6	3.5	0.3	1.0	4.2	2.3
LnGrp Delay(d), s/veh	40.8	31.7	30.0	35.4	31.9	30.3	8.0	5.9	4.6	7.6	6.2	5.7
LnGrp LOS	D	C	C	D	C	C	A	A	A	A	A	A
Approach Vol, veh/h		340			267			425			713	
Approach Delay, s/veh		35.1			32.1			6.1			6.2	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		25.2		70.0		25.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		12.2		19.7		11.6		11.3
Green Ext Time (p_c), s		2.8		1.5		4.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Future Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.93	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	289	959	103	103	1062	186	134	165	103	124	155	237
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	371	1927	206	321	1469	257	418	740	605	453	740	603
Arrive On Green	0.13	0.41	0.41	0.06	0.34	0.34	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1792	4675	500	1792	4341	759	988	1881	1538	1105	1881	1535
Grp Volume(v), veh/h	289	701	361	103	837	411	134	165	103	124	155	237
Grp Sat Flow(s),veh/h/ln	1792	1712	1751	1792	1712	1676	988	1881	1538	1105	1881	1535
Q Serve(g_s), s	8.5	13.1	13.2	3.2	18.5	18.6	9.0	5.0	3.8	7.3	4.7	9.6
Cycle Q Clear(g_c), s	8.5	13.1	13.2	3.2	18.5	18.6	13.7	5.0	3.8	12.3	4.7	9.6
Prop In Lane	1.00		0.29	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	1411	722	321	1159	567	418	740	605	453	740	603
V/C Ratio(X)	0.78	0.50	0.50	0.32	0.72	0.72	0.32	0.22	0.17	0.27	0.21	0.39
Avail Cap(c_a), veh/h	781	2494	1276	449	1702	833	418	740	605	453	740	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	18.8	18.8	17.2	25.1	25.1	21.9	17.5	17.1	21.6	17.4	18.8
Incr Delay (d2), s/veh	3.6	0.3	0.5	0.6	0.9	1.8	2.0	0.7	0.6	1.5	0.6	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	6.2	6.4	1.6	8.9	8.8	2.7	2.8	1.7	2.4	2.6	4.4
LnGrp Delay(d), s/veh	21.5	19.1	19.4	17.7	25.9	26.8	23.9	18.2	17.7	23.0	18.0	20.8
LnGrp LOS	C	B	B	B	C	C	C	B	B	C	B	C
Approach Vol, veh/h		1351			1351			402			516	
Approach Delay, s/veh		19.7			25.6			19.9			20.5	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.8	39.6		38.0	15.2	33.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0	11.0	63.0		34.0	31.0	43.0
Max Q Clear Time (g_c+I1), s		15.7	5.2	15.2		14.3	10.5	20.6
Green Ext Time (p_c), s		1.8	0.1	8.0		2.2	0.8	8.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	175.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	880	80	150	1100	30	90	20	240	10	10	130
Future Vol, veh/h	70	880	80	150	1100	30	90	20	240	10	10	130
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	72	907	82	155	1134	31	93	21	247	10	10	134

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1165	0	0	995	0	0	1980	2573	502	2069	2599	583
Stage 1	-	-	-	-	-	-	1098	1098	-	1460	1460	-
Stage 2	-	-	-	-	-	-	882	1475	-	609	1139	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	607	-	-	703	-	-	~ 37	26	520	32	25	461
Stage 1	-	-	-	-	-	-	230	291	-	138	196	-
Stage 2	-	-	-	-	-	-	312	192	-	454	278	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	607	-	-	699	-	-	~ 11	~ 18	517	-	17	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 11	~ 18	-	-	17	-
Stage 1	-	-	-	-	-	-	202	255	-	122	152	-
Stage 2	-	-	-	-	-	-	161	149	-	192	244	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.8	1.4	$ 1400.9	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	12	517	607	-	-	699	-	-	-
HCM Lane V/C Ratio	9.45	0.479	0.119	-	-	0.221	-	-	-
HCM Control Delay (s/veh)	$ 4417.8	18.2	11.7	-	-	11.6	-	-	-
HCM Lane LOS	F	C	B	-	-	B	-	-	-
HCM 95th %tile Q(veh)	15.4	2.6	0.4	-	-	0.8	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	710	70	30	700	40	120	160	50	40	130	120
Future Volume (veh/h)	100	710	70	30	700	40	120	160	50	40	130	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	724	71	31	714	41	122	163	51	41	133	122
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	238	1067	455	202	943	403	55	54	891	47	131	891
Arrive On Green	0.06	0.30	0.30	0.02	0.26	0.26	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1810	3610	1541	1810	3610	1544	0	98	1611	0	237	1611
Grp Volume(v), veh/h	102	724	71	31	714	41	285	0	51	174	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1541	1810	1805	1544	98	0	1611	237	0	1611
Q Serve(g_s), s	3.7	16.6	3.2	1.2	17.1	1.9	0.0	0.0	1.4	0.0	0.0	3.4
Cycle Q Clear(g_c), s	3.7	16.6	3.2	1.2	17.1	1.9	52.0	0.0	1.4	52.0	0.0	3.4
Prop In Lane	1.00		1.00	1.00		1.00	0.43		1.00	0.24		1.00
Lane Grp Cap(c), veh/h	238	1067	455	202	943	403	109	0	891	178	0	891
V/C Ratio(X)	0.43	0.68	0.16	0.15	0.76	0.10	2.62	0.00	0.06	0.98	0.00	0.14
Avail Cap(c_a), veh/h	365	1920	819	274	1690	723	109	0	891	178	0	891
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	24.3	29.2	24.5	25.5	32.0	26.4	23.9	0.0	9.7	31.4	0.0	10.2
Incr Delay (d2), s/veh	1.2	0.8	0.2	0.4	1.3	0.1	755.7	0.0	0.1	61.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	8.4	1.4	0.6	8.7	0.8	25.7	0.0	0.6	6.3	0.0	1.6
LnGrp Delay(d), s/veh	25.5	29.9	24.6	25.8	33.2	26.5	779.6	0.0	9.8	92.7	0.0	10.5
LnGrp LOS	C	C	C	C	C	C	F		A	F		B
Approach Vol, veh/h		897			786			336			296	
Approach Delay, s/veh		29.0			32.6			662.7			58.8	
Approach LOS		C			C			F			E	

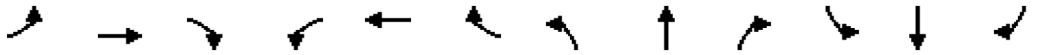
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	6.2	31.8		56.0	9.4	28.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	6.0	50.0		52.0	12.0	44.0
Max Q Clear Time (g_c+I1), s		54.0	3.2	18.6		54.0	5.7	19.1
Green Ext Time (p_c), s		0.0	0.0	6.0		0.0	0.1	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	126.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1240	580	480	1680	170	850	1060	290	230	910	190
Future Volume (veh/h)	290	1240	580	480	1680	170	850	1060	290	230	910	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	309	1319	617	511	1787	181	904	1128	309	245	968	202
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	319	1113	508	434	1840	569	782	1696	517	300	984	298
Arrive On Green	0.09	0.32	0.32	0.13	0.36	0.36	0.22	0.33	0.33	0.09	0.19	0.19
Sat Flow, veh/h	3476	3424	1562	3476	5136	1587	3476	5136	1566	3476	5136	1556
Grp Volume(v), veh/h	309	1319	617	511	1787	181	904	1128	309	245	968	202
Grp Sat Flow(s),veh/h/ln	1738	1712	1562	1738	1712	1587	1738	1712	1566	1738	1712	1556
Q Serve(g_s), s	10.6	39.0	39.0	15.0	41.1	9.9	27.0	22.6	19.8	8.3	22.5	14.5
Cycle Q Clear(g_c), s	10.6	39.0	39.0	15.0	41.1	9.9	27.0	22.6	19.8	8.3	22.5	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1113	508	434	1840	569	782	1696	517	300	984	298
V/C Ratio(X)	0.97	1.19	1.22	1.18	0.97	0.32	1.16	0.67	0.60	0.82	0.98	0.68
Avail Cap(c_a), veh/h	319	1113	508	434	1840	569	782	1696	517	319	984	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	40.5	40.5	52.5	37.9	27.9	46.5	34.5	33.5	53.9	48.3	45.1
Incr Delay (d2), s/veh	42.2	92.7	113.8	101.0	14.7	0.3	84.4	2.1	5.0	14.4	25.0	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	32.7	32.8	13.3	21.9	4.4	22.1	11.0	9.3	4.6	12.9	7.2
LnGrp Delay(d), s/veh	96.5	133.2	154.3	153.5	52.6	28.2	130.9	36.6	38.6	68.3	73.3	56.8
LnGrp LOS	F	F	F	F	D	C	F	D	D	E	E	E
Approach Vol, veh/h		2245			2479			2341			1415	
Approach Delay, s/veh		134.0			71.6			73.2			70.1	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	43.6	19.0	43.0	31.0	27.0	15.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	15.0	39.0	27.0	23.0	11.0	43.0
Max Q Clear Time (g_c+I1), s	10.3	24.6	17.0	41.0	29.0	24.5	12.6	43.1
Green Ext Time (p_c), s	0.1	7.2	0.0	0.0	0.0	0.0	0.0	0.0

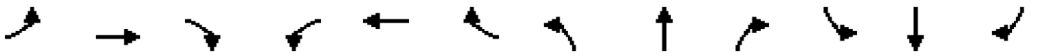
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	88.3
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1430	380	400	1090	250	270	1540	270	340	1670	290
Future Volume (veh/h)	270	1430	380	400	1090	250	270	1540	270	340	1670	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	287	1521	404	426	1160	266	287	1638	287	362	1777	309
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	302	1293	340	351	1297	394	234	1815	554	351	1703	293
Arrive On Green	0.17	0.32	0.32	0.10	0.25	0.25	0.07	0.35	0.35	0.10	0.38	0.38
Sat Flow, veh/h	1810	4082	1074	3510	5187	1575	3510	5187	1584	3510	4442	764
Grp Volume(v), veh/h	287	1286	639	426	1160	266	287	1638	287	362	1379	707
Grp Sat Flow(s),veh/h/ln	1810	1729	1698	1755	1729	1575	1755	1729	1584	1755	1729	1748
Q Serve(g_s), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	36.0	17.3	12.0	46.0	46.0
Cycle Q Clear(g_c), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	36.0	17.3	12.0	46.0	46.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	670
V/C Ratio(X)	0.95	1.17	1.19	1.21	0.89	0.68	1.23	0.90	0.52	1.03	1.04	1.06
Avail Cap(c_a), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	41.0	41.0	54.0	43.5	40.6	56.0	37.0	31.0	54.0	37.0	37.0
Incr Delay (d2), s/veh	38.9	88.4	101.9	119.5	8.4	4.5	133.6	7.8	3.4	56.3	35.8	50.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	31.5	33.0	11.6	13.4	8.5	8.2	18.4	8.1	8.5	28.5	31.5
LnGrp Delay(d), s/veh	88.4	129.4	142.9	173.5	51.8	45.1	189.6	44.8	34.4	110.3	72.8	87.4
LnGrp LOS	F	F	F	F	D	D	F	D	C	F	F	F
Approach Vol, veh/h		2212			1852			2212			2448	
Approach Delay, s/veh		128.0			78.9			62.3			82.5	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	46.0	16.0	42.0	12.0	50.0	24.0	34.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	42.0	12.0	38.0	8.0	46.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	14.0	38.0	14.0	40.0	10.0	48.0	20.9	27.9
Green Ext Time (p_c), s	0.0	3.3	0.0	0.0	0.0	0.0	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	88.1
HCM 2010 LOS	F



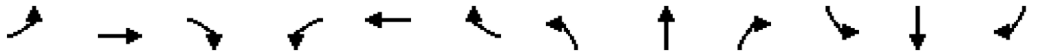
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	190	30	740	140	470	30	1470	570	260	1390	40
Future Volume (vph)	90	190	30	740	140	470	30	1470	570	260	1390	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1900	1615	1715	1745	1559	1805	5187	1594	1805	5158	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1900	1615	1715	1745	1559	1805	5187	1594	1805	5158	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	94	198	31	771	146	490	31	1531	594	271	1448	42
RTOR Reduction (vph)	0	0	27	0	0	261	0	0	343	0	2	0
Lane Group Flow (vph)	94	198	4	455	462	229	31	1531	251	271	1488	0
Confl. Peds. (#/hr)	9					9	6					6
Confl. Bikes (#/hr)						3			1			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	15.2	15.2	15.2	32.0	32.0	32.0	5.2	38.7	38.7	19.0	52.5	
Effective Green, g (s)	15.2	15.2	15.2	32.0	32.0	32.0	5.2	38.7	38.7	19.0	52.5	
Actuated g/C Ratio	0.13	0.13	0.13	0.26	0.26	0.26	0.04	0.32	0.32	0.16	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	226	238	203	453	461	412	77	1660	510	283	2239	
v/s Ratio Prot	0.05	c0.10		c0.27	0.26		0.02	c0.30		c0.15	0.29	
v/s Ratio Perm			0.00			0.15			0.16			
v/c Ratio	0.42	0.83	0.02	1.00	1.00	0.56	0.40	0.92	0.49	0.96	0.66	
Uniform Delay, d1	48.8	51.6	46.3	44.4	44.4	38.3	56.3	39.6	33.2	50.6	27.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	21.3	0.0	43.4	42.5	1.6	3.4	10.0	3.4	41.6	0.8	
Delay (s)	50.0	72.9	46.4	87.8	86.9	39.9	59.8	49.7	36.5	92.1	28.0	
Level of Service	D	E	D	F	F	D	E	D	D	F	C	
Approach Delay (s/veh)		63.7			70.9			46.2			37.8	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.3%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	130	60	70	200	530	110	1360	30	580	1140	50
Future Volume (veh/h)	60	130	60	70	200	530	110	1360	30	580	1140	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	61	133	61	71	204	541	112	1388	31	592	1163	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	314	261	187	314	576	139	1892	42	689	2323	1009
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.53	0.53	0.20	0.65	0.65
Sat Flow, veh/h	719	1881	1562	1191	1881	1552	1792	3573	80	3476	3574	1553
Grp Volume(v), veh/h	61	133	61	71	204	541	112	694	725	592	1163	51
Grp Sat Flow(s),veh/h/ln	719	1881	1562	1191	1881	1552	1792	1787	1865	1738	1787	1553
Q Serve(g_s), s	7.5	7.2	3.9	6.5	11.5	19.0	7.0	34.0	34.1	18.7	19.2	1.4
Cycle Q Clear(g_c), s	19.0	7.2	3.9	13.7	11.5	19.0	7.0	34.0	34.1	18.7	19.2	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	110	314	261	187	314	576	139	946	988	689	2323	1009
V/C Ratio(X)	0.55	0.42	0.23	0.38	0.65	0.94	0.80	0.73	0.73	0.86	0.50	0.05
Avail Cap(c_a), veh/h	110	314	261	187	314	576	236	946	988	1007	2323	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	42.5	41.1	48.7	44.3	35.1	51.6	20.6	20.6	44.1	10.3	7.2
Incr Delay (d2), s/veh	5.9	0.9	0.5	1.3	4.7	23.6	10.3	5.0	4.8	5.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	3.8	1.7	2.2	6.4	20.2	3.9	17.9	18.9	9.5	9.6	0.6
LnGrp Delay(d), s/veh	59.9	43.4	41.6	49.9	49.0	58.7	61.9	25.6	25.4	49.3	11.1	7.3
LnGrp LOS	E	D	D	D	D	E	E	C	C	D	B	A
Approach Vol, veh/h		255			816			1531			1806	
Approach Delay, s/veh		46.9			55.5			28.2			23.5	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.6	64.3		23.0	12.9	78.0		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	33.0	56.0		19.0	15.0	74.0		19.0
Max Q Clear Time (g_c+I1), s	20.7	36.1		21.0	9.0	21.2		21.0
Green Ext Time (p_c), s	1.8	9.9		0.0	0.1	11.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		32.4
HCM 2010 LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	770	110	410	1060	300	90	980	280	260	1000	150
Future Volume (veh/h)	220	770	110	410	1060	300	90	980	280	260	1000	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	227	794	113	423	1093	309	93	1010	289	268	1031	155
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	250	755	107	388	1162	503	189	909	258	254	1216	182
Arrive On Green	0.10	0.24	0.24	0.18	0.32	0.32	0.05	0.33	0.33	0.11	0.39	0.39
Sat Flow, veh/h	1792	3123	444	1792	3574	1547	1792	2726	775	1792	3090	464
Grp Volume(v), veh/h	227	454	453	423	1093	309	93	660	639	268	596	590
Grp Sat Flow(s),veh/h/ln	1792	1787	1780	1792	1787	1547	1792	1787	1714	1792	1787	1767
Q Serve(g_s), s	11.5	29.0	29.0	22.0	35.7	20.2	4.1	40.0	40.0	13.0	36.4	36.5
Cycle Q Clear(g_c), s	11.5	29.0	29.0	22.0	35.7	20.2	4.1	40.0	40.0	13.0	36.4	36.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.45	1.00		0.26
Lane Grp Cap(c), veh/h	250	432	430	388	1162	503	189	596	571	254	703	695
V/C Ratio(X)	0.91	1.05	1.05	1.09	0.94	0.61	0.49	1.11	1.12	1.05	0.85	0.85
Avail Cap(c_a), veh/h	250	432	430	388	1162	503	192	596	571	254	703	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.2	45.5	45.5	37.0	39.4	34.2	28.7	40.0	40.0	36.6	33.1	33.2
Incr Delay (d2), s/veh	33.7	57.7	57.8	71.7	14.5	2.2	2.0	70.0	74.7	71.6	12.1	12.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	21.2	21.1	20.6	19.9	8.9	2.1	31.3	30.7	13.5	20.2	20.1
LnGrp Delay(d), s/veh	66.9	103.2	103.3	108.6	53.9	36.4	30.6	110.0	114.7	108.2	45.2	45.5
LnGrp LOS	E	F	F	F	D	D	C	F	F	F	D	D
Approach Vol, veh/h		1134			1825			1392			1454	
Approach Delay, s/veh		96.0			63.6			106.9			56.9	
Approach LOS		F			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	44.0	26.0	33.0	9.8	51.2	16.0	43.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	40.0	22.0	29.0	6.0	47.0	12.0	39.0
Max Q Clear Time (g_c+I1), s	15.0	42.0	24.0	31.0	6.1	38.5	13.5	37.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	4.7	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	78.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	110	420	1000	60	140	1070	260	80	1080	80
Future Volume (veh/h)	110	620	110	420	1000	60	140	1070	260	80	1080	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	116	653	116	442	1053	63	147	1126	274	84	1137	84
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	218	688	283	466	1242	527	203	1466	620	189	1322	98
Arrive On Green	0.07	0.19	0.19	0.22	0.35	0.35	0.06	0.41	0.41	0.04	0.39	0.39
Sat Flow, veh/h	1792	3574	1468	1792	3574	1517	1792	3574	1512	1792	3360	248
Grp Volume(v), veh/h	116	653	116	442	1053	63	147	1126	274	84	604	617
Grp Sat Flow(s),veh/h/ln	1792	1787	1468	1792	1787	1517	1792	1787	1512	1792	1787	1821
Q Serve(g_s), s	6.1	21.6	8.3	24.4	32.6	3.4	5.9	32.4	15.6	3.3	37.0	37.1
Cycle Q Clear(g_c), s	6.1	21.6	8.3	24.4	32.6	3.4	5.9	32.4	15.6	3.3	37.0	37.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	218	688	283	466	1242	527	203	1466	620	189	703	716
V/C Ratio(X)	0.53	0.95	0.41	0.95	0.85	0.12	0.72	0.77	0.44	0.44	0.86	0.86
Avail Cap(c_a), veh/h	218	688	283	474	1256	533	203	1466	620	204	703	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.1	47.7	42.3	33.2	36.0	26.5	27.5	30.4	25.4	24.9	33.2	33.3
Incr Delay (d2), s/veh	2.5	22.6	1.0	28.6	5.6	0.1	12.0	3.9	2.3	1.6	13.0	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	12.8	3.4	18.1	17.0	1.4	3.5	16.8	6.9	1.7	20.8	21.2
LnGrp Delay(d), s/veh	38.6	70.3	43.3	61.8	41.6	26.6	39.5	34.3	27.7	26.6	46.2	46.2
LnGrp LOS	D	E	D	E	D	C	D	C	C	C	D	D
Approach Vol, veh/h		885			1558			1547			1305	
Approach Delay, s/veh		62.6			46.7			33.6			44.9	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	53.0	30.5	27.0	11.0	51.0	12.0	45.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	48.0	27.0	23.0	7.0	47.0	8.0	42.0
Max Q Clear Time (g_c+I1), s	5.3	34.4	26.4	23.6	7.9	39.1	8.1	34.6
Green Ext Time (p_c), s	0.0	7.3	0.1	0.0	0.0	4.8	0.0	4.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	230	90	70	300	190	90	1170	150	170	1410	70
Future Volume (veh/h)	120	230	90	70	300	190	90	1170	150	170	1410	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	124	237	93	72	309	196	93	1206	155	175	1454	72
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	40	36	652	36	116	644	150	1506	657	237	1638	701
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.03	0.42	0.42	0.07	0.46	0.46
Sat Flow, veh/h	0	87	1597	0	284	1578	1792	3574	1559	1792	3574	1529
Grp Volume(v), veh/h	361	0	93	381	0	196	93	1206	155	175	1454	72
Grp Sat Flow(s),veh/h/ln	87	0	1597	284	0	1578	1792	1787	1559	1792	1787	1529
Q Serve(g_s), s	0.0	0.0	4.4	0.0	0.0	10.1	3.6	35.4	7.7	6.4	44.6	3.2
Cycle Q Clear(g_c), s	49.0	0.0	4.4	49.0	0.0	10.1	3.6	35.4	7.7	6.4	44.6	3.2
Prop In Lane	0.34		1.00	0.19		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	76	0	652	152	0	644	150	1506	657	237	1638	701
V/C Ratio(X)	4.76	0.00	0.14	2.51	0.00	0.30	0.62	0.80	0.24	0.74	0.89	0.10
Avail Cap(c_a), veh/h	76	0	652	152	0	644	150	1506	657	260	1638	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.5	0.0	22.3	38.7	0.0	24.0	27.8	30.3	22.3	25.4	29.7	18.5
Incr Delay (d2), s/veh	1719.3	0.0	0.1	700.8	0.0	0.3	7.7	4.6	0.8	9.7	7.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	38.8	0.0	2.0	33.3	0.0	4.4	2.1	18.4	3.5	3.7	23.5	1.4
LnGrp Delay(d), s/veh	1756.9	0.0	22.4	739.5	0.0	24.2	35.5	34.9	23.1	35.0	37.2	18.8
LnGrp LOS	F		C	F		C	D	C	C	D	D	B
Approach Vol, veh/h		454			577			1454			1701	
Approach Delay, s/veh		1401.6			496.6			33.7			36.2	
Approach LOS		F			F			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	12.4	54.6		53.0	8.0	59.0		53.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	49.0		49.0	4.0	55.0		49.0
Max Q Clear Time (g_c+I1), s	8.4	37.4		51.0	5.6	46.6		51.0
Green Ext Time (p_c), s	0.1	6.7		0.0	0.0	5.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		246.9
HCM 2010 LOS		F

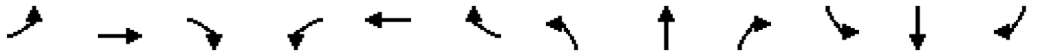
Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	20	0	0	20	0	1420	30	0	1620	20
Future Vol, veh/h	0	0	20	0	0	20	0	1420	30	0	1620	20
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	6	6	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	21	0	0	21	0	1464	31	0	1670	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	835	-	-	732	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	313	0	0	366	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	313	-	-	366	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.3	15.4	0	0
HCM LOS	C	C		

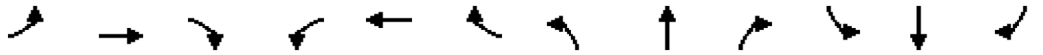
Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	313	366	-
HCM Lane V/C Ratio	-	0.066	0.056	-
HCM Control Delay (s/veh)	-	17.3	15.4	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.2	0.2	-



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	670	220	340	800	250	300	1530	480	310	1330	210
Future Volume (veh/h)	240	670	220	340	800	250	300	1530	480	310	1330	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.90	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	242	677	222	343	808	253	303	1545	485	313	1343	212
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	261	998	271	397	834	334	366	1668	712	319	2011	317
Arrive On Green	0.08	0.19	0.19	0.11	0.23	0.23	0.11	0.47	0.47	0.09	0.45	0.45
Sat Flow, veh/h	3476	5136	1396	3476	3574	1432	3476	3574	1526	3476	4437	700
Grp Volume(v), veh/h	242	677	222	343	808	253	303	1545	485	313	1036	519
Grp Sat Flow(s),veh/h/ln	1738	1712	1396	1738	1787	1432	1738	1787	1526	1738	1712	1714
Q Serve(g_s), s	8.3	14.7	18.3	11.6	26.9	19.7	10.3	48.7	29.8	10.8	28.5	28.5
Cycle Q Clear(g_c), s	8.3	14.7	18.3	11.6	26.9	19.7	10.3	48.7	29.8	10.8	28.5	28.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	261	998	271	397	834	334	366	1668	712	319	1551	776
V/C Ratio(X)	0.93	0.68	0.82	0.86	0.97	0.76	0.83	0.93	0.68	0.98	0.67	0.67
Avail Cap(c_a), veh/h	261	998	271	406	834	334	463	1668	712	319	1551	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	44.9	46.3	52.2	45.6	42.8	52.6	30.1	25.0	54.4	25.7	25.7
Incr Delay (d2), s/veh	37.0	1.9	17.7	17.2	23.7	9.5	9.7	10.3	5.2	45.5	2.3	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	7.1	8.4	6.5	16.0	8.7	5.4	26.2	13.6	7.2	13.9	14.4
LnGrp Delay(d), s/veh	92.2	46.7	64.0	69.4	69.3	52.4	62.3	40.4	30.2	99.9	28.0	30.3
LnGrp LOS	F	D	E	E	E	D	E	D	C	F	C	C
Approach Vol, veh/h		1141			1404			2333			1868	
Approach Delay, s/veh		59.7			66.3			41.1			40.7	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	60.0	17.7	27.3	16.6	58.4	13.0	32.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	56.0	14.0	23.0	16.0	51.0	9.0	28.0
Max Q Clear Time (g_c+I1), s	12.8	50.7	13.6	20.3	12.3	30.5	10.3	28.9
Green Ext Time (p_c), s	0.0	4.4	0.1	1.4	0.4	10.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.4
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	180	460	220	90	2100	0	0	1390	810
Future Volume (veh/h)	0	0	0	180	460	220	90	2100	0	0	1390	810
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				184	469	224	92	2143	0	0	1418	827
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				320	639	285	145	3855	0	0	2307	1052
Arrive On Green				0.18	0.18	0.18	0.04	0.75	0.00	0.00	0.67	0.67
Sat Flow, veh/h				1792	3574	1596	3476	5305	0	0	3593	1562
Grp Volume(v), veh/h				184	469	224	92	2143	0	0	1418	827
Grp Sat Flow(s),veh/h/ln				1792	1787	1596	1738	1712	0	0	1712	1562
Q Serve(g_s), s				10.6	14.0	15.2	3.0	20.2	0.0	0.0	26.1	41.6
Cycle Q Clear(g_c), s				10.6	14.0	15.2	3.0	20.2	0.0	0.0	26.1	41.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				320	639	285	145	3855	0	0	2307	1052
V/C Ratio(X)				0.57	0.73	0.79	0.64	0.56	0.00	0.00	0.61	0.79
Avail Cap(c_a), veh/h				427	852	381	215	3855	0	0	2307	1052
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.6	44.0	44.4	53.4	6.0	0.0	0.0	10.3	12.8
Incr Delay (d2), s/veh				1.6	2.3	7.6	4.6	0.6	0.0	0.0	1.2	5.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.4	7.1	7.3	1.5	9.5	0.0	0.0	12.6	19.4
LnGrp Delay(d), s/veh				44.2	46.2	52.0	58.0	6.6	0.0	0.0	11.5	18.7
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					877			2235			2245	
Approach Delay, s/veh					47.3			8.7			14.2	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		89.0			8.7	80.3		24.2
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		85.0			7.0	74.0		27.0
Max Q Clear Time (g_c+I1), s		22.2			5.0	43.6		17.2
Green Ext Time (p_c), s		30.8			0.0	21.4		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1160	370	200	0	0	0	0	1280	210	270	1270	0
Future Volume (veh/h)	1160	370	200	0	0	0	0	1280	210	270	1270	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881				0	1881	1881	1881	1881	0
Adj Flow Rate, veh/h	1184	378	204				0	1306	214	276	1296	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	1364	738	628				0	2062	628	344	2753	0
Arrive On Green	0.39	0.39	0.39				0.00	0.40	0.40	0.10	0.54	0.00
Sat Flow, veh/h	3476	1881	1599				0	5305	1564	3476	5305	0
Grp Volume(v), veh/h	1184	378	204				0	1306	214	276	1296	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1599				0	1712	1564	1738	1712	0
Q Serve(g_s), s	35.1	17.1	9.9				0.0	22.8	10.6	8.7	17.5	0.0
Cycle Q Clear(g_c), s	35.1	17.1	9.9				0.0	22.8	10.6	8.7	17.5	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1364	738	628				0	2062	628	344	2753	0
V/C Ratio(X)	0.87	0.51	0.33				0.00	0.63	0.34	0.80	0.47	0.00
Avail Cap(c_a), veh/h	1615	874	743				0	2062	628	466	2753	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	31.3	25.9	23.7				0.0	26.9	23.2	49.4	16.1	0.0
Incr Delay (d2), s/veh	4.7	0.6	0.3				0.0	1.5	1.5	7.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.7	8.9	4.4				0.0	11.0	4.8	4.5	8.4	0.0
LnGrp Delay(d), s/veh	36.0	26.4	24.0				0.0	28.4	24.7	56.5	16.7	0.0
LnGrp LOS	D	C	C					C	C	E	B	
Approach Vol, veh/h		1766						1520			1572	
Approach Delay, s/veh		32.6						27.9			23.7	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.1	48.9		47.9		64.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	15.0	41.0		52.0		60.0		
Max Q Clear Time (g_c+I1), s	10.7	24.8		37.1		19.5		
Green Ext Time (p_c), s	0.4	8.9		6.8		11.6		

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh			28.2
HCM 2010 LOS			C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	570	1710	120	480	1170	230	110	990	530	220	720	290
Future Volume (veh/h)	570	1710	120	480	1170	230	110	990	530	220	720	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	600	1800	126	505	1232	242	116	1042	558	232	758	305
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
Arrive On Green	0.19	0.34	0.34	0.15	0.30	0.30	0.08	0.31	0.31	0.07	0.30	0.30
Sat Flow, veh/h	3510	5187	1592	3510	5187	1612	1810	3610	1590	3510	3610	1585
Grp Volume(v), veh/h	600	1800	126	505	1232	242	116	1042	558	232	758	305
Grp Sat Flow(s),veh/h/ln	1755	1729	1592	1755	1729	1612	1810	1805	1590	1755	1805	1585
Q Serve(g_s), s	20.1	41.0	6.8	17.1	26.0	14.8	7.6	33.7	35.1	7.9	22.4	14.7
Cycle Q Clear(g_c), s	20.1	41.0	6.8	17.1	26.0	14.8	7.6	33.7	35.1	7.9	22.4	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
V/C Ratio(X)	0.91	1.02	0.23	0.96	0.78	0.49	0.82	0.94	0.76	0.99	0.71	0.39
Avail Cap(c_a), veh/h	702	1772	544	527	1574	489	166	1113	733	234	1071	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	39.5	28.2	50.6	38.2	34.2	54.5	40.4	27.1	56.0	37.6	19.7
Incr Delay (d2), s/veh	15.2	25.4	0.2	29.1	2.6	0.8	23.4	15.4	7.4	56.3	4.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	23.7	3.0	10.4	12.8	6.7	4.7	19.2	16.8	5.7	11.7	6.7
LnGrp Delay(d), s/veh	62.9	64.9	28.5	79.7	40.8	35.0	77.9	55.8	34.5	112.2	41.5	21.2
LnGrp LOS	E	F	C	E	D	D	E	E	C	F	D	C
Approach Vol, veh/h		2526			1979			1716			1295	
Approach Delay, s/veh		62.6			50.0			50.3			49.4	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	41.0	22.0	45.0	13.4	39.6	26.6	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	37.0	18.0	41.0	11.0	34.0	24.0	35.0
Max Q Clear Time (g_c+I1), s	9.9	37.1	19.1	43.0	9.6	24.4	22.1	28.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	4.0	0.5	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	870	150	550	1190	210	140	780	300	140	540	150
Future Volume (veh/h)	220	870	150	550	1190	210	140	780	300	140	540	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.87	1.00		0.83	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	242	956	165	604	1308	231	154	857	330	154	593	165
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	1037	179	647	1380	538	215	999	371	191	736	204
Arrive On Green	0.15	0.35	0.35	0.18	0.38	0.38	0.06	0.28	0.28	0.06	0.28	0.28
Sat Flow, veh/h	1810	2997	516	3510	3610	1407	1810	3610	1340	1810	2660	736
Grp Volume(v), veh/h	242	575	546	604	1308	231	154	857	330	154	401	357
Grp Sat Flow(s),veh/h/ln	1810	1805	1708	1755	1805	1407	1810	1805	1340	1810	1805	1591
Q Serve(g_s), s	15.7	36.5	36.6	20.2	41.9	14.5	7.0	26.9	28.2	7.0	24.7	24.9
Cycle Q Clear(g_c), s	15.7	36.5	36.6	20.2	41.9	14.5	7.0	26.9	28.2	7.0	24.7	24.9
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	269	625	591	647	1380	538	215	999	371	191	499	440
V/C Ratio(X)	0.90	0.92	0.92	0.93	0.95	0.43	0.72	0.86	0.89	0.81	0.80	0.81
Avail Cap(c_a), veh/h	273	636	601	647	1392	543	215	999	371	191	499	440
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	37.4	37.5	47.9	35.7	27.2	33.2	40.9	41.4	34.0	40.1	40.2
Incr Delay (d2), s/veh	30.0	18.7	19.8	20.6	13.6	0.5	10.8	9.5	25.9	21.7	12.9	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	21.5	20.5	11.7	23.5	5.7	4.2	14.6	13.1	4.7	14.1	12.7
LnGrp Delay(d), s/veh	79.9	56.1	57.3	68.5	49.3	27.8	44.0	50.4	67.3	55.7	53.0	55.1
LnGrp LOS	E	E	E	E	D	C	D	D	E	E	D	E
Approach Vol, veh/h		1363			2143			1341			912	
Approach Delay, s/veh		60.8			52.4			53.8			54.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	37.0	26.0	45.3	11.0	37.0	21.7	49.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	33.0	22.0	42.0	7.0	33.0	18.0	46.0
Max Q Clear Time (g_c+I1), s	9.0	30.2	22.2	38.6	9.0	26.9	17.7	43.9
Green Ext Time (p_c), s	0.0	1.8	0.0	2.2	0.0	2.5	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	510	280	590	870	160	450	900	490	110	980	190
Future Volume (veh/h)	120	510	280	590	870	160	450	900	490	110	980	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	125	531	292	615	906	167	469	938	510	115	1021	198
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	134	536	225	608	894	385	433	1730	756	274	993	192
Arrive On Green	0.08	0.15	0.15	0.17	0.25	0.25	0.21	0.48	0.48	0.06	0.33	0.33
Sat Flow, veh/h	1792	3574	1499	3476	3574	1541	1792	3574	1561	1792	2979	576
Grp Volume(v), veh/h	125	531	292	615	906	167	469	938	510	115	612	607
Grp Sat Flow(s),veh/h/ln	1792	1787	1499	1738	1787	1541	1792	1787	1561	1792	1787	1768
Q Serve(g_s), s	8.3	17.8	18.0	21.0	30.0	10.9	25.0	22.0	30.1	5.0	40.0	40.0
Cycle Q Clear(g_c), s	8.3	17.8	18.0	21.0	30.0	10.9	25.0	22.0	30.1	5.0	40.0	40.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	134	536	225	608	894	385	433	1730	756	274	596	589
V/C Ratio(X)	0.93	0.99	1.30	1.01	1.01	0.43	1.08	0.54	0.68	0.42	1.03	1.03
Avail Cap(c_a), veh/h	134	536	225	608	894	385	433	1730	756	305	596	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	50.9	51.0	49.5	45.0	37.9	38.4	21.6	23.7	23.9	40.0	40.0
Incr Delay (d2), s/veh	56.7	36.3	162.9	39.3	33.6	0.8	67.2	1.2	4.8	1.0	43.9	45.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.5	17.6	13.4	18.9	4.7	22.4	11.1	13.9	2.5	27.0	26.9
LnGrp Delay(d), s/veh	111.9	87.2	213.9	88.8	78.6	38.6	105.7	22.9	28.5	24.9	83.9	85.2
LnGrp LOS	F	F	F	F	F	D	F	C	C	C	F	F
Approach Vol, veh/h		948			1688			1917			1334	
Approach Delay, s/veh		129.5			78.4			44.6			79.4	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	62.1	25.0	22.0	29.0	44.0	13.0	34.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	56.0	21.0	18.0	25.0	40.0	9.0	30.0
Max Q Clear Time (g_c+I1), s	7.0	32.1	23.0	20.0	27.0	42.0	10.3	32.0
Green Ext Time (p_c), s	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	340	30	10	10	270	1720	60	10	1700	150
Future Volume (veh/h)	100	0	340	30	10	10	270	1720	60	10	1700	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	106	0	362	32	11	11	287	1830	64	11	1809	160
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	273	0	258	61	140	140	316	2592	1121	185	2017	175
Arrive On Green	0.16	0.00	0.16	0.16	0.16	0.16	0.13	0.73	0.73	0.01	0.61	0.61
Sat Flow, veh/h	1395	0	1594	1026	863	863	1792	3574	1546	1792	3317	288
Grp Volume(v), veh/h	106	0	362	32	0	22	287	1830	64	11	959	1010
Grp Sat Flow(s),veh/h/ln	1395	0	1594	1026	0	1727	1792	1787	1546	1792	1787	1818
Q Serve(g_s), s	8.2	0.0	19.0	0.0	0.0	1.3	12.7	33.8	1.4	0.3	53.2	57.4
Cycle Q Clear(g_c), s	9.4	0.0	19.0	19.0	0.0	1.3	12.7	33.8	1.4	0.3	53.2	57.4
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	273	0	258	61	0	280	316	2592	1121	185	1087	1105
V/C Ratio(X)	0.39	0.00	1.40	0.52	0.00	0.08	0.91	0.71	0.06	0.06	0.88	0.91
Avail Cap(c_a), veh/h	273	0	258	61	0	280	363	2592	1121	228	1087	1105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	49.1	58.6	0.0	41.7	38.7	9.1	4.6	10.4	19.4	20.3
Incr Delay (d2), s/veh	0.9	0.0	202.1	7.7	0.0	0.1	23.9	1.6	0.1	0.1	10.4	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	22.8	1.2	0.0	0.6	11.2	17.1	0.6	0.1	29.3	32.6
LnGrp Delay(d), s/veh	46.6	0.0	251.2	66.3	0.0	41.8	62.6	10.7	4.7	10.5	29.9	33.2
LnGrp LOS	D		F	E		D	E	B	A	B	C	C
Approach Vol, veh/h		468			54			2181			1980	
Approach Delay, s/veh		204.9			56.3			17.4			31.4	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	89.0		23.0	18.9	75.3		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	85.0		19.0	18.0	71.0		19.0
Max Q Clear Time (g_c+I1), s	2.3	35.8		21.0	14.7	59.4		21.0
Green Ext Time (p_c), s	0.0	23.6		0.0	0.3	9.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	810	190	250	770	290	290	1350	80	280	1490	230
Future Volume (veh/h)	290	810	190	250	770	290	290	1350	80	280	1490	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	293	818	192	253	778	293	293	1364	81	283	1505	232
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1244	289	314	646	243	209	1370	593	225	1400	607
Arrive On Green	0.13	0.30	0.30	0.09	0.26	0.26	0.08	0.38	0.38	0.09	0.39	0.39
Sat Flow, veh/h	1792	4129	960	3476	2502	942	1792	3574	1547	1792	3574	1551
Grp Volume(v), veh/h	293	677	333	253	555	516	293	1364	81	283	1505	232
Grp Sat Flow(s),veh/h/ln	1792	1712	1666	1738	1787	1657	1792	1787	1547	1792	1787	1551
Q Serve(g_s), s	16.0	20.7	20.9	8.6	31.0	31.0	10.0	45.7	4.1	11.0	47.0	12.8
Cycle Q Clear(g_c), s	16.0	20.7	20.9	8.6	31.0	31.0	10.0	45.7	4.1	11.0	47.0	12.8
Prop In Lane	1.00		0.58	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1032	502	314	462	428	209	1370	593	225	1400	607
V/C Ratio(X)	1.23	0.66	0.66	0.81	1.20	1.20	1.40	1.00	0.14	1.26	1.08	0.38
Avail Cap(c_a), veh/h	239	1032	502	406	462	428	209	1370	593	225	1400	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	36.5	36.6	53.5	44.5	44.5	35.2	36.9	24.1	35.9	36.5	26.1
Incr Delay (d2), s/veh	133.2	1.5	3.3	8.9	110.5	112.3	206.2	23.3	0.5	146.2	47.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	10.0	10.1	4.5	29.4	27.5	18.9	27.0	1.8	16.6	32.3	5.8
LnGrp Delay(d), s/veh	185.2	38.0	39.9	62.4	155.0	156.8	241.4	60.2	24.6	182.2	83.5	27.9
LnGrp LOS	F	D	D	E	F	F	F	E	C	F	F	C
Approach Vol, veh/h		1303			1324			1738			2020	
Approach Delay, s/veh		71.6			138.0			89.1			91.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	50.0	14.8	40.2	14.0	51.0	20.0	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	46.0	14.0	33.0	10.0	47.0	16.0	31.0
Max Q Clear Time (g_c+I1), s	13.0	47.7	10.6	22.9	12.0	49.0	18.0	33.0
Green Ext Time (p_c), s	0.0	0.0	0.3	4.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	96.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	240	350	690	110	1320	0	0	1690	390
Future Volume (veh/h)	0	0	0	240	350	690	110	1320	0	0	1690	390
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				250	365	719	115	1375	0	0	1760	406
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				569	900	653	119	2696	0	0	1773	401
Arrive On Green				0.41	0.41	0.41	0.07	0.52	0.00	0.00	0.43	0.43
Sat Flow, veh/h				1394	2205	1599	1792	5305	0	0	4342	944
Grp Volume(v), veh/h				325	290	719	115	1375	0	0	1438	728
Grp Sat Flow(s),veh/h/ln				1811	1787	1599	1792	1712	0	0	1712	1693
Q Serve(g_s), s				15.5	13.8	49.0	7.7	20.8	0.0	0.0	50.0	51.0
Cycle Q Clear(g_c), s				15.5	13.8	49.0	7.7	20.8	0.0	0.0	50.0	51.0
Prop In Lane				0.77		1.00	1.00		0.00	0.00		0.56
Lane Grp Cap(c), veh/h				740	730	653	119	2696	0	0	1455	719
V/C Ratio(X)				0.44	0.40	1.10	0.96	0.51	0.00	0.00	0.99	1.01
Avail Cap(c_a), veh/h				740	730	653	119	2696	0	0	1455	719
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.6	25.1	35.5	55.9	18.5	0.0	0.0	34.2	34.5
Incr Delay (d2), s/veh				0.4	0.4	66.2	70.5	0.7	0.0	0.0	21.0	36.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.8	6.8	33.6	6.1	10.0	0.0	0.0	27.8	31.1
LnGrp Delay(d), s/veh				26.0	25.4	101.7	126.3	19.2	0.0	0.0	55.2	71.1
LnGrp LOS				C	C	F	F	B			E	F
Approach Vol, veh/h					1334			1490			2166	
Approach Delay, s/veh					66.7			27.5			60.5	
Approach LOS					E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			12.0	55.0		53.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			8.0	51.0		49.0
Max Q Clear Time (g_c+I1), s		22.8			9.7	53.0		51.0
Green Ext Time (p_c), s		12.6			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	420	70	0	0	0	0	1240	400	780	1140	0
Future Volume (veh/h)	320	420	70	0	0	0	0	1240	400	780	1140	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	330	433	72				0	1278	412	804	1175	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	444	442	396				0	1507	484	868	2418	0
Arrive On Green	0.25	0.25	0.25				0.00	0.40	0.40	0.25	0.68	0.00
Sat Flow, veh/h	1774	1770	1583				0	3958	1218	3442	3632	0
Grp Volume(v), veh/h	330	433	72				0	1143	547	804	1175	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583				0	1695	1618	1721	1770	0
Q Serve(g_s), s	20.6	29.2	4.3				0.0	36.8	36.9	27.3	18.9	0.0
Cycle Q Clear(g_c), s	20.6	29.2	4.3				0.0	36.8	36.9	27.3	18.9	0.0
Prop In Lane	1.00		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	444	442	396				0	1348	644	868	2418	0
V/C Ratio(X)	0.74	0.98	0.18				0.00	0.85	0.85	0.93	0.49	0.00
Avail Cap(c_a), veh/h	444	442	396				0	1348	644	918	2418	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.5	44.7	35.4				0.0	32.8	32.9	43.8	9.0	0.0
Incr Delay (d2), s/veh	6.7	37.1	0.2				0.0	6.8	13.3	14.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	18.8	1.9				0.0	18.4	18.8	14.7	9.4	0.0
LnGrp Delay(d), s/veh	48.1	81.8	35.6				0.0	39.6	46.2	58.3	9.7	0.0
LnGrp LOS	D	F	D					D	D	E	A	
Approach Vol, veh/h		835						1690			1979	
Approach Delay, s/veh		64.5						41.7			29.4	
Approach LOS		E						D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	34.3	51.7		34.0		86.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	32.0	46.0		30.0		82.0		
Max Q Clear Time (g_c+I1), s	29.3	38.9		31.2		20.9		
Green Ext Time (p_c), s	0.9	5.3		0.0		11.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1360	110	200	2560	140	120	120	130	110	120	70
Future Volume (veh/h)	60	1360	110	200	2560	140	120	120	130	110	120	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.97		0.93	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	62	1417	115	208	2667	146	125	125	135	115	125	73
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	2165	175	295	2327	126	210	254	201	201	296	158
Arrive On Green	0.03	0.64	0.64	0.06	0.67	0.67	0.03	0.13	0.13	0.03	0.13	0.13
Sat Flow, veh/h	1810	3377	273	1810	3476	188	1810	1900	1502	1810	2209	1179
Grp Volume(v), veh/h	62	754	778	208	1370	1443	125	125	135	115	100	98
Grp Sat Flow(s),veh/h/ln	1810	1805	1845	1810	1805	1859	1810	1900	1502	1810	1805	1583
Q Serve(g_s), s	1.4	30.8	31.3	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Cycle Q Clear(g_c), s	1.4	30.8	31.3	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Prop In Lane	1.00		0.15	1.00		0.10	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	113	1157	1183	295	1208	1244	210	254	201	201	242	212
V/C Ratio(X)	0.55	0.65	0.66	0.70	1.13	1.16	0.60	0.49	0.67	0.57	0.41	0.46
Avail Cap(c_a), veh/h	121	1157	1183	464	1208	1244	210	254	201	201	242	212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	13.2	13.3	16.9	19.7	19.7	48.0	48.0	49.2	47.6	47.4	47.8
Incr Delay (d2), s/veh	4.5	1.3	1.3	3.1	71.0	81.0	4.5	6.6	16.4	3.8	5.2	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	15.5	16.2	4.8	63.1	68.4	3.8	4.3	5.2	3.5	3.4	3.4
LnGrp Delay(d), s/veh	35.7	14.5	14.7	19.9	90.8	100.7	52.5	54.6	65.7	51.4	52.6	54.9
LnGrp LOS	D	B	B	B	F	F	D	D	E	D	D	D
Approach Vol, veh/h		1594			3021			385			313	
Approach Delay, s/veh		15.4			90.6			57.8			52.9	
Approach LOS		B			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	20.0	10.9	80.6	8.0	20.0	7.5	84.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	16.0	18.0	66.0	4.0	16.0	4.0	80.0
Max Q Clear Time (g_c+I1), s	6.0	12.2	6.5	33.3	6.0	8.8	3.4	82.0
Green Ext Time (p_c), s	0.0	0.4	0.4	13.5	0.0	0.6	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		63.5
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Future Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	224	816	133	31	1184	51	143	102	20	92	102	245
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	295	1480	241	293	1436	62	337	832	159	493	454	397
Arrive On Green	0.09	0.48	0.48	0.02	0.41	0.41	0.08	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1810	3100	505	1810	3526	152	1810	3015	575	1810	1805	1581
Grp Volume(v), veh/h	224	475	474	31	606	629	143	60	62	92	102	245
Grp Sat Flow(s),veh/h/ln	1810	1805	1800	1810	1805	1872	1810	1805	1784	1810	1805	1581
Q Serve(g_s), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Cycle Q Clear(g_c), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Prop In Lane	1.00		0.28	1.00		0.08	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	295	861	859	293	735	763	337	498	492	493	454	397
V/C Ratio(X)	0.76	0.55	0.55	0.11	0.82	0.83	0.42	0.12	0.13	0.19	0.22	0.62
Avail Cap(c_a), veh/h	529	1303	1300	328	977	1014	426	498	492	512	454	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	17.5	17.5	16.2	24.9	24.9	23.8	25.5	25.6	24.0	28.0	31.2
Incr Delay (d2), s/veh	4.0	0.6	0.6	0.2	4.4	4.3	0.8	0.5	0.5	0.2	1.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	8.8	8.8	0.5	14.9	15.4	2.7	1.2	1.3	1.8	2.2	6.4
LnGrp Delay(d), s/veh	23.8	18.0	18.0	16.4	29.3	29.2	24.7	26.0	26.1	24.2	29.1	38.3
LnGrp LOS	C	B	B	B	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1173			1266			265			439	
Approach Delay, s/veh		19.1			28.9			25.3			33.2	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	30.0	6.2	49.0	11.3	27.7	12.8	42.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	26.0	4.0	68.0	12.0	20.0	21.0	51.0
Max Q Clear Time (g_c+I1), s	5.5	4.5	2.9	19.6	7.4	14.9	8.4	30.3
Green Ext Time (p_c), s	0.0	0.6	0.0	6.9	0.1	0.9	0.5	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	700	250	380	1100	130	280	290	220	90	280	180
Future Volume (veh/h)	140	700	250	380	1100	130	280	290	220	90	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	147	737	263	400	1158	137	295	305	232	95	295	189
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	1019	359	482	1451	172	511	712	526	376	1016	444
Arrive On Green	0.10	0.28	0.28	0.14	0.32	0.32	0.14	0.37	0.37	0.05	0.29	0.29
Sat Flow, veh/h	1757	3649	1285	3408	4552	538	1757	1907	1409	1757	3505	1532
Grp Volume(v), veh/h	147	677	323	400	854	441	295	280	257	95	295	189
Grp Sat Flow(s),veh/h/ln	1757	1679	1577	1704	1679	1733	1757	1752	1564	1757	1752	1532
Q Serve(g_s), s	8.6	19.0	19.4	11.9	24.3	24.3	11.7	12.4	12.9	3.9	6.8	10.4
Cycle Q Clear(g_c), s	8.6	19.0	19.4	11.9	24.3	24.3	11.7	12.4	12.9	3.9	6.8	10.4
Prop In Lane	1.00		0.81	1.00		0.31	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	179	937	440	482	1070	552	511	654	584	376	1016	444
V/C Ratio(X)	0.82	0.72	0.73	0.83	0.80	0.80	0.58	0.43	0.44	0.25	0.29	0.43
Avail Cap(c_a), veh/h	303	1221	574	685	1318	680	657	654	584	383	1016	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	34.0	34.1	43.6	32.5	32.5	19.8	24.4	24.6	23.9	28.8	30.1
Incr Delay (d2), s/veh	9.1	1.5	3.4	5.9	2.9	5.5	1.0	2.0	2.4	0.4	0.7	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	9.0	8.8	6.0	11.7	12.5	5.7	6.4	6.0	1.9	3.4	4.8
LnGrp Delay(d), s/veh	55.1	35.5	37.6	49.6	35.4	38.0	20.9	26.4	27.0	24.3	29.5	33.0
LnGrp LOS	E	D	D	D	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1147			1695			832			579	
Approach Delay, s/veh		38.6			39.4			24.6			29.8	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	43.0	18.8	33.2	18.3	34.3	14.6	37.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	39.0	21.0	38.0	23.0	22.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	5.9	14.9	13.9	21.4	13.7	12.4	10.6	26.3
Green Ext Time (p_c), s	0.0	3.2	0.8	6.0	0.6	1.7	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1460	70	190	1990	170	110	360	100	250	490	510
Future Volume (veh/h)	520	1460	70	190	1990	170	110	360	100	250	490	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	553	1553	74	202	2117	181	117	383	106	266	521	543
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	463	1865	809	229	1847	801	90	566	231	203	596	458
Arrive On Green	0.13	0.52	0.52	0.13	0.52	0.52	0.05	0.16	0.16	0.06	0.17	0.17
Sat Flow, veh/h	3476	3574	1551	1792	3574	1551	1792	3574	1459	3476	3574	1471
Grp Volume(v), veh/h	553	1553	74	202	2117	181	117	383	106	266	521	543
Grp Sat Flow(s),veh/h/ln	1738	1787	1551	1792	1787	1551	1792	1787	1459	1738	1787	1471
Q Serve(g_s), s	16.0	44.1	2.9	13.3	62.0	7.7	6.0	12.1	7.9	7.0	17.1	20.0
Cycle Q Clear(g_c), s	16.0	44.1	2.9	13.3	62.0	7.7	6.0	12.1	7.9	7.0	17.1	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	1865	809	229	1847	801	90	566	231	203	596	458
V/C Ratio(X)	1.19	0.83	0.09	0.88	1.15	0.23	1.31	0.68	0.46	1.31	0.87	1.18
Avail Cap(c_a), veh/h	463	1865	809	254	1847	801	90	566	231	203	596	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	24.3	14.4	51.4	29.0	15.9	57.0	47.6	45.8	56.5	48.8	42.4
Incr Delay (d2), s/veh	106.5	3.4	0.0	26.3	72.8	0.1	197.5	6.4	6.4	171.0	16.3	103.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	22.4	1.2	8.2	48.9	3.3	7.9	6.5	3.6	8.2	9.7	28.3
LnGrp Delay(d), s/veh	158.5	27.6	14.4	77.8	101.8	16.0	254.5	54.0	52.3	227.5	65.1	145.8
LnGrp LOS	F	C	B	E	F	B	F	D	D	F	E	F
Approach Vol, veh/h		2180			2500			606			1330	
Approach Delay, s/veh		60.4			93.6			92.4			130.5	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	23.0	19.4	66.6	10.0	24.0	20.0	66.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	19.0	17.0	61.0	6.0	20.0	16.0	62.0
Max Q Clear Time (g_c+I1), s	9.0	14.1	15.3	46.1	8.0	22.0	18.0	64.0
Green Ext Time (p_c), s	0.0	1.2	0.1	9.6	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	90.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Future Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	215	344	269	151	280	32	527	1118	151	43	871	247
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	248	285	218	165	431	49	463	2002	270	295	815	677
Arrive On Green	0.08	0.15	0.15	0.06	0.13	0.13	0.22	0.63	0.63	0.03	0.43	0.43
Sat Flow, veh/h	1792	1903	1456	1792	3232	366	1792	3163	426	1792	1881	1562
Grp Volume(v), veh/h	215	323	290	151	154	158	527	631	638	43	871	247
Grp Sat Flow(s),veh/h/ln	1792	1787	1572	1792	1787	1811	1792	1787	1803	1792	1881	1562
Q Serve(g_s), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Cycle Q Clear(g_c), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Prop In Lane	1.00		0.93	1.00		0.20	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	248	268	236	165	238	241	463	1131	1141	295	815	677
V/C Ratio(X)	0.87	1.20	1.23	0.92	0.64	0.66	1.14	0.56	0.56	0.15	1.07	0.36
Avail Cap(c_a), veh/h	248	268	236	165	238	241	463	1131	1141	309	815	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	51.0	51.0	46.5	49.3	49.4	39.7	12.5	12.5	18.0	34.0	22.9
Incr Delay (d2), s/veh	26.1	121.6	135.4	46.9	5.9	6.3	85.4	2.0	2.0	0.2	51.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	17.9	16.7	6.4	5.2	5.4	26.3	12.4	12.5	0.8	38.6	5.8
LnGrp Delay(d), s/veh	72.5	172.6	186.4	93.4	55.2	55.7	125.1	14.5	14.5	18.2	85.4	24.4
LnGrp LOS	E	F	F	F	E	E	F	B	B	B	F	C
Approach Vol, veh/h		828			463			1796			1161	
Approach Delay, s/veh		151.4			67.8			46.9			70.0	
Approach LOS		F			E			D			E	

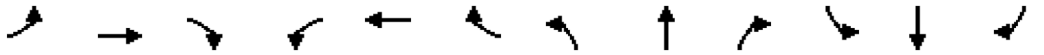
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	80.0	11.0	22.0	31.0	56.0	13.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	75.0	7.0	18.0	27.0	52.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	26.2	9.0	20.0	29.0	54.0	11.0	12.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	960	350	480	1130	60	390	270	300	130	280	60
Future Volume (veh/h)	60	960	350	480	1130	60	390	270	300	130	280	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	64	1021	372	511	1202	64	415	287	319	138	298	64
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	244	991	361	528	2464	131	454	852	372	317	590	121
Arrive On Green	0.04	0.28	0.28	0.27	0.50	0.50	0.18	0.24	0.24	0.08	0.14	0.14
Sat Flow, veh/h	1757	3605	1313	1757	4889	260	1757	3505	1531	1757	4165	854
Grp Volume(v), veh/h	64	951	442	511	825	441	415	287	319	138	237	125
Grp Sat Flow(s),veh/h/ln	1757	1679	1561	1757	1679	1792	1757	1752	1531	1757	1679	1661
Q Serve(g_s), s	3.1	33.0	33.0	30.3	19.4	19.4	22.0	8.1	23.9	7.9	7.8	8.3
Cycle Q Clear(g_c), s	3.1	33.0	33.0	30.3	19.4	19.4	22.0	8.1	23.9	7.9	7.8	8.3
Prop In Lane	1.00		0.84	1.00		0.15	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	244	923	429	528	1692	903	454	852	372	317	476	235
V/C Ratio(X)	0.26	1.03	1.03	0.97	0.49	0.49	0.91	0.34	0.86	0.44	0.50	0.53
Avail Cap(c_a), veh/h	266	923	429	528	1692	903	454	852	372	319	476	235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	43.5	43.5	35.4	19.6	19.6	36.0	37.5	43.4	39.2	47.6	47.8
Incr Delay (d2), s/veh	0.6	37.5	51.4	30.8	0.2	0.4	22.8	1.1	21.7	0.9	3.7	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	20.1	20.3	21.1	9.0	9.7	6.0	4.0	12.3	3.9	3.9	4.4
LnGrp Delay(d), s/veh	30.0	81.0	94.9	66.2	19.8	20.0	58.8	38.5	65.2	40.2	51.3	56.1
LnGrp LOS	C	F	F	E	B	B	E	D	E	D	D	E
Approach Vol, veh/h		1457			1777			1021			500	
Approach Delay, s/veh		83.0			33.2			55.1			49.4	
Approach LOS		F			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	33.2	36.0	37.0	26.0	21.0	8.5	64.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	29.0	32.0	33.0	22.0	17.0	6.0	59.0
Max Q Clear Time (g_c+I1), s	9.9	25.9	32.3	35.0	24.0	10.3	5.1	21.4
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.0	1.1	0.0	9.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1830	30	320	2140	120	30	170	190	100	200	180
Future Volume (veh/h)	120	1830	30	320	2140	120	30	170	190	100	200	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.98		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	124	1887	31	330	2206	124	31	175	196	103	206	186
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	151	1946	32	352	2351	1026	160	358	286	134	377	286
Arrive On Green	0.04	0.54	0.54	0.16	0.66	0.66	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1792	3597	59	1792	3574	1560	981	1787	1427	1013	1881	1428
Grp Volume(v), veh/h	124	935	983	330	2206	124	31	175	196	103	206	186
Grp Sat Flow(s),veh/h/ln	1792	1787	1869	1792	1787	1560	981	1787	1427	1013	1881	1428
Q Serve(g_s), s	3.7	60.3	61.1	17.2	66.1	3.5	3.5	10.4	15.3	8.7	11.8	14.3
Cycle Q Clear(g_c), s	3.7	60.3	61.1	17.2	66.1	3.5	15.3	10.4	15.3	24.0	11.8	14.3
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	967	1011	352	2351	1026	160	358	286	134	377	286
V/C Ratio(X)	0.82	0.97	0.97	0.94	0.94	0.12	0.19	0.49	0.69	0.77	0.55	0.65
Avail Cap(c_a), veh/h	151	970	1014	352	2357	1029	160	358	286	134	377	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	26.5	26.6	40.9	18.3	7.6	49.9	42.5	44.4	56.8	43.0	44.0
Incr Delay (d2), s/veh	28.5	21.2	21.8	32.5	8.1	0.1	2.7	4.7	12.6	33.6	5.6	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	35.3	37.3	13.9	34.8	1.5	1.1	5.6	7.0	4.6	6.7	6.5
LnGrp Delay(d), s/veh	56.4	47.6	48.5	73.5	26.4	7.7	52.6	47.2	57.0	90.4	48.6	55.0
LnGrp LOS	E	D	D	E	C	A	D	D	E	F	D	D
Approach Vol, veh/h		2042			2660			402			495	
Approach Delay, s/veh		48.6			31.4			52.4			59.7	
Approach LOS		D			C			D			E	

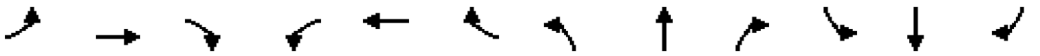
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	23.0	68.8		28.0	9.0	82.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	19.0	65.0		24.0	5.0	79.0
Max Q Clear Time (g_c+I1), s		17.3	19.2	63.1		26.0	5.7	68.1
Green Ext Time (p_c), s		1.3	0.0	1.7		0.0	0.0	9.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1110	610	250	2060	0	0	0	0	170	110	210
Future Volume (veh/h)	0	1110	610	250	2060	0	0	0	0	170	110	210
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	1144	629	258	2124	0				175	113	216
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1622	739	292	2403	0				285	184	411
Arrive On Green	0.00	0.47	0.47	0.16	0.67	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3593	1560	1792	3668	0				1109	716	1599
Grp Volume(v), veh/h	0	1144	629	258	2124	0				288	0	216
Grp Sat Flow(s),veh/h/ln	0	1712	1560	1792	1787	0				1826	0	1599
Q Serve(g_s), s	0.0	29.8	40.2	15.9	54.2	0.0				15.7	0.0	13.1
Cycle Q Clear(g_c), s	0.0	29.8	40.2	15.9	54.2	0.0				15.7	0.0	13.1
Prop In Lane	0.00		1.00	1.00		0.00				0.61		1.00
Lane Grp Cap(c), veh/h	0	1622	739	292	2403	0				469	0	411
V/C Ratio(X)	0.00	0.71	0.85	0.88	0.88	0.00				0.61	0.00	0.53
Avail Cap(c_a), veh/h	0	1622	739	444	2628	0				469	0	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.5	26.2	46.2	14.9	0.0				37.0	0.0	36.0
Incr Delay (d2), s/veh	0.0	1.4	9.4	12.8	3.7	0.0				5.9	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.3	19.2	8.9	27.5	0.0				8.7	0.0	6.3
LnGrp Delay(d), s/veh	0.0	24.9	35.6	59.0	18.7	0.0				42.9	0.0	40.8
LnGrp LOS		C	D	E	B					D		D
Approach Vol, veh/h		1773			2382						504	
Approach Delay, s/veh		28.7			23.0						42.0	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.4	57.5		33.0		79.9
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			28.0	51.0		29.0		83.0
Max Q Clear Time (g_c+I1), s			17.9	42.2		17.7		56.2
Green Ext Time (p_c), s			0.5	6.7		1.7		19.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	850	0	0	1110	270	1000	0	880	0	0	0
Future Volume (vph)	160	850	0	0	1110	270	1000	0	880	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	0.93	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	1805	3610			3479		1715	1570	1534			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	1805	3610			3479		1715	1570	1534			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	165	876	0	0	1144	278	1031	0	907	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	27	67	0	0	0
Lane Group Flow (vph)	165	876	0	0	1404	0	670	624	550	0	0	0
Confl. Peds. (#/hr)	3		10	10		3						
Confl. Bikes (#/hr)			11			6						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Effective Green, g (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Actuated g/C Ratio	0.10	0.53			0.39		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	180	1895			1362		700	641	626			
v/s Ratio Prot	c0.09	0.24			c0.40		0.39	c0.40	0.36			
v/s Ratio Perm												
v/c Ratio	0.92	0.46			1.03		0.96	0.97	0.88			
Uniform Delay, d1	53.5	17.9			36.5		34.5	34.9	32.7			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	43.6	0.2			32.7		25.0	29.7	16.0			
Delay (s)	97.1	18.1			69.2		59.5	64.6	48.7			
Level of Service	F	B			E		E	E	D			
Approach Delay (s/veh)		30.6			69.2			57.8			0.0	
Approach LOS		C			E			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	129.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1320	180	120	870	190	500	670	160	330	440	210
Future Volume (veh/h)	270	1320	180	120	870	190	500	670	160	330	440	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	284	1389	189	126	916	200	526	705	168	347	463	221
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	342	1324	837	121	1213	521	584	716	170	332	627	297
Arrive On Green	0.10	0.37	0.37	0.07	0.34	0.34	0.17	0.25	0.25	0.18	0.27	0.27
Sat Flow, veh/h	3510	3610	1551	1810	3610	1550	3510	2863	682	1810	2347	1110
Grp Volume(v), veh/h	284	1389	189	126	916	200	526	444	429	347	355	329
Grp Sat Flow(s),veh/h/ln	1755	1805	1551	1810	1805	1550	1755	1805	1740	1810	1805	1652
Q Serve(g_s), s	9.5	44.0	7.8	8.0	27.1	11.8	17.6	29.4	29.4	22.0	21.5	21.9
Cycle Q Clear(g_c), s	9.5	44.0	7.8	8.0	27.1	11.8	17.6	29.4	29.4	22.0	21.5	21.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.67
Lane Grp Cap(c), veh/h	342	1324	837	121	1213	521	584	451	435	332	482	441
V/C Ratio(X)	0.83	1.05	0.23	1.04	0.76	0.38	0.90	0.98	0.99	1.05	0.74	0.75
Avail Cap(c_a), veh/h	380	1324	837	121	1213	521	614	451	435	332	482	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	38.0	14.9	56.0	35.5	30.4	49.1	44.8	44.8	49.0	40.1	40.2
Incr Delay (d2), s/veh	13.3	38.8	0.1	94.3	2.8	0.5	16.0	38.7	39.7	61.9	9.7	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	29.0	3.3	7.1	13.9	5.1	9.8	19.5	19.0	16.7	12.0	11.3
LnGrp Delay(d), s/veh	66.5	76.8	15.0	150.8	38.2	30.8	65.1	83.5	84.5	110.9	49.8	51.1
LnGrp LOS	E	F	B	F	D	C	E	F	F	F	D	D
Approach Vol, veh/h		1862			1242			1399			1031	
Approach Delay, s/veh		68.9			48.4			76.9			70.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	34.0	12.0	48.0	24.0	36.0	15.7	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	30.0	8.0	44.0	21.0	31.0	13.0	39.0
Max Q Clear Time (g_c+I1), s	24.0	31.4	10.0	46.0	19.6	23.9	11.5	29.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.3	2.3	0.2	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Future Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.95	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	495	309	247	186	258	113	103	1371	82	103	1082	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	520	558	458	372	286	231	211	1510	90	146	1381	158
Arrive On Green	0.24	0.29	0.29	0.10	0.15	0.15	0.05	0.44	0.44	0.03	0.42	0.42
Sat Flow, veh/h	1810	1900	1559	1810	1900	1537	1810	3455	206	1810	3262	373
Grp Volume(v), veh/h	495	309	247	186	258	113	103	714	739	103	598	608
Grp Sat Flow(s),veh/h/ln	1810	1900	1559	1810	1900	1537	1810	1805	1856	1810	1805	1830
Q Serve(g_s), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Cycle Q Clear(g_c), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	520	558	458	372	286	231	211	789	811	146	764	775
V/C Ratio(X)	0.95	0.55	0.54	0.50	0.90	0.49	0.49	0.91	0.91	0.71	0.78	0.78
Avail Cap(c_a), veh/h	534	575	472	372	288	233	231	789	811	146	764	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	35.4	35.2	37.1	49.7	46.3	23.9	31.2	31.3	28.3	29.6	29.6
Incr Delay (d2), s/veh	27.0	1.1	1.2	1.0	29.3	1.6	1.8	15.9	16.1	14.6	7.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	8.8	6.9	5.2	10.6	3.5	2.0	25.3	26.2	2.5	18.6	18.9
LnGrp Delay(d), s/veh	58.0	36.5	36.4	38.2	78.9	47.9	25.7	47.1	47.4	42.9	37.4	37.4
LnGrp LOS	E	D	D	D	E	D	C	D	D	D	D	D
Approach Vol, veh/h		1051			557			1556			1309	
Approach Delay, s/veh		46.6			59.0			45.8			37.8	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	56.0	16.0	38.9	9.6	54.4	33.0	21.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	52.0	12.0	36.0	7.0	49.0	30.0	18.0
Max Q Clear Time (g_c+I1), s	5.9	46.3	12.2	18.3	5.8	36.1	28.8	17.9
Green Ext Time (p_c), s	0.0	4.1	0.0	2.5	0.0	6.4	0.2	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Future Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	106	21	21	11	32	53	11	447	11	43	574	106
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	203	127	127	240	94	155	594	1478	1217	740	1478	1213
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1327	870	870	1378	641	1062	771	1900	1564	946	1900	1559
Grp Volume(v), veh/h	106	0	42	11	0	85	11	447	11	43	574	106
Grp Sat Flow(s),veh/h/ln	1327	0	1739	1378	0	1704	771	1900	1564	946	1900	1559
Q Serve(g_s), s	8.2	0.0	2.2	0.7	0.0	4.7	0.5	7.2	0.2	1.5	10.1	1.7
Cycle Q Clear(g_c), s	13.0	0.0	2.2	3.0	0.0	4.7	10.6	7.2	0.2	8.7	10.1	1.7
Prop In Lane	1.00		0.50	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	0	254	240	0	249	594	1478	1217	740	1478	1213
V/C Ratio(X)	0.52	0.00	0.17	0.05	0.00	0.34	0.02	0.30	0.01	0.06	0.39	0.09
Avail Cap(c_a), veh/h	386	0	495	431	0	485	594	1478	1217	740	1478	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	39.4	40.7	0.0	40.4	5.4	3.4	2.6	4.6	3.7	2.8
Incr Delay (d2), s/veh	2.1	0.0	0.3	0.1	0.0	0.8	0.1	0.5	0.0	0.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.1	0.3	0.0	2.3	0.1	3.9	0.1	0.4	5.6	0.8
LnGrp Delay(d), s/veh	48.4	0.0	39.7	40.8	0.0	41.3	5.5	3.9	2.6	4.8	4.5	2.9
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		148			96			469			723	
Approach Delay, s/veh		45.9			41.2			3.9			4.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.0		19.4		86.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		82.0		30.0		82.0		30.0
Max Q Clear Time (g_c+I1), s		12.6		15.0		12.1		6.7
Green Ext Time (p_c), s		3.3		0.4		5.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.9
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	11.3
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	20	10	20	40	190	30	140	40	150	20	20
Future Vol, veh/h	20	20	10	20	40	190	30	140	40	150	20	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	23	12	23	47	221	35	163	47	174	23	23
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	9.6	10.3	12.4	11.8
HCM LOS	A	B	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	14%	50%	0%	33%	0%	88%	0%
Vol Thru, %	67%	50%	0%	67%	0%	12%	0%
Vol Right, %	19%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	210	40	10	60	190	170	20
LT Vol	30	20	0	20	0	150	0
Through Vol	140	20	0	40	0	20	0
RT Vol	40	0	10	0	190	0	20
Lane Flow Rate	244	47	12	70	221	198	23
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.389	0.085	0.018	0.119	0.323	0.343	0.033
Departure Headway (Hd)	5.734	6.572	5.605	6.137	5.259	6.243	5.09
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	628	545	637	585	683	577	704
Service Time	3.763	4.316	3.349	3.871	2.992	3.972	2.819
HCM Lane V/C Ratio	0.389	0.086	0.019	0.12	0.324	0.343	0.033
HCM Control Delay, s/veh	12.4	9.9	8.5	9.7	10.5	12.2	8
HCM Lane LOS	B	A	A	A	B	B	A
HCM 95th-tile Q	1.8	0.3	0.1	0.4	1.4	1.5	0.1

Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	10	10	20	20	10
Future Vol, veh/h	10	10	10	20	20	10
Conflicting Peds, #/hr	0	10	10	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	17	17	34	34	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	44	0	105	37
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1577	-	898	1041
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1564	-	880	1031
Mov Cap-2 Maneuver	-	-	-	-	880	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	947	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.4	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	880	1031	-	-	1564	-
HCM Lane V/C Ratio	0.039	0.016	-	-	0.011	-
HCM Control Delay (s/veh)	9.3	8.6	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Future Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Conflicting Peds, #/hr	6	0	4	4	0	6	3	0	3	3	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	183	32	32	237	11	11	11	32	11	11	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	254	0	0	219	0	0	546	543	206	559	554	252
Stage 1	-	-	-	-	-	-	225	225	-	313	313	-
Stage 2	-	-	-	-	-	-	321	318	-	246	241	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1323	-	-	1362	-	-	452	450	840	443	443	792
Stage 1	-	-	-	-	-	-	782	721	-	702	661	-
Stage 2	-	-	-	-	-	-	695	657	-	762	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1316	-	-	1357	-	-	423	430	835	403	424	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	423	430	-	403	424	-
Stage 1	-	-	-	-	-	-	772	712	-	691	640	-
Stage 2	-	-	-	-	-	-	654	636	-	712	701	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.9	11.5	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	604	1316	-	-	1357	-	-	491
HCM Lane V/C Ratio	0.089	0.008	-	-	0.024	-	-	0.066
HCM Control Delay (s/veh)	11.5	7.8	0	-	7.7	0	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	130	80	80	150	20	90	1380	60	40	1470	70
Future Volume (veh/h)	50	130	80	80	150	20	90	1380	60	40	1470	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	51	133	82	82	153	20	92	1408	61	41	1500	71
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	209	306	123	323	42	234	2556	111	260	2545	120
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	261	1043	1528	1173	1613	211	329	3486	151	363	3470	164
Grp Volume(v), veh/h	184	0	82	82	0	173	92	720	749	41	770	801
Grp Sat Flow(s),veh/h/ln	1304	0	1528	1173	0	1824	329	1787	1849	363	1787	1847
Q Serve(g_s), s	7.5	0.0	5.4	6.4	0.0	10.1	22.0	21.6	21.8	6.9	24.2	24.5
Cycle Q Clear(g_c), s	17.6	0.0	5.4	24.0	0.0	10.1	46.5	21.6	21.8	28.6	24.2	24.5
Prop In Lane	0.28		1.00	1.00		0.12	1.00		0.08	1.00		0.09
Lane Grp Cap(c), veh/h	299	0	306	123	0	365	234	1311	1356	260	1311	1354
V/C Ratio(X)	0.62	0.00	0.27	0.67	0.00	0.47	0.39	0.55	0.55	0.16	0.59	0.59
Avail Cap(c_a), veh/h	299	0	306	123	0	365	234	1311	1356	260	1311	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	40.6	57.6	0.0	42.4	18.5	7.1	7.2	13.6	7.5	7.5
Incr Delay (d2), s/veh	3.7	0.0	0.5	13.1	0.0	1.0	4.9	1.7	1.6	1.3	1.9	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	2.3	3.2	0.0	5.1	2.3	11.0	11.6	0.8	12.5	13.0
LnGrp Delay(d), s/veh	49.4	0.0	41.0	70.7	0.0	43.4	23.4	8.8	8.8	14.9	9.4	9.4
LnGrp LOS	D		D	E		D	C	A	A	B	A	A
Approach Vol, veh/h		266			255			1561			1612	
Approach Delay, s/veh		46.8			52.2			9.7			9.6	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		28.0		92.0		28.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		24.0		88.0		24.0
Max Q Clear Time (g_c+I1), s		48.5		19.6		30.6		26.0
Green Ext Time (p_c), s		16.7		0.5		19.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	18

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	60	60	2030	2060	30
Future Vol, veh/h	20	60	60	2030	2060	30
Conflicting Peds, #/hr	2	2	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	65	65	2183	2215	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3448	1119	2256	0	-	0
Stage 1	2224	-	-	-	-	-
Stage 2	1224	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	~ 5	203	228	-	-	-
Stage 1	69	-	-	-	-	-
Stage 2	243	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 4	201	226	-	-	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	49	-	-	-	-	-
Stage 2	241	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 939.3	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	226	-	4	201	-	-
HCM Lane V/C Ratio	0.285	-	5.376	0.321	-	-
HCM Control Delay (s/veh)	27.2	-	$ 3663.7	31.2	-	-
HCM Lane LOS	D	-	F	D	-	-
HCM 95th %tile Q(veh)	1.1	-	4.1	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	50	70	90	50	70	110	1790	50	100	1880	120
Future Volume (veh/h)	150	50	70	90	50	70	110	1790	50	100	1880	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	155	52	72	93	52	72	113	1845	52	103	1938	124
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	270	49	14	264	148	2690	75	178	2583	163
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	0	0	1542	0	79	1510	204	3547	99	240	3407	215
Grp Volume(v), veh/h	207	0	72	145	0	72	113	925	972	103	1005	1057
Grp Sat Flow(s),veh/h/ln	0	0	1542	79	0	1510	204	1787	1860	240	1787	1835
Q Serve(g_s), s	0.0	0.0	4.8	0.0	0.0	5.0	51.6	31.1	31.8	45.9	37.2	39.4
Cycle Q Clear(g_c), s	21.0	0.0	4.8	21.0	0.0	5.0	91.0	31.1	31.8	77.6	37.2	39.4
Prop In Lane	0.75		1.00	0.64		1.00	1.00		0.05	1.00		0.12
Lane Grp Cap(c), veh/h	52	0	270	63	0	264	148	1355	1410	178	1355	1391
V/C Ratio(X)	3.95	0.00	0.27	2.30	0.00	0.27	0.77	0.68	0.69	0.58	0.74	0.76
Avail Cap(c_a), veh/h	52	0	270	63	0	264	148	1355	1410	178	1355	1391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	42.8	55.5	0.0	42.9	40.0	7.3	7.3	27.0	8.0	8.3
Incr Delay (d2), s/veh	1370.0	0.0	0.5	630.6	0.0	0.6	30.9	2.8	2.8	13.0	3.7	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.7	0.0	2.1	13.1	0.0	2.1	5.0	16.2	17.0	3.6	19.2	21.2
LnGrp Delay(d), s/veh	1430.0	0.0	43.4	686.1	0.0	43.4	70.9	10.1	10.1	40.0	11.7	12.2
LnGrp LOS	F		D	F		D	E	B	B	D	B	B
Approach Vol, veh/h		279			217			2010			2165	
Approach Delay, s/veh		1072.1			472.9			13.5			13.3	
Approach LOS		F			F			B			B	

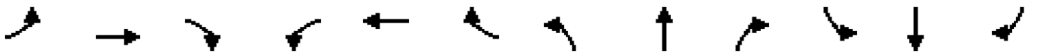
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		25.0		95.0		25.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		21.0		91.0		21.0
Max Q Clear Time (g_c+I1), s		93.0		23.0		79.6		23.0
Green Ext Time (p_c), s		0.0		0.0		10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	98.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	800	70	150	1090	110	60	360	90	240	400	460
Future Volume (veh/h)	330	800	70	150	1090	110	60	360	90	240	400	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	347	842	74	158	1147	0	63	379	95	253	421	484
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	1767	155	189	1339	417	81	999	430	320	583	505
Arrive On Green	0.21	0.37	0.37	0.11	0.26	0.00	0.05	0.28	0.28	0.09	0.33	0.33
Sat Flow, veh/h	1774	4755	416	1774	5085	1583	1774	3539	1525	3442	1770	1531
Grp Volume(v), veh/h	347	599	317	158	1147	0	63	379	95	253	421	484
Grp Sat Flow(s),veh/h/ln	1774	1695	1781	1774	1695	1583	1774	1770	1525	1721	1770	1531
Q Serve(g_s), s	20.8	14.7	14.8	9.5	23.4	0.0	3.8	9.4	5.2	7.9	22.8	33.8
Cycle Q Clear(g_c), s	20.8	14.7	14.8	9.5	23.4	0.0	3.8	9.4	5.2	7.9	22.8	33.8
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	1260	662	189	1339	417	81	999	430	320	583	505
V/C Ratio(X)	0.91	0.48	0.48	0.84	0.86	0.00	0.78	0.38	0.22	0.79	0.72	0.96
Avail Cap(c_a), veh/h	487	1335	701	292	1444	450	114	999	430	441	583	505
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	26.2	26.2	47.8	38.3	0.0	51.6	31.5	30.0	48.5	32.2	35.9
Incr Delay (d2), s/veh	18.1	0.3	0.5	11.7	5.0	0.0	19.6	1.1	1.2	6.5	7.5	31.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	7.0	7.4	5.3	11.6	0.0	2.3	4.7	2.3	4.0	12.3	18.6
LnGrp Delay(d), s/veh	60.0	26.5	26.8	59.5	43.3	0.0	71.2	32.6	31.2	55.0	39.7	66.9
LnGrp LOS	E	C	C	E	D		E	C	C	D	D	E
Approach Vol, veh/h		1263			1305			537			1158	
Approach Delay, s/veh		35.8			45.3			36.9			54.4	
Approach LOS		D			D			D			D	

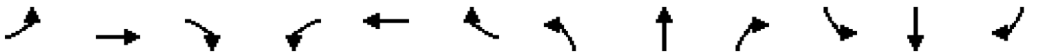
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	34.8	15.6	44.6	9.0	40.0	27.5	32.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	18.0	43.0	7.0	36.0	30.0	31.0
Max Q Clear Time (g_c+I1), s	9.9	11.4	11.5	16.8	5.8	35.8	22.8	25.4
Green Ext Time (p_c), s	0.3	2.4	0.2	5.9	0.0	0.1	0.6	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.9
HCM 2010 LOS	D



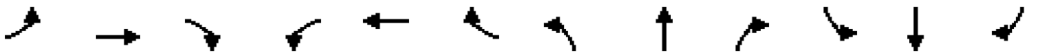
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	840	1140	160	1280	0	0	0	0	150	240	620
Future Volume (vph)	0	840	1140	160	1280	0	0	0	0	150	240	620
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.97	0.93	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.94	0.85	1.00	1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3175	1372	3502	3610					1715	1613	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3175	1372	3502	3610					1715	1613	1534
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	966	1310	184	1471	0	0	0	0	172	276	713
RTOR Reduction (vph)	0	70	180	0	0	0	0	0	0	0	9	29
Lane Group Flow (vph)	0	1499	527	184	1471	0	0	0	0	155	512	456
Confl. Peds. (#/hr)	174		24	24		174						
Confl. Bikes (#/hr)			4			31						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		58.0	58.0	7.0	69.0					43.0	43.0	43.0
Effective Green, g (s)		58.0	58.0	7.0	69.0					43.0	43.0	43.0
Actuated g/C Ratio		0.48	0.48	0.06	0.57					0.36	0.36	0.36
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1534	663	204	2075					614	577	549
v/s Ratio Prot		c0.47		c0.05	0.41					0.09	c0.32	0.30
v/s Ratio Perm			0.38									
v/c Ratio		0.98	0.79	0.90	0.71					0.25	0.89	0.83
Uniform Delay, d1		30.4	26.0	56.2	18.3					27.2	36.2	35.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		17.6	6.5	37.1	1.1					1.0	18.1	13.7
Delay (s)		48.0	32.5	93.2	19.4					28.1	54.3	48.8
Level of Service		D	C	F	B					C	D	D
Approach Delay (s/veh)		43.2			27.6			0.0			48.5	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



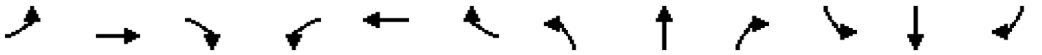
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	800	0	20	960	360	10	10	10	170	10	260
Future Volume (vph)	280	800	0	20	960	360	10	10	10	170	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	298	851	0	21	1021	383	11	11	11	181	11	277
RTOR Reduction (vph)	0	0	0	0	0	210	0	0	9	0	233	0
Lane Group Flow (vph)	298	851	0	21	1021	173	0	22	2	163	73	0
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			4			2						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	13.9	44.6		1.7	32.4	32.4		19.5	19.5	15.6	15.6	
Effective Green, g (s)	13.9	44.6		1.7	32.4	32.4		19.5	19.5	15.6	15.6	
Actuated g/C Ratio	0.14	0.46		0.02	0.33	0.33		0.20	0.20	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	485	2306		30	1675	513		360	313	266	241	
v/s Ratio Prot	c0.09	0.17		0.01	c0.20			c0.01		c0.10	0.05	
v/s Ratio Perm						0.11			0.00			
v/c Ratio	0.61	0.37		0.70	0.61	0.34		0.06	0.01	0.61	0.30	
Uniform Delay, d1	39.2	17.2		47.6	27.2	24.4		31.5	31.2	38.1	36.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.3	0.1		54.0	0.6	0.4		0.3	0.0	4.1	0.7	
Delay (s)	41.5	17.3		101.6	27.8	24.8		31.9	31.2	42.2	36.8	
Level of Service	D	B		F	C	C		C	C	D	D	
Approach Delay (s/veh)		23.6			28.1			31.7			38.7	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	97.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	560	0	0	650	80	750	280	250	0	0	0
Future Volume (vph)	260	560	0	0	650	80	750	280	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.96		1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3422		1643	3161	1442			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3422		1643	3161	1442			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	292	629	0	0	730	90	843	315	281	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	2	104	0	0	0
Lane Group Flow (vph)	292	629	0	0	820	0	421	763	149	0	0	0
Confl. Peds. (#/hr)	162		26	26		162			3	3		
Confl. Bikes (#/hr)			9			51			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	14.0	50.7			32.7		50.4	50.4	50.4			
Effective Green, g (s)	14.0	50.7			32.7		50.4	50.4	50.4			
Actuated g/C Ratio	0.13	0.46			0.30		0.46	0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	449	1677			1025		759	1460	666			
v/s Ratio Prot	c0.08	0.17			c0.24		c0.26	0.24				
v/s Ratio Perm									0.10			
v/c Ratio	0.65	0.38			0.80		0.55	0.52	0.22			
Uniform Delay, d1	45.2	18.9			35.2		21.2	20.8	17.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	3.4	0.1			4.5		2.9	1.3	0.8			
Delay (s)	48.6	19.1			39.7		24.1	22.2	18.4			
Level of Service	D	B			D		C	C	B			
Approach Delay (s/veh)		28.4			39.7			22.1			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	109.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	760	0	0	1090	550	270	0	360	0	0	0
Future Volume (veh/h)	230	760	0	0	1090	550	270	0	360	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1900	1845	0	1845			
Adj Flow Rate, veh/h	247	817	0	0	1172	591	290	0	387			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	311	2856	0	0	1479	675	1235	0	568			
Arrive On Green	0.09	0.57	0.00	0.00	0.44	0.44	0.36	0.00	0.36			
Sat Flow, veh/h	3408	5202	0	0	3523	1532	3408	0	1568			
Grp Volume(v), veh/h	247	817	0	0	1172	591	290	0	387			
Grp Sat Flow(s),veh/h/ln	1704	1679	0	0	1679	1532	1704	0	1568			
Q Serve(g_s), s	8.0	9.5	0.0	0.0	34.0	39.8	6.7	0.0	23.7			
Cycle Q Clear(g_c), s	8.0	9.5	0.0	0.0	34.0	39.8	6.7	0.0	23.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	311	2856	0	0	1479	675	1235	0	568			
V/C Ratio(X)	0.79	0.29	0.00	0.00	0.79	0.88	0.23	0.00	0.68			
Avail Cap(c_a), veh/h	422	3159	0	0	1572	718	1235	0	568			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.4	12.7	0.0	0.0	27.2	28.8	25.2	0.0	30.6			
Incr Delay (d2), s/veh	7.3	0.1	0.0	0.0	2.7	11.3	0.4	0.0	6.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.1	4.4	0.0	0.0	16.2	18.9	3.2	0.0	11.2			
LnGrp Delay(d), s/veh	57.7	12.7	0.0	0.0	29.9	40.1	25.6	0.0	37.0			
LnGrp LOS	E	B			C	D	C		D			
Approach Vol, veh/h		1064			1763			677				
Approach Delay, s/veh		23.1			33.4			32.1				
Approach LOS		C			C			C				

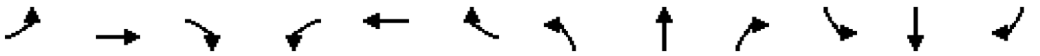
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		45.0		68.2			14.3	53.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		41.0		71.0			14.0	53.0
Max Q Clear Time (g_c+I1), s		25.7		11.5			10.0	41.8
Green Ext Time (p_c), s		2.3		6.4			0.3	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1480	440	340	1660	190	420	870	230	210	690	230
Future Volume (veh/h)	230	1480	440	340	1660	190	420	870	230	210	690	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	258	1663	494	382	1865	213	472	978	258	236	775	258
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	290	1792	543	406	1964	596	493	1620	490	296	925	401
Arrive On Green	0.08	0.35	0.35	0.12	0.38	0.38	0.14	0.32	0.32	0.09	0.26	0.26
Sat Flow, veh/h	3476	5136	1556	3476	5136	1558	3476	5136	1553	3476	3574	1548
Grp Volume(v), veh/h	258	1663	494	382	1865	213	472	978	258	236	775	258
Grp Sat Flow(s),veh/h/ln	1738	1712	1556	1738	1712	1558	1738	1712	1553	1738	1787	1548
Q Serve(g_s), s	8.8	37.4	36.3	13.1	42.2	11.7	16.2	19.3	16.3	8.0	24.6	17.8
Cycle Q Clear(g_c), s	8.8	37.4	36.3	13.1	42.2	11.7	16.2	19.3	16.3	8.0	24.6	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	1792	543	406	1964	596	493	1620	490	296	925	401
V/C Ratio(X)	0.89	0.93	0.91	0.94	0.95	0.36	0.96	0.60	0.53	0.80	0.84	0.64
Avail Cap(c_a), veh/h	290	1800	545	406	1972	598	493	1620	490	377	925	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	37.5	37.2	52.5	35.9	26.5	51.0	34.7	33.7	53.8	42.0	39.5
Incr Delay (d2), s/veh	26.8	8.9	19.3	30.0	10.7	0.4	29.8	1.7	4.0	9.0	9.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	19.0	18.4	8.0	21.8	5.1	9.8	9.4	7.6	4.2	13.3	8.4
LnGrp Delay(d), s/veh	81.2	46.5	56.5	82.5	46.6	26.8	80.9	36.4	37.7	62.8	51.0	47.3
LnGrp LOS	F	D	E	F	D	C	F	D	D	E	D	D
Approach Vol, veh/h		2415			2460			1708			1269	
Approach Delay, s/veh		52.2			50.5			48.9			52.4	
Approach LOS		D			D			D			D	

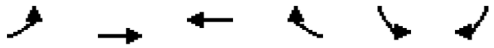
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	41.8	18.0	45.8	21.0	35.0	14.0	49.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	14.0	42.0	17.0	31.0	10.0	46.0
Max Q Clear Time (g_c+I1), s	10.0	21.3	15.1	39.4	18.2	26.6	10.8	44.2
Green Ext Time (p_c), s	0.2	6.0	0.0	2.4	0.0	2.4	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	200	40	740	270	330	50	870	710	220	540	100
Future Volume (vph)	110	200	40	740	270	330	50	870	710	220	540	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.98		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4981		3285	1704	1594	1805	3610	1579	3502	5046	
Flt Permitted		0.75		0.95	0.78	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3799		3285	1350	1594	1805	3610	1579	3502	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	217	43	804	293	359	54	946	772	239	587	109
RTOR Reduction (vph)	0	14	0	0	0	119	0	0	22	0	22	0
Lane Group Flow (vph)	0	366	0	724	373	240	54	946	750	239	674	0
Confl. Peds. (#/hr)			25	25			1		11	11		1
Confl. Bikes (#/hr)			1			2			2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.2		30.8	52.0	52.0	6.9	45.8	76.6	10.8	49.7	
Effective Green, g (s)		17.2		30.8	52.0	52.0	6.9	45.8	76.6	10.8	49.7	
Actuated g/C Ratio		0.14		0.26	0.43	0.43	0.06	0.38	0.64	0.09	0.41	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		541		838	672	687	103	1370	1055	313	2079	
v/s Ratio Prot				c0.22	0.14		0.03	0.26	c0.18	c0.07	c0.13	
v/s Ratio Perm		c0.10			0.10	0.15			0.29			
v/c Ratio		0.68		0.86	0.56	0.35	0.52	0.69	0.71	0.76	0.32	
Uniform Delay, d1		49.1		42.9	25.6	23.0	55.3	31.4	14.6	53.7	24.1	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.4		9.2	1.0	0.3	4.7	2.9	2.3	10.5	0.4	
Delay (s)		52.4		52.1	26.6	23.3	60.0	34.3	16.9	64.2	24.5	
Level of Service		D		D	C	C	E	C	B	E	C	
Approach Delay (s/veh)		52.4			38.5			27.5			34.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	1020	1380	0	410	240
Future Volume (veh/h)	0	1020	1380	0	410	240
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	1109	1500	0	446	261
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2011	2011	0	970	865
Arrive On Green	0.00	0.39	0.39	0.00	0.54	0.54
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	1109	1500	0	446	261
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	17.4	26.0	0.0	15.9	9.4
Cycle Q Clear(g_c), s	0.0	17.4	26.0	0.0	15.9	9.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2011	2011	0	970	865
V/C Ratio(X)	0.00	0.55	0.75	0.00	0.46	0.30
Avail Cap(c_a), veh/h	0	2779	2779	0	970	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	27.6	0.0	14.9	13.4
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	1.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	12.5	0.0	8.4	4.3
LnGrp Delay(d), s/veh	0.0	25.2	28.3	0.0	16.5	14.3
LnGrp LOS		C	C		B	B
Approach Vol, veh/h		1109	1500		707	
Approach Delay, s/veh		25.2	28.3		15.7	
Approach LOS		C	C		B	

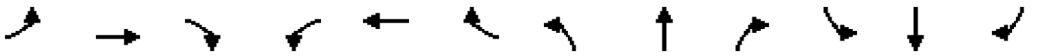
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.5		60.0		44.5
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s				19.4		17.9		28.0
Green Ext Time (p_c), s				9.1		2.5		12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1270	0	0	1270	550	1170
Future Volume (vph)	1270	0	0	1270	550	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.94	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5187			5187	1738	1534
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5187			5187	1738	1534
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1337	0	0	1337	579	1232
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1337	0	0	1337	936	875
Confl. Peds. (#/hr)		7	7		5	
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	33.9			33.9	78.0	78.0
Effective Green, g (s)	33.9			33.9	78.0	78.0
Actuated g/C Ratio	0.28			0.28	0.65	0.65
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1466			1466	1130	997
v/s Ratio Prot	c0.26			0.26	0.54	
v/s Ratio Perm						c0.57
v/c Ratio	0.91			0.91	0.83	0.88
Uniform Delay, d1	41.6			41.6	15.9	17.1
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	8.9			8.9	7.0	10.8
Delay (s)	50.5			50.5	22.9	27.8
Level of Service	D			D	C	C
Approach Delay (s/veh)	50.5			50.5	25.3	
Approach LOS	D			D	C	

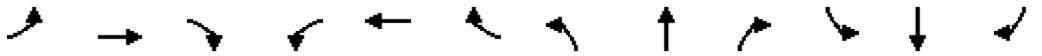
Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	119.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Future Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.86						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1512						5085	1564	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.38	1.00	
Satd. Flow (perm)	1681	1512						5085	1564	711	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	284	0	621	0	0	0	0	653	474	337	505	0
RTOR Reduction (vph)	0	273	0	0	0	0	0	0	163	0	0	0
Lane Group Flow (vph)	256	376	0	0	0	0	0	653	311	337	505	0
Confl. Peds. (#/hr)							5					5
Confl. Bikes (#/hr)									1			10
Turn Type	Perm	NA						NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4								2	6		
Actuated Green, G (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Effective Green, g (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Actuated g/C Ratio	0.28	0.28						0.66	0.66	0.66	0.66	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	462	415						3332	1024	465	2319	
v/s Ratio Prot								0.13			0.14	
v/s Ratio Perm	0.15	0.25							0.20	c0.47		
v/c Ratio	0.55	0.91						0.20	0.30	0.72	0.22	
Uniform Delay, d1	35.6	40.2						7.8	8.5	13.0	8.0	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	22.9						0.1	0.8	9.5	0.2	
Delay (s)	37.1	63.2						8.0	9.3	22.5	8.2	
Level of Service	D	E						A	A	C	A	
Approach Delay (s/veh)		55.8			0.0			8.5			13.9	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



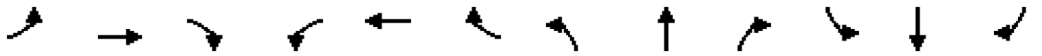
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Future Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.95
Flpb, ped/bikes				1.00		1.00	0.99	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1736		1553	1720	3471			4988	1479
Flt Permitted				0.95		1.00	0.38	1.00			1.00	1.00
Satd. Flow (perm)				1736		1553	696	3471			4988	1479
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	234	0	181	383	574	0	0	670	585
RTOR Reduction (vph)	0	0	0	0	0	152	0	0	0	0	0	134
Lane Group Flow (vph)	0	0	0	234	0	29	383	574	0	0	670	451
Confl. Peds. (#/hr)							6		2	2		6
Confl. Bikes (#/hr)									1			12
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				19.2		19.2	91.5	91.5			91.5	91.5
Effective Green, g (s)				19.2		19.2	91.5	91.5			91.5	91.5
Actuated g/C Ratio				0.16		0.16	0.77	0.77			0.77	0.77
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				280		251	536	2675			3845	1140
v/s Ratio Prot								0.17			0.13	
v/s Ratio Perm				c0.13		0.02	c0.55					0.30
v/c Ratio				0.84		0.12	0.71	0.21			0.17	0.40
Uniform Delay, d1				48.2		42.5	6.9	3.7			3.6	4.5
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				18.9		0.2	7.9	0.2			0.1	1.0
Delay (s)				67.2		42.7	14.9	3.9			3.7	5.5
Level of Service				E		D	B	A			A	A
Approach Delay (s/veh)		0.0			56.5			8.3			4.5	
Approach LOS		A			E			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	118.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Future Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				484	0	358	200	1684	0	0	1337	347
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				541	0	850	266	2232	0	0	2625	794
Arrive On Green				0.30	0.00	0.30	0.08	0.62	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1552
Grp Volume(v), veh/h				484	0	358	200	1684	0	0	1337	347
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1552
Q Serve(g_s), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Cycle Q Clear(g_c), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				541	0	850	266	2232	0	0	2625	794
V/C Ratio(X)				0.89	0.00	0.42	0.75	0.75	0.00	0.00	0.51	0.44
Avail Cap(c_a), veh/h				724	0	1137	383	2232	0	0	2625	794
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.3	0.0	30.4	49.3	14.5	0.0	0.0	17.6	16.7
Incr Delay (d2), s/veh				11.0	0.0	0.3	4.9	2.4	0.0	0.0	0.7	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.5	0.0	4.3	3.1	18.5	0.0	0.0	9.0	6.9
LnGrp Delay(d), s/veh				47.3	0.0	30.7	54.2	16.9	0.0	0.0	18.3	18.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					842			1884			1684	
Approach Delay, s/veh					40.3			20.9			18.3	
Approach LOS					D			C			B	

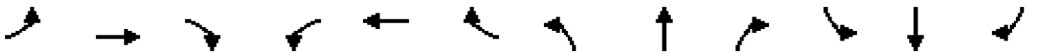
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		72.0			12.3	59.7		36.9
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		68.0			12.0	52.0		44.0
Max Q Clear Time (g_c+I1), s		38.4			8.1	20.7		30.1
Green Ext Time (p_c), s		16.4			0.2	13.7		2.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Future Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.99	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1617	1519					5136	1533	3467	3574	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1617	1519					5136	1533	3467	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	520	0	214	0	0	0	0	1388	582	367	1439	0
RTOR Reduction (vph)	0	32	39	0	0	0	0	0	308	0	0	0
Lane Group Flow (vph)	270	239	154	0	0	0	0	1388	274	367	1439	0
Confl. Peds. (#/hr)							6		12	12		6
Confl. Bikes (#/hr)									6			6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Effective Green, g (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Actuated g/C Ratio	0.28	0.28	0.28					0.47	0.47	0.15	0.65	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	481	458	430					2413	720	508	2323	
v/s Ratio Prot	c0.16	0.15						0.27		c0.11	c0.40	
v/s Ratio Perm			0.10						0.18			
v/c Ratio	0.56	0.52	0.36					0.58	0.38	0.72	0.62	
Uniform Delay, d1	36.6	36.2	34.3					23.1	20.5	48.9	12.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.5	1.1	0.5					1.0	1.5	5.0	1.3	
Delay (s)	38.1	37.2	34.8					24.1	22.0	53.9	13.6	
Level of Service	D	D	C					C	C	D	B	
Approach Delay (s/veh)		36.9			0.0			23.5			21.8	
Approach LOS		D			A			C			C	

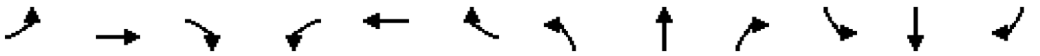
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Future Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.87	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1461	1504					4868		3433	5085	
Flt Permitted	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1461	1504					4868		3433	5085	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	187	0	330	0	0	0	0	956	286	418	615	0
RTOR Reduction (vph)	0	126	143	0	0	0	0	36	0	0	0	0
Lane Group Flow (vph)	168	48	32	0	0	0	0	1206	0	418	615	0
Confl. Peds. (#/hr)							1		11	11		1
Confl. Bikes (#/hr)									4			3
Turn Type	Prot	NA	Perm					NA		Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Effective Green, g (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Actuated g/C Ratio	0.19	0.19	0.19					0.54		0.17	0.74	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	311	270	278					2635		575	3784	
v/s Ratio Prot	c0.10	0.03						c0.25		c0.12	0.12	
v/s Ratio Perm			0.02									
v/c Ratio	0.54	0.18	0.12					0.46		0.73	0.16	
Uniform Delay, d1	41.8	38.9	38.5					15.9		44.7	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.3	0.2					0.6		4.6	0.1	
Delay (s)	43.7	39.2	38.7					16.4		49.3	4.3	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.5			0.0			16.4			22.5	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Future Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.90	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1665	1489	1490	3400	5036			4718	
Flt Permitted				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1665	1489	1490	3400	5036			4718	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	204	0	237	355	742	0	0	817	591
RTOR Reduction (vph)	0	0	0	0	58	116	0	0	0	0	92	0
Lane Group Flow (vph)	0	0	0	153	88	26	355	742	0	0	1316	0
Confl. Peds. (#/hr)							2		12	12		2
Confl. Bikes (#/hr)									4			4
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	0%
Turn Type				Prot	NA	Perm	Prot	NA			NA	
Protected Phases				3	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Effective Green, g (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Actuated g/C Ratio				0.18	0.18	0.18	0.15	0.75			0.56	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				307	275	275	506	3760			2659	
v/s Ratio Prot				c0.09	0.06		c0.10	0.15			c0.28	
v/s Ratio Perm						0.02						
v/c Ratio				0.50	0.32	0.10	0.70	0.20			0.49	
Uniform Delay, d1				42.8	41.3	39.5	47.3	4.4			15.4	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.3	0.7	0.2	4.4	0.1			0.7	
Delay (s)				44.1	42.0	39.7	51.7	4.5			16.1	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			42.0			19.8			16.1	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	116.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Norwalk - 2040 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1200	270	10	1410	410	950	1260	0	280	770	10
Future Volume (vph)	0	1200	270	10	1410	410	950	1260	0	280	770	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.97		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (prot)		4931		1770	5085	1551	1522	4748		1522	4797	1560
Flt Permitted		1.00		0.08	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (perm)		4931		149	5085	1551	1522	4748		1522	4797	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1333	300	11	1567	456	1056	1400	0	311	856	11
RTOR Reduction (vph)	0	24	0	0	0	88	0	0	0	0	0	9
Lane Group Flow (vph)	0	1609	0	11	1567	368	602	1854	0	280	887	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		76.0		76.0	76.0	76.0	40.0	40.0		22.0	22.0	22.0
Effective Green, g (s)		76.0		76.0	76.0	76.0	40.0	40.0		22.0	22.0	22.0
Actuated g/C Ratio		0.51		0.51	0.51	0.51	0.27	0.27		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2498		75	2576	785	405	1266		223	703	228
v/s Ratio Prot		c0.33			0.31		c0.40	0.39		0.18	c0.18	
v/s Ratio Perm				0.07		0.24						0.00
v/c Ratio		0.64		0.15	0.61	0.47	1.49	1.46		1.26	1.26	0.01
Uniform Delay, d1		27.1		19.7	26.4	23.9	55.0	55.0		64.0	64.0	54.7
Progression Factor		0.93		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1		0.9	0.4	0.4	231.7	213.4		146.2	129.0	0.1
Delay (s)		25.2		20.6	26.8	24.4	286.7	268.4		210.2	193.0	54.7
Level of Service		C		C	C	C	F	F		F	F	D
Approach Delay (s/veh)		25.2			26.2			272.9			195.8	
Approach LOS		C			C			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	136.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	87.4%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Future Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.87	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
Arrive On Green	0.06	0.50	0.50	0.04	0.48	0.48	0.13	0.26	0.26	0.09	0.22	0.22
Sat Flow, veh/h	1757	3505	1523	1757	3505	1542	3408	3505	1367	1757	3505	1353
Grp Volume(v), veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1523	1757	1752	1542	1704	1752	1367	1757	1752	1353
Q Serve(g_s), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Cycle Q Clear(g_c), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
V/C Ratio(X)	0.87	0.61	0.24	0.39	0.90	0.19	0.88	0.73	0.43	0.65	0.65	0.37
Avail Cap(c_a), veh/h	240	1906	828	286	1806	795	488	903	352	273	766	296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	25.4	20.1	20.7	33.6	21.1	59.9	47.4	43.3	38.7	49.7	46.4
Incr Delay (d2), s/veh	22.5	0.5	0.2	1.0	6.4	0.1	16.1	5.1	3.8	5.0	4.2	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	14.9	4.1	2.0	28.0	3.1	8.3	12.2	5.2	5.4	9.1	3.8
LnGrp Delay(d), s/veh	54.5	25.9	20.3	21.8	40.0	21.2	76.0	52.4	47.1	43.7	53.8	49.8
LnGrp LOS	D	C	C	C	D	C	E	D	D	D	D	D
Approach Vol, veh/h		1409			1742			1194			775	
Approach Delay, s/veh		28.5			37.5			59.4			51.0	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	40.0	9.8	73.4	22.0	34.5	12.7	70.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	36.0	9.0	76.0	20.0	29.0	13.0	72.0
Max Q Clear Time (g_c+I1), s	12.5	25.9	5.9	32.7	17.6	20.0	8.6	57.1
Green Ext Time (p_c), s	0.0	3.4	0.1	10.1	0.4	2.4	0.2	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1100	120	140	1150	70	50	520	150	80	430	370
Future Volume (veh/h)	290	1100	120	140	1150	70	50	520	150	80	430	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	299	1134	124	144	1186	72	52	536	155	82	443	381
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	333	1964	599	173	1505	463	67	1227	545	130	1226	544
Arrive On Green	0.19	0.39	0.39	0.10	0.30	0.30	0.04	0.35	0.35	0.04	0.35	0.35
Sat Flow, veh/h	1774	5085	1550	1774	5085	1566	1774	3539	1571	3442	3539	1571
Grp Volume(v), veh/h	299	1134	124	144	1186	72	52	536	155	82	443	381
Grp Sat Flow(s),veh/h/ln	1774	1695	1550	1774	1695	1566	1774	1770	1571	1721	1770	1571
Q Serve(g_s), s	20.0	21.3	6.5	9.7	25.9	4.1	3.5	14.1	8.7	2.8	11.3	25.3
Cycle Q Clear(g_c), s	20.0	21.3	6.5	9.7	25.9	4.1	3.5	14.1	8.7	2.8	11.3	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	333	1964	599	173	1505	463	67	1227	545	130	1226	544
V/C Ratio(X)	0.90	0.58	0.21	0.83	0.79	0.16	0.77	0.44	0.28	0.63	0.36	0.70
Avail Cap(c_a), veh/h	571	2686	819	307	1931	594	146	1227	545	199	1226	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	29.4	24.8	53.7	39.2	31.5	57.8	30.5	28.7	57.5	29.6	34.1
Incr Delay (d2), s/veh	9.9	0.3	0.2	10.0	1.7	0.2	17.1	1.1	1.3	5.0	0.8	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	10.0	2.8	5.2	12.3	1.8	2.1	7.1	4.0	1.4	5.7	12.1
LnGrp Delay(d), s/veh	58.0	29.6	25.0	63.7	40.9	31.6	74.9	31.6	30.0	62.5	30.4	41.5
LnGrp LOS	E	C	C	E	D	C	E	C	C	E	C	D
Approach Vol, veh/h		1557			1402			743			906	
Approach Delay, s/veh		34.7			42.8			34.3			38.0	
Approach LOS		C			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.6	46.0	15.8	50.8	8.6	46.0	26.7	39.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	42.0	21.0	64.0	10.0	39.0	39.0	46.0
Max Q Clear Time (g_c+I1), s	4.8	16.1	11.7	23.3	5.5	27.3	22.0	27.9
Green Ext Time (p_c), s	0.0	4.0	0.2	10.2	0.0	3.3	0.8	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Future Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	1126	242	105	1505	126	221	653	105	74	547	179
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	258	2202	674	128	1718	144	247	1084	476	93	777	576
Arrive On Green	0.15	0.44	0.44	0.07	0.37	0.37	0.14	0.31	0.31	0.05	0.22	0.22
Sat Flow, veh/h	1740	4988	1526	1740	4683	392	1740	3471	1525	1740	3471	1545
Grp Volume(v), veh/h	232	1126	242	105	1068	563	221	653	105	74	547	179
Grp Sat Flow(s),veh/h/ln	1740	1663	1526	1740	1663	1750	1740	1736	1525	1740	1736	1545
Q Serve(g_s), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Cycle Q Clear(g_c), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	2202	674	128	1220	642	247	1084	476	93	777	576
V/C Ratio(X)	0.90	0.51	0.36	0.82	0.88	0.88	0.89	0.60	0.22	0.79	0.70	0.31
Avail Cap(c_a), veh/h	336	2335	715	207	1310	689	323	1084	476	168	777	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	27.1	24.9	61.4	39.7	39.7	56.7	39.2	34.2	62.9	48.1	30.0
Incr Delay (d2), s/veh	21.6	0.2	0.3	12.6	6.6	11.7	21.5	2.5	1.1	13.8	5.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.0	6.0	4.3	19.7	21.6	9.6	10.6	3.0	3.1	9.9	4.9
LnGrp Delay(d), s/veh	77.9	27.3	25.3	74.0	46.4	51.4	78.2	41.7	35.2	76.7	53.4	31.4
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	D	C
Approach Vol, veh/h		1600			1736			979			800	
Approach Delay, s/veh		34.3			49.7			49.2			50.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	46.0	13.9	63.4	23.1	34.1	24.0	53.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	42.0	16.0	63.0	25.0	30.0	26.0	53.0
Max Q Clear Time (g_c+I1), s	7.7	23.4	10.0	23.9	18.8	21.5	19.6	42.4
Green Ext Time (p_c), s	0.1	4.2	0.1	10.4	0.3	2.6	0.3	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Future Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
Arrive On Green	0.10	0.47	0.47	0.07	0.45	0.45	0.11	0.30	0.30	0.04	0.23	0.23
Sat Flow, veh/h	1740	3471	1525	1740	3471	1526	1740	3471	1547	1740	3471	1525
Grp Volume(v), veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Grp Sat Flow(s),veh/h/ln	1740	1736	1525	1740	1736	1526	1740	1736	1547	1740	1736	1525
Q Serve(g_s), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Cycle Q Clear(g_c), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
V/C Ratio(X)	0.90	0.58	0.30	0.60	0.92	0.10	0.76	0.65	0.29	0.38	0.73	0.42
Avail Cap(c_a), veh/h	290	1704	749	361	1631	717	335	1047	467	209	805	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	27.4	23.1	22.0	37.2	22.8	36.9	43.3	38.1	40.2	50.7	46.6
Incr Delay (d2), s/veh	25.9	0.5	0.2	2.0	9.0	0.1	8.9	3.1	1.6	1.1	5.9	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	13.8	5.3	4.0	28.4	1.6	7.3	12.1	4.3	2.4	11.4	5.3
LnGrp Delay(d), s/veh	66.3	27.8	23.3	24.0	46.2	22.9	45.9	46.4	39.7	41.3	56.5	50.2
LnGrp LOS	E	C	C	C	D	C	D	D	D	D	E	D
Approach Vol, veh/h		1387			1682			1045			819	
Approach Delay, s/veh		33.1			42.8			45.4			53.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	47.0	14.2	71.3	19.9	37.1	17.9	67.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	15.0	70.0	19.0	30.0	18.0	67.0
Max Q Clear Time (g_c+I1), s	7.0	26.3	10.0	30.5	15.7	24.5	13.7	57.4
Green Ext Time (p_c), s	0.0	4.5	0.2	8.8	0.2	2.0	0.2	6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1000	300	230	1330	60	390	1030	490	140	800	160
Future Volume (veh/h)	200	1000	300	230	1330	60	390	1030	490	140	800	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	1053	316	242	1400	63	411	1084	516	147	842	168
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	233	1433	433	265	1524	461	435	1255	785	169	1042	314
Arrive On Green	0.13	0.28	0.28	0.15	0.30	0.30	0.25	0.36	0.36	0.10	0.21	0.21
Sat Flow, veh/h	1757	5036	1520	1757	5036	1522	1757	3505	1531	1757	5036	1516
Grp Volume(v), veh/h	211	1053	316	242	1400	63	411	1084	516	147	842	168
Grp Sat Flow(s),veh/h/ln	1757	1679	1520	1757	1679	1522	1757	1752	1531	1757	1679	1516
Q Serve(g_s), s	17.2	27.5	27.3	19.7	39.0	4.4	33.4	41.8	36.3	12.0	23.1	14.4
Cycle Q Clear(g_c), s	17.2	27.5	27.3	19.7	39.0	4.4	33.4	41.8	36.3	12.0	23.1	14.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	233	1433	433	265	1524	461	435	1255	785	169	1042	314
V/C Ratio(X)	0.90	0.74	0.73	0.91	0.92	0.14	0.94	0.86	0.66	0.87	0.81	0.54
Avail Cap(c_a), veh/h	254	1433	433	302	1560	472	484	1255	785	194	1042	314
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.1	47.0	46.9	60.7	48.9	36.9	53.7	43.3	26.4	64.7	54.9	51.4
Incr Delay (d2), s/veh	31.1	2.0	6.2	28.4	9.0	0.1	26.3	8.0	4.3	29.1	6.8	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	13.0	12.2	11.6	19.4	1.9	19.4	21.6	16.2	7.2	11.4	6.6
LnGrp Delay(d), s/veh	93.1	49.0	53.1	89.1	57.9	37.0	79.9	51.4	30.7	93.8	61.6	57.8
LnGrp LOS	F	D	D	F	E	D	E	D	C	F	E	E
Approach Vol, veh/h		1580			1705			2011			1157	
Approach Delay, s/veh		55.7			61.6			51.9			65.2	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	56.0	25.9	45.3	40.0	34.0	23.3	47.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	52.0	25.0	41.0	40.0	28.0	21.0	45.0
Max Q Clear Time (g_c+I1), s	14.0	43.8	21.7	29.5	35.4	25.1	19.2	41.0
Green Ext Time (p_c), s	0.1	5.5	0.2	6.1	0.6	1.6	0.1	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Future Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
Arrive On Green	0.14	0.44	0.44	0.03	0.33	0.33	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1757	5036	1543	1757	5036	1541	584	3505	1546	739	3505	1545
Grp Volume(v), veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Grp Sat Flow(s),veh/h/ln	1757	1679	1543	1757	1679	1541	584	1752	1546	739	1752	1545
Q Serve(g_s), s	15.0	14.0	7.6	3.0	30.5	11.2	17.0	15.1	4.1	8.1	16.0	17.6
Cycle Q Clear(g_c), s	15.0	14.0	7.6	3.0	30.5	11.2	33.0	15.1	4.1	23.1	16.0	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
V/C Ratio(X)	0.88	0.37	0.22	0.78	0.80	0.35	0.40	0.40	0.12	0.21	0.42	0.45
Avail Cap(c_a), veh/h	414	2886	884	124	2056	629	240	1541	680	294	1541	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	24.2	22.4	61.3	38.9	32.4	35.8	24.2	21.2	32.1	24.5	24.9
Incr Delay (d2), s/veh	10.4	0.1	0.2	21.2	1.9	0.4	4.8	0.8	0.4	1.7	0.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	6.5	3.3	1.8	14.4	4.8	3.1	7.5	1.8	1.8	7.9	7.9
LnGrp Delay(d), s/veh	64.4	24.3	22.6	82.5	40.8	32.8	40.6	25.0	21.5	33.7	25.3	27.1
LnGrp LOS	E	C	C	F	D	C	D	C	C	C	C	C
Approach Vol, veh/h		1179			1547			790			1010	
Approach Delay, s/veh		31.3			41.0			26.5			26.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	7.9	59.5		60.0	21.4	46.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	9.0	73.0		56.0	30.0	52.0
Max Q Clear Time (g_c+I1), s		35.0	5.0	16.0		25.1	17.0	32.5
Green Ext Time (p_c), s		5.0	0.0	6.8		6.1	0.4	9.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Future Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
Arrive On Green	0.10	0.38	0.38	0.16	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1757	3505	1546	1757	3505	1547	706	3505	1545	665	3505	1544
Grp Volume(v), veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Grp Sat Flow(s),veh/h/ln	1757	1752	1546	1757	1752	1547	706	1752	1545	665	1752	1544
Q Serve(g_s), s	11.4	27.8	8.4	18.7	48.6	3.3	16.3	20.8	6.9	11.2	18.9	6.2
Cycle Q Clear(g_c), s	11.4	27.8	8.4	18.7	48.6	3.3	35.2	20.8	6.9	32.0	18.9	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
V/C Ratio(X)	0.86	0.65	0.24	0.90	0.89	0.10	0.43	0.52	0.20	0.31	0.48	0.18
Avail Cap(c_a), veh/h	244	1384	611	411	1717	758	224	1333	587	204	1333	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.7	35.2	29.2	56.7	35.8	22.9	45.4	32.7	28.4	45.1	32.1	28.2
Incr Delay (d2), s/veh	18.7	1.0	0.2	15.9	5.7	0.1	5.9	1.4	0.8	4.0	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	13.6	3.6	10.3	24.7	1.4	3.5	10.3	3.1	2.3	9.4	2.8
LnGrp Delay(d), s/veh	79.4	36.3	29.4	72.6	41.5	23.0	51.3	34.2	29.2	49.0	33.3	28.9
LnGrp LOS	E	D	C	E	D	C	D	C	C	D	C	C
Approach Vol, veh/h		1149			1660			904			808	
Approach Delay, s/veh		41.0			45.4			35.3			34.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	25.2	55.5		56.0	17.5	63.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	32.0	54.0		52.0	19.0	67.0
Max Q Clear Time (g_c+I1), s		37.2	20.7	29.8		34.0	13.4	50.6
Green Ext Time (p_c), s		4.8	0.5	6.3		4.6	0.2	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Future Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	872	1845	1547	1067	1845	1567	616	3505	1529	649	3505	1530
Grp Volume(v), veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Grp Sat Flow(s),veh/h/ln	872	1845	1547	1067	1845	1567	616	1752	1529	649	1752	1530
Q Serve(g_s), s	16.6	9.4	7.6	24.0	26.1	6.0	10.0	15.6	2.0	17.9	15.9	3.8
Cycle Q Clear(g_c), s	42.7	9.4	7.6	33.3	26.1	6.0	25.9	15.6	2.0	33.5	15.9	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
V/C Ratio(X)	0.60	0.28	0.23	0.61	0.66	0.18	0.22	0.37	0.06	0.36	0.38	0.11
Avail Cap(c_a), veh/h	278	831	697	460	831	706	350	2096	914	367	2096	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	32.3	31.7	44.4	37.8	31.2	20.8	14.1	11.3	22.7	14.1	11.7
Incr Delay (d2), s/veh	3.1	0.2	0.2	1.7	1.2	0.2	1.4	0.5	0.1	2.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.8	3.3	7.2	13.5	2.6	1.9	7.6	0.9	3.5	7.8	1.7
LnGrp Delay(d), s/veh	59.0	32.6	31.9	46.2	39.0	31.4	22.3	14.6	11.5	25.5	14.6	11.9
LnGrp LOS	E	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		407			726			912			1022	
Approach Delay, s/veh		39.5			40.0			15.0			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.0		50.4		85.0		50.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		81.0		61.0		81.0		61.0
Max Q Clear Time (g_c+I1), s		27.9		44.7		35.5		35.3
Green Ext Time (p_c), s		7.0		1.7		8.0		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1000	60	230	1510	110	90	790	300	80	450	190
Future Volume (veh/h)	140	1000	60	230	1510	110	90	790	300	80	450	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	157	1124	67	258	1697	124	101	888	337	90	506	213
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	1705	508	285	1900	139	123	1135	495	111	1110	490
Arrive On Green	0.10	0.34	0.34	0.16	0.40	0.40	0.07	0.32	0.32	0.06	0.32	0.32
Sat Flow, veh/h	1757	5036	1499	1757	4775	348	1757	3505	1530	1757	3505	1549
Grp Volume(v), veh/h	157	1124	67	258	1192	629	101	888	337	90	506	213
Grp Sat Flow(s),veh/h/ln	1757	1679	1499	1757	1679	1766	1757	1752	1530	1757	1752	1549
Q Serve(g_s), s	12.5	27.0	4.4	20.5	47.1	47.3	8.1	32.6	27.1	7.2	16.4	15.5
Cycle Q Clear(g_c), s	12.5	27.0	4.4	20.5	47.1	47.3	8.1	32.6	27.1	7.2	16.4	15.5
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	1705	508	285	1336	702	123	1135	495	111	1110	490
V/C Ratio(X)	0.87	0.66	0.13	0.91	0.89	0.90	0.82	0.78	0.68	0.81	0.46	0.43
Avail Cap(c_a), veh/h	223	1705	508	408	1394	733	198	1135	495	136	1110	490
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.8	40.0	32.5	58.5	39.9	40.0	65.2	43.5	41.7	65.7	38.8	38.5
Incr Delay (d2), s/veh	25.1	0.9	0.1	18.1	7.5	13.2	13.3	5.4	7.4	25.5	1.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	12.6	1.8	11.4	23.2	25.6	4.4	16.6	12.4	4.3	8.1	7.0
LnGrp Delay(d), s/veh	87.9	41.0	32.6	76.6	47.4	53.2	78.4	48.9	49.0	91.2	40.1	41.2
LnGrp LOS	F	D	C	E	D	D	E	D	D	F	D	D
Approach Vol, veh/h		1348			2079			1326			809	
Approach Delay, s/veh		46.0			52.8			51.2			46.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	50.0	27.0	52.1	14.0	49.0	18.6	60.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	46.0	33.0	44.0	16.0	41.0	18.0	59.0
Max Q Clear Time (g_c+I1), s	9.2	34.6	22.5	29.0	10.1	18.4	14.5	49.3
Green Ext Time (p_c), s	0.0	5.4	0.5	6.8	0.1	3.8	0.1	7.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1200	210	130	1690	10	180	10	40	0	0	0
Future Volume (veh/h)	0	1200	210	130	1690	10	180	10	40	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	0	1333	233	144	1878	11	200	11	44	0	0	0
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	65	1771	309	227	2656	16	773	130	521	0	746	0
Arrive On Green	0.00	0.42	0.42	0.07	0.52	0.52	0.41	0.41	0.41	0.00	0.00	0.00
Sat Flow, veh/h	234	4238	741	1740	5115	30	1734	319	1277	0	1827	0
Grp Volume(v), veh/h	0	1046	520	144	1221	668	200	0	55	0	0	0
Grp Sat Flow(s),veh/h/ln	234	1663	1654	1740	1663	1820	1734	0	1596	0	1827	0
Q Serve(g_s), s	0.0	29.4	29.5	5.0	30.7	30.8	8.5	0.0	2.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	29.4	29.5	5.0	30.7	30.8	8.5	0.0	2.3	0.0	0.0	0.0
Prop In Lane	1.00		0.45	1.00		0.02	1.00		0.80	0.00		0.00
Lane Grp Cap(c), veh/h	65	1389	691	227	1726	945	773	0	652	0	746	0
V/C Ratio(X)	0.00	0.75	0.75	0.63	0.71	0.71	0.26	0.00	0.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	118	2142	1065	461	2926	1602	773	0	652	0	746	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	27.2	27.3	22.7	20.1	20.1	21.8	0.0	20.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	1.7	2.9	0.5	1.0	0.8	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.7	13.8	2.5	14.2	15.7	4.2	0.0	1.1	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	28.1	28.9	25.6	20.7	21.1	22.6	0.0	20.2	0.0	0.0	0.0
LnGrp LOS		C	C	C	C	C	C		C			
Approach Vol, veh/h		1566			2033			255			0	
Approach Delay, s/veh		28.4			21.2			22.1			0.0	
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		49.0	11.2	50.1		49.0		61.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0	22.0	71.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		10.5	7.0	31.5		0.0		32.8
Green Ext Time (p_c), s		0.9	0.3	14.6		0.0		22.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Future Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	129	710	161	86	1527	75	172	538	65	22	484	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	962	107
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	316	3539	1562	633	3539	1561	864	3539	1559	813	3206	356
Grp Volume(v), veh/h	129	710	161	86	1527	75	172	538	65	22	266	272
Grp Sat Flow(s),veh/h/ln	316	1770	1562	633	1770	1561	864	1770	1559	813	1770	1793
Q Serve(g_s), s	56.8	13.3	6.1	10.4	40.2	2.7	26.2	18.8	4.6	3.4	18.6	18.8
Cycle Q Clear(g_c), s	97.0	13.3	6.1	23.7	40.2	2.7	45.0	18.8	4.6	22.3	18.6	18.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
V/C Ratio(X)	0.77	0.31	0.16	0.21	0.67	0.07	0.86	0.51	0.14	0.12	0.50	0.51
Avail Cap(c_a), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	11.7	10.4	17.0	16.5	9.8	63.5	43.3	38.3	52.5	43.3	43.3
Incr Delay (d2), s/veh	19.4	0.1	0.1	0.3	0.8	0.0	36.1	1.7	0.6	1.2	3.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.5	2.6	1.8	19.8	1.2	9.1	9.4	2.0	0.8	9.6	9.8
LnGrp Delay(d), s/veh	68.0	11.8	10.5	17.2	17.2	9.9	99.6	45.1	39.0	53.8	46.6	46.7
LnGrp LOS	E	B	B	B	B	A	F	D	D	D	D	D
Approach Vol, veh/h		1000			1688			775			560	
Approach Delay, s/veh		18.8			16.9			56.7			46.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		101.0		49.0		101.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		97.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		47.0		99.0		24.3		42.2
Green Ext Time (p_c), s		0.0		0.0		3.1		18.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	970	130	30	1510	150	130	40	30	220	60	140
Future Volume (veh/h)	110	970	130	30	1510	150	130	40	30	220	60	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	115	1010	135	31	1573	156	135	42	31	229	62	146
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	142	2237	298	39	2042	202	443	397	330	525	474	394
Arrive On Green	0.08	0.50	0.50	0.02	0.44	0.44	0.08	0.22	0.22	0.12	0.26	0.26
Sat Flow, veh/h	1740	4443	592	1740	4600	456	1740	1827	1518	1740	1827	1521
Grp Volume(v), veh/h	115	755	390	31	1136	593	135	42	31	229	62	146
Grp Sat Flow(s),veh/h/ln	1740	1663	1710	1740	1663	1731	1740	1827	1518	1740	1827	1521
Q Serve(g_s), s	7.5	16.9	17.0	2.1	33.4	33.5	6.9	2.1	1.9	11.3	3.0	9.1
Cycle Q Clear(g_c), s	7.5	16.9	17.0	2.1	33.4	33.5	6.9	2.1	1.9	11.3	3.0	9.1
Prop In Lane	1.00		0.35	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	142	1674	861	39	1476	768	443	397	330	525	474	394
V/C Ratio(X)	0.81	0.45	0.45	0.80	0.77	0.77	0.30	0.11	0.09	0.44	0.13	0.37
Avail Cap(c_a), veh/h	301	2385	1227	105	2011	1047	520	397	330	649	474	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	18.5	18.5	56.3	27.2	27.2	31.2	36.3	36.2	27.9	32.9	35.1
Incr Delay (d2), s/veh	10.3	0.2	0.4	30.8	1.3	2.5	0.4	0.5	0.6	0.6	0.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	7.8	8.1	1.3	15.6	16.5	3.3	1.1	0.8	5.5	1.6	4.1
LnGrp Delay(d), s/veh	62.6	18.6	18.8	87.2	28.5	29.7	31.6	36.8	36.7	28.5	33.4	37.8
LnGrp LOS	E	B	B	F	C	C	C	D	D	C	C	D
Approach Vol, veh/h		1260			1760			208			437	
Approach Delay, s/veh		22.7			29.9			33.4			32.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	29.2	6.6	62.3	12.9	34.0	13.5	55.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	22.0	7.0	83.0	14.0	30.0	20.0	70.0
Max Q Clear Time (g_c+I1), s	13.3	4.1	4.1	19.0	8.9	11.1	9.5	35.5
Green Ext Time (p_c), s	0.4	0.2	0.0	9.5	0.1	0.7	0.2	15.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	960	120	50	1110	10	110	20	20	20	60	590
Future Volume (veh/h)	200	960	120	50	1110	10	110	20	20	20	60	590
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	206	990	124	52	1144	10	113	21	21	21	62	608
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	281	1563	195	67	1553	14	428	912	773	724	912	1360
Arrive On Green	0.08	0.35	0.35	0.04	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	3375	4474	559	1740	5099	45	749	1827	1548	1329	1827	2725
Grp Volume(v), veh/h	206	735	379	52	746	408	113	21	21	21	62	608
Grp Sat Flow(s),veh/h/ln	1688	1663	1708	1740	1663	1819	749	1827	1548	1329	1827	1362
Q Serve(g_s), s	6.3	19.6	19.7	3.1	21.4	21.4	9.8	0.6	0.7	0.9	1.9	15.3
Cycle Q Clear(g_c), s	6.3	19.6	19.7	3.1	21.4	21.4	11.7	0.6	0.7	1.5	1.9	15.3
Prop In Lane	1.00		0.33	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1162	597	67	1013	554	428	912	773	724	912	1360
V/C Ratio(X)	0.73	0.63	0.63	0.78	0.74	0.74	0.26	0.02	0.03	0.03	0.07	0.45
Avail Cap(c_a), veh/h	731	2161	1110	262	1941	1062	428	912	773	724	912	1360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	28.8	28.9	50.6	33.1	33.1	16.8	13.5	13.5	13.9	13.8	17.1
Incr Delay (d2), s/veh	3.7	0.6	1.1	17.4	1.1	1.9	1.5	0.0	0.1	0.1	0.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	9.1	9.4	1.8	9.9	11.0	2.2	0.3	0.3	0.3	1.0	5.9
LnGrp Delay(d), s/veh	51.2	29.4	30.0	68.0	34.2	35.0	18.3	13.5	13.6	13.9	13.9	18.2
LnGrp LOS	D	C	C	E	C	D	B	B	B	B	B	B
Approach Vol, veh/h		1320			1206			155			691	
Approach Delay, s/veh		33.0			35.9			17.0			17.7	
Approach LOS		C			D			B			B	

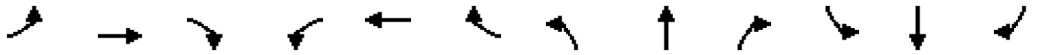
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	8.1	41.1		57.0	12.9	36.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	16.0	69.0		53.0	23.0	62.0
Max Q Clear Time (g_c+I1), s		13.7	5.1	21.7		17.3	8.3	23.4
Green Ext Time (p_c), s		1.1	0.1	9.0		3.1	0.5	9.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.2
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Future Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	583	21	198	677	125	104	573	104	83	1448	198
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1104	488	226	1021	446	127	1660	295	104	1669	228
Arrive On Green	0.15	0.31	0.31	0.13	0.29	0.29	0.07	0.38	0.38	0.06	0.37	0.37
Sat Flow, veh/h	1774	3539	1565	1774	3539	1544	1774	4325	770	1774	4501	615
Grp Volume(v), veh/h	240	583	21	198	677	125	104	447	230	83	1090	556
Grp Sat Flow(s),veh/h/ln	1774	1770	1565	1774	1770	1544	1774	1695	1704	1774	1695	1725
Q Serve(g_s), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Cycle Q Clear(g_c), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.36
Lane Grp Cap(c), veh/h	267	1104	488	226	1021	446	127	1301	654	104	1257	640
V/C Ratio(X)	0.90	0.53	0.04	0.88	0.66	0.28	0.82	0.34	0.35	0.80	0.87	0.87
Avail Cap(c_a), veh/h	354	1104	488	354	1021	446	184	1380	694	171	1355	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	38.3	32.4	57.9	42.3	37.2	61.9	29.6	29.7	62.8	39.4	39.5
Incr Delay (d2), s/veh	20.4	1.8	0.2	14.1	3.4	1.6	16.8	0.2	0.3	12.8	5.9	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	9.3	0.6	8.1	11.6	3.8	4.4	5.9	6.2	3.4	19.8	21.2
LnGrp Delay(d), s/veh	76.8	40.1	32.6	72.0	45.7	38.8	78.7	29.7	30.0	75.7	45.3	50.4
LnGrp LOS	E	D	C	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		844			1000			781			1729	
Approach Delay, s/veh		50.3			50.0			36.3			48.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	46.2	11.9	55.9	24.3	43.0	13.7	54.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	39.0	13.0	55.0	27.0	39.0	14.0	54.0
Max Q Clear Time (g_c+I1), s	16.8	20.3	8.2	15.0	20.0	24.7	9.8	42.4
Green Ext Time (p_c), s	0.4	3.7	0.1	4.6	0.4	4.2	0.1	7.7

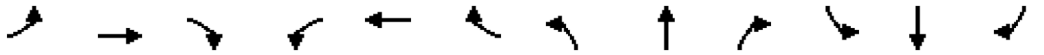
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Future Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
Arrive On Green	0.08	0.42	0.42	0.10	0.44	0.44	0.10	0.34	0.34	0.03	0.27	0.27
Sat Flow, veh/h	1774	3539	1553	1774	3539	1574	1774	3539	1550	1774	3539	1521
Grp Volume(v), veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1574	1774	1770	1550	1774	1770	1521
Q Serve(g_s), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Cycle Q Clear(g_c), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
V/C Ratio(X)	0.84	0.34	0.13	0.86	0.92	0.04	0.75	0.54	0.24	0.18	0.76	0.28
Avail Cap(c_a), veh/h	161	1499	658	261	1660	738	303	1214	532	246	960	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	27.7	25.1	63.6	37.4	22.7	35.2	37.8	33.5	36.7	47.8	41.0
Incr Delay (d2), s/veh	27.0	0.1	0.1	15.7	8.4	0.0	9.4	1.7	1.0	0.4	5.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.8	2.0	6.4	28.4	0.7	6.4	10.8	3.7	1.2	13.9	3.8
LnGrp Delay(d), s/veh	92.0	27.9	25.2	79.3	45.8	22.7	44.6	39.6	34.6	37.0	53.4	42.7
LnGrp LOS	F	C	C	E	D	C	D	D	C	D	D	D
Approach Vol, veh/h		708			1615			989			886	
Approach Delay, s/veh		38.0			48.4			40.0			51.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	53.0	17.7	64.5	17.8	42.8	15.1	67.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0	21.0	59.0	16.0	38.0	13.0	67.0
Max Q Clear Time (g_c+I1), s	4.4	23.3	13.6	15.9	13.7	29.0	11.1	56.5
Green Ext Time (p_c), s	0.0	5.1	0.2	3.8	0.1	3.5	0.0	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Future Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	756	3539	1562	1141	3539	1562	678	3539	1560	665	3539	1559
Grp Volume(v), veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Grp Sat Flow(s),veh/h/ln	756	1770	1562	1141	1770	1562	678	1770	1560	665	1770	1559
Q Serve(g_s), s	4.1	4.9	1.0	31.4	16.4	2.7	3.3	12.3	5.5	13.8	14.0	1.8
Cycle Q Clear(g_c), s	20.5	4.9	1.0	36.2	16.4	2.7	17.3	12.3	5.5	26.1	14.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
V/C Ratio(X)	0.14	0.16	0.04	0.73	0.48	0.09	0.09	0.34	0.17	0.32	0.37	0.06
Avail Cap(c_a), veh/h	421	2173	959	714	2173	959	364	1997	880	367	1997	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	25.5	24.3	37.7	29.1	24.8	19.3	14.1	12.7	21.1	14.5	11.8
Incr Delay (d2), s/veh	0.3	0.1	0.0	2.4	0.3	0.1	0.5	0.5	0.4	2.3	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.4	0.5	10.1	8.1	1.2	0.7	6.1	2.5	2.8	7.0	0.8
LnGrp Delay(d), s/veh	37.2	25.6	24.3	40.1	29.4	24.9	19.8	14.6	13.1	23.4	15.0	12.0
LnGrp LOS	D	C	C	D	C	C	B	B	B	C	B	B
Approach Vol, veh/h		266			1000			851			915	
Approach Delay, s/veh		26.9			32.6			14.5			15.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		48.5		72.0		48.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		74.0		68.0		74.0
Max Q Clear Time (g_c+I1), s		19.3		22.5		28.1		38.2
Green Ext Time (p_c), s		6.1		1.7		7.5		6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	160	150	990	50	190	670	70	90	870	40
Future Volume (veh/h)	80	780	160	150	990	50	190	670	70	90	870	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	848	174	163	1076	54	207	728	76	98	946	43
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	108	993	202	188	1390	70	335	1743	769	371	1624	716
Arrive On Green	0.06	0.24	0.24	0.11	0.28	0.28	0.08	0.50	0.50	0.04	0.46	0.46
Sat Flow, veh/h	1757	4180	852	1757	4911	246	1757	3505	1547	1757	3505	1546
Grp Volume(v), veh/h	87	680	342	163	735	395	207	728	76	98	946	43
Grp Sat Flow(s),veh/h/ln	1757	1679	1675	1757	1679	1800	1757	1752	1547	1757	1752	1546
Q Serve(g_s), s	6.8	26.9	27.1	12.7	27.9	27.9	8.3	18.3	3.6	4.1	27.5	2.1
Cycle Q Clear(g_c), s	6.8	26.9	27.1	12.7	27.9	27.9	8.3	18.3	3.6	4.1	27.5	2.1
Prop In Lane	1.00		0.51	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	798	398	188	950	509	335	1743	769	371	1624	716
V/C Ratio(X)	0.80	0.85	0.86	0.87	0.77	0.77	0.62	0.42	0.10	0.26	0.58	0.06
Avail Cap(c_a), veh/h	190	895	447	279	1065	571	466	1743	769	372	1624	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	50.6	50.7	61.0	45.7	45.7	20.6	22.1	18.4	18.7	27.4	20.6
Incr Delay (d2), s/veh	12.8	7.3	14.3	16.9	3.2	5.9	1.9	0.7	0.3	0.4	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.3	14.1	7.0	13.4	14.8	4.1	9.0	1.6	2.0	13.6	0.9
LnGrp Delay(d), s/veh	77.1	57.9	65.0	77.8	48.9	51.6	22.4	22.9	18.7	19.1	28.9	20.7
LnGrp LOS	E	E	E	E	D	D	C	C	B	B	C	C
Approach Vol, veh/h		1109			1293			1011			1087	
Approach Delay, s/veh		61.6			53.4			22.5			27.7	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	73.0	18.9	37.0	14.6	68.3	12.6	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	69.0	22.0	37.0	21.0	54.0	15.0	44.0
Max Q Clear Time (g_c+I1), s	6.1	20.3	14.7	29.1	10.3	29.5	8.8	29.9
Green Ext Time (p_c), s	0.0	5.5	0.2	3.8	0.4	7.3	0.1	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Future Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	32	484	179	158	1316	137	84	632	0	379	1211	53
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	116	1439	641	409	1460	151	105	967	0	408	1801	79
Arrive On Green	0.02	0.40	0.40	0.06	0.45	0.45	0.06	0.19	0.00	0.23	0.36	0.36
Sat Flow, veh/h	1792	3574	1592	1792	3268	339	1792	5305	0	1792	5043	221
Grp Volume(v), veh/h	32	484	179	158	717	736	84	632	0	379	822	442
Grp Sat Flow(s),veh/h/ln	1792	1787	1592	1792	1787	1820	1792	1712	0	1792	1712	1840
Q Serve(g_s), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Cycle Q Clear(g_c), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.00	1.00		0.12
Lane Grp Cap(c), veh/h	116	1439	641	409	799	813	105	967	0	408	1223	657
V/C Ratio(X)	0.28	0.34	0.28	0.39	0.90	0.90	0.80	0.65	0.00	0.93	0.67	0.67
Avail Cap(c_a), veh/h	131	1589	708	423	873	889	183	967	0	522	1223	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	28.3	27.6	21.2	35.1	35.2	63.8	51.5	0.0	51.9	37.3	37.3
Incr Delay (d2), s/veh	1.3	0.1	0.2	0.6	11.4	12.0	12.7	3.4	0.0	20.2	3.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.3	4.6	3.4	27.6	28.5	3.5	7.7	0.0	16.4	13.6	15.1
LnGrp Delay(d), s/veh	32.8	28.5	27.8	21.8	46.5	47.3	76.4	55.0	0.0	72.1	40.3	42.7
LnGrp LOS	C	C	C	C	D	D	E	D		E	D	D
Approach Vol, veh/h		695			1611			716			1643	
Approach Delay, s/veh		28.5			44.4			57.5			48.3	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	53.0	12.9	59.2	35.2	29.8	6.8	65.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	49.0	10.0	61.0	40.0	23.0	4.0	67.0
Max Q Clear Time (g_c+I1), s	8.4	29.9	8.9	14.8	30.4	17.6	3.4	53.5
Green Ext Time (p_c), s	0.1	7.7	0.0	4.0	0.8	1.8	0.0	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1370	120	50	1170	710	640	250	20	0	0	0
Future Volume (veh/h)	200	1370	120	50	1170	710	640	250	20	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	217	1489	130	54	1272	772	696	272	22			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	263	2552	223	69	2534	789	611	609	545			
Arrive On Green	0.08	0.54	0.54	0.04	0.50	0.50	0.34	0.34	0.34			
Sat Flow, veh/h	3442	4764	416	1774	5085	1583	1774	1770	1583			
Grp Volume(v), veh/h	217	1060	559	54	1272	772	696	272	22			
Grp Sat Flow(s),veh/h/ln	1721	1695	1789	1774	1695	1583	1774	1770	1583			
Q Serve(g_s), s	9.2	31.3	31.3	4.5	24.8	70.7	51.0	17.6	1.4			
Cycle Q Clear(g_c), s	9.2	31.3	31.3	4.5	24.8	70.7	51.0	17.6	1.4			
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	263	1816	959	69	2534	789	611	609	545			
V/C Ratio(X)	0.82	0.58	0.58	0.78	0.50	0.98	1.14	0.45	0.04			
Avail Cap(c_a), veh/h	302	1816	959	120	2540	791	611	609	545			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	67.4	23.2	23.2	70.6	24.9	36.4	48.6	37.6	32.3			
Incr Delay (d2), s/veh	15.1	1.4	2.6	16.9	0.2	26.6	81.5	0.5	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.0	14.9	16.1	2.5	11.6	36.7	38.8	8.7	0.6			
LnGrp Delay(d), s/veh	82.5	24.6	25.8	87.5	25.0	63.0	130.1	38.2	32.3			
LnGrp LOS	F	C	C	F	C	E	F	D	C			
Approach Vol, veh/h		1836			2098			990				
Approach Delay, s/veh		31.8			40.6			102.6				
Approach LOS		C			D			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.8	83.4			15.3	77.8		55.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	77.0			13.0	74.0		51.0
Max Q Clear Time (g_c+I1), s	6.5	33.3			11.2	72.7		53.0
Green Ext Time (p_c), s	0.0	15.5			0.1	1.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1040	170	180	1780	0	0	0	0	670	50	30
Future Volume (vph)	0	1040	170	180	1780	0	0	0	0	670	50	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3249	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3249	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1130	185	196	1935	0	0	0	0	728	54	33
RTOR Reduction (vph)	0	0	61	0	0	0	0	0	0	0	0	24
Lane Group Flow (vph)	0	1130	124	196	1935	0	0	0	0	364	418	9
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		68.1	68.1	12.4	84.5					35.7	35.7	35.7
Effective Green, g (s)		68.1	68.1	12.4	84.5					35.7	35.7	35.7
Actuated g/C Ratio		0.53	0.53	0.10	0.66					0.28	0.28	0.28
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2701	840	332	3351					448	904	440
v/s Ratio Prot		0.22		0.06	c0.38					c0.23	0.13	
v/s Ratio Perm			0.08									0.01
v/c Ratio		0.42	0.15	0.59	0.58					0.81	0.46	0.02
Uniform Delay, d1		18.1	15.3	55.5	12.0					43.1	38.3	33.6
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	2.8	0.7					10.7	0.4	0.0
Delay (s)		18.2	15.4	58.3	12.8					53.9	38.7	33.6
Level of Service		B	B	E	B					D	D	C
Approach Delay (s/veh)		17.8			16.9			0.0			45.3	
Approach LOS		B			B			A			D	

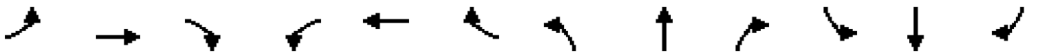
Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	128.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	59.6%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	50	60	870	650	210	610	0	0	950	20
Future Volume (veh/h)	40	0	50	60	870	650	210	610	0	0	950	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	54	65	946	707	228	663	0	0	1033	22
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	110	1687	786	284	2246	0	0	1682	36
Arrive On Green	0.00	0.00	0.00	0.50	0.50	0.50	0.08	0.44	0.00	0.00	0.33	0.33
Sat Flow, veh/h		0		222	3399	1583	3442	5253	0	0	5292	109
Grp Volume(v), veh/h		0.0		542	469	707	228	663	0	0	683	372
Grp Sat Flow(s),veh/h/ln				1852	1770	1583	1721	1695	0	0	1695	1843
Q Serve(g_s), s				26.9	23.5	52.4	8.4	10.8	0.0	0.0	21.9	21.9
Cycle Q Clear(g_c), s				26.9	23.5	52.4	8.4	10.8	0.0	0.0	21.9	21.9
Prop In Lane				0.12		1.00	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h				919	878	786	284	2246	0	0	1112	605
V/C Ratio(X)				0.59	0.53	0.90	0.80	0.30	0.00	0.00	0.61	0.61
Avail Cap(c_a), veh/h				1062	1015	908	373	2246	0	0	1112	605
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.1	22.3	29.6	58.2	23.1	0.0	0.0	36.5	36.5
Incr Delay (d2), s/veh				0.6	0.5	10.8	9.1	0.3	0.0	0.0	2.5	4.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.9	11.6	25.1	4.4	5.1	0.0	0.0	10.6	11.9
LnGrp Delay(d), s/veh				23.8	22.8	40.4	67.3	23.5	0.0	0.0	39.0	41.1
LnGrp LOS				C	C	D	E	C			D	D
Approach Vol, veh/h					1718			891			1055	
Approach Delay, s/veh					30.3			34.7			39.8	
Approach LOS					C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.0			14.6	46.4		68.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		57.0			14.0	39.0		74.0
Max Q Clear Time (g_c+I1), s		12.8			10.4	23.9		54.4
Green Ext Time (p_c), s		5.1			0.2	6.0		9.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	30	160	0	0	0	0	720	260	470	610	0
Future Volume (vph)	50	30	160	0	0	0	0	720	260	470	610	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.89	0.85					0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	3022	1441					4883		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	3022	1441					4883		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	33	174	0	0	0	0	783	283	511	663	0
RTOR Reduction (vph)	0	81	81	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	54	39	6	0	0	0	0	1039	0	511	663	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	9.5	9.5	9.5					88.6		25.5	118.1	
Effective Green, g (s)	9.5	9.5	9.5					88.6		25.5	118.1	
Actuated g/C Ratio	0.07	0.07	0.07					0.65		0.19	0.87	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	124	211	100					3190		645	4428	
v/s Ratio Prot	c0.03	0.01						c0.21		c0.15	0.13	
v/s Ratio Perm			0.00									
v/c Ratio	0.44	0.19	0.06					0.33		0.79	0.15	
Uniform Delay, d1	60.5	59.4	58.9					10.3		52.5	1.3	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	2.4	0.4	0.3					0.3		6.6	0.1	
Delay (s)	62.9	59.8	59.1					10.6		59.1	1.4	
Level of Service	E	E	E					B		E	A	
Approach Delay (s/veh)		60.2			0.0			10.6			26.5	
Approach LOS		E			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	135.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Future Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	115	646	458	365	1427	42	448	417	219	31	438	52
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1880	866	237	2814	83	305	859	446	238	1221	144
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	356	3357	1546	504	5026	148	894	2221	1153	781	3158	373
Grp Volume(v), veh/h	115	646	458	365	953	516	448	328	308	31	242	248
Grp Sat Flow(s),veh/h/ln	356	1679	1546	504	1679	1816	894	1752	1622	781	1752	1778
Q Serve(g_s), s	44.1	15.7	27.8	56.2	26.2	26.2	43.1	21.2	21.6	4.7	14.7	14.9
Cycle Q Clear(g_c), s	70.2	15.7	27.8	84.0	26.2	26.2	58.0	21.2	21.6	26.3	14.7	14.9
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.71	1.00		0.21
Lane Grp Cap(c), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
V/C Ratio(X)	0.62	0.34	0.53	1.54	0.51	0.51	1.47	0.48	0.49	0.13	0.36	0.36
Avail Cap(c_a), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	18.0	20.6	52.6	20.3	20.3	56.8	34.7	34.8	44.8	32.7	32.8
Incr Delay (d2), s/veh	6.3	0.1	0.6	263.9	0.2	0.4	228.4	2.5	2.7	1.1	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	7.3	12.0	27.1	12.1	13.2	32.0	10.7	10.1	1.1	7.4	7.6
LnGrp Delay(d), s/veh	48.1	18.1	21.2	316.5	20.5	20.7	285.3	37.2	37.6	45.9	34.2	34.3
LnGrp LOS	D	B	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1219			1834			1084			521	
Approach Delay, s/veh		22.1			79.5			139.8			34.9	
Approach LOS		C			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		88.0		62.0		88.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		60.0		72.2		28.3		86.0
Green Ext Time (p_c), s		0.0		6.8		3.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Future Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	140	86	43	204	65	269	22	602	151	172	398	118
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	151	69	254	72	289	472	1487	372	341	1892	831
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	522	373	170	535	179	713	878	2781	696	707	3539	1555
Grp Volume(v), veh/h	269	0	0	538	0	0	22	382	371	172	398	118
Grp Sat Flow(s),veh/h/ln	1066	0	0	1426	0	0	878	1770	1707	707	1770	1555
Q Serve(g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	1.8	17.0	17.1	25.4	7.8	5.1
Cycle Q Clear(g_c), s	26.8	0.0	0.0	48.1	0.0	0.0	9.6	17.0	17.1	42.5	7.8	5.1
Prop In Lane	0.52		0.16	0.38		0.50	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	473	0	0	615	0	0	472	946	912	341	1892	831
V/C Ratio(X)	0.57	0.00	0.00	0.87	0.00	0.00	0.05	0.40	0.41	0.50	0.21	0.14
Avail Cap(c_a), veh/h	640	0	0	804	0	0	472	946	912	341	1892	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	0.0	38.0	0.0	0.0	18.7	18.4	18.4	31.0	16.2	15.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	8.5	0.0	0.0	0.2	1.3	1.3	5.2	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	0.0	20.3	0.0	0.0	0.5	8.6	8.4	5.5	3.9	2.2
LnGrp Delay(d), s/veh	32.0	0.0	0.0	46.5	0.0	0.0	18.9	19.6	19.7	36.3	16.5	15.9
LnGrp LOS	C			D			B	B	B	D	B	B
Approach Vol, veh/h		269			538			775			688	
Approach Delay, s/veh		32.0			46.5			19.7			21.3	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		57.8		75.0		57.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		71.0		71.0		71.0
Max Q Clear Time (g_c+I1), s		19.1		28.8		44.5		50.1
Green Ext Time (p_c), s		5.3		2.2		4.5		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Future Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	196	22	87	304	141	152	1022	174	98	1043	174
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	58	236	24	164	475	401	301	2405	1050	308	2405	1051
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	111	917	95	1147	1845	1561	452	3505	1530	462	3505	1531
Grp Volume(v), veh/h	261	0	0	87	304	141	152	1022	174	98	1043	174
Grp Sat Flow(s),veh/h/ln	1123	0	0	1147	1845	1561	452	1752	1530	462	1752	1531
Q Serve(g_s), s	12.6	0.0	0.0	0.0	20.7	10.4	32.0	18.3	5.7	16.9	18.8	5.7
Cycle Q Clear(g_c), s	33.3	0.0	0.0	31.8	20.7	10.4	50.8	18.3	5.7	35.1	18.8	5.7
Prop In Lane	0.16		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	0	0	164	475	401	301	2405	1050	308	2405	1051
V/C Ratio(X)	0.82	0.00	0.00	0.53	0.64	0.35	0.50	0.42	0.17	0.32	0.43	0.17
Avail Cap(c_a), veh/h	414	0	0	234	587	497	301	2405	1050	308	2405	1051
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	0.0	50.8	46.7	42.9	21.3	9.8	7.9	17.6	9.9	7.9
Incr Delay (d2), s/veh	9.6	0.0	0.0	2.7	1.6	0.5	5.9	0.6	0.3	2.7	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	0.0	3.4	10.8	4.6	4.5	9.0	2.5	2.4	9.2	2.5
LnGrp Delay(d), s/veh	61.2	0.0	0.0	53.4	48.3	43.4	27.2	10.4	8.2	20.3	10.5	8.2
LnGrp LOS	E			D	D	D	C	B	A	C	B	A
Approach Vol, veh/h		261			532			1348			1315	
Approach Delay, s/veh		61.2			47.9			12.0			10.9	
Approach LOS		E			D			B			B	

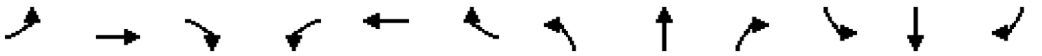
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		101.0		40.4		101.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		97.0		45.0		97.0		45.0
Max Q Clear Time (g_c+I1), s		52.8		35.3		37.1		33.8
Green Ext Time (p_c), s		13.4		1.0		12.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Future Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1130	359	1098	1239	0	0	0	0	272	0	554
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1071	340	1101	2218	0	0	596	0	1197	0	507
Arrive On Green	0.00	0.28	0.28	0.32	0.63	0.00	0.00	0.00	0.00	0.32	0.00	0.32
Sat Flow, veh/h	0	3991	1215	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1002	487	1098	1239	0	0	0	0	272	0	554
Grp Sat Flow(s),veh/h/ln	0	1695	1648	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Cycle Q Clear(g_c), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Prop In Lane	0.00		0.74	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
V/C Ratio(X)	0.00	1.06	1.06	1.00	0.56	0.00	0.00	0.00	0.00	0.23	0.00	1.09
Avail Cap(c_a), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	54.0	54.0	50.9	16.1	0.0	0.0	0.0	0.0	37.7	0.0	51.0
Incr Delay (d2), s/veh	0.0	45.0	57.3	26.3	0.3	0.0	0.0	0.0	0.0	0.4	0.0	67.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	25.6	26.4	26.8	14.7	0.0	0.0	0.0	0.0	4.2	0.0	30.5
LnGrp Delay(d), s/veh	0.0	99.0	111.3	77.3	16.4	0.0	0.0	0.0	0.0	38.1	0.0	118.8
LnGrp LOS		F	F	E	B					D		F
Approach Vol, veh/h		1489			2337			0			826	
Approach Delay, s/veh		103.0			45.0			0.0			92.2	
Approach LOS		F			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		52.0	52.0	46.0		52.0		98.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		48.0	48.0	42.0		48.0		94.0
Max Q Clear Time (g_c+I1), s		0.0	49.8	44.0		50.0		32.2
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0		12.0

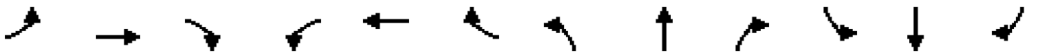
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Future Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3378	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.61	1.00	0.65	1.00	
Satd. Flow (perm)	1770	3378	1441	3433	3536		1681	1074	2787	1210	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1022	261	239	1978	11	315	11	228	11	11	11
RTOR Reduction (vph)	0	1	114	0	0	0	0	0	160	0	9	0
Lane Group Flow (vph)	11	1047	121	239	1989	0	164	162	68	11	13	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Effective Green, g (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Actuated g/C Ratio	0.01	0.51	0.51	0.10	0.60		0.13	0.30	0.30	0.15	0.15	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1738	741	343	2135		211	399	836	176	251	
v/s Ratio Prot	0.01	0.31		c0.07	c0.56		c0.10	0.05			0.01	
v/s Ratio Perm			0.08					c0.07	0.02	0.01		
v/c Ratio	0.61	0.60	0.16	0.70	0.93		0.78	0.41	0.08	0.06	0.05	
Uniform Delay, d1	69.4	24.1	18.1	61.3	25.3		59.7	39.3	35.4	51.8	51.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	0.6	0.1	6.1	8.1		16.3	0.7	0.2	0.7	0.4	
Delay (s)	118.1	24.7	18.2	67.4	33.3		76.0	40.0	35.6	52.5	52.1	
Level of Service	F	C	B	E	C		E	D	D	D	D	
Approach Delay (s/veh)		24.3			37.0			48.8			52.2	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Future Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.97			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1668			1745		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.87			0.95		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1496			1669		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	11	11	11	22	22	641	413	11	22	250	359
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	4	0	0	253
Lane Group Flow (vph)	61	54	0	0	41	0	641	413	7	22	250	106
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Effective Green, g (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Actuated g/C Ratio	0.06	0.22			0.13		0.40	0.67	0.67	0.02	0.29	0.29
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	106	341			216		710	2374	1062	43	1040	465
v/s Ratio Prot	c0.04	0.01					c0.36	0.12		0.01	c0.07	
v/s Ratio Perm		0.03			c0.02				0.00			0.07
v/c Ratio	0.58	0.16			0.19		0.90	0.17	0.01	0.51	0.24	0.23
Uniform Delay, d1	65.3	45.1			55.7		40.3	8.8	7.8	69.2	38.5	38.3
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.4	0.2			0.4		14.8	0.2	0.0	9.9	0.5	1.1
Delay (s)	72.7	45.4			56.2		55.1	8.9	7.8	79.1	39.0	39.4
Level of Service	E	D			E		E	A	A	E	D	D
Approach Delay (s/veh)		59.2			56.2			36.7			40.7	
Approach LOS		E			E			D			D	

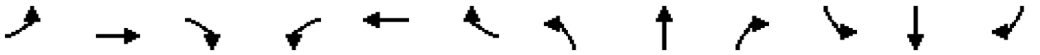
Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	143.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Future Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	152	1163	76	174	1913	185	207	22	272			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	199	2080	136	199	2374	1062	303	32	298			
Arrive On Green	0.06	0.62	0.62	0.11	0.67	0.67	0.19	0.19	0.19			
Sat Flow, veh/h	3442	3373	220	1774	3539	1583	1611	171	1583			
Grp Volume(v), veh/h	152	610	629	174	1913	185	229	0	272			
Grp Sat Flow(s),veh/h/ln	1721	1770	1824	1774	1770	1583	1782	0	1583			
Q Serve(g_s), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Cycle Q Clear(g_c), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Prop In Lane	1.00		0.12	1.00		1.00	0.90		1.00			
Lane Grp Cap(c), veh/h	199	1091	1125	199	2374	1062	336	0	298			
V/C Ratio(X)	0.76	0.56	0.56	0.87	0.81	0.17	0.68	0.00	0.91			
Avail Cap(c_a), veh/h	262	1091	1125	294	2374	1062	370	0	328			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	67.1	16.2	16.2	63.2	17.1	8.9	54.7	0.0	57.5			
Incr Delay (d2), s/veh	9.1	2.1	2.0	17.4	3.0	0.4	4.5	0.0	27.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.3	14.9	15.3	7.8	28.1	2.8	8.9	0.0	12.9			
LnGrp Delay(d), s/veh	76.2	18.3	18.2	80.6	20.1	9.2	59.2	0.0	84.7			
LnGrp LOS	E	B	B	F	C	A	E		F			
Approach Vol, veh/h		1391			2272			501				
Approach Delay, s/veh		24.6			23.8			73.0				
Approach LOS		C			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	20.2	93.2			12.4	101.0		31.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	84.0			11.0	97.0		30.0
Max Q Clear Time (g_c+I1), s	16.0	31.2			8.3	58.0		26.3
Green Ext Time (p_c), s	0.3	10.5			0.1	23.3		0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Future Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	11	1446	0	0	2000	783	304	11	250			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	35	3793	0	0	3591	1118	345	362	308			
Arrive On Green	0.01	0.75	0.00	0.00	0.71	0.71	0.19	0.19	0.19			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	11	1446	0	0	2000	783	304	11	250			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Cycle Q Clear(g_c), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	35	3793	0	0	3591	1118	345	362	308			
V/C Ratio(X)	0.32	0.38	0.00	0.00	0.56	0.70	0.88	0.03	0.81			
Avail Cap(c_a), veh/h	103	3793	0	0	3591	1118	556	584	496			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	65.9	6.0	0.0	0.0	9.5	11.5	52.5	43.8	51.7			
Incr Delay (d2), s/veh	5.2	0.3	0.0	0.0	0.6	3.7	9.5	0.0	5.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	6.4	0.0	0.0	12.1	17.9	11.9	0.3	9.3			
LnGrp Delay(d), s/veh	71.1	6.3	0.0	0.0	10.2	15.1	62.0	43.8	57.0			
LnGrp LOS	E	A			B	B	E	D	E			
Approach Vol, veh/h		1457			2783			565				
Approach Delay, s/veh		6.8			11.6			59.4				
Approach LOS		A			B			E				

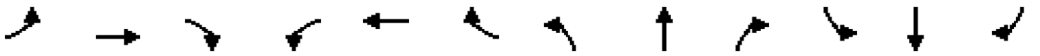
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		104.0			5.3	98.7		30.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		100.0			4.0	92.0		42.0
Max Q Clear Time (g_c+I1), s		15.5			2.4	40.5		24.3
Green Ext Time (p_c), s		15.2			0.0	33.5		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Future Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	1402	109	11	2565	228	33	11	326	11	11	391
RTOR Reduction (vph)	0	4	0	0	6	0	0	0	200	0	0	191
Lane Group Flow (vph)	370	1507	0	11	2787	0	33	11	126	11	11	200
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Effective Green, g (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Actuated g/C Ratio	0.12	0.74		0.01	0.63		0.10	0.10	0.10	0.03	0.03	0.15
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	420	3735		19	3168		179	189	160	51	54	422
v/s Ratio Prot	c0.11	0.30		0.01	c0.55		0.02	0.01		0.01	0.01	c0.06
v/s Ratio Perm									c0.08			0.01
v/c Ratio	0.88	0.40		0.58	0.88		0.18	0.06	0.79	0.22	0.20	0.47
Uniform Delay, d1	59.5	6.5		67.9	21.1		56.7	56.0	60.5	65.4	65.4	53.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.9	0.3		36.3	3.9		0.5	0.1	21.9	2.1	1.9	0.8
Delay (s)	78.4	6.8		104.2	25.0		57.2	56.1	82.4	67.5	67.3	54.3
Level of Service	E	A		F	C		E	E	F	E	E	D
Approach Delay (s/veh)		20.9			25.3			79.3			55.0	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	137.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1190	0	10	1360	630	10	20	10	70	10	260
Future Volume (vph)	210	1190	0	10	1360	630	10	20	10	70	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.98	0.85		0.97			0.92	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1764	4708	1332		1780			1594	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1764	4708	1332		1780			1594	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	219	1240	0	10	1417	656	10	21	10	73	10	271
RTOR Reduction (vph)	0	0	0	0	10	192	0	7	0	0	29	149
Lane Group Flow (vph)	219	1240	0	10	1597	274	0	34	0	0	152	24
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	21.2	80.9		0.7	60.4	60.4		12.4			17.3	17.3
Effective Green, g (s)	21.2	80.9		0.7	60.4	60.4		12.4			17.3	17.3
Actuated g/C Ratio	0.17	0.64		0.01	0.47	0.47		0.10			0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	294	3231		9	2233	631		173			216	204
v/s Ratio Prot	c0.12	0.24		0.01	c0.34			c0.02			c0.10	
v/s Ratio Perm						0.21						0.02
v/c Ratio	0.74	0.38		1.11	0.72	0.43		0.20			0.70	0.12
Uniform Delay, d1	50.5	11.2		63.3	26.6	22.1		52.9			52.5	48.3
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	9.8	0.1		342.2	1.1	0.5		2.5			9.9	0.3
Delay (s)	60.3	11.3		405.5	27.7	22.6		55.4			62.4	48.5
Level of Service	E	B		F	C	C		E			E	D
Approach Delay (s/veh)		18.6			28.4			55.4			55.6	
Approach LOS		B			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	127.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1000	230	330	1710	40	310	140	320	20	30	40
Future Volume (vph)	90	1000	230	330	1710	40	310	140	320	20	30	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00		1.00	0.96	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	4877		1752	5015		1665	1562	1404	1665	1747	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	4877		1752	5015		1665	1562	1404	1665	1747	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1053	242	347	1800	42	326	147	337	21	32	42
RTOR Reduction (vph)	0	25	0	0	2	0	0	10	180	0	0	40
Lane Group Flow (vph)	95	1270	0	347	1840	0	277	270	73	19	34	2
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.2	43.0		32.3	63.1		40.3	40.3	40.3	8.1	8.1	8.1
Effective Green, g (s)	12.2	43.0		32.3	63.1		40.3	40.3	40.3	8.1	8.1	8.1
Actuated g/C Ratio	0.09	0.31		0.23	0.45		0.29	0.29	0.29	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	153	1501		405	2265		480	450	405	96	101	90
v/s Ratio Prot	0.05	0.26		c0.20	c0.37		0.17	c0.17		0.01	c0.02	
v/s Ratio Perm									0.05			0.00
v/c Ratio	0.62	0.85		0.86	0.81		0.58	0.60	0.18	0.20	0.34	0.03
Uniform Delay, d1	61.5	45.3		51.5	33.2		42.4	42.8	37.3	62.7	63.2	62.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.6	4.6		16.2	2.3		5.0	5.8	1.0	4.6	8.8	0.6
Delay (s)	69.1	49.9		67.6	35.5		47.4	48.6	38.3	67.3	72.0	62.6
Level of Service	E	D		E	D		D	D	D	E	E	E
Approach Delay (s/veh)		51.2			40.6			45.0			66.9	
Approach LOS		D			D			D			E	

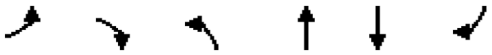
Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	139.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	390	210	150	450	440
Future Volume (veh/h)	390	390	210	150	450	440
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	443	0	239	170	511	500
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	535	246	272	2719	2057	901
Arrive On Green	0.16	0.00	0.16	0.78	0.59	0.59
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	443	0	239	170	511	500
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	14.9	0.0	15.8	1.4	8.4	23.7
Cycle Q Clear(g_c), s	14.9	0.0	15.8	1.4	8.4	23.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	535	246	272	2719	2057	901
V/C Ratio(X)	0.83	0.00	0.88	0.06	0.25	0.56
Avail Cap(c_a), veh/h	1437	661	533	2719	2057	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	0.0	49.0	3.1	11.8	15.0
Incr Delay (d2), s/veh	3.4	0.0	8.8	0.0	0.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	8.3	0.7	4.1	10.6
LnGrp Delay(d), s/veh	51.8	0.0	57.8	3.2	12.1	17.5
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	443			409	1011	
Approach Delay, s/veh	51.8			35.1	14.8	
Approach LOS	D			D	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		96.0		22.6	22.4	73.6		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		92.0		50.0	36.0	52.0		
Max Q Clear Time (g_c+I1), s		3.4		16.9	17.8	25.7		
Green Ext Time (p_c), s		1.1		1.7	0.6	5.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.0
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	840	570	310	840	470	410
Future Volume (veh/h)	840	570	310	840	470	410
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	923	0	341	923	516	451
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1006	463	368	2340	1506	653
Arrive On Green	0.29	0.00	0.21	0.65	0.42	0.42
Sat Flow, veh/h	3476	1599	1792	3668	3668	1549
Grp Volume(v), veh/h	923	0	341	923	516	451
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1549
Q Serve(g_s), s	36.9	0.0	26.8	17.3	14.0	34.1
Cycle Q Clear(g_c), s	36.9	0.0	26.8	17.3	14.0	34.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1006	463	368	2340	1506	653
V/C Ratio(X)	0.92	0.00	0.93	0.39	0.34	0.69
Avail Cap(c_a), veh/h	1162	535	474	2340	1506	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	0.0	56.0	11.5	28.1	33.9
Incr Delay (d2), s/veh	10.5	0.0	21.0	0.5	0.6	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	0.0	15.4	8.6	7.0	15.6
LnGrp Delay(d), s/veh	59.8	0.0	76.9	12.0	28.7	39.8
LnGrp LOS	E		E	B	C	D
Approach Vol, veh/h	923			1264	967	
Approach Delay, s/veh	59.8			29.5	33.9	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		98.0		45.6	33.5	64.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		94.0		48.0	38.0	52.0		
Max Q Clear Time (g_c+I1), s		19.3		38.9	28.8	36.1		
Green Ext Time (p_c), s		7.6		2.7	0.7	4.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	920	240	240	1580	30	240	810	640	60	300	250
Future Volume (veh/h)	160	920	240	240	1580	30	240	810	640	60	300	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	182	1045	273	273	1795	34	273	920	727	68	341	284
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1511	444	301	1839	35	301	1268	551	74	816	351
Arrive On Green	0.11	0.30	0.30	0.17	0.36	0.36	0.17	0.36	0.36	0.04	0.23	0.23
Sat Flow, veh/h	1774	5085	1496	1774	5133	97	1774	3539	1539	1774	3539	1522
Grp Volume(v), veh/h	182	1045	273	273	1185	644	273	920	727	68	341	284
Grp Sat Flow(s),veh/h/ln	1774	1695	1496	1774	1695	1840	1774	1770	1539	1774	1770	1522
Q Serve(g_s), s	12.2	21.8	18.8	18.1	41.4	41.4	18.1	27.0	43.0	4.6	9.8	21.2
Cycle Q Clear(g_c), s	12.2	21.8	18.8	18.1	41.4	41.4	18.1	27.0	43.0	4.6	9.8	21.2
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	1511	444	301	1215	659	301	1268	551	74	816	351
V/C Ratio(X)	0.95	0.69	0.61	0.91	0.98	0.98	0.91	0.73	1.32	0.92	0.42	0.81
Avail Cap(c_a), veh/h	192	1511	444	340	1215	659	340	1268	551	74	816	351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	37.3	36.3	48.9	38.0	38.0	48.9	33.4	38.5	57.3	39.3	43.7
Incr Delay (d2), s/veh	49.7	1.4	2.5	25.2	20.1	29.1	25.2	3.6	155.7	77.6	1.6	18.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	10.4	8.1	11.0	22.7	26.3	11.0	13.8	42.1	3.8	5.0	10.6
LnGrp Delay(d), s/veh	102.9	38.7	38.8	74.1	58.1	67.1	74.1	37.0	194.2	134.9	40.9	61.7
LnGrp LOS	F	D	D	E	E	E	E	D	F	F	D	E
Approach Vol, veh/h		1500			2102			1920			693	
Approach Delay, s/veh		46.5			62.9			101.8			58.7	
Approach LOS		D			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	47.0	24.3	39.7	24.3	31.7	17.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	43.0	23.0	33.0	23.0	25.0	13.0	43.0
Max Q Clear Time (g_c+I1), s	6.6	45.0	20.1	23.8	20.1	23.2	14.2	43.4
Green Ext Time (p_c), s	0.0	0.0	0.2	5.1	0.2	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	70.5
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	30	1370	0	0	580
Future Volume (veh/h)	30	30	1370	0	0	580
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	33	33	1489	0	0	630
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	48	3128	0	1	3128
Arrive On Green	0.06	0.06	0.88	0.00	0.00	0.88
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	33	33	1489	0	0	630
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	2.5	6.9	11.8	0.0	0.0	3.5
Cycle Q Clear(g_c), s	2.5	6.9	11.8	0.0	0.0	3.5
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	105	48	3128	0	1	3128
V/C Ratio(X)	0.32	0.68	0.48	0.00	0.00	0.20
Avail Cap(c_a), veh/h	228	158	3128	0	51	3128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	63.3	256.1	1.6	0.0	0.0	1.1
Incr Delay (d2), s/veh	1.7	15.6	0.5	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	5.8	0.0	0.0	1.7
LnGrp Delay(d), s/veh	65.0	271.7	2.2	0.0	0.0	1.3
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	66		1489			630
Approach Delay, s/veh	168.3		2.2			1.3
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	128.0				128.0		12.3
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	116.0				124.0		18.0
Max Q Clear Time (g_c+I1), s	0.0	13.8				5.5		8.9
Green Ext Time (p_c), s	0.0	17.6				4.6		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.9
HCM 2010 LOS	A



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	390	400	660	480	130
Future Volume (veh/h)	120	390	400	660	480	130
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	424	435	717	522	141
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	284	253	615	2784	2171	584
Arrive On Green	0.16	0.16	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1774	1583	769	3632	2853	742
Grp Volume(v), veh/h	130	424	435	717	334	329
Grp Sat Flow(s),veh/h/ln	1774	1583	769	1770	1770	1732
Q Serve(g_s), s	10.0	24.0	51.4	8.1	7.4	7.5
Cycle Q Clear(g_c), s	10.0	24.0	58.9	8.1	7.4	7.5
Prop In Lane	1.00	1.00	1.00			0.43
Lane Grp Cap(c), veh/h	284	253	615	2784	1392	1362
V/C Ratio(X)	0.46	1.67	0.71	0.26	0.24	0.24
Avail Cap(c_a), veh/h	284	253	615	2784	1392	1362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	63.0	12.0	4.3	4.2	4.2
Incr Delay (d2), s/veh	1.2	319.9	6.8	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	33.0	11.9	4.0	3.8	3.7
LnGrp Delay(d), s/veh	58.3	382.9	18.7	4.5	4.6	4.6
LnGrp LOS	E	F	B	A	A	A
Approach Vol, veh/h	554			1152	663	
Approach Delay, s/veh	306.7			9.9	4.6	
Approach LOS	F			A	A	

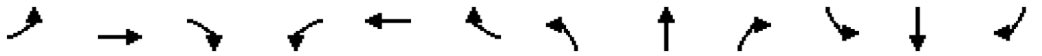
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		122.0		28.0		122.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		118.0		24.0		118.0		
Max Q Clear Time (g_c+I1), s		60.9		26.0		9.5		
Green Ext Time (p_c), s		10.8		0.0		4.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	77.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	750	130	670	810	240	190	310	430	490	290	90
Future Volume (veh/h)	90	750	130	670	810	240	190	310	430	490	290	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	815	141	728	880	261	207	337	467	533	315	98
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	1199	536	807	1788	1893	234	485	588	600	636	284
Arrive On Green	0.07	0.34	0.34	0.23	0.51	0.51	0.13	0.14	0.14	0.17	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	98	815	141	728	880	261	207	337	467	533	315	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.6	27.4	9.0	28.5	22.7	4.6	15.9	12.6	19.0	21.0	11.1	7.5
Cycle Q Clear(g_c), s	7.6	27.4	9.0	28.5	22.7	4.6	15.9	12.6	19.0	21.0	11.1	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	1199	536	807	1788	1893	234	485	588	600	636	284
V/C Ratio(X)	0.81	0.68	0.26	0.90	0.49	0.14	0.88	0.69	0.79	0.89	0.50	0.34
Avail Cap(c_a), veh/h	192	1199	536	993	1788	1893	358	485	588	745	636	284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.7	39.4	33.3	51.5	22.6	7.9	59.1	57.0	38.8	55.9	51.2	49.7
Incr Delay (d2), s/veh	13.1	3.1	1.2	9.8	1.0	0.2	15.4	8.0	10.6	10.9	2.7	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	13.9	4.1	14.6	11.2	1.8	8.8	6.7	17.7	10.9	5.7	3.5
LnGrp Delay(d), s/veh	76.8	42.5	34.5	61.3	23.6	8.0	74.5	65.0	49.4	66.8	53.9	53.0
LnGrp LOS	E	D	C	E	C	A	E	E	D	E	D	D
Approach Vol, veh/h		1054			1869			1011			946	
Approach Delay, s/veh		44.6			36.1			59.7			61.1	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.5	50.9	22.3	28.9	13.4	74.0	28.2	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	40.0	45.0	28.0	21.0	15.0	70.0	30.0	19.0
Max Q Clear Time (g_c+I1), s	30.5	29.4	17.9	13.1	9.6	24.7	23.0	21.0
Green Ext Time (p_c), s	2.0	5.2	0.4	1.3	0.1	8.5	1.2	0.0

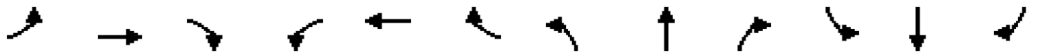
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1140	0	0	1310	110	350	30	70	0	0	0
Future Volume (vph)	110	1140	0	0	1310	110	350	30	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1698	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1698	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1239	0	0	1424	120	380	33	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	63	0	0	0
Lane Group Flow (vph)	120	1239	0	0	1424	120	205	208	13	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.1	101.2			83.1	83.1	21.8	21.8	21.8			
Effective Green, g (s)	14.1	101.2			83.1	83.1	21.8	21.8	21.8			
Actuated g/C Ratio	0.11	0.77			0.63	0.63	0.17	0.17	0.17			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	190	2733			3225	1004	279	282	263			
v/s Ratio Prot	c0.07	c0.35			0.28		0.12	c0.12				
v/s Ratio Perm						0.08			0.01			
v/c Ratio	0.63	0.45			0.44	0.12	0.73	0.74	0.05			
Uniform Delay, d1	56.0	5.2			12.2	9.5	51.9	51.9	45.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.7	0.5			0.4	0.2	9.6	9.7	0.1			
Delay (s)	62.6	5.8			12.6	9.7	61.5	61.5	46.0			
Level of Service	E	A			B	A	E	E	D			
Approach Delay (s/veh)		10.8			12.4			59.1			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	131.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1150	520	140	1630	0	0	0	0	110	20	80
Future Volume (vph)	0	1150	520	140	1630	0	0	0	0	110	20	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1711	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1711	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1250	565	152	1772	0	0	0	0	120	22	87
RTOR Reduction (vph)	0	0	268	0	0	0	0	0	0	0	0	43
Lane Group Flow (vph)	0	1250	297	152	1772	0	0	0	0	71	71	44
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		49.9	49.9	14.4	68.3					22.7	22.7	22.7
Effective Green, g (s)		49.9	49.9	14.4	68.3					22.7	22.7	22.7
Actuated g/C Ratio		0.50	0.50	0.15	0.69					0.23	0.23	0.23
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1783	797	257	3508					385	392	362
v/s Ratio Prot		c0.35		c0.09	0.35					c0.04	0.04	0.03
v/s Ratio Perm			0.19									
v/c Ratio		0.70	0.37	0.59	0.51					0.18	0.18	0.12
Uniform Delay, d1		18.8	15.0	39.5	7.3					30.7	30.7	30.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.3	0.3	3.6	0.1					1.1	1.0	0.7
Delay (s)		20.1	15.3	43.2	7.4					31.8	31.7	30.9
Level of Service		C	B	D	A					C	C	C
Approach Delay (s/veh)		18.6			10.2			0.0			31.4	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Future Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.90	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	255	1000	160	234	1191	138	138	372	170	160	362	160
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	287	1183	500	265	1480	171	166	619	276	189	659	284
Arrive On Green	0.16	0.34	0.34	0.15	0.33	0.33	0.09	0.27	0.27	0.11	0.29	0.29
Sat Flow, veh/h	1757	3505	1483	1757	4551	527	1757	2275	1014	1757	2309	994
Grp Volume(v), veh/h	255	1000	160	234	878	451	138	284	258	160	272	250
Grp Sat Flow(s),veh/h/ln	1757	1752	1483	1757	1679	1721	1757	1752	1536	1757	1752	1551
Q Serve(g_s), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Cycle Q Clear(g_c), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.66	1.00		0.64
Lane Grp Cap(c), veh/h	287	1183	500	265	1092	560	166	477	418	189	500	442
V/C Ratio(X)	0.89	0.85	0.32	0.88	0.80	0.81	0.83	0.60	0.62	0.85	0.54	0.56
Avail Cap(c_a), veh/h	449	1475	624	420	1357	696	290	477	418	304	500	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	37.2	29.8	50.4	37.4	37.4	53.9	38.3	38.6	53.1	36.7	36.9
Incr Delay (d2), s/veh	13.0	3.9	0.4	12.6	2.9	5.6	10.2	5.4	6.7	11.6	4.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	16.2	4.0	8.6	13.9	14.6	5.0	9.0	8.3	5.9	8.3	7.8
LnGrp Delay(d), s/veh	62.6	41.1	30.2	63.0	40.3	43.0	64.1	43.7	45.2	64.7	40.9	42.0
LnGrp LOS	E	D	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1415			1563			680			682	
Approach Delay, s/veh		43.8			44.5			48.4			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	37.0	22.3	44.9	15.4	38.6	23.8	43.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	33.0	29.0	51.0	20.0	34.0	31.0	49.0
Max Q Clear Time (g_c+I1), s	12.8	19.8	17.8	34.1	11.4	18.6	19.2	31.0
Green Ext Time (p_c), s	0.2	2.7	0.5	6.8	0.2	2.9	0.5	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	160	190	140	230	110
Future Vol, veh/h	140	160	190	140	230	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	152	174	207	152	250	120

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	816	250	370	0	-	0
Stage 1	250	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	347	789	1189	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	287	789	1189	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	20.2	5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1189	-	287	789	-	-
HCM Lane V/C Ratio	0.174	-	0.53	0.22	-	-
HCM Control Delay (s/veh)	8.7	-	30.9	10.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	2.9	0.8	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	250	60	20	250	40	10
Future Vol, veh/h	250	60	20	250	40	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	272	65	22	272	43	11

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	119	22	0	0	294	0
Stage 1	22	-	-	-	-	-
Stage 2	97	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	877	1055	-	-	1268	-
Stage 1	1001	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	847	1055	-	-	1268	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10.7	0	6.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	847	1055	1268	-	-	-
HCM Lane V/C Ratio	0.321	0.062	0.034	-	-	-
HCM Control Delay (s/veh)	11.2	8.6	7.9	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	1.4	0.2	0.1	-	-	-

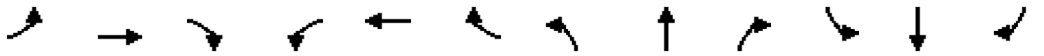
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	840	70	60	890	100	110	760	60	190	710	450
Future Volume (veh/h)	360	840	70	60	890	100	110	760	60	190	710	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	387	903	75	65	957	108	118	817	65	204	763	484
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	449	1086	90	83	1133	127	142	1263	564	231	1439	842
Arrive On Green	0.13	0.34	0.34	0.05	0.25	0.25	0.08	0.36	0.36	0.13	0.41	0.41
Sat Flow, veh/h	3375	3238	269	1740	4534	510	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	387	484	494	65	701	364	118	817	65	204	763	484
Grp Sat Flow(s),veh/h/ln	1688	1736	1771	1740	1663	1719	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	26.0	3.7	15.3	21.9	27.7
Cycle Q Clear(g_c), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	26.0	3.7	15.3	21.9	27.7
Prop In Lane	1.00		0.15	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	449	582	594	83	831	430	142	1263	564	231	1439	842
V/C Ratio(X)	0.86	0.83	0.83	0.79	0.84	0.85	0.83	0.65	0.12	0.88	0.53	0.57
Avail Cap(c_a), veh/h	585	667	681	131	953	492	236	1263	564	341	1439	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	40.6	40.6	62.5	47.3	47.3	60.0	35.1	28.0	56.5	29.1	19.8
Incr Delay (d2), s/veh	10.1	7.9	7.7	15.0	6.3	11.7	11.5	2.6	0.4	16.6	1.4	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	17.5	17.9	2.7	12.9	14.0	4.7	12.9	1.6	8.4	10.8	12.4
LnGrp Delay(d), s/veh	66.5	48.5	48.4	77.5	53.6	59.1	71.5	37.7	28.4	73.1	30.5	22.7
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		1365			1130			1000			1451	
Approach Delay, s/veh		53.5			56.7			41.1			33.9	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	52.2	10.3	48.5	14.9	59.0	21.6	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	47.0	10.0	51.0	18.0	55.0	23.0	38.0
Max Q Clear Time (g_c+I1), s	17.3	28.0	6.9	36.1	10.9	29.7	16.9	28.7
Green Ext Time (p_c), s	0.3	5.3	0.0	5.3	0.1	7.3	0.7	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

Notes

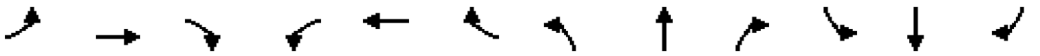
User approved changes to right turn type.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	130	90	510	0	0	650	220
Future Volume (vph)	0	0	0	160	0	130	90	510	0	0	650	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.36	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1286	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	141	98	554	0	0	707	239
RTOR Reduction (vph)	0	0	0	0	0	120	0	0	0	0	0	53
Lane Group Flow (vph)	0	0	0	174	0	21	98	554	0	0	707	186
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				15.7		15.7	83.4	83.4			83.4	83.4
Effective Green, g (s)				15.7		15.7	83.4	83.4			83.4	83.4
Actuated g/C Ratio				0.15		0.15	0.78	0.78			0.78	0.78
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				259		232	1001	3959			4989	1232
v/s Ratio Prot								0.11			0.11	
v/s Ratio Perm				c0.10		0.01	0.08					c0.12
v/c Ratio				0.67		0.09	0.10	0.14			0.14	0.15
Uniform Delay, d1				43.3		39.5	2.8	2.9			2.9	3.0
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				6.7		0.2	0.2	0.1			0.1	0.3
Delay (s)				50.0		39.7	3.0	3.0			3.0	3.2
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			45.4			3.0			3.1	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	107.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	90	0	0	0	0	480	90	280	850	0
Future Volume (vph)	150	0	90	0	0	0	0	480	90	280	850	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.43	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1572	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	98	0	0	0	0	522	98	304	924	0
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	163	0	13	0	0	0	0	522	78	304	924	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	16.2		16.2					95.2	95.2	95.2	95.2	
Effective Green, g (s)	16.2		16.2					95.2	95.2	95.2	95.2	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	240		378					5109	1262	1253	4054	
v/s Ratio Prot								0.08			0.18	
v/s Ratio Perm	c0.09		0.00						0.05	c0.19		
v/c Ratio	0.68		0.04					0.10	0.06	0.24	0.23	
Uniform Delay, d1	49.1		44.8					2.7	2.6	3.0	3.0	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.4		0.0					0.0	0.1	0.5	0.1	
Delay (s)	56.6		44.9					2.7	2.7	3.5	3.1	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		52.2			0.0			2.7			3.2	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	119.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	460	10	90	0	970	580	150	980	0
Future Volume (vph)	10	10	10	460	10	90	0	970	580	150	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1718		1665	1672	1473		5036	1519	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1672	1473		5036	1519	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	511	11	100	0	1078	644	167	1089	0
RTOR Reduction (vph)	0	10	0	0	0	76	0	0	182	0	0	0
Lane Group Flow (vph)	0	23	0	261	261	24	0	1078	462	167	1089	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		32.0	32.0	32.0		58.0	90.0	17.6	79.6	
Effective Green, g (s)		7.5		32.0	32.0	32.0		58.0	90.0	17.6	79.6	
Actuated g/C Ratio		0.06		0.24	0.24	0.24		0.44	0.69	0.13	0.61	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		406	408	359		2227	1042	235	3057	
v/s Ratio Prot				c0.16	0.16			c0.21	0.11	c0.10	0.22	
v/s Ratio Perm		c0.04				0.02			0.20			
v/c Ratio		0.65		0.64	0.64	0.07		0.48	0.44	0.71	0.36	
Uniform Delay, d1		60.5		44.4	44.4	38.1		25.9	9.3	54.3	12.9	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.4		3.5	3.3	0.1		0.8	0.3	9.7	0.3	
Delay (s)		94.9		47.9	47.7	38.2		26.7	9.6	64.0	13.2	
Level of Service		F		D	D	D		C	A	E	B	
Approach Delay (s/veh)		94.9			46.2			20.3			20.0	
Approach LOS		F			D			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	20	120	30	60	20	190	800	10	20	360	310
Future Volume (veh/h)	320	20	120	30	60	20	190	800	10	20	360	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	381	24	143	36	71	24	226	952	12	24	429	369
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	491	27	574	0	687	575	297	1791	23	34	1534	673
Arrive On Green	0.37	0.37	0.37	0.00	0.37	0.37	0.09	0.50	0.50	0.02	0.43	0.43
Sat Flow, veh/h	1155	73	1557	0	1863	1559	3442	3578	45	1774	3539	1553
Grp Volume(v), veh/h	405	0	143	0	71	24	226	471	493	24	429	369
Grp Sat Flow(s),veh/h/ln	1228	0	1557	0	1863	1559	1721	1770	1853	1774	1770	1553
Q Serve(g_s), s	31.4	0.0	6.9	0.0	2.7	1.1	6.9	19.5	19.5	1.5	8.4	19.0
Cycle Q Clear(g_c), s	34.1	0.0	6.9	0.0	2.7	1.1	6.9	19.5	19.5	1.5	8.4	19.0
Prop In Lane	0.94		1.00	0.00		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	518	0	574	0	687	575	297	886	928	34	1534	673
V/C Ratio(X)	0.78	0.00	0.25	0.00	0.10	0.04	0.76	0.53	0.53	0.71	0.28	0.55
Avail Cap(c_a), veh/h	887	0	1010	0	1347	1127	511	886	928	99	1534	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	23.6	0.0	22.3	21.8	48.2	18.3	18.3	52.6	19.7	22.7
Incr Delay (d2), s/veh	2.6	0.0	0.2	0.0	0.1	0.0	4.0	2.3	2.2	24.0	0.5	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	0.0	3.0	0.0	1.4	0.5	3.5	10.1	10.6	0.9	4.2	8.7
LnGrp Delay(d), s/veh	36.1	0.0	23.9	0.0	22.4	21.8	52.2	20.6	20.5	76.6	20.2	25.9
LnGrp LOS	D		C		C	C	D	C	C	E	C	C
Approach Vol, veh/h		548			95			1190			822	
Approach Delay, s/veh		32.9			22.2			26.5			24.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	58.0	0.0	43.8	13.3	50.7		43.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	54.0	4.0	70.0	16.0	44.0		78.0
Max Q Clear Time (g_c+I1), s	3.5	21.5	0.0	36.1	8.9	21.0		4.7
Green Ext Time (p_c), s	0.0	6.6	0.0	3.7	0.4	4.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	80	40	60	70	240	20	670	20	180	280	20
Future Volume (veh/h)	30	80	40	60	70	240	20	670	20	180	280	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.87	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	36	96	48	72	84	289	24	807	24	217	337	24
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	124	53	118	126	338	735	2515	1109	458	2515	1086
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	89	510	218	342	521	1391	1021	3574	1576	664	3574	1544
Grp Volume(v), veh/h	180	0	0	156	0	289	24	807	24	217	337	24
Grp Sat Flow(s),veh/h/ln	816	0	0	863	0	1391	1021	1787	1576	664	1787	1544
Q Serve(g_s), s	8.7	0.0	0.0	0.0	0.0	29.6	1.2	12.9	0.7	27.8	4.6	0.7
Cycle Q Clear(g_c), s	34.2	0.0	0.0	25.4	0.0	29.6	5.8	12.9	0.7	40.7	4.6	0.7
Prop In Lane	0.20		0.27	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	0	245	0	338	735	2515	1109	458	2515	1086
V/C Ratio(X)	0.79	0.00	0.00	0.64	0.00	0.86	0.03	0.32	0.02	0.47	0.13	0.02
Avail Cap(c_a), veh/h	235	0	0	253	0	345	735	2515	1109	458	2515	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	0.0	0.0	51.1	0.0	54.0	8.2	8.5	6.7	16.3	7.2	6.7
Incr Delay (d2), s/veh	16.3	0.0	0.0	5.0	0.0	18.4	0.1	0.3	0.0	3.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	0.0	6.3	0.0	13.1	0.4	6.4	0.3	5.5	2.3	0.3
LnGrp Delay(d), s/veh	71.6	0.0	0.0	56.1	0.0	72.4	8.3	8.8	6.7	19.7	7.3	6.7
LnGrp LOS	E			E		E	A	A	A	B	A	A
Approach Vol, veh/h		180			445			855			578	
Approach Delay, s/veh		71.6			66.7			8.7			12.0	
Approach LOS		E			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		109.0		40.2		109.0		40.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		105.0		37.0		105.0		37.0
Max Q Clear Time (g_c+I1), s		14.9		36.2		42.7		31.6
Green Ext Time (p_c), s		6.6		0.1		4.8		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.7
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	17.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Future Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	306	42	69	0	42	14	97	83	14	14	69	319
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	20.5	10.3	13.2	16.9
HCM LOS	C	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	54%	0%	73%	0%	3%
Vol Thru, %	46%	0%	10%	75%	17%
Vol Right, %	0%	100%	17%	25%	79%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	10	300	40	290
LT Vol	70	0	220	0	10
Through Vol	60	0	30	30	50
RT Vol	0	10	50	10	230
Lane Flow Rate	181	14	417	56	403
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.348	0.023	0.678	0.102	0.612
Departure Headway (Hd)	6.941	5.952	5.856	6.585	5.469
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	515	595	613	548	657
Service Time	4.74	3.75	3.929	4.585	3.551
HCM Lane V/C Ratio	0.351	0.024	0.68	0.102	0.613
HCM Control Delay, s/veh	13.5	8.9	20.5	10.3	16.9
HCM Lane LOS	B	A	C	B	C
HCM 95th-tile Q	1.5	0.1	5.2	0.3	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	100	20	10	20	150	930	100	40	1090	20
Future Volume (veh/h)	10	20	100	20	10	20	150	930	100	40	1090	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	11	22	111	22	11	22	167	1033	111	44	1211	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	69	115	135	116	50	110	195	2745	1200	56	2469	1090
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.11	0.79	0.79	0.03	0.71	0.71
Sat Flow, veh/h	375	1317	1553	798	577	1263	1740	3471	1518	1740	3471	1533
Grp Volume(v), veh/h	33	0	111	30	0	25	167	1033	111	44	1211	22
Grp Sat Flow(s),veh/h/ln	1692	0	1553	1198	0	1440	1740	1736	1518	1740	1736	1533
Q Serve(g_s), s	0.0	0.0	9.4	1.8	0.0	2.2	12.6	11.9	2.2	3.4	20.7	0.6
Cycle Q Clear(g_c), s	2.3	0.0	9.4	4.1	0.0	2.2	12.6	11.9	2.2	3.4	20.7	0.6
Prop In Lane	0.33		1.00	0.74		0.88	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	0	135	151	0	126	195	2745	1200	56	2469	1090
V/C Ratio(X)	0.18	0.00	0.82	0.20	0.00	0.20	0.86	0.38	0.09	0.78	0.49	0.02
Avail Cap(c_a), veh/h	285	0	232	234	0	215	415	2745	1200	156	2469	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	60.1	57.8	0.0	56.8	58.5	4.2	3.2	64.4	8.6	5.7
Incr Delay (d2), s/veh	0.5	0.0	11.4	0.6	0.0	0.8	10.3	0.4	0.2	20.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	4.5	1.1	0.0	0.9	6.6	5.7	1.0	1.9	10.0	0.2
LnGrp Delay(d), s/veh	57.3	0.0	71.6	58.5	0.0	57.6	68.8	4.6	3.3	84.7	9.3	5.7
LnGrp LOS	E		E	E		E	E	A	A	F	A	A
Approach Vol, veh/h		144			55			1311			1277	
Approach Delay, s/veh		68.3			58.1			12.6			11.8	
Approach LOS		E			E			B			B	

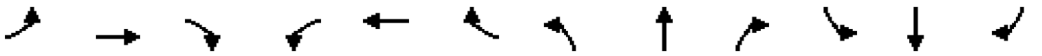
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.3	110.0		15.7	19.0	99.3		15.7
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	106.0		20.0	32.0	86.0		20.0
Max Q Clear Time (g_c+I1), s	5.4	13.9		11.4	14.6	22.7		6.1
Green Ext Time (p_c), s	0.0	10.9		0.3	0.4	12.4		0.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		16.0
HCM 2010 LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1340	70	580	1640	310	470
Future Volume (veh/h)	1340	70	580	1640	310	470
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1396	73	604	1708	323	490
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1566	1116	673	3391	488	436
Arrive On Green	0.44	0.44	0.20	0.67	0.28	0.28
Sat Flow, veh/h	3632	1537	3442	5253	1774	1583
Grp Volume(v), veh/h	1396	73	604	1708	323	490
Grp Sat Flow(s),veh/h/ln	1770	1537	1721	1695	1774	1583
Q Serve(g_s), s	50.1	1.9	23.7	23.3	22.3	38.0
Cycle Q Clear(g_c), s	50.1	1.9	23.7	23.3	22.3	38.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1566	1116	673	3391	488	436
V/C Ratio(X)	0.89	0.07	0.90	0.50	0.66	1.12
Avail Cap(c_a), veh/h	1743	1193	797	3830	488	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	5.8	54.2	11.5	44.4	50.0
Incr Delay (d2), s/veh	5.8	0.0	11.7	0.1	6.9	81.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.7	1.6	12.3	10.8	11.9	26.5
LnGrp Delay(d), s/veh	41.2	5.8	65.9	11.7	51.3	131.7
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1469			2312	813	
Approach Delay, s/veh	39.5			25.8	99.8	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		42.0	31.0	65.1				96.1
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		38.0	32.0	68.0				104.0
Max Q Clear Time (g_c+I1), s		40.0	25.7	52.1				25.3
Green Ext Time (p_c), s		0.0	1.3	9.0				23.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.3
HCM 2010 LOS	D



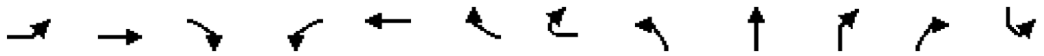
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	860	480	70	1110	60	10	10	20	580	30	280
Future Volume (vph)	20	860	480	70	1110	60	10	10	20	580	30	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1545	1787	3574	1547		1715		1698	1620	1519
Flt Permitted	0.14	1.00	1.00	0.95	1.00	1.00		0.90		0.95	0.71	1.00
Satd. Flow (perm)	264	3574	1545	1787	3574	1547		1566		1698	1192	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	21	887	495	72	1144	62	10	10	21	598	31	289
RTOR Reduction (vph)	0	0	110	0	0	35	0	16	0	0	2	42
Lane Group Flow (vph)	21	887	385	72	1144	27	0	25	0	329	327	218
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	42.8	42.8	42.8	8.2	55.0	55.0		28.0		29.3	61.3	61.3
Effective Green, g (s)	42.8	42.8	42.8	8.2	55.0	55.0		28.0		29.3	61.3	61.3
Actuated g/C Ratio	0.34	0.34	0.34	0.07	0.44	0.44		0.23		0.24	0.49	0.49
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	90	1230	531	117	1581	684		352		400	688	749
v/s Ratio Prot		0.25		0.04	c0.32					c0.19	0.11	
v/s Ratio Perm	0.08		0.25			0.02		0.02			c0.12	0.14
v/c Ratio	0.23	0.72	0.72	0.62	0.72	0.04		0.07		0.82	0.48	0.29
Uniform Delay, d1	29.1	35.5	35.6	56.5	28.4	19.7		37.9		45.0	20.9	18.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	2.1	4.9	9.3	1.7	0.0		0.1		12.8	0.5	1.0
Delay (s)	30.4	37.7	40.5	65.8	30.1	19.7		38.0		57.8	21.4	19.6
Level of Service	C	D	D	E	C	B		D		E	C	B
Approach Delay (s/veh)		38.5			31.6			38.0			33.9	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	124.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	990	310	250	1280	220	320	710	180	170	500	260
Future Volume (veh/h)	170	990	310	250	1280	220	320	710	180	170	500	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	183	1065	333	269	1376	237	344	763	194	183	538	280
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	207	1156	503	293	1630	281	368	1023	439	207	700	300
Arrive On Green	0.12	0.32	0.32	0.16	0.37	0.37	0.21	0.29	0.29	0.12	0.20	0.20
Sat Flow, veh/h	1792	3574	1554	1792	4388	755	1792	3574	1535	1792	3574	1533
Grp Volume(v), veh/h	183	1065	333	269	1073	540	344	763	194	183	538	280
Grp Sat Flow(s),veh/h/ln	1792	1787	1554	1792	1712	1720	1792	1787	1535	1792	1787	1533
Q Serve(g_s), s	14.4	41.1	26.4	21.2	41.1	41.2	27.0	27.8	14.8	14.4	20.4	25.8
Cycle Q Clear(g_c), s	14.4	41.1	26.4	21.2	41.1	41.2	27.0	27.8	14.8	14.4	20.4	25.8
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	1156	503	293	1272	639	368	1023	439	207	700	300
V/C Ratio(X)	0.89	0.92	0.66	0.92	0.84	0.84	0.93	0.75	0.44	0.89	0.77	0.93
Avail Cap(c_a), veh/h	238	1197	521	325	1314	660	413	1023	439	238	700	300
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.4	46.7	41.7	59.0	41.2	41.2	56.0	46.4	41.8	62.4	54.5	56.7
Incr Delay (d2), s/veh	28.0	11.4	3.0	28.6	5.1	9.6	26.8	5.0	3.2	28.0	7.9	37.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	22.1	11.8	12.8	20.3	21.2	16.1	14.4	6.7	8.8	10.9	14.0
LnGrp Delay(d), s/veh	90.4	58.1	44.7	87.6	46.3	50.8	82.8	51.4	45.0	90.4	62.5	93.9
LnGrp LOS	F	E	D	F	D	D	F	D	D	F	E	F
Approach Vol, veh/h		1581			1882			1301			1001	
Approach Delay, s/veh		59.0			53.5			58.7			76.4	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	45.0	27.4	50.4	33.5	32.1	20.5	57.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	41.0	26.0	48.0	33.0	27.0	19.0	55.0
Max Q Clear Time (g_c+I1), s	16.4	29.8	23.2	43.1	29.0	27.8	16.4	43.2
Green Ext Time (p_c), s	0.1	4.3	0.2	3.2	0.4	0.0	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.2
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2	SBL2
Lane Configurations												
Traffic Volume (vph)	260	820	80	40	700	240	120	100	510	370	10	10
Future Volume (vph)	260	820	80	40	700	240	120	100	510	370	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0		
Lane Util. Factor	1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91		
Frpb, ped/bikes	1.00	1.00	0.97	1.00	0.99			1.00	0.98	0.91		
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Frt	1.00	1.00	0.85	1.00	0.95			1.00	0.97	0.85		
Flt Protected	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		
Satd. Flow (prot)	1770	3539	1534	1770	4772			1770	3250	1310		
Flt Permitted	0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00		
Satd. Flow (perm)	1770	3539	1534	1770	4772			1770	3250	1310		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	277	872	85	43	745	255	128	106	543	394	11	11
RTOR Reduction (vph)	0	0	57	0	11	0	0	0	0	125	0	0
Lane Group Flow (vph)	277	872	28	43	1117	0	0	106	657	166	0	0
Confl. Peds. (#/hr)	7		7	7		7		2		27		
Confl. Bikes (#/hr)						2				4		
Turn Type	Prot	NA	Perm	Prot	NA			Prot	NA	Perm		Prot
Protected Phases	7	4		3	8			5	2			1
Permitted Phases			4							2		
Actuated Green, G (s)	22.0	49.0	49.0	4.8	31.8			13.5	28.0	28.0		
Effective Green, g (s)	22.0	49.0	49.0	4.8	31.8			13.5	28.0	28.0		
Actuated g/C Ratio	0.15	0.32	0.32	0.03	0.21			0.09	0.19	0.19		
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0		
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0		
Lane Grp Cap (vph)	258	1149	498	56	1006			158	603	243		
v/s Ratio Prot	c0.16	0.25		0.02	c0.23			0.06	c0.20			
v/s Ratio Perm			0.02							0.13		
v/c Ratio	1.07	0.76	0.06	0.77	1.11			0.67	1.09	0.68		
Uniform Delay, d1	64.4	45.6	35.0	72.4	59.5			66.5	61.4	57.3		
Progression Factor	1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00		
Incremental Delay, d2	76.9	2.9	0.0	46.0	63.7			10.7	63.4	14.6		
Delay (s)	141.3	48.5	35.0	118.5	123.2			77.2	124.8	71.9		
Level of Service	F	D	D	F	F			E	F	E		
Approach Delay (s/veh)		68.4			123.0				105.4			
Approach LOS		E			F				F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	98.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.08		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	24.0
Intersection Capacity Utilization	98.7%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBL	SBT	SBR	SWL2	SWL	SWR	SWR2
Lane Configurations							
Traffic Volume (vph)	160	350	80	100	240	200	20
Future Volume (vph)	160	350	80	100	240	200	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.99	0.85	
Flt Protected	0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (prot)	1770	3539	1568	1770	1760	1504	
Flt Permitted	0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (perm)	1770	3539	1568	1770	1760	1504	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	170	372	85	106	255	213	21
RTOR Reduction (vph)	0	0	57	0	0	131	0
Lane Group Flow (vph)	181	372	28	106	276	82	0
Confl. Peds. (#/hr)	27		2				
Confl. Bikes (#/hr)							
Turn Type	Prot	NA	pm+ov	Prot	Prot	Perm	
Protected Phases	1	6	7	9	10		
Permitted Phases			6			10	
Actuated Green, G (s)	14.0	28.5	50.5	9.0	22.0	22.0	
Effective Green, g (s)	14.0	28.5	50.5	9.0	22.0	22.0	
Actuated g/C Ratio	0.09	0.19	0.33	0.06	0.15	0.15	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	164	668	566	105	256	219	
v/s Ratio Prot	c0.10	0.11	0.01	c0.06	c0.16		
v/s Ratio Perm			0.01			0.05	
v/c Ratio	1.10	0.56	0.05	1.01	1.08	0.38	
Uniform Delay, d1	68.4	55.4	33.9	70.9	64.4	58.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	100.8	1.0	0.0	90.4	78.6	1.1	
Delay (s)	169.2	56.4	34.0	161.3	143.0	59.3	
Level of Service	F	E	C	F	F	E	
Approach Delay (s/veh)		85.4			116.3		
Approach LOS		F			F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Future Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1015	1827	1541	1158	1827	1541	741	3471	1518	681	3471	1517
Grp Volume(v), veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Grp Sat Flow(s),veh/h/ln	1015	1827	1541	1158	1827	1541	741	1736	1518	681	1736	1517
Q Serve(g_s), s	7.9	6.7	7.2	9.0	18.1	7.2	31.0	9.5	1.4	2.4	7.3	2.6
Cycle Q Clear(g_c), s	25.9	6.7	7.2	15.7	18.1	7.2	38.4	9.5	1.4	11.9	7.3	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
V/C Ratio(X)	0.46	0.28	0.29	0.35	0.68	0.29	0.54	0.28	0.05	0.07	0.22	0.09
Avail Cap(c_a), veh/h	178	461	389	288	461	389	563	2581	1129	511	2581	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	48.3	48.4	54.9	52.8	48.4	11.5	5.9	4.9	7.8	5.6	5.0
Incr Delay (d2), s/veh	2.6	0.4	0.5	0.9	2.9	0.5	3.8	0.3	0.1	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.4	3.1	2.9	9.4	3.1	6.9	4.6	0.6	0.5	3.5	1.2
LnGrp Delay(d), s/veh	67.4	48.7	49.0	55.9	55.7	49.0	15.3	6.2	5.0	8.1	5.8	5.2
LnGrp LOS	E	D	D	E	E	D	B	A	A	A	A	A
Approach Vol, veh/h		250			421			1080			716	
Approach Delay, s/veh		53.1			54.3			8.7			5.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		110.0		32.5		110.0		32.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		106.0		36.0		106.0		36.0
Max Q Clear Time (g_c+I1), s		40.4		27.9		13.9		20.1
Green Ext Time (p_c), s		9.5		0.6		4.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Future Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	66	55	99	44	143	44	187	912	22	66	890	121
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	20	333	30	79	333	391	2523	1081	415	2523	1104
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	90	1468	0	349	1467	550	3505	1502	591	3505	1533
Grp Volume(v), veh/h	121	0	99	187	0	44	187	912	22	66	890	121
Grp Sat Flow(s),veh/h/ln	90	0	1468	349	0	1467	550	1752	1502	591	1752	1533
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	3.6	29.0	14.8	0.6	7.1	14.3	3.6
Cycle Q Clear(g_c), s	34.0	0.0	8.4	34.0	0.0	3.6	43.3	14.8	0.6	21.9	14.3	3.6
Prop In Lane	0.55		1.00	0.24		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
V/C Ratio(X)	2.10	0.00	0.30	1.72	0.00	0.13	0.48	0.36	0.02	0.16	0.35	0.11
Avail Cap(c_a), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	0.0	48.1	52.6	0.0	46.2	16.0	7.9	6.0	12.1	7.9	6.4
Incr Delay (d2), s/veh	549.3	0.0	0.5	359.4	0.0	0.2	4.1	0.4	0.0	0.8	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	3.5	15.4	0.0	1.5	4.8	7.2	0.3	1.2	6.9	1.6
LnGrp Delay(d), s/veh	612.5	0.0	48.6	412.1	0.0	46.4	20.1	8.4	6.0	12.9	8.3	6.6
LnGrp LOS	F		D	F		D	C	A	A	B	A	A
Approach Vol, veh/h		220			231			1121			1077	
Approach Delay, s/veh		358.7			342.4			10.3			8.4	
Approach LOS		F			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		45.3		36.0		23.9		36.0
Green Ext Time (p_c), s		11.9		0.0		9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.4
HCM 2010 LOS	E

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	110	55	4	110	55	4
Future Volume (veh/h)	110	55	4	110	55	4
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	120	60	4	120	60	4
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1623	1379	1109	1623	81	73
Arrive On Green	0.87	0.87	0.87	0.87	0.05	0.05
Sat Flow, veh/h	1863	1583	1199	1863	1774	1583
Grp Volume(v), veh/h	120	60	4	120	60	4
Grp Sat Flow(s),veh/h/ln	1863	1583	1199	1863	1774	1583
Q Serve(g_s), s	0.9	0.5	0.0	0.9	3.2	0.2
Cycle Q Clear(g_c), s	0.9	0.5	0.9	0.9	3.2	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1623	1379	1109	1623	81	73
V/C Ratio(X)	0.07	0.04	0.00	0.07	0.74	0.06
Avail Cap(c_a), veh/h	1623	1379	1109	1623	1067	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.9	0.8	0.9	0.9	45.4	44.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	12.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.0	0.5	1.9	0.1
LnGrp Delay(d), s/veh	0.9	0.9	0.9	0.9	57.6	44.3
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h	180			124	64	
Approach Delay, s/veh	0.9			0.9	56.8	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		88.0		8.4		88.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		84.0		58.0		84.0		
Max Q Clear Time (g_c+I1), s		2.9		5.2		2.9		
Green Ext Time (p_c), s		0.8		0.2		0.9		

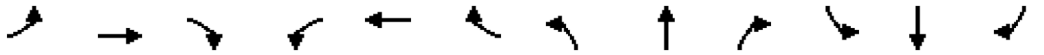
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.6
HCM 2010 LOS	B

Norwalk - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1210	380	20	1450	380	390	540	0	370	710	10
Future Volume (vph)	0	1210	380	20	1450	380	390	540	0	370	710	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.96		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)		4885		1770	5085	1551	1522	4751		1522	4775	1560
Flt Permitted		1.00		0.08	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)		4885		143	5085	1551	1522	4751		1522	4775	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1344	422	22	1611	422	433	600	0	411	789	11
RTOR Reduction (vph)	0	38	0	0	0	79	0	0	0	0	0	9
Lane Group Flow (vph)	0	1728	0	22	1611	343	251	782	0	292	908	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Effective Green, g (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Actuated g/C Ratio		0.57		0.57	0.57	0.57	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2800		81	2915	889	294	918		233	732	239
v/s Ratio Prot		c0.35			0.32		c0.16	0.16		c0.19	0.19	
v/s Ratio Perm				0.15		0.22						0.00
v/c Ratio		0.62		0.27	0.55	0.39	0.85	0.85		1.25	1.24	0.01
Uniform Delay, d1		21.1		16.2	20.0	17.5	58.5	58.4		63.5	63.5	53.8
Progression Factor		0.88		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.0		1.8	0.2	0.3	25.7	9.8		144.2	119.7	0.1
Delay (s)		18.6		18.0	20.2	17.8	84.2	68.3		207.7	183.2	53.9
Level of Service		B		B	C	B	F	E		F	F	D
Approach Delay (s/veh)		18.6			19.7			72.1			187.9	
Approach LOS		B			B			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	61.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Future Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.88	0.97		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
Arrive On Green	0.04	0.48	0.48	0.06	0.50	0.50	0.09	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1757	3505	1522	1757	3505	1544	3408	3505	1382	1757	3505	1379
Grp Volume(v), veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1522	1757	1752	1544	1704	1752	1382	1757	1752	1379
Q Serve(g_s), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Cycle Q Clear(g_c), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
V/C Ratio(X)	0.45	0.86	0.37	0.81	0.83	0.11	0.81	0.39	0.33	0.31	0.52	0.31
Avail Cap(c_a), veh/h	213	1997	867	309	2216	976	399	985	388	342	875	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	29.6	21.3	28.0	27.1	16.7	57.5	37.2	36.5	33.1	41.4	39.1
Incr Delay (d2), s/veh	1.9	3.4	0.3	8.6	2.3	0.1	8.5	1.2	2.3	0.6	2.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	23.0	6.1	3.3	22.7	1.6	4.5	5.7	3.9	2.6	7.2	3.4
LnGrp Delay(d), s/veh	27.1	33.0	21.6	36.6	29.5	16.7	65.9	38.4	38.8	33.6	43.6	41.5
LnGrp LOS	C	C	C	D	C	B	E	D	D	C	D	D
Approach Vol, veh/h		1774			1720			753			657	
Approach Delay, s/veh		31.0			29.5			47.1			41.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	40.0	12.0	65.1	15.0	36.0	8.5	68.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	36.0	16.0	73.0	15.0	30.0	8.0	81.0
Max Q Clear Time (g_c+I1), s	7.2	13.4	7.8	48.2	10.7	16.2	4.8	48.0
Green Ext Time (p_c), s	0.0	2.8	0.2	12.9	0.3	2.7	0.0	14.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Notes

User approved changes to right turn type.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1080	100	170	1290	80	70	590	120	100	510	280
Future Volume (veh/h)	310	1080	100	170	1290	80	70	590	120	100	510	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	320	1113	103	175	1330	82	72	608	124	103	526	289
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	353	2077	633	204	1651	509	92	1076	477	153	1050	465
Arrive On Green	0.20	0.41	0.41	0.12	0.32	0.32	0.05	0.30	0.30	0.04	0.30	0.30
Sat Flow, veh/h	1774	5085	1551	1774	5085	1567	1774	3539	1569	3442	3539	1569
Grp Volume(v), veh/h	320	1113	103	175	1330	82	72	608	124	103	526	289
Grp Sat Flow(s),veh/h/ln	1774	1695	1551	1774	1695	1567	1774	1770	1569	1721	1770	1569
Q Serve(g_s), s	22.0	20.7	5.3	12.1	29.9	4.7	5.0	18.0	7.5	3.7	15.3	19.9
Cycle Q Clear(g_c), s	22.0	20.7	5.3	12.1	29.9	4.7	5.0	18.0	7.5	3.7	15.3	19.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	353	2077	633	204	1651	509	92	1076	477	153	1050	465
V/C Ratio(X)	0.91	0.54	0.16	0.86	0.81	0.16	0.78	0.57	0.26	0.67	0.50	0.62
Avail Cap(c_a), veh/h	553	2603	794	341	1993	614	170	1076	477	220	1050	465
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.0	28.0	23.4	54.3	38.6	30.1	58.6	36.6	32.9	58.8	36.3	37.9
Incr Delay (d2), s/veh	12.9	0.2	0.1	10.8	2.1	0.1	13.4	2.2	1.3	5.0	1.7	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	9.7	2.3	6.5	14.4	2.0	2.8	9.1	3.4	1.9	7.8	9.4
LnGrp Delay(d), s/veh	61.9	28.2	23.5	65.1	40.7	30.2	72.0	38.7	34.2	63.8	38.0	44.0
LnGrp LOS	E	C	C	E	D	C	E	D	C	E	D	D
Approach Vol, veh/h		1536			1587			804			918	
Approach Delay, s/veh		34.9			42.9			41.0			42.8	
Approach LOS		C			D			D			D	

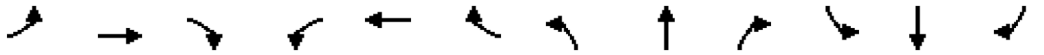
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	42.0	18.4	55.1	10.5	41.1	28.9	44.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	38.0	24.0	64.0	12.0	34.0	39.0	49.0
Max Q Clear Time (g_c+I1), s	5.7	20.0	14.1	22.7	7.0	21.9	24.0	31.9
Green Ext Time (p_c), s	0.1	4.0	0.3	9.9	0.0	3.5	0.8	8.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Future Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	105	1305	211	105	1189	105	179	526	95	147	758	242
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	129	1595	487	129	1490	132	207	1325	583	174	1259	676
Arrive On Green	0.07	0.32	0.32	0.07	0.32	0.32	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	1740	4988	1524	1740	4659	411	1740	3471	1527	1740	3471	1548
Grp Volume(v), veh/h	105	1305	211	105	848	446	179	526	95	147	758	242
Grp Sat Flow(s),veh/h/ln	1740	1663	1524	1740	1663	1745	1740	1736	1527	1740	1736	1548
Q Serve(g_s), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Cycle Q Clear(g_c), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	1595	487	129	1063	558	207	1325	583	174	1259	676
V/C Ratio(X)	0.81	0.82	0.43	0.81	0.80	0.80	0.87	0.40	0.16	0.85	0.60	0.36
Avail Cap(c_a), veh/h	217	1865	570	217	1243	653	339	1325	583	285	1259	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	40.2	34.5	58.6	39.9	39.9	55.5	28.9	26.2	56.8	33.3	24.1
Incr Delay (d2), s/veh	11.6	2.6	0.6	11.6	3.2	6.0	12.2	0.9	0.6	11.8	2.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	14.6	6.0	4.1	14.1	15.4	6.9	7.0	2.3	5.7	11.3	6.0
LnGrp Delay(d), s/veh	70.2	42.8	35.1	70.2	43.1	45.9	67.7	29.8	26.8	68.6	35.5	25.6
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	D	C
Approach Vol, veh/h		1621			1399			800			1147	
Approach Delay, s/veh		43.6			46.0			37.9			37.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	53.0	13.5	45.0	19.3	50.6	13.5	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	16.0	48.0	25.0	45.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	12.7	16.2	9.6	32.9	15.0	24.9	9.6	31.9
Green Ext Time (p_c), s	0.2	3.8	0.1	8.1	0.3	5.6	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Future Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
Arrive On Green	0.07	0.44	0.44	0.06	0.44	0.44	0.09	0.31	0.31	0.07	0.28	0.28
Sat Flow, veh/h	1740	3471	1524	1740	3471	1526	1740	3471	1547	1740	3471	1527
Grp Volume(v), veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Grp Sat Flow(s),veh/h/ln	1740	1736	1524	1740	1736	1526	1740	1736	1547	1740	1736	1527
Q Serve(g_s), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Cycle Q Clear(g_c), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
V/C Ratio(X)	0.70	0.91	0.22	0.86	0.76	0.07	0.76	0.53	0.29	0.46	0.79	0.39
Avail Cap(c_a), veh/h	308	1636	718	234	1587	698	294	1066	475	325	987	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	36.4	23.9	31.8	33.0	22.6	34.6	40.2	36.8	32.8	46.3	40.4
Incr Delay (d2), s/veh	5.1	8.0	0.2	21.8	2.2	0.0	9.4	1.9	1.5	1.1	6.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	27.1	3.6	4.4	19.5	1.0	5.8	9.4	4.2	3.8	14.9	5.6
LnGrp Delay(d), s/veh	32.9	44.3	24.1	53.6	35.2	22.6	44.0	42.1	38.4	33.9	52.9	43.0
LnGrp LOS	C	D	C	D	D	C	D	D	D	C	D	D
Approach Vol, veh/h		1727			1374			897			1090	
Approach Delay, s/veh		41.5			37.0			41.9			49.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	47.0	13.1	66.2	16.9	43.8	13.6	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	43.0	13.0	66.0	16.0	39.0	15.0	64.0
Max Q Clear Time (g_c+I1), s	9.7	21.0	9.0	55.1	12.7	31.2	9.4	41.8
Green Ext Time (p_c), s	0.1	4.1	0.1	7.1	0.2	3.3	0.2	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1070	560	680	1510	70	680	840	430	100	1130	150
Future Volume (veh/h)	160	1070	560	680	1510	70	680	840	430	100	1130	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	168	1126	589	716	1589	74	716	884	453	105	1189	158
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	176	940	281	445	1712	519	445	1337	981	126	1007	303
Arrive On Green	0.10	0.19	0.19	0.25	0.34	0.34	0.25	0.38	0.38	0.07	0.20	0.20
Sat Flow, veh/h	1757	5036	1506	1757	5036	1525	1757	3505	1532	1757	5036	1515
Grp Volume(v), veh/h	168	1126	589	716	1589	74	716	884	453	105	1189	158
Grp Sat Flow(s),veh/h/ln	1757	1679	1506	1757	1679	1525	1757	1752	1532	1757	1679	1515
Q Serve(g_s), s	14.3	28.0	28.0	38.0	45.6	5.0	38.0	31.3	23.0	8.8	30.0	14.0
Cycle Q Clear(g_c), s	14.3	28.0	28.0	38.0	45.6	5.0	38.0	31.3	23.0	8.8	30.0	14.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	176	940	281	445	1712	519	445	1337	981	126	1007	303
V/C Ratio(X)	0.96	1.20	2.10	1.61	0.93	0.14	1.61	0.66	0.46	0.83	1.18	0.52
Avail Cap(c_a), veh/h	176	940	281	445	1712	519	445	1337	981	187	1007	303
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.2	61.0	61.0	56.0	47.7	34.3	56.0	38.4	14.2	68.7	60.0	53.6
Incr Delay (d2), s/veh	55.0	99.4	505.1	284.2	9.3	0.1	284.2	2.6	1.6	17.6	91.6	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	21.6	51.1	53.6	22.7	2.1	53.6	15.6	10.1	4.9	22.4	6.4
LnGrp Delay(d), s/veh	122.2	160.4	566.1	340.2	57.1	34.5	340.2	41.0	15.8	86.3	151.6	59.9
LnGrp LOS	F	F	F	F	E	C	F	D	B	F	F	E
Approach Vol, veh/h		1883			2379			2053			1452	
Approach Delay, s/veh		283.9			141.6			139.8			136.9	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	61.2	42.0	32.0	42.0	34.0	19.0	55.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	52.0	38.0	28.0	38.0	30.0	15.0	51.0
Max Q Clear Time (g_c+I1), s	10.8	33.3	40.0	30.0	40.0	32.0	16.3	47.6
Green Ext Time (p_c), s	0.1	7.7	0.0	0.0	0.0	0.0	0.0	2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	174.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Future Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
Arrive On Green	0.12	0.31	0.31	0.04	0.23	0.23	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1757	5036	1541	1757	5036	1538	613	3505	1547	725	3505	1546
Grp Volume(v), veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Grp Sat Flow(s),veh/h/ln	1757	1679	1541	1757	1679	1538	613	1752	1547	725	1752	1546
Q Serve(g_s), s	12.2	26.2	6.2	3.7	17.9	4.0	13.7	12.2	2.7	12.7	11.8	11.8
Cycle Q Clear(g_c), s	12.2	26.2	6.2	3.7	17.9	4.0	25.5	12.2	2.7	25.0	11.8	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
V/C Ratio(X)	0.85	0.77	0.22	0.78	0.70	0.18	0.31	0.33	0.09	0.30	0.32	0.32
Avail Cap(c_a), veh/h	444	2383	729	172	1602	489	340	1944	858	389	1944	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	38.4	31.5	58.4	43.4	38.1	21.7	14.9	12.8	21.7	14.8	14.8
Incr Delay (d2), s/veh	9.5	0.8	0.2	16.9	0.8	0.2	2.3	0.5	0.2	2.0	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	12.2	2.7	2.1	8.4	1.7	2.5	6.0	1.2	2.8	5.8	5.2
LnGrp Delay(d), s/veh	62.5	39.2	31.7	75.3	44.2	38.3	24.0	15.3	13.0	23.6	15.2	15.7
LnGrp LOS	E	D	C	E	D	D	C	B	B	C	B	B
Approach Vol, veh/h		1473			916			821			1011	
Approach Delay, s/veh		41.5			45.6			16.2			16.3	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		72.0	8.8	41.8		72.0	18.6	32.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	12.0	58.0		68.0	31.0	39.0
Max Q Clear Time (g_c+I1), s		27.5	5.7	28.2		27.0	14.2	19.9
Green Ext Time (p_c), s		6.0	0.0	9.6		6.6	0.4	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Future Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
Arrive On Green	0.07	0.44	0.44	0.08	0.45	0.45	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1757	3505	1547	1757	3505	1547	686	3505	1545	584	3505	1544
Grp Volume(v), veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Grp Sat Flow(s),veh/h/ln	1757	1752	1547	1757	1752	1547	686	1752	1545	584	1752	1544
Q Serve(g_s), s	7.4	49.5	4.5	9.0	31.4	2.2	18.7	21.0	15.8	17.8	18.6	8.2
Cycle Q Clear(g_c), s	7.4	49.5	4.5	9.0	31.4	2.2	37.3	21.0	15.8	38.8	18.6	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
V/C Ratio(X)	0.81	0.89	0.12	0.83	0.65	0.06	0.46	0.51	0.40	0.44	0.46	0.23
Avail Cap(c_a), veh/h	191	1757	775	191	1757	776	228	1375	606	192	1375	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	35.4	22.8	62.4	29.2	21.2	44.9	31.8	30.2	46.5	31.1	27.9
Incr Delay (d2), s/veh	12.5	5.5	0.1	19.9	0.7	0.0	6.6	1.4	2.0	7.2	1.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	25.0	1.9	5.2	15.4	0.9	4.0	10.4	7.1	3.3	9.3	3.7
LnGrp Delay(d), s/veh	75.9	40.9	22.9	82.3	29.9	21.2	51.6	33.1	32.2	53.7	32.2	28.8
LnGrp LOS	E	D	C	F	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1553			1192			1053			861	
Approach Delay, s/veh		42.0			34.7			34.8			33.8	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	15.0	64.7		58.0	13.3	66.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	15.0	69.0		54.0	15.0	69.0
Max Q Clear Time (g_c+I1), s		39.3	11.0	51.5		40.8	9.4	33.4
Green Ext Time (p_c), s		5.3	0.1	9.1		4.3	0.1	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Future Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	985	1845	1546	1005	1845	1566	669	3505	1529	604	3505	1530
Grp Volume(v), veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Grp Sat Flow(s),veh/h/ln	985	1845	1546	1005	1845	1566	669	1752	1529	604	1752	1530
Q Serve(g_s), s	11.5	20.1	2.8	11.1	20.9	3.5	16.8	13.7	2.7	11.4	11.4	2.7
Cycle Q Clear(g_c), s	32.4	20.1	2.8	31.2	20.9	3.5	28.2	13.7	2.7	25.2	11.4	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
V/C Ratio(X)	0.52	0.63	0.10	0.49	0.65	0.13	0.35	0.35	0.09	0.25	0.31	0.09
Avail Cap(c_a), veh/h	300	751	630	311	751	638	441	2326	1015	392	2326	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	42.0	35.8	55.7	42.3	36.0	15.4	9.8	8.0	15.3	9.4	8.0
Incr Delay (d2), s/veh	2.4	1.3	0.1	2.1	1.4	0.1	2.2	0.4	0.2	1.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	10.4	1.2	3.2	10.8	1.5	3.3	6.8	1.2	2.1	5.6	1.2
LnGrp Delay(d), s/veh	59.0	43.3	35.9	57.7	43.7	36.1	17.6	10.2	8.1	16.9	9.8	8.1
LnGrp LOS	E	D	D	E	D	D	B	B	A	B	A	A
Approach Vol, veh/h		451			473			1066			901	
Approach Delay, s/veh		45.6			45.4			11.1			10.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		40.6		92.0		40.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		54.0		88.0		54.0
Max Q Clear Time (g_c+I1), s		30.2		34.4		27.2		33.2
Green Ext Time (p_c), s		8.7		2.2		6.9		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1140	90	230	1310	100	120	560	440	160	680	180
Future Volume (veh/h)	90	1140	90	230	1310	100	120	560	440	160	680	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	101	1281	101	258	1472	112	135	629	494	180	764	202
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	1433	424	282	1786	136	159	1141	498	203	1230	544
Arrive On Green	0.07	0.28	0.28	0.16	0.38	0.38	0.09	0.33	0.33	0.12	0.35	0.35
Sat Flow, veh/h	1757	5036	1490	1757	4757	362	1757	3505	1530	1757	3505	1551
Grp Volume(v), veh/h	101	1281	101	258	1039	545	135	629	494	180	764	202
Grp Sat Flow(s),veh/h/ln	1757	1679	1490	1757	1679	1762	1757	1752	1530	1757	1752	1551
Q Serve(g_s), s	8.0	34.5	7.4	20.4	39.5	39.5	10.7	20.8	45.4	14.3	25.6	13.7
Cycle Q Clear(g_c), s	8.0	34.5	7.4	20.4	39.5	39.5	10.7	20.8	45.4	14.3	25.6	13.7
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	123	1433	424	282	1261	662	159	1141	498	203	1230	544
V/C Ratio(X)	0.82	0.89	0.24	0.91	0.82	0.82	0.85	0.55	0.99	0.88	0.62	0.37
Avail Cap(c_a), veh/h	149	1497	443	336	1355	711	224	1141	498	236	1230	544
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	48.5	38.8	58.3	39.9	39.9	63.3	39.2	47.4	61.5	38.0	34.2
Incr Delay (d2), s/veh	25.6	7.1	0.3	25.8	4.0	7.4	19.0	1.9	38.4	27.7	2.4	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	17.0	3.1	11.9	19.0	20.6	6.0	10.4	24.4	8.5	12.7	6.2
LnGrp Delay(d), s/veh	90.4	55.6	39.1	84.1	43.9	47.3	82.3	41.1	85.8	89.2	40.4	36.1
LnGrp LOS	F	E	D	F	D	D	F	D	F	F	D	D
Approach Vol, veh/h		1483			1842			1258			1146	
Approach Delay, s/veh		56.9			50.5			63.1			47.3	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.4	50.0	26.7	44.2	16.8	53.6	13.9	57.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	46.0	27.0	42.0	18.0	47.0	12.0	57.0
Max Q Clear Time (g_c+I1), s	16.3	47.4	22.4	36.5	12.7	27.6	10.0	41.5
Green Ext Time (p_c), s	0.1	0.0	0.3	3.7	0.1	5.4	0.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1580	160	40	1460	10	210	10	120	0	0	10
Future Volume (veh/h)	0	1580	160	40	1460	10	210	10	120	0	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	0	1756	178	44	1622	11	233	11	133	0	0	11
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	56	2233	225	136	2773	19	590	47	571	0	0	604
Arrive On Green	0.00	0.49	0.49	0.02	0.54	0.54	0.40	0.40	0.40	0.00	0.00	0.40
Sat Flow, veh/h	301	4584	463	1740	5110	35	1366	120	1446	0	0	1528
Grp Volume(v), veh/h	0	1272	662	44	1055	578	233	0	144	0	0	11
Grp Sat Flow(s),veh/h/ln	301	1663	1721	1740	1663	1819	1366	0	1565	0	0	1528
Q Serve(g_s), s	0.0	41.0	41.4	1.6	27.4	27.4	16.2	0.0	7.9	0.0	0.0	0.6
Cycle Q Clear(g_c), s	0.0	41.0	41.4	1.6	27.4	27.4	16.7	0.0	7.9	0.0	0.0	0.6
Prop In Lane	1.00		0.27	1.00		0.02	1.00		0.92	0.00		1.00
Lane Grp Cap(c), veh/h	56	1620	838	136	1805	988	590	0	619	0	0	604
V/C Ratio(X)	0.00	0.79	0.79	0.32	0.58	0.58	0.40	0.00	0.23	0.00	0.00	0.02
Avail Cap(c_a), veh/h	98	2087	1080	174	2345	1283	590	0	619	0	0	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.5	27.6	23.9	19.8	19.8	28.9	0.0	26.0	0.0	0.0	23.8
Incr Delay (d2), s/veh	0.0	1.5	3.1	1.4	0.3	0.6	2.0	0.0	0.9	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	19.1	20.2	0.8	12.5	13.8	6.4	0.0	3.6	0.0	0.0	0.2
LnGrp Delay(d), s/veh	0.0	29.0	30.7	25.2	20.1	20.3	30.8	0.0	26.9	0.0	0.0	23.8
LnGrp LOS		C	C	C	C	C	C		C			C
Approach Vol, veh/h		1934			1677			377			11	
Approach Delay, s/veh		29.6			20.3			29.3			23.8	
Approach LOS		C			C			C			C	

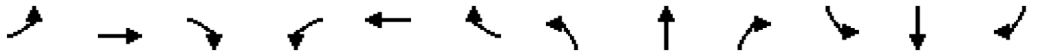
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		55.0	7.2	66.9		55.0		74.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		51.0	6.0	81.0		51.0		91.0
Max Q Clear Time (g_c+I1), s		18.7	3.6	43.4		2.6		29.4
Green Ext Time (p_c), s		1.7	0.0	19.5		0.0		16.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Future Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	1430	204	54	903	54	118	398	86	65	516	161
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1898	838	119	1898	837	250	1442	636	352	1080	335
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	584	3539	1562	306	3539	1561	759	3539	1560	907	2649	822
Grp Volume(v), veh/h	65	1430	204	54	903	54	118	398	86	65	344	333
Grp Sat Flow(s),veh/h/ln	584	1770	1562	306	1770	1561	759	1770	1560	907	1770	1702
Q Serve(g_s), s	11.1	44.7	9.9	23.7	22.6	2.4	19.3	10.7	4.9	7.3	20.3	20.5
Cycle Q Clear(g_c), s	33.7	44.7	9.9	68.5	22.6	2.4	39.8	10.7	4.9	18.0	20.3	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	271	1898	838	119	1898	837	250	1442	636	352	721	694
V/C Ratio(X)	0.24	0.75	0.24	0.46	0.48	0.06	0.47	0.28	0.14	0.18	0.48	0.48
Avail Cap(c_a), veh/h	303	2089	922	135	2089	921	250	1442	636	352	721	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	25.7	17.6	52.3	20.5	15.9	45.7	28.1	26.4	34.2	31.0	31.1
Incr Delay (d2), s/veh	0.5	1.4	0.1	2.7	0.2	0.0	6.2	0.5	0.4	1.2	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.2	4.3	2.1	11.1	1.0	4.5	5.3	2.2	2.0	10.4	10.1
LnGrp Delay(d), s/veh	31.5	27.1	17.8	55.0	20.7	15.9	52.0	28.6	26.9	35.3	33.3	33.4
LnGrp LOS	C	C	B	E	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1699			1011			602			742	
Approach Delay, s/veh		26.2			22.3			32.9			33.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		80.3		62.0		80.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		41.8		46.7		22.5		70.5
Green Ext Time (p_c), s		3.2		15.6		4.8		5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1450	120	40	1210	150	160	60	30	230	50	90
Future Volume (veh/h)	120	1450	120	40	1210	150	160	60	30	230	50	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	125	1510	125	42	1260	156	167	62	31	240	52	94
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	156	2067	171	53	1711	212	530	457	380	567	514	429
Arrive On Green	0.09	0.44	0.44	0.03	0.38	0.38	0.09	0.25	0.25	0.12	0.28	0.28
Sat Flow, veh/h	1740	4687	388	1740	4479	555	1740	1827	1520	1740	1827	1522
Grp Volume(v), veh/h	125	1071	564	42	935	481	167	62	31	240	52	94
Grp Sat Flow(s),veh/h/ln	1740	1663	1750	1740	1663	1709	1740	1827	1520	1740	1827	1522
Q Serve(g_s), s	7.3	27.3	27.4	2.5	24.9	24.9	7.2	2.7	1.6	10.1	2.2	4.9
Cycle Q Clear(g_c), s	7.3	27.3	27.4	2.5	24.9	24.9	7.2	2.7	1.6	10.1	2.2	4.9
Prop In Lane	1.00		0.22	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	1467	772	53	1270	653	530	457	380	567	514	429
V/C Ratio(X)	0.80	0.73	0.73	0.79	0.74	0.74	0.31	0.14	0.08	0.42	0.10	0.22
Avail Cap(c_a), veh/h	389	2422	1275	186	2034	1045	692	457	380	792	514	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	23.7	23.7	49.6	27.4	27.4	24.7	30.0	29.6	22.7	27.4	28.3
Incr Delay (d2), s/veh	9.2	0.7	1.4	22.4	0.8	1.6	0.3	0.6	0.4	0.5	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	12.6	13.5	1.5	11.6	12.0	3.5	1.4	0.7	4.9	1.2	2.2
LnGrp Delay(d), s/veh	55.1	24.4	25.1	72.0	28.2	29.0	25.0	30.6	30.0	23.2	27.7	29.5
LnGrp LOS	E	C	C	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1760			1458			260			386	
Approach Delay, s/veh		26.8			29.7			27.0			25.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	29.7	7.1	49.4	13.4	33.0	13.2	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	22.0	11.0	75.0	19.0	29.0	23.0	63.0
Max Q Clear Time (g_c+I1), s	12.1	4.7	4.5	29.4	9.2	6.9	9.3	26.9
Green Ext Time (p_c), s	0.5	0.3	0.0	16.0	0.3	0.5	0.2	12.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	540	1100	120	60	900	40	130	60	40	10	40	320
Future Volume (veh/h)	540	1100	120	60	900	40	130	60	40	10	40	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	557	1134	124	62	928	41	134	62	41	10	41	330
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	677	1911	209	80	1300	57	465	746	632	563	746	1112
Arrive On Green	0.20	0.42	0.42	0.05	0.27	0.27	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	3375	4550	497	1740	4896	216	986	1827	1547	1258	1827	2723
Grp Volume(v), veh/h	557	828	430	62	630	339	134	62	41	10	41	330
Grp Sat Flow(s),veh/h/ln	1688	1663	1722	1740	1663	1787	986	1827	1547	1258	1827	1362
Q Serve(g_s), s	15.1	18.4	18.4	3.4	16.4	16.4	9.1	2.0	1.5	0.5	1.3	7.8
Cycle Q Clear(g_c), s	15.1	18.4	18.4	3.4	16.4	16.4	10.4	2.0	1.5	2.5	1.3	7.8
Prop In Lane	1.00		0.29	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	677	1396	723	80	883	475	465	746	632	563	746	1112
V/C Ratio(X)	0.82	0.59	0.59	0.77	0.71	0.72	0.29	0.08	0.06	0.02	0.05	0.30
Avail Cap(c_a), veh/h	1697	2820	1461	328	1776	955	465	746	632	563	746	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	21.4	21.4	45.1	31.8	31.8	20.2	17.3	17.2	18.1	17.1	19.0
Incr Delay (d2), s/veh	2.6	0.4	0.8	14.6	1.1	2.0	1.6	0.2	0.2	0.1	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	8.5	8.9	1.9	7.7	8.4	2.7	1.0	0.7	0.2	0.7	3.0
LnGrp Delay(d), s/veh	39.1	21.8	22.2	59.6	32.9	33.8	21.8	17.5	17.4	18.1	17.2	19.7
LnGrp LOS	D	C	C	E	C	C	C	B	B	B	B	B
Approach Vol, veh/h		1815			1031			237			381	
Approach Delay, s/veh		27.2			34.8			19.9			19.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	8.4	44.1		43.0	23.1	29.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		39.0	18.0	81.0		39.0	48.0	51.0
Max Q Clear Time (g_c+I1), s		12.4	5.4	20.4		9.8	17.1	18.4
Green Ext Time (p_c), s		1.1	0.1	11.0		1.6	2.1	6.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Future Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	198	760	125	219	594	115	188	854	250	188	1010	135
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	1206	534	249	1248	545	217	1048	305	217	1219	162
Arrive On Green	0.13	0.34	0.34	0.14	0.35	0.35	0.12	0.27	0.27	0.12	0.27	0.27
Sat Flow, veh/h	1774	3539	1567	1774	3539	1548	1774	3879	1128	1774	4510	601
Grp Volume(v), veh/h	198	760	125	219	594	115	188	746	358	188	759	386
Grp Sat Flow(s),veh/h/ln	1774	1770	1567	1774	1770	1548	1774	1695	1616	1774	1695	1721
Q Serve(g_s), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Cycle Q Clear(g_c), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.70	1.00		0.35
Lane Grp Cap(c), veh/h	228	1206	534	249	1248	545	217	916	437	217	916	465
V/C Ratio(X)	0.87	0.63	0.23	0.88	0.48	0.21	0.87	0.81	0.82	0.87	0.83	0.83
Avail Cap(c_a), veh/h	379	1206	534	379	1248	545	337	1074	512	337	1074	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	34.9	29.8	53.2	31.8	28.6	54.4	43.1	43.2	54.4	43.3	43.3
Incr Delay (d2), s/veh	11.1	2.5	1.0	14.2	1.3	0.9	13.5	4.3	9.0	13.5	4.8	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	11.5	3.3	8.5	8.3	2.9	7.2	12.7	12.8	7.2	13.0	13.9
LnGrp Delay(d), s/veh	65.1	37.4	30.8	67.5	33.1	29.5	67.9	47.3	52.1	67.9	48.1	52.6
LnGrp LOS	E	D	C	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1083			928			1292			1333	
Approach Delay, s/veh		41.7			40.8			51.7			52.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	47.0	19.4	38.1	20.2	48.5	19.4	38.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	43.0	24.0	40.0	27.0	43.0	24.0	40.0
Max Q Clear Time (g_c+I1), s	17.3	24.8	15.1	28.2	15.8	18.5	15.1	28.7
Green Ext Time (p_c), s	0.4	5.3	0.3	5.4	0.4	4.5	0.3	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Future Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
Arrive On Green	0.13	0.40	0.40	0.10	0.37	0.37	0.05	0.34	0.34	0.05	0.33	0.33
Sat Flow, veh/h	1774	3539	1552	1774	3539	1572	1774	3539	1549	1774	3539	1529
Grp Volume(v), veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1572	1774	1770	1549	1774	1770	1529
Q Serve(g_s), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Cycle Q Clear(g_c), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
V/C Ratio(X)	0.88	0.87	0.22	0.85	0.49	0.07	0.39	0.70	0.44	0.45	0.57	0.25
Avail Cap(c_a), veh/h	344	1635	717	251	1451	644	306	1187	520	229	1172	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	37.1	26.4	59.7	32.6	27.4	29.0	38.8	34.8	30.6	37.0	32.7
Incr Delay (d2), s/veh	15.1	5.1	0.2	16.5	0.3	0.1	0.9	3.5	2.7	1.5	2.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	22.2	3.3	6.1	9.3	1.0	2.6	14.0	7.0	2.4	10.5	3.5
LnGrp Delay(d), s/veh	72.7	42.2	26.6	76.2	32.9	27.4	29.9	42.2	37.5	32.1	39.0	33.9
LnGrp LOS	E	D	C	E	C	C	C	D	D	C	D	C
Approach Vol, veh/h		1573			834			1166			886	
Approach Delay, s/veh		44.7			40.2			40.2			37.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	17.0	57.7	11.1	48.4	21.1	53.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	19.0	62.0	10.0	43.0	26.0	55.0
Max Q Clear Time (g_c+I1), s	6.7	29.5	12.9	45.4	7.2	22.8	16.7	20.9
Green Ext Time (p_c), s	0.0	5.8	0.2	8.3	0.1	4.8	0.3	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Future Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	957	3539	1562	852	3539	1562	699	3539	1560	371	3539	1558
Grp Volume(v), veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Grp Sat Flow(s),veh/h/ln	957	1770	1562	852	1770	1562	699	1770	1560	371	1770	1558
Q Serve(g_s), s	10.8	15.2	1.8	36.6	9.0	5.8	5.2	28.0	19.4	42.5	15.6	3.2
Cycle Q Clear(g_c), s	19.9	15.2	1.8	51.8	9.0	5.8	20.8	28.0	19.4	70.4	15.6	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
V/C Ratio(X)	0.26	0.38	0.05	0.76	0.24	0.16	0.12	0.55	0.42	0.64	0.35	0.09
Avail Cap(c_a), veh/h	402	1522	672	326	1522	672	363	1964	866	184	1964	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	31.5	27.4	50.0	29.6	28.6	23.5	20.5	18.6	43.0	17.7	15.0
Incr Delay (d2), s/veh	0.4	0.2	0.0	9.2	0.1	0.1	0.7	1.1	1.5	15.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.5	0.8	9.4	4.5	2.5	1.1	13.9	8.7	5.2	7.7	1.4
LnGrp Delay(d), s/veh	36.7	31.7	27.5	59.3	29.7	28.7	24.2	21.6	20.1	58.7	18.2	15.2
LnGrp LOS	D	C	C	E	C	C	C	C	C	E	B	B
Approach Vol, veh/h		649			649			1479			882	
Approach Delay, s/veh		32.2			39.7			21.3			23.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		84.0		60.2		84.0		60.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		80.0		62.0		80.0		62.0
Max Q Clear Time (g_c+I1), s		30.0		21.9		72.4		53.8
Green Ext Time (p_c), s		12.9		4.3		3.8		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	890	160	130	730	120	200	1150	110	110	730	70
Future Volume (veh/h)	130	890	160	130	730	120	200	1150	110	110	730	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	141	967	174	141	793	130	217	1250	120	120	793	76
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	166	1112	199	165	1131	184	375	1678	740	217	1575	695
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.26	0.08	0.48	0.48	0.05	0.45	0.45
Sat Flow, veh/h	1757	4281	768	1757	4362	710	1757	3505	1546	1757	3505	1546
Grp Volume(v), veh/h	141	758	383	141	609	314	217	1250	120	120	793	76
Grp Sat Flow(s),veh/h/ln	1757	1679	1692	1757	1679	1715	1757	1752	1546	1757	1752	1546
Q Serve(g_s), s	10.9	29.7	29.9	10.9	22.6	22.9	8.8	39.8	6.0	5.0	22.2	3.9
Cycle Q Clear(g_c), s	10.9	29.7	29.9	10.9	22.6	22.9	8.8	39.8	6.0	5.0	22.2	3.9
Prop In Lane	1.00		0.45	1.00		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	872	439	165	871	445	375	1678	740	217	1575	695
V/C Ratio(X)	0.85	0.87	0.87	0.85	0.70	0.71	0.58	0.74	0.16	0.55	0.50	0.11
Avail Cap(c_a), veh/h	268	950	479	229	877	448	450	1678	740	267	1575	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	48.8	48.8	61.5	46.2	46.3	19.6	29.1	20.3	25.1	27.0	22.0
Incr Delay (d2), s/veh	13.2	8.2	15.2	19.3	2.5	5.0	1.4	3.1	0.5	2.2	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	14.8	15.8	6.2	10.8	11.4	4.4	20.0	2.7	2.5	10.9	1.7
LnGrp Delay(d), s/veh	74.6	57.0	64.1	80.8	48.7	51.3	21.0	32.1	20.8	27.4	28.2	22.3
LnGrp LOS	E	E	E	F	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1282			1064			1587			989	
Approach Delay, s/veh		61.0			53.7			29.8			27.6	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	70.0	17.0	39.8	15.1	65.9	17.0	39.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	66.0	18.0	39.0	17.0	60.0	21.0	36.0
Max Q Clear Time (g_c+I1), s	7.0	41.8	12.9	31.9	10.8	24.2	12.9	24.9
Green Ext Time (p_c), s	0.1	9.8	0.1	3.9	0.3	6.5	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Future Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	1168	432	179	600	105	200	1200	0	263	1042	126
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	307	1300	579	205	1228	214	225	1466	0	288	1490	180
Arrive On Green	0.04	0.36	0.36	0.08	0.40	0.40	0.13	0.29	0.00	0.16	0.32	0.32
Sat Flow, veh/h	1792	3574	1591	1792	3041	531	1792	5305	0	1792	4640	560
Grp Volume(v), veh/h	74	1168	432	179	352	353	200	1200	0	263	768	400
Grp Sat Flow(s),veh/h/ln	1792	1787	1591	1792	1787	1785	1792	1712	0	1792	1712	1777
Q Serve(g_s), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Cycle Q Clear(g_c), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Prop In Lane	1.00		1.00	1.00		0.30	1.00		0.00	1.00		0.32
Lane Grp Cap(c), veh/h	307	1300	579	205	722	721	225	1466	0	288	1099	570
V/C Ratio(X)	0.24	0.90	0.75	0.87	0.49	0.49	0.89	0.82	0.00	0.91	0.70	0.70
Avail Cap(c_a), veh/h	307	1377	613	248	803	802	268	1466	0	345	1099	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	42.2	39.0	32.9	31.0	31.1	60.4	46.7	0.0	57.8	41.7	41.7
Incr Delay (d2), s/veh	0.4	8.0	4.7	24.2	0.5	0.5	25.7	5.2	0.0	25.0	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.9	15.3	5.5	10.2	10.2	9.2	15.2	0.0	12.0	13.6	14.7
LnGrp Delay(d), s/veh	27.7	50.1	43.7	57.0	31.5	31.6	86.1	51.9	0.0	82.8	45.4	48.7
LnGrp LOS	C	D	D	E	C	C	F	D		F	D	D
Approach Vol, veh/h		1674			884			1400			1431	
Approach Delay, s/veh		47.5			36.7			56.8			53.2	
Approach LOS		D			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	49.0	14.6	55.0	26.6	44.0	9.0	60.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	45.0	14.0	54.0	27.0	39.0	5.0	63.0
Max Q Clear Time (g_c+I1), s	17.4	29.6	10.5	45.3	22.2	32.5	5.6	22.6
Green Ext Time (p_c), s	0.2	6.4	0.1	5.7	0.3	3.8	0.0	4.6

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		49.6	
HCM 2010 LOS		D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	510	1660	70	20	1110	510	130	320	40	0	0	0
Future Volume (veh/h)	510	1660	70	20	1110	510	130	320	40	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	554	1804	76	22	1207	554	141	348	43			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	629	3648	154	29	2861	891	165	436	266			
Arrive On Green	0.18	0.73	0.73	0.02	0.56	0.56	0.17	0.17	0.17			
Sat Flow, veh/h	3442	5005	211	1774	5085	1583	985	2598	1583			
Grp Volume(v), veh/h	554	1221	659	22	1207	554	260	229	43			
Grp Sat Flow(s),veh/h/ln	1721	1695	1826	1774	1695	1583	1814	1770	1583			
Q Serve(g_s), s	21.7	21.1	21.2	1.7	18.9	32.6	19.3	17.2	3.2			
Cycle Q Clear(g_c), s	21.7	21.1	21.2	1.7	18.9	32.6	19.3	17.2	3.2			
Prop In Lane	1.00		0.12	1.00		1.00	0.54		1.00			
Lane Grp Cap(c), veh/h	629	2471	1331	29	2861	891	305	297	266			
V/C Ratio(X)	0.88	0.49	0.50	0.75	0.42	0.62	0.85	0.77	0.16			
Avail Cap(c_a), veh/h	869	2471	1331	77	2861	891	406	396	354			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	55.1	8.0	8.0	67.9	17.4	20.4	56.0	55.1	49.3			
Incr Delay (d2), s/veh	7.9	0.7	1.3	31.5	0.1	1.3	12.5	6.5	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	11.0	10.1	11.1	1.1	8.9	14.5	10.7	8.9	1.4			
LnGrp Delay(d), s/veh	63.1	8.7	9.3	99.3	17.5	21.7	68.5	61.6	49.6			
LnGrp LOS	E	A	A	F	B	C	E	E	D			
Approach Vol, veh/h		2434			1783			532				
Approach Delay, s/veh		21.2			19.8			64.0				
Approach LOS		C			B			E				

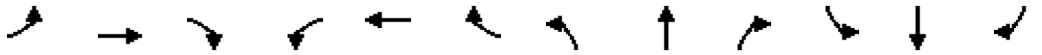
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.3	105.0			29.3	82.0		27.3
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	101.0			35.0	72.0		31.0
Max Q Clear Time (g_c+I1), s	3.7	23.2			23.7	34.6		21.3
Green Ext Time (p_c), s	0.0	23.3			1.6	14.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1300	360	350	1200	0	0	0	0	660	50	110
Future Volume (vph)	0	1300	360	350	1200	0	0	0	0	660	50	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3249	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3249	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1413	391	380	1304	0	0	0	0	717	54	120
RTOR Reduction (vph)	0	0	107	0	0	0	0	0	0	0	0	42
Lane Group Flow (vph)	0	1413	284	380	1304	0	0	0	0	358	413	78
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		65.7	65.7	19.8	89.5					37.0	37.0	37.0
Effective Green, g (s)		65.7	65.7	19.8	89.5					37.0	37.0	37.0
Actuated g/C Ratio		0.49	0.49	0.15	0.67					0.28	0.28	0.28
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2483	773	505	3383					442	893	435
v/s Ratio Prot		c0.28		c0.11	0.26					c0.22	0.13	
v/s Ratio Perm			0.18									0.05
v/c Ratio		0.57	0.37	0.75	0.39					0.81	0.46	0.18
Uniform Delay, d1		24.4	21.4	55.0	10.1					45.5	40.5	37.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.3	0.3	6.3	0.3					10.5	0.4	0.2
Delay (s)		24.7	21.7	61.3	10.5					56.0	40.9	37.4
Level of Service		C	C	E	B					E	D	D
Approach Delay (s/veh)		24.0			21.9			0.0			46.5	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	134.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.4%	ICU Level of Service	B
Analysis Period (min)	15		

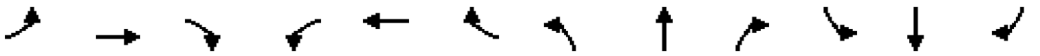
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	20	30	160	330	330	430	0	0	1220	70
Future Volume (veh/h)	60	0	20	30	160	330	330	430	0	0	1220	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	65	0	22	33	174	359	359	467	0	0	1326	76
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	135	750	388	429	3522	0	0	2642	151
Arrive On Green	0.00	0.00	0.00	0.25	0.25	0.25	0.12	0.69	0.00	0.00	0.54	0.54
Sat Flow, veh/h		0		549	3056	1583	3442	5253	0	0	5089	282
Grp Volume(v), veh/h		0.0		110	97	359	359	467	0	0	913	489
Grp Sat Flow(s),veh/h/ln				1835	1770	1583	1721	1695	0	0	1695	1813
Q Serve(g_s), s				6.2	5.6	28.4	13.1	4.0	0.0	0.0	22.0	22.0
Cycle Q Clear(g_c), s				6.2	5.6	28.4	13.1	4.0	0.0	0.0	22.0	22.0
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.16
Lane Grp Cap(c), veh/h				450	434	388	429	3522	0	0	1820	973
V/C Ratio(X)				0.25	0.22	0.92	0.84	0.13	0.00	0.00	0.50	0.50
Avail Cap(c_a), veh/h				500	482	431	669	3522	0	0	1820	973
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				38.9	38.7	47.3	55.0	6.7	0.0	0.0	18.9	18.9
Incr Delay (d2), s/veh				0.3	0.3	24.4	5.5	0.1	0.0	0.0	1.0	1.8
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.2	2.8	15.1	6.6	1.9	0.0	0.0	10.5	11.5
LnGrp Delay(d), s/veh				39.2	39.0	71.7	60.5	6.8	0.0	0.0	19.9	20.7
LnGrp LOS				D	D	E	E	A			B	C
Approach Vol, veh/h					566			826			1402	
Approach Delay, s/veh					59.8			30.1			20.2	
Approach LOS					E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		93.0			20.0	73.0		35.5
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		89.0			25.0	60.0		35.0
Max Q Clear Time (g_c+I1), s		6.0			15.1	24.0		30.4
Green Ext Time (p_c), s		3.5			0.9	12.3		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	40	380	0	0	0	0	700	140	590	820	0
Future Volume (vph)	60	40	380	0	0	0	0	700	140	590	820	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.88	0.85					0.98		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2969	1441					4958		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2969	1441					4958		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	43	413	0	0	0	0	761	152	641	891	0
RTOR Reduction (vph)	0	189	188	0	0	0	0	12	0	0	0	0
Lane Group Flow (vph)	65	61	18	0	0	0	0	901	0	641	891	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	10.9	10.9	10.9					74.6		28.5	107.1	
Effective Green, g (s)	10.9	10.9	10.9					74.6		28.5	107.1	
Actuated g/C Ratio	0.09	0.09	0.09					0.59		0.23	0.85	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	153	256	124					2935		776	4322	
v/s Ratio Prot	c0.04	0.02						c0.18		c0.19	0.18	
v/s Ratio Perm			0.01									
v/c Ratio	0.42	0.24	0.14					0.31		0.83	0.21	
Uniform Delay, d1	54.6	53.7	53.2					12.8		46.4	1.7	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.5	0.5					0.3		7.2	0.1	
Delay (s)	56.5	54.2	53.8					13.1		53.6	1.8	
Level of Service	E	D	D					B		D	A	
Approach Delay (s/veh)		54.3			0.0			13.1			23.5	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Future Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	104	1167	281	177	896	42	448	396	354	52	396	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	301	2155	519	173	2628	123	341	724	639	216	1223	224
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	589	4041	973	363	4927	230	911	1752	1546	702	2960	541
Grp Volume(v), veh/h	104	970	478	177	610	328	448	396	354	52	233	236
Grp Sat Flow(s),veh/h/ln	589	1679	1656	363	1679	1800	911	1752	1546	702	1752	1748
Q Serve(g_s), s	18.4	28.4	28.4	51.6	15.5	15.6	48.3	25.7	26.1	9.1	13.5	13.7
Cycle Q Clear(g_c), s	34.0	28.4	28.4	80.0	15.5	15.6	62.0	25.7	26.1	35.3	13.5	13.7
Prop In Lane	1.00		0.59	1.00		0.13	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
V/C Ratio(X)	0.35	0.54	0.54	1.02	0.34	0.34	1.31	0.55	0.55	0.24	0.32	0.33
Avail Cap(c_a), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	23.0	23.0	56.4	20.0	20.0	54.3	33.3	33.5	46.9	29.8	29.8
Incr Delay (d2), s/veh	0.7	0.3	0.7	75.1	0.1	0.2	160.1	3.0	3.4	2.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	13.3	13.2	10.8	7.2	7.8	29.3	13.0	11.7	1.9	6.8	6.9
LnGrp Delay(d), s/veh	30.3	23.3	23.6	131.7	20.1	20.2	214.4	36.3	36.9	49.5	30.9	31.0
LnGrp LOS	C	C	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1552			1115			1198			521	
Approach Delay, s/veh		23.9			37.8			103.1			32.8	
Approach LOS		C			D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		84.0		66.0		84.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		80.0		62.0		80.0
Max Q Clear Time (g_c+I1), s		64.0		36.0		37.3		82.0
Green Ext Time (p_c), s		0.0		15.4		3.1		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		50.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Future Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	86	65	43	226	97	237	22	269	97	183	538	86
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	187	112	290	110	260	397	1287	450	513	1791	786
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	487	443	265	580	260	616	795	2542	890	1006	3539	1554
Grp Volume(v), veh/h	194	0	0	560	0	0	22	185	181	183	538	86
Grp Sat Flow(s),veh/h/ln	1194	0	0	1456	0	0	795	1770	1662	1006	1770	1554
Q Serve(g_s), s	0.0	0.0	0.0	28.6	0.0	0.0	1.8	6.4	6.7	13.6	9.8	3.2
Cycle Q Clear(g_c), s	11.5	0.0	0.0	40.1	0.0	0.0	11.6	6.4	6.7	20.3	9.8	3.2
Prop In Lane	0.44		0.22	0.40		0.42	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	550	0	0	660	0	0	397	896	841	513	1791	786
V/C Ratio(X)	0.35	0.00	0.00	0.85	0.00	0.00	0.06	0.21	0.22	0.36	0.30	0.11
Avail Cap(c_a), veh/h	1027	0	0	1185	0	0	397	896	841	513	1791	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	0.0	30.3	0.0	0.0	19.3	15.1	15.1	20.8	15.9	14.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	3.2	0.0	0.0	0.3	0.5	0.6	1.9	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	16.6	0.0	0.0	0.4	3.2	3.2	4.0	4.9	1.4
LnGrp Delay(d), s/veh	21.9	0.0	0.0	33.5	0.0	0.0	19.6	15.6	15.7	22.7	16.3	14.6
LnGrp LOS	C			C			B	B	B	C	B	B
Approach Vol, veh/h		194			560			388			807	
Approach Delay, s/veh		21.9			33.5			15.9			17.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		50.6		60.0		50.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		86.0		56.0		86.0
Max Q Clear Time (g_c+I1), s		13.6		13.5		22.3		42.1
Green Ext Time (p_c), s		2.4		1.6		5.0		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Future Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	141	22	141	283	174	65	815	152	87	1217	87
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	73	223	32	227	488	413	263	2373	1036	384	2373	1037
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	156	842	119	1206	1845	1561	416	3505	1530	573	3505	1531
Grp Volume(v), veh/h	206	0	0	141	283	174	65	815	152	87	1217	87
Grp Sat Flow(s),veh/h/ln	1117	0	0	1206	1845	1561	416	1752	1530	573	1752	1531
Q Serve(g_s), s	8.6	0.0	0.0	5.2	18.3	12.7	12.6	13.4	4.9	10.3	23.6	2.7
Cycle Q Clear(g_c), s	26.8	0.0	0.0	32.0	18.3	12.7	36.2	13.4	4.9	23.8	23.6	2.7
Prop In Lane	0.21		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	0	0	227	488	413	263	2373	1036	384	2373	1037
V/C Ratio(X)	0.63	0.00	0.00	0.62	0.58	0.42	0.25	0.34	0.15	0.23	0.51	0.08
Avail Cap(c_a), veh/h	465	0	0	338	658	557	263	2373	1036	384	2373	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	0.0	0.0	51.5	43.9	41.8	19.9	9.3	8.0	14.3	11.0	7.6
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.8	1.1	0.7	2.2	0.4	0.3	1.4	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.0	5.3	9.5	5.5	1.6	6.6	2.2	1.8	11.6	1.2
LnGrp Delay(d), s/veh	48.5	0.0	0.0	54.3	45.0	42.5	22.2	9.7	8.3	15.7	11.8	7.8
LnGrp LOS	D			D	D	D	C	A	A	B	B	A
Approach Vol, veh/h		206			598			1032			1391	
Approach Delay, s/veh		48.5			46.4			10.3			11.8	
Approach LOS		D			D			B			B	

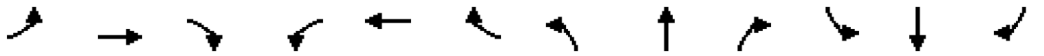
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		40.4		97.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		49.0		93.0		49.0
Max Q Clear Time (g_c+I1), s		38.2		28.8		25.8		34.0
Green Ext Time (p_c), s		8.7		1.1		14.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Future Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1185	446	826	1043	0	0	0	0	359	0	457
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1276	480	890	2252	0	0	575	0	1161	0	489
Arrive On Green	0.00	0.35	0.35	0.26	0.64	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Sat Flow, veh/h	0	3810	1369	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1103	528	826	1043	0	0	0	0	359	0	457
Grp Sat Flow(s),veh/h/ln	0	1695	1621	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Cycle Q Clear(g_c), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Prop In Lane	0.00		0.84	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1188	568	890	2252	0	0	575	0	1161	0	489
V/C Ratio(X)	0.00	0.93	0.93	0.93	0.46	0.00	0.00	0.00	0.00	0.31	0.00	0.93
Avail Cap(c_a), veh/h	0	1210	578	968	2356	0	0	575	0	1161	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	45.6	45.6	52.7	13.7	0.0	0.0	0.0	0.0	38.9	0.0	48.9
Incr Delay (d2), s/veh	0.0	12.2	21.6	14.1	0.1	0.0	0.0	0.0	0.0	0.7	0.0	27.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	23.3	23.8	17.9	10.8	0.0	0.0	0.0	0.0	5.7	0.0	21.6
LnGrp Delay(d), s/veh	0.0	57.8	67.2	66.8	13.8	0.0	0.0	0.0	0.0	39.6	0.0	76.3
LnGrp LOS		E	E	E	B					D		E
Approach Vol, veh/h		1631			1869			0			816	
Approach Delay, s/veh		60.9			37.2			0.0			60.1	
Approach LOS		E			D						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		49.0	41.7	55.1		49.0		96.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0	41.0	52.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		0.0	36.1	47.8		42.9		24.1
Green Ext Time (p_c), s		0.0	1.5	3.3		0.9		9.2

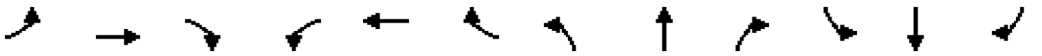
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Future Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3374	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.67	1.00	0.66	1.00	
Satd. Flow (perm)	1770	3374	1441	3433	3536		1681	1191	2787	1221	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1076	348	196	1576	11	293	11	1065	11	11	11
RTOR Reduction (vph)	0	2	152	0	1	0	0	0	184	0	8	0
Lane Group Flow (vph)	11	1109	161	196	1586	0	152	152	881	11	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Effective Green, g (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Actuated g/C Ratio	0.01	0.41	0.41	0.09	0.49		0.12	0.42	0.42	0.26	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1384	591	303	1725		205	556	1159	323	456	
v/s Ratio Prot	0.01	0.33		c0.06	c0.45		0.09	0.03			0.01	
v/s Ratio Perm			0.11					0.08	c0.32	0.01		
v/c Ratio	0.61	0.80	0.27	0.65	0.92		0.74	0.27	0.76	0.03	0.03	
Uniform Delay, d1	69.2	36.4	27.5	61.9	33.4		59.5	27.0	35.0	38.3	38.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	3.4	0.3	4.7	8.3		13.5	0.3	4.7	0.2	0.1	
Delay (s)	117.8	39.8	27.7	66.6	41.7		72.9	27.3	39.7	38.5	38.4	
Level of Service	F	D	C	E	D		E	C	D	D	D	
Approach Delay (s/veh)		37.8			44.4			42.0			38.4	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

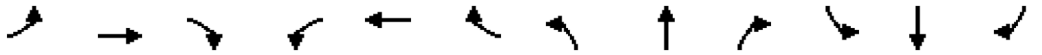
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Future Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.94			0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1646			1682		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.98			0.96		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1625			1629		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	11	11	11	43	76	1272	11	33	239	315
RTOR Reduction (vph)	0	9	0	0	37	0	0	0	4	0	0	114
Lane Group Flow (vph)	28	18	0	0	28	0	76	1272	7	33	239	201
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Effective Green, g (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Actuated g/C Ratio	0.04	0.21			0.14		0.07	0.67	0.67	0.04	0.64	0.64
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	62	335			227		121	2378	1064	63	2262	1011
v/s Ratio Prot	c0.02	0.00					c0.04	c0.36		0.02	0.07	
v/s Ratio Perm		0.01			c0.02				0.00			0.13
v/c Ratio	0.45	0.05			0.12		0.63	0.53	0.01	0.52	0.11	0.20
Uniform Delay, d1	65.7	44.5			52.5		63.2	11.7	7.5	66.0	9.7	10.4
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	0.1			0.2		9.8	0.9	0.0	7.6	0.1	0.4
Delay (s)	70.9	44.5			52.7		72.9	12.6	7.5	73.7	9.8	10.8
Level of Service	E	D			D		E	B	A	E	A	B
Approach Delay (s/veh)		57.9			52.7			15.9			14.0	
Approach LOS		E			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	139.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

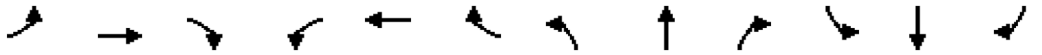
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Future Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	359	1826	261	33	1500	152	130	33	239			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	415	2276	318	42	2239	1002	236	60	261			
Arrive On Green	0.12	0.73	0.73	0.02	0.63	0.63	0.17	0.17	0.17			
Sat Flow, veh/h	3442	3120	436	1774	3539	1583	1429	363	1583			
Grp Volume(v), veh/h	359	1017	1070	33	1500	152	163	0	239			
Grp Sat Flow(s),veh/h/ln	1721	1770	1786	1774	1770	1583	1791	0	1583			
Q Serve(g_s), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Cycle Q Clear(g_c), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Prop In Lane	1.00		0.24	1.00		1.00	0.80		1.00			
Lane Grp Cap(c), veh/h	415	1291	1303	42	2239	1002	296	0	261			
V/C Ratio(X)	0.87	0.79	0.82	0.78	0.67	0.15	0.55	0.00	0.91			
Avail Cap(c_a), veh/h	540	1291	1303	60	2239	1002	317	0	281			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.3	12.6	13.4	71.2	17.2	10.9	56.3	0.0	60.2			
Incr Delay (d2), s/veh	11.2	4.9	5.9	33.1	1.6	0.3	1.8	0.0	31.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.8	27.5	31.0	1.7	19.7	2.6	6.2	0.0	11.8			
LnGrp Delay(d), s/veh	74.5	17.5	19.3	104.3	18.8	11.3	58.0	0.0	91.5			
LnGrp LOS	E	B	B	F	B	B	E		F			
Approach Vol, veh/h		2446			1685			402				
Approach Delay, s/veh		26.7			19.8			77.9				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	7.5	111.0			21.7	96.8		28.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	107.0			23.0	89.0		26.0
Max Q Clear Time (g_c+I1), s	4.7	61.4			17.0	41.6		23.8
Green Ext Time (p_c), s	0.0	27.7			0.7	17.1		0.4

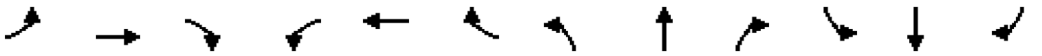
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Future Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	54	2076	0	0	1641	359	43	11	120			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	92	4305	0	0	4016	1250	165	173	147			
Arrive On Green	0.03	0.85	0.00	0.00	0.79	0.79	0.09	0.09	0.09			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	54	2076	0	0	1641	359	43	11	120			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Cycle Q Clear(g_c), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	92	4305	0	0	4016	1250	165	173	147			
V/C Ratio(X)	0.59	0.48	0.00	0.00	0.41	0.29	0.26	0.06	0.82			
Avail Cap(c_a), veh/h	234	4305	0	0	4016	1250	402	422	359			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	63.7	2.6	0.0	0.0	4.3	3.8	55.8	54.8	58.9			
Incr Delay (d2), s/veh	5.9	0.4	0.0	0.0	0.3	0.6	0.8	0.2	10.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	6.5	0.0	0.0	6.2	3.7	1.5	0.4	4.7			
LnGrp Delay(d), s/veh	69.5	3.0	0.0	0.0	4.6	4.4	56.6	54.9	69.3			
LnGrp LOS	E	A			A	A	E	D	E			
Approach Vol, veh/h		2130			2000			174				
Approach Delay, s/veh		4.7			4.6			65.3				
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		116.0			7.5	108.5		16.3
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		112.0			9.0	99.0		30.0
Max Q Clear Time (g_c+I1), s		16.0			4.1	15.3		11.8
Green Ext Time (p_c), s		33.2			0.0	23.6		0.5

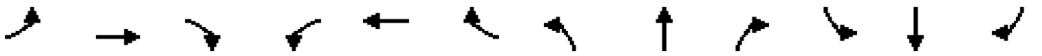
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.1
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Future Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1902	348	65	1978	98	109	11	163	130	11	283
RTOR Reduction (vph)	0	15	0	0	3	0	0	0	137	0	0	88
Lane Group Flow (vph)	98	2235	0	65	2073	0	109	11	26	130	11	195
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Effective Green, g (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Actuated g/C Ratio	0.06	0.63		0.06	0.63		0.09	0.09	0.09	0.11	0.11	0.17
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	214	3118		105	3156		167	176	149	187	197	468
v/s Ratio Prot	0.03	c0.45		c0.04	0.41		c0.06	0.01		c0.07	0.01	0.03
v/s Ratio Perm									0.02			0.04
v/c Ratio	0.46	0.72		0.62	0.66		0.65	0.06	0.18	0.70	0.06	0.42
Uniform Delay, d1	64.6	18.0		65.5	17.0		62.3	58.8	59.5	61.6	57.4	53.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	1.4		10.4	1.1		8.8	0.1	0.6	10.7	0.1	0.6
Delay (s)	66.1	19.4		75.9	18.1		71.2	59.0	60.0	72.3	57.5	53.7
Level of Service	E	B		E	B		E	E	E	E	E	D
Approach Delay (s/veh)		21.4			19.9			64.3			59.5	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	142.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	610	1660	0	40	1050	1080	20	20	30	90	20	280
Future Volume (vph)	610	1660	0	40	1050	1080	20	20	30	90	20	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	0.99	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.95	0.85		0.94			0.93	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1770	4524	1329		1731			1613	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1770	4524	1329		1731			1613	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	635	1729	0	42	1094	1125	21	21	31	94	21	292
RTOR Reduction (vph)	0	0	0	0	62	268	0	18	0	0	20	174
Lane Group Flow (vph)	635	1729	0	42	1595	294	0	55	0	0	191	22
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	54.0	99.9		6.9	52.8	52.8		11.0			17.0	17.0
Effective Green, g (s)	54.0	99.9		6.9	52.8	52.8		11.0			17.0	17.0
Actuated g/C Ratio	0.36	0.66		0.05	0.35	0.35		0.07			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	633	3368		80	1584	465		126			181	169
v/s Ratio Prot	c0.36	0.34		0.02	c0.35			c0.03			c0.12	
v/s Ratio Perm						0.22						0.01
v/c Ratio	1.00	0.51		0.53	1.01	0.63		0.44			1.05	0.13
Uniform Delay, d1	48.4	13.0		70.3	49.0	40.9		66.9			66.9	60.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	36.5	0.1		6.1	24.3	2.8		10.7			81.6	0.4
Delay (s)	84.9	13.2		76.4	73.3	43.7		77.7			148.5	60.6
Level of Service	F	B		E	E	D		E			F	E
Approach Delay (s/veh)		32.4			66.0			77.7			106.2	
Approach LOS		C			E			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	53.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	92.8%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1310	280	350	1440	120	500	240	500	90	60	120
Future Volume (vph)	190	1310	280	350	1440	120	500	240	500	90	60	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.96	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1752	4885		1752	4966		1665	1572	1400	1665	1734	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1752	4885		1752	4966		1665	1572	1400	1665	1734	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	200	1379	295	368	1516	126	526	253	526	95	63	126
RTOR Reduction (vph)	0	22	0	0	7	0	0	8	260	0	0	119
Lane Group Flow (vph)	200	1652	0	368	1635	0	447	445	145	78	80	7
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Effective Green, g (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Actuated g/C Ratio	0.13	0.33		0.21	0.41		0.30	0.30	0.30	0.05	0.05	0.05
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	231	1595		373	2026		499	471	420	88	92	83
v/s Ratio Prot	0.11	c0.34		c0.21	0.33		0.27	c0.28		c0.05	0.05	
v/s Ratio Perm									0.10			0.00
v/c Ratio	0.87	1.04		0.99	0.81		0.90	0.94	0.35	0.89	0.87	0.08
Uniform Delay, d1	63.8	50.5		58.8	39.2		50.3	51.3	41.0	70.5	70.5	67.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.0	32.3		42.6	2.5		21.3	29.6	2.2	68.3	62.9	1.9
Delay (s)	90.8	82.8		101.4	41.7		71.6	80.9	43.3	138.9	133.4	69.4
Level of Service	F	F		F	D		E	F	D	F	F	E
Approach Delay (s/veh)		83.7			52.6			66.0			106.5	
Approach LOS		F			D			E			F	

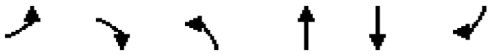
Intersection Summary			
HCM 2000 Control Delay (s/veh)	69.2	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	610	80	320	530	230	460
Future Volume (veh/h)	610	80	320	530	230	460
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	693	0	364	602	261	523
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	775	357	394	2507	1621	709
Arrive On Green	0.23	0.00	0.22	0.72	0.46	0.46
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	693	0	364	602	261	523
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	27.6	0.0	28.3	8.3	6.0	38.9
Cycle Q Clear(g_c), s	27.6	0.0	28.3	8.3	6.0	38.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	775	357	394	2507	1621	709
V/C Ratio(X)	0.89	0.00	0.92	0.24	0.16	0.74
Avail Cap(c_a), veh/h	1024	471	591	2507	1621	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	53.1	6.8	21.8	30.7
Incr Delay (d2), s/veh	8.2	0.0	15.3	0.2	0.2	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	0.0	15.4	4.0	3.0	17.7
LnGrp Delay(d), s/veh	60.6	0.0	68.4	7.1	22.0	37.4
LnGrp LOS	E		E	A	C	D
Approach Vol, veh/h	693			966	784	
Approach Delay, s/veh	60.6			30.2	32.3	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		104.0		35.8	35.3	68.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		100.0		42.0	47.0	49.0		
Max Q Clear Time (g_c+I1), s		10.3		29.6	30.3	40.9		
Green Ext Time (p_c), s		4.6		2.2	1.0	2.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.5
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	830	630	230	640	660	240
Future Volume (veh/h)	830	630	230	640	660	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	912	0	253	703	725	264
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1030	474	284	2289	1609	698
Arrive On Green	0.30	0.00	0.16	0.64	0.45	0.45
Sat Flow, veh/h	3476	1599	1792	3668	3668	1550
Grp Volume(v), veh/h	912	0	253	703	725	264
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1550
Q Serve(g_s), s	31.7	0.0	17.5	11.1	17.7	14.3
Cycle Q Clear(g_c), s	31.7	0.0	17.5	11.1	17.7	14.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1030	474	284	2289	1609	698
V/C Ratio(X)	0.89	0.00	0.89	0.31	0.45	0.38
Avail Cap(c_a), veh/h	1676	771	467	2289	1609	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	52.1	10.2	24.0	23.0
Incr Delay (d2), s/veh	3.6	0.0	11.6	0.3	0.9	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	0.0	9.6	5.6	9.0	6.4
LnGrp Delay(d), s/veh	46.1	0.0	63.7	10.5	24.9	24.6
LnGrp LOS	D		E	B	C	C
Approach Vol, veh/h	912			956	989	
Approach Delay, s/veh	46.1			24.6	24.8	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		85.0		41.5	24.1	60.9		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		81.0		61.0	33.0	44.0		
Max Q Clear Time (g_c+I1), s		13.1		33.7	19.5	19.7		
Green Ext Time (p_c), s		5.3		3.8	0.6	6.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1300	320	260	1230	50	530	730	500	80	390	160
Future Volume (veh/h)	190	1300	320	260	1230	50	530	730	500	80	390	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.95	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	216	1477	364	295	1398	57	602	830	568	91	443	182
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	222	1356	397	281	1500	61	547	1336	582	114	472	199
Arrive On Green	0.13	0.27	0.27	0.16	0.30	0.30	0.31	0.38	0.38	0.06	0.13	0.13
Sat Flow, veh/h	1774	5085	1488	1774	5000	204	1774	3539	1540	1774	3539	1492
Grp Volume(v), veh/h	216	1477	364	295	948	507	602	830	568	91	443	182
Grp Sat Flow(s),veh/h/ln	1774	1695	1488	1774	1695	1814	1774	1770	1540	1774	1770	1492
Q Serve(g_s), s	14.6	32.0	28.5	19.0	32.6	32.6	37.0	22.9	43.6	6.1	14.9	14.5
Cycle Q Clear(g_c), s	14.6	32.0	28.5	19.0	32.6	32.6	37.0	22.9	43.6	6.1	14.9	14.5
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	222	1356	397	281	1017	544	547	1336	582	114	472	199
V/C Ratio(X)	0.97	1.09	0.92	1.05	0.93	0.93	1.10	0.62	0.98	0.80	0.94	0.92
Avail Cap(c_a), veh/h	222	1356	397	281	1017	544	547	1336	582	133	472	199
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	44.0	42.7	50.5	40.8	40.8	41.5	30.4	36.8	55.4	51.5	51.3
Incr Delay (d2), s/veh	52.9	52.5	25.8	67.5	14.6	23.1	68.9	2.2	32.0	24.9	28.7	44.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.4	21.5	14.6	14.6	17.3	19.8	28.6	11.6	23.7	3.8	9.1	8.4
LnGrp Delay(d), s/veh	105.2	96.5	68.5	118.0	55.5	63.9	110.4	32.6	68.9	80.3	80.2	96.2
LnGrp LOS	F	F	E	F	E	E	F	C	E	F	F	F
Approach Vol, veh/h		2057			1750			2000			716	
Approach Delay, s/veh		92.5			68.4			66.3			84.3	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	49.3	23.0	36.0	41.0	20.0	19.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	44.0	19.0	32.0	37.0	16.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	8.1	45.6	21.0	34.0	39.0	16.9	16.6	34.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	77.1
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	90	90	880	0	0	850
Future Volume (veh/h)	90	90	880	0	0	850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	98	98	957	0	0	924
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	194	126	2938	0	1	2938
Arrive On Green	0.11	0.11	0.83	0.00	0.00	0.83
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	98	98	957	0	0	924
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	6.9	12.0	8.3	0.0	0.0	8.0
Cycle Q Clear(g_c), s	6.9	12.0	8.3	0.0	0.0	8.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	194	126	2938	0	1	2938
V/C Ratio(X)	0.50	0.78	0.33	0.00	0.00	0.31
Avail Cap(c_a), veh/h	428	335	2938	0	54	2938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	55.6	120.3	2.6	0.0	0.0	2.6
Incr Delay (d2), s/veh	2.0	9.9	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.3	4.1	0.0	0.0	4.0
LnGrp Delay(d), s/veh	57.6	130.2	2.9	0.0	0.0	2.9
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	196		957			924
Approach Delay, s/veh	93.9		2.9			2.9
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	114.0				114.0		18.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	102.0				110.0		32.0
Max Q Clear Time (g_c+I1), s	0.0	10.3				10.0		14.0
Green Ext Time (p_c), s	0.0	8.1				7.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.5
HCM 2010 LOS	B



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	340	450	590	620	240
Future Volume (veh/h)	80	340	450	590	620	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	370	489	641	674	261
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	189	169	514	2973	2096	812
Arrive On Green	0.11	0.11	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1774	1583	596	3632	2589	966
Grp Volume(v), veh/h	87	370	489	641	478	457
Grp Sat Flow(s),veh/h/ln	1774	1583	596	1770	1770	1692
Q Serve(g_s), s	6.9	16.0	117.1	5.3	8.9	8.9
Cycle Q Clear(g_c), s	6.9	16.0	126.0	5.3	8.9	8.9
Prop In Lane	1.00	1.00	1.00			0.57
Lane Grp Cap(c), veh/h	189	169	514	2973	1486	1421
V/C Ratio(X)	0.46	2.19	0.95	0.22	0.32	0.32
Avail Cap(c_a), veh/h	189	169	514	2973	1486	1421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	67.0	19.2	2.3	2.6	2.6
Incr Delay (d2), s/veh	1.7	554.8	29.4	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	33.0	24.4	2.7	4.5	4.3
LnGrp Delay(d), s/veh	64.7	621.8	48.6	2.5	3.2	3.2
LnGrp LOS	E	F	D	A	A	A
Approach Vol, veh/h	457			1130	935	
Approach Delay, s/veh	515.7			22.5	3.2	
Approach LOS	F			C	A	

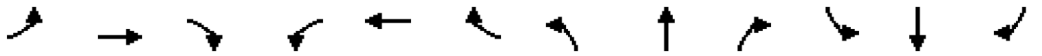
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		130.0		20.0		130.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		126.0		16.0		126.0		
Max Q Clear Time (g_c+I1), s		128.0		18.0		10.9		
Green Ext Time (p_c), s		0.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	110	270	660	260	320	540	450	450	370	140
Future Volume (veh/h)	80	780	110	270	660	260	320	540	450	450	370	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	87	848	120	293	717	283	348	587	489	489	402	152
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1392	623	357	1543	1661	376	809	526	551	626	280
Arrive On Green	0.06	0.39	0.39	0.10	0.44	0.44	0.21	0.23	0.23	0.16	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	87	848	120	293	717	283	348	587	489	489	402	152
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	6.8	26.8	7.0	11.7	20.1	6.4	26.9	21.5	32.0	19.5	14.8	12.2
Cycle Q Clear(g_c), s	6.8	26.8	7.0	11.7	20.1	6.4	26.9	21.5	32.0	19.5	14.8	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	1392	623	357	1543	1661	376	809	526	551	626	280
V/C Ratio(X)	0.80	0.61	0.19	0.82	0.46	0.17	0.93	0.73	0.93	0.89	0.64	0.54
Avail Cap(c_a), veh/h	177	1392	623	713	1543	1661	482	809	526	664	626	280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	33.9	27.9	61.4	27.9	12.7	54.1	49.9	45.1	57.5	53.5	52.4
Incr Delay (d2), s/veh	12.8	2.0	0.7	4.7	1.0	0.2	20.9	5.6	25.1	12.3	5.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.5	3.1	5.8	10.0	2.5	15.3	11.1	21.9	10.2	7.6	5.9
LnGrp Delay(d), s/veh	77.7	35.9	28.6	66.1	28.9	12.9	74.9	55.5	70.2	69.8	58.5	59.8
LnGrp LOS	E	D	C	E	C	B	E	E	E	E	E	E
Approach Vol, veh/h		1055			1293			1424			1043	
Approach Delay, s/veh		38.5			33.9			65.3			64.0	
Approach LOS		D			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	59.0	33.6	28.7	12.5	65.0	26.4	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	46.0	38.0	21.0	14.0	61.0	27.0	32.0
Max Q Clear Time (g_c+I1), s	13.7	28.8	28.9	16.8	8.8	22.1	21.5	34.0
Green Ext Time (p_c), s	0.8	5.6	0.7	1.2	0.1	6.7	0.9	0.0

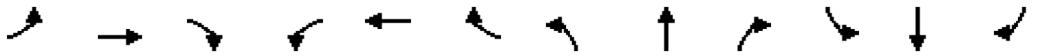
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1280	0	0	780	80	550	30	100	0	0	0
Future Volume (vph)	30	1280	0	0	780	80	550	30	100	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1694	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1694	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	1391	0	0	848	87	598	33	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	33	1391	0	0	848	87	317	314	71	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	4.9	93.1			84.2	84.2	31.2	31.2	31.2			
Effective Green, g (s)	4.9	93.1			84.2	84.2	31.2	31.2	31.2			
Actuated g/C Ratio	0.04	0.70			0.64	0.64	0.24	0.24	0.24			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	65	2490			3236	1007	396	399	373			
v/s Ratio Prot	0.02	c0.39			0.17		c0.19	0.19				
v/s Ratio Perm						0.05			0.04			
v/c Ratio	0.51	0.56			0.26	0.09	0.80	0.79	0.19			
Uniform Delay, d1	62.5	9.6			10.5	9.3	47.6	47.4	40.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.1	0.9			0.2	0.2	11.0	9.9	0.2			
Delay (s)	68.6	10.5			10.7	9.4	58.7	57.3	40.7			
Level of Service	E	B			B	A	E	E	D			
Approach Delay (s/veh)		11.8			10.6			55.4			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

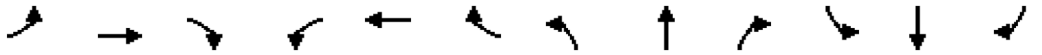
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1270	410	50	1270	0	0	0	0	90	10	80
Future Volume (vph)	0	1270	410	50	1270	0	0	0	0	90	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1702	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1702	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1380	446	54	1380	0	0	0	0	98	11	87
RTOR Reduction (vph)	0	0	208	0	0	0	0	0	0	0	0	64
Lane Group Flow (vph)	0	1380	238	54	1380	0	0	0	0	54	55	23
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Effective Green, g (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Actuated g/C Ratio		0.53	0.53	0.07	0.65					0.27	0.27	0.27
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1885	843	127	3291					450	456	424
v/s Ratio Prot		c0.39		0.03	c0.27					0.03	c0.03	0.01
v/s Ratio Perm			0.15									
v/c Ratio		0.73	0.28	0.43	0.42					0.12	0.12	0.05
Uniform Delay, d1		16.9	12.1	41.9	8.1					26.1	26.1	25.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.5	0.2	2.3	0.1					0.5	0.5	0.2
Delay (s)		18.4	12.3	44.2	8.1					26.7	26.7	25.9
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		16.9			9.5			0.0			26.3	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	94.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Future Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	138	1170	160	245	1223	96	202	287	287	181	309	96
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	1309	556	271	2063	162	227	418	333	206	583	175
Arrive On Green	0.09	0.37	0.37	0.15	0.43	0.43	0.13	0.24	0.24	0.12	0.23	0.23
Sat Flow, veh/h	1757	3505	1488	1757	4746	372	1757	1752	1395	1757	2571	774
Grp Volume(v), veh/h	138	1170	160	245	865	454	202	287	287	181	207	198
Grp Sat Flow(s),veh/h/ln	1757	1752	1488	1757	1679	1761	1757	1752	1395	1757	1752	1593
Q Serve(g_s), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Cycle Q Clear(g_c), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	163	1309	556	271	1460	765	227	418	333	206	397	361
V/C Ratio(X)	0.85	0.89	0.29	0.91	0.59	0.59	0.89	0.69	0.86	0.88	0.52	0.55
Avail Cap(c_a), veh/h	257	1434	609	334	1521	798	270	418	333	257	397	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	40.3	30.1	56.9	29.4	29.5	58.6	47.5	50.0	59.4	46.4	46.7
Incr Delay (d2), s/veh	13.9	7.2	0.3	23.8	0.6	1.1	25.8	8.9	24.4	23.8	4.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	22.1	4.3	10.9	12.5	13.2	9.1	10.9	12.7	8.1	7.4	7.2
LnGrp Delay(d), s/veh	75.1	47.5	30.4	80.7	30.0	30.6	84.5	56.4	74.4	83.2	51.3	52.6
LnGrp LOS	E	D	C	F	C	C	F	E	E	F	D	D
Approach Vol, veh/h		1468			1564			776			586	
Approach Delay, s/veh		48.2			38.1			70.3			61.6	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	36.6	25.1	55.1	21.7	35.0	16.7	63.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	26.0	56.0	21.0	31.0	20.0	62.0
Max Q Clear Time (g_c+I1), s	15.9	29.0	20.8	45.0	17.5	17.0	12.6	28.9
Green Ext Time (p_c), s	0.2	1.1	0.3	6.2	0.2	2.1	0.2	10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	52.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	200	190	360	150	180	140
Future Vol, veh/h	200	190	360	150	180	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	217	207	391	163	196	152

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	196	348	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	222	845	1211	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 150	845	1211	-	-	-
Mov Cap-2 Maneuver	~ 150	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	378	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	154.3	6.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1211	-	150	845	-	-
HCM Lane V/C Ratio	0.323	-	1.449	0.244	-	-
HCM Control Delay (s/veh)	9.4	-	290.9	10.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	1.4	-	14.2	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	8.5

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	300	80	10	130	70	30
Future Vol, veh/h	300	80	10	130	70	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	326	87	11	141	76	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	11	0	0	152	0
Stage 1	11	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	793	1070	-	-	1429	-
Stage 1	1012	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	750	1070	-	-	1429	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	12.4	0	5.4
HCM LOS	B		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	750	1070	1429	-	-	-
HCM Lane V/C Ratio	0.435	0.081	0.053	-	-	-
HCM Control Delay (s/veh)	13.4	8.7	7.7	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	2.2	0.3	0.2	-	-	-

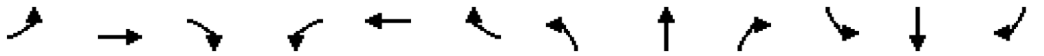
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	460	950	70	60	860	140	180	930	90	170	700	460
Future Volume (veh/h)	460	950	70	60	860	140	180	930	90	170	700	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	495	1022	75	65	925	151	194	1000	97	183	753	495
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	548	1152	85	82	1018	166	217	1286	575	206	1264	810
Arrive On Green	0.16	0.35	0.35	0.05	0.24	0.24	0.12	0.37	0.37	0.12	0.36	0.36
Sat Flow, veh/h	3375	3273	240	1740	4304	699	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	495	542	555	65	714	362	194	1000	97	183	753	495
Grp Sat Flow(s),veh/h/ln	1688	1736	1777	1740	1663	1678	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	36.4	6.0	14.8	25.2	32.3
Cycle Q Clear(g_c), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	36.4	6.0	14.8	25.2	32.3
Prop In Lane	1.00		0.14	1.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	611	625	82	787	397	217	1286	575	206	1264	810
V/C Ratio(X)	0.90	0.89	0.89	0.79	0.91	0.91	0.89	0.78	0.17	0.89	0.60	0.61
Avail Cap(c_a), veh/h	614	643	659	97	814	411	255	1286	575	243	1264	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	43.7	43.7	67.4	53.1	53.1	61.6	39.8	30.2	62.1	36.9	23.7
Incr Delay (d2), s/veh	15.6	13.7	13.5	30.3	13.6	23.9	27.5	4.7	0.6	27.4	2.1	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	22.5	23.0	3.2	15.2	16.5	9.2	18.3	2.7	8.7	12.4	14.3
LnGrp Delay(d), s/veh	74.4	57.4	57.2	97.7	66.7	77.1	89.1	44.5	30.9	89.5	39.0	27.1
LnGrp LOS	E	E	E	F	E	E	F	D	C	F	D	C
Approach Vol, veh/h		1592			1141			1291			1431	
Approach Delay, s/veh		62.6			71.8			50.2			41.3	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	57.0	10.7	54.3	21.9	56.1	27.2	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	53.0	8.0	53.0	21.0	52.0	26.0	35.0
Max Q Clear Time (g_c+I1), s	16.8	38.4	7.3	44.1	17.7	34.3	22.6	32.1
Green Ext Time (p_c), s	0.1	5.9	0.0	4.4	0.2	6.4	0.7	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.0
HCM 2010 LOS	E

Notes

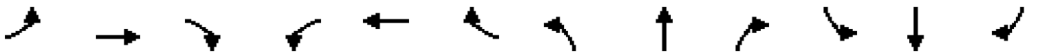
User approved changes to right turn type.



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	240	270	520	0	0	510	290
Future Volume (vph)	0	0	0	160	0	240	270	520	0	0	510	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.42	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1518	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	261	293	565	0	0	554	315
RTOR Reduction (vph)	0	0	0	0	0	223	0	0	0	0	0	69
Lane Group Flow (vph)	0	0	0	174	0	38	293	565	0	0	554	246
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				15.9		15.9	85.2	85.2			85.2	85.2
Effective Green, g (s)				15.9		15.9	85.2	85.2			85.2	85.2
Actuated g/C Ratio				0.15		0.15	0.78	0.78			0.78	0.78
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				257		230	1185	3971			5004	1236
v/s Ratio Prot								0.11			0.09	
v/s Ratio Perm				c0.10		0.02	c0.19					0.16
v/c Ratio				0.68		0.17	0.25	0.14			0.11	0.20
Uniform Delay, d1				44.2		40.8	3.2	2.9			2.9	3.1
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				6.9		0.3	0.5	0.1			0.0	0.4
Delay (s)				51.1		41.1	3.7	3.0			2.9	3.5
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			45.1			3.3			3.1	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	109.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

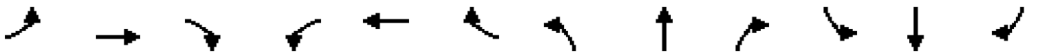
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	220	0	0	0	0	760	90	400	980	0
Future Volume (vph)	170	0	220	0	0	0	0	760	90	400	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1127	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	0	239	0	0	0	0	826	98	435	1065	0
RTOR Reduction (vph)	0	0	205	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	185	0	34	0	0	0	0	826	78	435	1065	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	19.5		19.5					110.1	110.1	110.1	110.1	
Effective Green, g (s)	19.5		19.5					110.1	110.1	110.1	110.1	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	250		394					5127	1266	901	4068	
v/s Ratio Prot								0.13			0.21	
v/s Ratio Perm	c0.10		0.01						0.05	c0.39		
v/c Ratio	0.74		0.09					0.16	0.06	0.48	0.26	
Uniform Delay, d1	56.6		51.3					3.2	2.9	4.5	3.5	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.2		0.1					0.1	0.1	1.9	0.2	
Delay (s)	67.8		51.4					3.2	3.0	6.3	3.6	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		58.5			0.0			3.2			4.4	
Approach LOS		E			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	137.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	500	0	210	0	800	500	200	1350	0
Future Volume (vph)	10	10	10	500	0	210	0	800	500	200	1350	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1719		1665	1665	1473		5036	1521	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1665	1473		5036	1521	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	556	0	233	0	889	556	222	1500	0
RTOR Reduction (vph)	0	10	0	0	0	174	0	0	183	0	0	0
Lane Group Flow (vph)	0	23	0	278	278	59	0	889	373	222	1500	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		33.2	33.2	33.2		53.7	86.9	21.8	79.5	
Effective Green, g (s)		7.5		33.2	33.2	33.2		53.7	86.9	21.8	79.5	
Actuated g/C Ratio		0.06		0.25	0.25	0.25		0.41	0.66	0.16	0.60	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		418	418	369		2045	999	288	3028	
v/s Ratio Prot				c0.17	0.17			0.18	0.09	c0.13	c0.30	
v/s Ratio Perm		c0.04				0.04			0.15			
v/c Ratio		0.65		0.67	0.67	0.16		0.43	0.37	0.77	0.50	
Uniform Delay, d1		61.1		44.5	44.5	38.6		28.3	10.3	52.8	15.0	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.3		4.0	4.0	0.2		0.7	0.2	12.0	0.6	
Delay (s)		95.4		48.5	48.5	38.8		29.0	10.5	64.8	15.5	
Level of Service		F		D	D	D		C	B	E	B	
Approach Delay (s/veh)		95.4			45.6			21.9			21.9	
Approach LOS		F			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	132.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	490	40	220	20	20	10	120	570	10	20	730	290
Future Volume (veh/h)	490	40	220	20	20	10	120	570	10	20	730	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	583	48	262	24	24	12	143	679	12	24	869	345
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	688	52	774	0	925	775	197	1373	24	32	1228	538
Arrive On Green	0.50	0.50	0.50	0.00	0.50	0.50	0.06	0.39	0.39	0.02	0.35	0.35
Sat Flow, veh/h	1270	105	1559	0	1863	1560	3442	3556	63	1774	3539	1550
Grp Volume(v), veh/h	631	0	262	0	24	12	143	338	353	24	869	345
Grp Sat Flow(s),veh/h/ln	1374	0	1559	0	1863	1560	1721	1770	1849	1774	1770	1550
Q Serve(g_s), s	51.1	0.0	12.3	0.0	0.8	0.5	4.9	17.5	17.5	1.6	25.7	22.6
Cycle Q Clear(g_c), s	51.9	0.0	12.3	0.0	0.8	0.5	4.9	17.5	17.5	1.6	25.7	22.6
Prop In Lane	0.92		1.00	0.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	740	0	774	0	925	775	197	683	714	32	1228	538
V/C Ratio(X)	0.85	0.00	0.34	0.00	0.03	0.02	0.73	0.49	0.49	0.74	0.71	0.64
Avail Cap(c_a), veh/h	969	0	1030	0	1355	1135	228	683	714	88	1228	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	18.4	0.0	15.5	15.5	56.1	28.2	28.2	59.1	34.2	33.2
Incr Delay (d2), s/veh	5.9	0.0	0.3	0.0	0.0	0.0	9.4	2.5	2.4	27.5	3.5	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	0.0	5.4	0.0	0.4	0.2	2.6	9.0	9.4	1.0	13.1	10.5
LnGrp Delay(d), s/veh	34.7	0.0	18.7	0.0	15.6	15.5	65.5	30.7	30.6	86.6	37.6	38.9
LnGrp LOS	C		B		B	B	E	C	C	F	D	D
Approach Vol, veh/h		893			36			834			1238	
Approach Delay, s/veh		30.0			15.5			36.7			39.0	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	50.7	0.0	64.1	10.9	46.0		64.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	44.0	4.0	80.0	8.0	42.0		88.0
Max Q Clear Time (g_c+I1), s	3.6	19.5	0.0	53.9	6.9	27.7		2.8
Green Ext Time (p_c), s	0.0	4.1	0.0	6.2	0.0	6.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	20	60	50	250	20	370	30	390	570	30
Future Volume (veh/h)	20	50	20	60	50	250	20	370	30	390	570	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.83	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	24	60	24	72	60	301	24	446	36	470	687	36
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	42	93	30	120	90	249	563	2716	1199	712	2716	1175
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	68	496	161	442	480	1334	733	3574	1578	915	3574	1546
Grp Volume(v), veh/h	108	0	0	132	0	301	24	446	36	470	687	36
Grp Sat Flow(s),veh/h/ln	725	0	0	922	0	1334	733	1787	1578	915	1787	1546
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	28.0	1.5	5.1	0.8	43.5	8.6	0.9
Cycle Q Clear(g_c), s	25.0	0.0	0.0	22.2	0.0	28.0	10.1	5.1	0.8	48.6	8.6	0.9
Prop In Lane	0.22		0.22	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	0	209	0	249	563	2716	1199	712	2716	1175
V/C Ratio(X)	0.66	0.00	0.00	0.63	0.00	1.21	0.04	0.16	0.03	0.66	0.25	0.03
Avail Cap(c_a), veh/h	165	0	0	209	0	249	563	2716	1199	712	2716	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	0.0	57.7	0.0	61.0	6.8	4.9	4.4	11.6	5.3	4.4
Incr Delay (d2), s/veh	9.0	0.0	0.0	6.0	0.0	125.3	0.1	0.1	0.0	4.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	5.6	0.0	19.0	0.3	2.5	0.4	11.8	4.3	0.4
LnGrp Delay(d), s/veh	65.1	0.0	0.0	63.7	0.0	186.3	7.0	5.1	4.5	16.4	5.6	4.5
LnGrp LOS	E			E		F	A	A	A	B	A	A
Approach Vol, veh/h		108			433			506			1193	
Approach Delay, s/veh		65.1			148.9			5.1			9.8	
Approach LOS		E			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		118.0		32.0		118.0		32.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		114.0		28.0		114.0		28.0
Max Q Clear Time (g_c+I1), s		12.1		27.0		50.6		30.0
Green Ext Time (p_c), s		3.4		0.0		9.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	20.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Future Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	403	42	69	0	42	42	83	42	0	28	28	292
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	28.3	10.3	12.6	15.3
HCM LOS	D	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	0%	78%	0%	8%
Vol Thru, %	33%	100%	8%	50%	8%
Vol Right, %	0%	0%	14%	50%	84%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	0	370	60	250
LT Vol	60	0	290	0	20
Through Vol	30	0	30	30	20
RT Vol	0	0	50	30	210
Lane Flow Rate	125	0	514	83	347
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.257	0	0.807	0.144	0.543
Departure Headway (Hd)	7.4	7.059	5.651	6.204	5.634
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	488	0	637	581	635
Service Time	5.106	4.764	3.724	4.213	3.724
HCM Lane V/C Ratio	0.256	0	0.807	0.143	0.546
HCM Control Delay, s/veh	12.6	9.8	28.3	10.3	15.3
HCM Lane LOS	B	N	D	B	C
HCM 95th-tile Q	1	0	8.2	0.5	3.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	200	70	30	70	80	1370	40	50	970	20
Future Volume (veh/h)	30	30	200	70	30	70	80	1370	40	50	970	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	33	33	222	78	33	78	89	1522	44	56	1078	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	119	107	268	138	74	189	110	2439	1066	72	2362	1043
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.06	0.70	0.70	0.04	0.68	0.68
Sat Flow, veh/h	470	617	1553	520	429	1094	1740	3471	1517	1740	3471	1533
Grp Volume(v), veh/h	66	0	222	84	0	105	89	1522	44	56	1078	22
Grp Sat Flow(s),veh/h/ln	1087	0	1553	573	0	1469	1740	1736	1517	1740	1736	1533
Q Serve(g_s), s	3.4	0.0	19.8	10.3	0.0	9.1	7.3	33.4	1.3	4.6	20.7	0.7
Cycle Q Clear(g_c), s	12.5	0.0	19.8	22.8	0.0	9.1	7.3	33.4	1.3	4.6	20.7	0.7
Prop In Lane	0.50		1.00	0.93		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	0	268	147	0	254	110	2439	1066	72	2362	1043
V/C Ratio(X)	0.29	0.00	0.83	0.57	0.00	0.41	0.81	0.62	0.04	0.78	0.46	0.02
Avail Cap(c_a), veh/h	227	0	270	149	0	256	230	2439	1066	145	2362	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.8	0.0	57.4	64.4	0.0	53.0	66.4	11.3	6.5	68.3	10.6	7.4
Incr Delay (d2), s/veh	0.7	0.0	18.7	5.1	0.0	1.1	12.9	1.2	0.1	16.7	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	9.9	3.5	0.0	3.8	3.9	16.3	0.6	2.5	10.1	0.3
LnGrp Delay(d), s/veh	55.5	0.0	76.1	69.5	0.0	54.0	79.3	12.5	6.6	85.0	11.3	7.5
LnGrp LOS	E		E	E		D	E	B	A	F	B	A
Approach Vol, veh/h		288			189			1655			1156	
Approach Delay, s/veh		71.4			60.9			16.0			14.8	
Approach LOS		E			E			B			B	

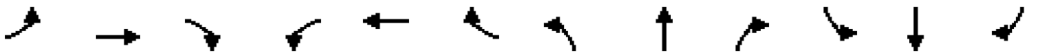
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	105.0		28.8	13.1	101.8		28.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	101.0		25.0	19.0	94.0		25.0
Max Q Clear Time (g_c+I1), s	6.6	35.4		21.8	9.3	22.7		24.8
Green Ext Time (p_c), s	0.0	20.3		0.3	0.1	10.3		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.0
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1240	100	470	1320	410	610
Future Volume (veh/h)	1240	100	470	1320	410	610
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1292	104	490	1375	427	635
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1399	1184	542	2950	647	578
Arrive On Green	0.40	0.40	0.16	0.58	0.36	0.36
Sat Flow, veh/h	3632	1535	3442	5253	1774	1583
Grp Volume(v), veh/h	1292	104	490	1375	427	635
Grp Sat Flow(s),veh/h/ln	1770	1535	1721	1695	1774	1583
Q Serve(g_s), s	50.5	2.5	20.3	22.6	29.2	53.0
Cycle Q Clear(g_c), s	50.5	2.5	20.3	22.6	29.2	53.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1399	1184	542	2950	647	578
V/C Ratio(X)	0.92	0.09	0.90	0.47	0.66	1.10
Avail Cap(c_a), veh/h	1462	1212	592	3116	647	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	4.5	60.1	17.6	38.6	46.1
Incr Delay (d2), s/veh	9.9	0.0	16.6	0.1	5.2	67.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.5	2.7	10.9	10.6	15.3	34.0
LnGrp Delay(d), s/veh	51.8	4.5	76.7	17.7	43.8	113.6
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1396			1865	1062	
Approach Delay, s/veh	48.2			33.2	85.5	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		57.0	26.9	61.4				88.3
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		53.0	25.0	60.0				89.0
Max Q Clear Time (g_c+I1), s		55.0	22.3	52.5				24.6
Green Ext Time (p_c), s		0.0	0.5	4.9				15.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	600	350	40	900	120	10	10	20	770	30	300
Future Volume (vph)	70	600	350	40	900	120	10	10	20	770	30	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1784	3574	1542	1787	3574	1547		1715		1698	1621	1519
Flt Permitted	0.17	1.00	1.00	0.95	1.00	1.00		0.89		0.95	0.70	1.00
Satd. Flow (perm)	315	3574	1542	1787	3574	1547		1544		1698	1191	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	72	619	361	41	928	124	10	10	21	794	31	309
RTOR Reduction (vph)	0	0	119	0	0	76	0	16	0	0	1	42
Lane Group Flow (vph)	72	619	242	41	928	48	0	25	0	429	426	236
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	34.1	34.1	34.1	6.0	44.1	44.1		32.0		35.3	71.3	71.3
Effective Green, g (s)	34.1	34.1	34.1	6.0	44.1	44.1		32.0		35.3	71.3	71.3
Actuated g/C Ratio	0.28	0.28	0.28	0.05	0.36	0.36		0.26		0.29	0.58	0.58
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	87	987	426	86	1277	552		400		485	811	877
v/s Ratio Prot		0.17		0.02	c0.26					c0.25	0.15	
v/s Ratio Perm	c0.23		0.16			0.03		0.02			c0.15	0.16
v/c Ratio	0.83	0.63	0.57	0.48	0.73	0.09		0.06		0.88	0.52	0.27
Uniform Delay, d1	41.9	39.1	38.3	57.2	34.4	26.3		34.4		42.1	15.8	13.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	44.8	1.3	1.7	4.1	2.1	0.1		0.1		17.2	0.6	0.8
Delay (s)	86.7	40.3	40.1	61.3	36.5	26.4		34.5		59.3	16.4	13.8
Level of Service	F	D	D	E	D	C		C		E	B	B
Approach Delay (s/veh)		43.4			36.3			34.5			32.0	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	123.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1060	390	330	1210	210	300	620	200	280	620	180
Future Volume (veh/h)	200	1060	390	330	1210	210	300	620	200	280	620	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	215	1140	419	355	1301	226	323	667	215	301	667	194
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	237	1120	487	346	1639	285	322	763	324	311	739	317
Arrive On Green	0.13	0.31	0.31	0.19	0.37	0.37	0.18	0.21	0.21	0.17	0.21	0.21
Sat Flow, veh/h	1792	3574	1553	1792	4381	761	1792	3574	1521	1792	3574	1535
Grp Volume(v), veh/h	215	1140	419	355	1017	510	323	667	215	301	667	194
Grp Sat Flow(s),veh/h/ln	1792	1787	1553	1792	1712	1719	1792	1787	1521	1792	1787	1535
Q Serve(g_s), s	17.7	47.0	38.1	29.0	39.6	39.7	27.0	27.1	19.4	25.0	27.3	17.2
Cycle Q Clear(g_c), s	17.7	47.0	38.1	29.0	39.6	39.7	27.0	27.1	19.4	25.0	27.3	17.2
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	1120	487	346	1281	643	322	763	324	311	739	317
V/C Ratio(X)	0.91	1.02	0.86	1.02	0.79	0.79	1.00	0.87	0.66	0.97	0.90	0.61
Avail Cap(c_a), veh/h	263	1120	487	346	1281	643	322	763	324	311	739	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.1	51.5	48.4	60.5	41.8	41.8	61.5	57.1	54.1	61.6	58.0	54.0
Incr Delay (d2), s/veh	30.4	31.5	14.5	54.9	3.5	6.8	50.5	13.3	10.2	42.6	16.5	8.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	28.1	18.3	19.6	19.4	20.1	17.9	14.8	9.1	16.1	15.2	8.1
LnGrp Delay(d), s/veh	94.5	83.0	63.0	115.4	45.3	48.6	112.0	70.4	64.3	104.2	74.5	62.5
LnGrp LOS	F	F	E	F	D	D	F	E	E	F	E	E
Approach Vol, veh/h		1774			1882			1205			1162	
Approach Delay, s/veh		79.6			59.4			80.5			80.2	
Approach LOS		E			E			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	36.0	33.0	51.0	31.0	35.0	23.9	60.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	32.0	29.0	47.0	27.0	31.0	22.0	54.0
Max Q Clear Time (g_c+I1), s	27.0	29.1	31.0	49.0	29.0	29.3	19.7	41.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.9	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.6
HCM 2010 LOS	E

Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	80	160	600	90	60	720	120	20	120	520	220	20
Future Volume (vph)	80	160	600	90	60	720	120	20	120	520	220	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.97	1.00	0.99			1.00	1.00	0.91	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.98			1.00	0.99	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	3539	1534	1770	4934			1770	3358	1309	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	3539	1534	1770	4934			1770	3358	1309	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	85	170	638	96	64	766	128	21	128	553	234	21
RTOR Reduction (vph)	0	0	0	71	0	2	0	0	0	0	127	0
Lane Group Flow (vph)	0	255	638	25	64	913	0	0	128	576	105	0
Confl. Peds. (#/hr)		7		7	7		7		2		27	
Confl. Bikes (#/hr)							2				4	
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		20.0	38.6	38.6	7.2	25.8			11.0	26.0	26.0	
Effective Green, g (s)		20.0	38.6	38.6	7.2	25.8			11.0	26.0	26.0	
Actuated g/C Ratio		0.13	0.26	0.26	0.05	0.17			0.07	0.17	0.17	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		234	905	392	84	844			129	578	225	
v/s Ratio Prot		c0.14	0.18		0.04	c0.19			0.07	c0.17		
v/s Ratio Perm				0.02							0.08	
v/c Ratio		1.09	0.70	0.06	0.76	1.08			0.99	1.00	0.47	
Uniform Delay, d1		65.4	50.9	42.4	71.0	62.5			69.9	62.4	56.2	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		84.8	2.5	0.1	32.8	55.6			76.6	36.6	6.9	
Delay (s)		150.2	53.4	42.5	103.7	118.1			146.4	99.0	63.0	
Level of Service		F	D	D	F	F			F	F	E	
Approach Delay (s/veh)			77.3			117.2				96.5		
Approach LOS			E			F				F		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	96.1	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	24.0
Intersection Capacity Utilization	99.0%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBL2	SBL	SBT	SBR	SWL2	SWL	SWR	SWR2
Lane Configurations								
Traffic Volume (vph)	10	150	560	120	110	340	320	20
Future Volume (vph)	10	150	560	120	110	340	320	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00	0.95	
Frpb, ped/bikes		1.00	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.99	0.85	
Flt Protected		0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (prot)		1770	3539	1567	1770	1758	1504	
Flt Permitted		0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (perm)		1770	3539	1567	1770	1758	1504	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	160	596	128	117	362	340	21
RTOR Reduction (vph)	0	0	0	64	0	0	122	0
Lane Group Flow (vph)	0	171	596	64	117	396	205	0
Confl. Peds. (#/hr)		27		2				
Confl. Bikes (#/hr)								
Turn Type	Prot	Prot	NA	pm+ov	Prot	Prot	Perm	
Protected Phases	1	1	6	7	9	10		
Permitted Phases				6			10	
Actuated Green, G (s)		14.0	29.0	49.0	10.0	31.0	31.0	
Effective Green, g (s)		14.0	29.0	49.0	10.0	31.0	31.0	
Actuated g/C Ratio		0.09	0.19	0.32	0.07	0.21	0.21	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		164	680	550	117	361	309	
v/s Ratio Prot		c0.10	c0.17	0.02	c0.07	c0.23		
v/s Ratio Perm				0.03			0.14	
v/c Ratio		1.04	0.88	0.12	1.00	1.10	0.66	
Uniform Delay, d1		68.4	59.2	35.7	70.4	59.9	55.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		82.0	12.2	0.1	83.2	76.0	5.3	
Delay (s)		150.4	71.4	35.8	153.6	135.9	60.4	
Level of Service		F	E	D	F	F	E	
Approach Delay (s/veh)			81.4			109.0		
Approach LOS			F			F		

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Future Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1125	1827	1542	859	1827	1542	659	3471	1518	840	3471	1517
Grp Volume(v), veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Grp Sat Flow(s),veh/h/ln	1125	1827	1542	859	1827	1542	659	1736	1518	840	1736	1517
Q Serve(g_s), s	12.3	17.4	19.2	4.8	10.2	3.8	11.6	6.3	0.5	3.7	9.2	2.3
Cycle Q Clear(g_c), s	22.5	17.4	19.2	22.2	10.2	3.8	20.8	6.3	0.5	9.9	9.2	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
V/C Ratio(X)	0.54	0.69	0.75	0.27	0.43	0.17	0.28	0.21	0.02	0.11	0.29	0.08
Avail Cap(c_a), veh/h	421	737	622	285	737	622	484	2500	1093	621	2500	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	45.6	46.3	55.8	42.8	40.3	9.9	5.8	5.0	7.5	6.2	5.3
Incr Delay (d2), s/veh	2.2	2.2	3.4	1.2	0.7	0.2	1.4	0.2	0.0	0.4	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	9.0	8.4	1.2	5.2	1.6	2.3	3.0	0.2	0.9	4.5	1.0
LnGrp Delay(d), s/veh	54.7	47.8	49.7	57.0	43.5	40.5	11.3	6.0	5.1	7.8	6.5	5.4
LnGrp LOS	D	D	D	E	D	D	B	A	A	A	A	A
Approach Vol, veh/h		637			261			682			875	
Approach Delay, s/veh		49.7			44.6			7.0			6.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		31.3		95.0		31.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		51.0		91.0		51.0
Max Q Clear Time (g_c+I1), s		22.8		24.5		11.9		24.2
Green Ext Time (p_c), s		5.4		2.9		6.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Future Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	121	99	198	22	44	44	99	1143	33	66	912	55
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	12	498	32	49	498	322	2150	917	248	2150	937
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	0	37	1494	0	148	1493	573	3505	1496	470	3505	1527
Grp Volume(v), veh/h	220	0	198	66	0	44	99	1143	33	66	912	55
Grp Sat Flow(s),veh/h/ln	37	0	1494	148	0	1493	573	1752	1496	470	1752	1527
Q Serve(g_s), s	0.0	0.0	15.3	0.0	0.0	3.0	16.4	28.1	1.3	14.0	20.4	2.2
Cycle Q Clear(g_c), s	50.0	0.0	15.3	50.0	0.0	3.0	36.8	28.1	1.3	42.1	20.4	2.2
Prop In Lane	0.55		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
V/C Ratio(X)	4.44	0.00	0.40	0.81	0.00	0.09	0.31	0.53	0.04	0.27	0.42	0.06
Avail Cap(c_a), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	0.0	38.4	41.6	0.0	34.3	24.8	16.6	11.5	28.7	15.2	11.6
Incr Delay (d2), s/veh	1595.5	0.0	0.5	44.5	0.0	0.1	2.5	0.9	0.1	2.6	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.0	0.0	6.4	2.9	0.0	1.3	2.8	13.8	0.6	2.0	10.1	0.9
LnGrp Delay(d), s/veh	1658.2	0.0	38.9	86.1	0.0	34.4	27.2	17.6	11.5	31.3	15.8	11.8
LnGrp LOS	F		D	F		C	C	B	B	C	B	B
Approach Vol, veh/h		418			110			1275			1033	
Approach Delay, s/veh		891.2			65.5			18.2			16.6	
Approach LOS		F			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		54.0		96.0		54.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		38.8		52.0		44.1		52.0
Green Ext Time (p_c), s		13.2		0.0		9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	148.1
HCM 2010 LOS	F

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	170	65	4	130	65	4
Future Volume (veh/h)	170	65	4	130	65	4
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	185	71	4	141	71	4
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1620	1377	1026	1620	95	85
Arrive On Green	0.87	0.87	0.87	0.87	0.05	0.05
Sat Flow, veh/h	1863	1583	1119	1863	1774	1583
Grp Volume(v), veh/h	185	71	4	141	71	4
Grp Sat Flow(s),veh/h/ln	1863	1583	1119	1863	1774	1583
Q Serve(g_s), s	1.5	0.6	0.1	1.1	4.1	0.3
Cycle Q Clear(g_c), s	1.5	0.6	1.6	1.1	4.1	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1620	1377	1026	1620	95	85
V/C Ratio(X)	0.11	0.05	0.00	0.09	0.75	0.05
Avail Cap(c_a), veh/h	1620	1377	1026	1620	865	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.0	0.9	1.1	1.0	48.8	47.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	10.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	0.0	0.6	2.3	0.1
LnGrp Delay(d), s/veh	1.1	1.0	1.1	1.1	59.7	47.2
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h	256			145	75	
Approach Delay, s/veh	1.1			1.1	59.1	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		95.0		9.6		95.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		91.0		51.0		91.0		
Max Q Clear Time (g_c+I1), s		3.6		6.1		3.5		
Green Ext Time (p_c), s		0.9		0.2		1.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.2
HCM 2010 LOS	B

Shared Passenger Track Alternatives A/B with Norwalk/Santa Fe Springs HSR Station Option

ALIGNMENT - 2040 PLUS PROJECT AM

Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Future Volume (vph)	0	0	770	570	150	670	10	470	0	130	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.95	1.00	1.00		1.00		0.95		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.97	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3276	1372	1770	3528		3433		1504		
Flt Permitted			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3276	1372	1770	3528		3433		1504		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	819	606	160	713	11	500	0	138	0	0
RTOR Reduction (vph)	0	0	14	278	0	1	0	0	0	82	0	0
Lane Group Flow (vph)	0	0	975	158	160	723	0	500	0	56	0	0
Confl. Peds. (#/hr)		9		16	16		9			18	18	
Confl. Bikes (#/hr)				5			2			2		
Turn Type	Prot		NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases				4						2		
Actuated Green, G (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Effective Green, g (s)			40.7	40.7	14.6	59.3		20.7		45.3		
Actuated g/C Ratio			0.36	0.36	0.13	0.53		0.18		0.40		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			1184	495	229	1857		631		605		
v/s Ratio Prot			c0.30		c0.09	0.20		c0.15				
v/s Ratio Perm				0.11						c0.04		
v/c Ratio			0.82	0.32	0.70	0.39		0.79		0.09		
Uniform Delay, d1			32.7	25.9	46.9	15.9		43.9		20.9		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			4.8	0.4	9.0	0.1		6.8		0.3		
Delay (s)			37.4	26.3	55.9	16.0		50.7		21.2		
Level of Service			D	C	E	B		D		C		
Approach Delay (s/veh)			34.0			23.2			44.3			37.7
Approach LOS			C			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	112.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.4%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1611
Flt Permitted	1.00
Satd. Flow (perm)	1611
Peak-hour factor, PHF	0.94
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	20.6
Effective Green, g (s)	20.6
Actuated g/C Ratio	0.18
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	294
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	37.6
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	37.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	100	10	10	30	0	650	40	20	780
Future Volume (vph)	0	0	60	100	10	10	30	0	650	40	20	780
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00	1.00	0.95
Frpb, ped/bikes			0.82	1.00	0.90		1.00		1.00	0.92	1.00	1.00
Flpb, ped/bikes			1.00	0.84	1.00		1.00		1.00	1.00	0.98	1.00
Frt			0.87	1.00	0.93		1.00		1.00	0.85	1.00	1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00	0.95	1.00
Satd. Flow (prot)			1326	1481	1555		1770		3539	1461	1732	3539
Flt Permitted			1.00	0.95	1.00		0.33		1.00	1.00	0.38	1.00
Satd. Flow (perm)			1326	1481	1555		611		3539	1461	698	3539
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	106	11	11	32	0	691	43	21	830
RTOR Reduction (vph)	0	0	56	0	10	0	0	0	0	9	0	0
Lane Group Flow (vph)	0	0	8	106	12	0	32	0	691	34	21	830
Confl. Peds. (#/hr)	93		85	85		93		2		18	18	
Confl. Bikes (#/hr)			4			6				2		
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			12.8	12.8	12.8		81.7		81.7	81.7	81.7	81.7
Effective Green, g (s)			12.8	12.8	12.8		81.7		81.7	81.7	81.7	81.7
Actuated g/C Ratio			0.12	0.12	0.12		0.80		0.80	0.80	0.80	0.80
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0	4.0	4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0	3.0	3.0
Lane Grp Cap (vph)			165	184	194		487		2820	1164	556	2820
v/s Ratio Prot					0.01				0.20			c0.23
v/s Ratio Perm			0.01	c0.07			0.05			0.02	0.03	
v/c Ratio			0.05	0.58	0.06		0.07		0.25	0.03	0.04	0.29
Uniform Delay, d1			39.5	42.3	39.6		2.2		2.6	2.2	2.2	2.8
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00	1.00	1.00
Incremental Delay, d2			0.1	4.3	0.1		0.3		0.2	0.0	0.1	0.3
Delay (s)			39.6	46.6	39.7		2.5		2.8	2.2	2.3	3.0
Level of Service			D	D	D		A		A	A	A	A
Approach Delay (s/veh)		39.6			45.4				2.8			3.0
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	7.1	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.33		
Actuated Cycle Length (s)	102.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	53.6%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	900	130	320	1130	280	70	410	150	210	520	130
Future Volume (veh/h)	120	900	130	320	1130	280	70	410	150	210	520	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	947	137	337	1189	295	74	432	158	221	547	137
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	156	1164	168	376	1548	384	302	932	405	395	1163	646
Arrive On Green	0.09	0.26	0.26	0.21	0.38	0.38	0.04	0.26	0.26	0.11	0.33	0.33
Sat Flow, veh/h	1774	4460	643	1774	4021	998	1774	3539	1537	1774	3539	1542
Grp Volume(v), veh/h	126	719	365	337	1002	482	74	432	158	221	547	137
Grp Sat Flow(s),veh/h/ln	1774	1695	1713	1774	1695	1629	1774	1770	1537	1774	1770	1542
Q Serve(g_s), s	7.2	20.6	20.7	19.1	26.7	26.7	3.1	10.6	8.7	9.0	12.7	5.9
Cycle Q Clear(g_c), s	7.2	20.6	20.7	19.1	26.7	26.7	3.1	10.6	8.7	9.0	12.7	5.9
Prop In Lane	1.00		0.38	1.00		0.61	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	885	447	376	1305	627	302	932	405	395	1163	646
V/C Ratio(X)	0.81	0.81	0.82	0.90	0.77	0.77	0.25	0.46	0.39	0.56	0.47	0.21
Avail Cap(c_a), veh/h	274	1016	513	566	1573	756	327	932	405	511	1163	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	35.8	35.9	39.7	27.8	27.8	26.1	32.0	31.3	22.9	27.6	19.3
Incr Delay (d2), s/veh	9.4	4.5	8.9	12.0	1.9	4.0	0.4	1.7	2.8	1.2	1.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	10.1	10.8	10.6	12.9	12.7	1.6	5.4	4.0	4.4	6.5	2.6
LnGrp Delay(d), s/veh	55.7	40.4	44.8	51.7	29.7	31.7	26.5	33.6	34.1	24.1	28.9	20.1
LnGrp LOS	E	D	D	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1210			1821			664			905	
Approach Delay, s/veh		43.3			34.3			32.9			26.4	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.3	31.2	25.9	31.0	8.5	38.0	13.1	43.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	22.0	33.0	31.0	6.0	34.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	11.0	12.6	21.1	22.7	5.1	14.7	9.2	28.7
Green Ext Time (p_c), s	0.3	2.3	0.8	4.3	0.0	3.9	0.1	10.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	230	100	330	170	90	40	490	180	110	990	40
Future Volume (veh/h)	40	230	100	330	170	90	40	490	180	110	990	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	43	250	109	359	185	98	43	533	196	120	1076	43
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	505	614	268	444	572	303	142	1487	642	292	1455	58
Arrive On Green	0.51	0.51	0.51	0.51	0.51	0.51	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	1080	1212	528	1008	1129	598	497	3505	1513	716	3430	137
Grp Volume(v), veh/h	43	0	359	359	0	283	43	533	196	120	550	569
Grp Sat Flow(s),veh/h/ln	1080	0	1740	1008	0	1727	497	1752	1513	716	1752	1815
Q Serve(g_s), s	2.8	0.0	14.8	39.7	0.0	11.2	9.2	11.9	9.9	15.8	30.4	30.4
Cycle Q Clear(g_c), s	14.0	0.0	14.8	54.5	0.0	11.2	39.6	11.9	9.9	27.7	30.4	30.4
Prop In Lane	1.00		0.30	1.00		0.35	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	505	0	881	444	0	874	142	1487	642	292	744	770
V/C Ratio(X)	0.09	0.00	0.41	0.81	0.00	0.32	0.30	0.36	0.31	0.41	0.74	0.74
Avail Cap(c_a), veh/h	547	0	949	483	0	942	142	1487	642	292	744	770
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.0	0.0	17.7	34.7	0.0	16.8	44.5	22.6	22.0	32.0	27.9	27.9
Incr Delay (d2), s/veh	0.1	0.0	0.3	9.3	0.0	0.2	5.4	0.7	1.2	4.2	6.5	6.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	7.2	12.2	0.0	5.4	1.5	5.9	4.4	3.4	16.0	16.5
LnGrp Delay(d), s/veh	21.0	0.0	18.0	44.0	0.0	17.0	49.9	23.2	23.2	36.2	34.4	34.2
LnGrp LOS	C		B	D		B	D	C	C	D	C	C
Approach Vol, veh/h		402			642			772			1239	
Approach Delay, s/veh		18.3			32.1			24.7			34.5	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		53.0		62.5		53.0		62.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		49.0		63.0		49.0		63.0
Max Q Clear Time (g_c+I1), s		41.6		16.8		32.4		56.5
Green Ext Time (p_c), s		2.8		2.6		7.6		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	10	100	30	10	20	40	580	30	10	1260	130
Future Volume (veh/h)	110	10	100	30	10	20	40	580	30	10	1260	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.99		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	115	10	104	31	10	21	42	604	31	10	1312	135
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	221	18	185	145	68	143	307	2812	1224	660	2569	263
Arrive On Green	0.13	0.13	0.13	0.13	0.13	0.13	0.79	0.79	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1350	136	1414	1259	522	1096	367	3539	1541	789	3233	331
Grp Volume(v), veh/h	115	0	114	31	0	31	42	604	31	10	715	732
Grp Sat Flow(s),veh/h/ln	1350	0	1550	1259	0	1618	367	1770	1541	789	1770	1795
Q Serve(g_s), s	8.8	0.0	7.4	2.5	0.0	1.8	4.8	4.5	0.5	0.3	14.9	15.1
Cycle Q Clear(g_c), s	10.6	0.0	7.4	9.9	0.0	1.8	19.9	4.5	0.5	4.9	14.9	15.1
Prop In Lane	1.00		0.91	1.00		0.68	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	221	0	203	145	0	212	307	2812	1224	660	1406	1426
V/C Ratio(X)	0.52	0.00	0.56	0.21	0.00	0.15	0.14	0.21	0.03	0.02	0.51	0.51
Avail Cap(c_a), veh/h	385	0	391	298	0	408	307	2812	1224	660	1406	1426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.9	0.0	43.6	48.3	0.0	41.2	7.3	2.7	2.3	3.3	3.8	3.8
Incr Delay (d2), s/veh	1.9	0.0	2.4	0.7	0.0	0.3	0.9	0.2	0.0	0.0	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	0.0	3.3	0.9	0.0	0.8	0.6	2.2	0.2	0.1	7.7	7.8
LnGrp Delay(d), s/veh	47.8	0.0	46.1	49.0	0.0	41.5	8.2	2.9	2.3	3.4	5.1	5.1
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		229			62			677			1457	
Approach Delay, s/veh		46.9			45.3			3.2			5.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		18.0		89.0		18.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		21.9		12.6		17.1		11.9
Green Ext Time (p_c), s		5.8		0.8		15.6		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Future Volume (veh/h)	40	210	110	190	120	40	30	510	180	70	1270	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	228	120	207	130	43	33	554	196	76	1380	33
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	431	227	296	709	578	162	1937	838	393	1937	838
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1190	1132	596	1029	1863	1517	379	3539	1532	708	3539	1532
Grp Volume(v), veh/h	43	0	348	207	130	43	33	554	196	76	1380	33
Grp Sat Flow(s),veh/h/ln	1190	0	1727	1029	1863	1517	379	1770	1532	708	1770	1532
Q Serve(g_s), s	2.8	0.0	17.4	21.8	5.2	2.0	7.9	9.4	7.4	7.2	32.2	1.1
Cycle Q Clear(g_c), s	8.0	0.0	17.4	39.2	5.2	2.0	40.1	9.4	7.4	16.5	32.2	1.1
Prop In Lane	1.00		0.34	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	0	658	296	709	578	162	1937	838	393	1937	838
V/C Ratio(X)	0.09	0.00	0.53	0.70	0.18	0.07	0.20	0.29	0.23	0.19	0.71	0.04
Avail Cap(c_a), veh/h	554	0	791	375	852	694	162	1937	838	393	1937	838
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.6	0.0	26.7	41.9	23.0	22.0	33.6	13.5	13.1	18.0	18.7	11.7
Incr Delay (d2), s/veh	0.1	0.0	0.7	4.1	0.1	0.1	2.8	0.4	0.7	1.1	2.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	8.4	6.5	2.7	0.8	1.0	4.6	3.3	1.5	16.3	0.5
LnGrp Delay(d), s/veh	25.7	0.0	27.4	46.0	23.1	22.0	36.4	13.9	13.7	19.1	21.0	11.8
LnGrp LOS	C		C	D	C	C	D	B	B	B	C	B
Approach Vol, veh/h		391			380			783			1489	
Approach Delay, s/veh		27.2			35.5			14.8			20.7	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		65.0		46.4		65.0		46.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		61.0		51.0		61.0		51.0
Max Q Clear Time (g_c+I1), s		42.1		19.4		34.2		41.2
Green Ext Time (p_c), s		4.7		2.4		12.9		1.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		21.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Future Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	186	649	103	175	598	113	113	763	134	82	577	186
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	894	384	211	727	137	143	1428	620	106	998	321
Arrive On Green	0.13	0.25	0.25	0.12	0.25	0.25	0.08	0.40	0.40	0.06	0.38	0.38
Sat Flow, veh/h	1774	3539	1519	1774	2953	556	1774	3539	1537	1774	2610	839
Grp Volume(v), veh/h	186	649	103	175	358	353	113	763	134	82	391	372
Grp Sat Flow(s),veh/h/ln	1774	1770	1519	1774	1770	1740	1774	1770	1537	1774	1770	1680
Q Serve(g_s), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Cycle Q Clear(g_c), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	223	894	384	211	435	428	143	1428	620	106	677	642
V/C Ratio(X)	0.84	0.73	0.27	0.83	0.82	0.83	0.79	0.53	0.22	0.78	0.58	0.58
Avail Cap(c_a), veh/h	385	1208	518	367	586	576	275	1428	620	220	677	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	33.1	29.0	41.6	34.4	34.5	43.7	21.9	18.9	44.8	23.7	23.7
Incr Delay (d2), s/veh	8.0	1.4	0.4	8.1	6.8	7.2	9.4	1.4	0.8	11.5	3.6	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	8.1	2.2	5.0	9.9	9.8	3.3	8.0	2.5	2.5	8.9	8.5
LnGrp Delay(d), s/veh	49.3	34.5	29.3	49.8	41.3	41.7	53.0	23.4	19.7	56.3	27.2	27.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	E	C	C
Approach Vol, veh/h		938			886			1010			845	
Approach Delay, s/veh		36.9			43.1			26.2			30.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	43.0	15.5	28.4	11.8	41.0	16.1	27.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	39.0	20.0	33.0	15.0	36.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	17.9	11.3	18.2	8.0	19.0	11.9	20.6
Green Ext Time (p_c), s	0.1	5.7	0.3	4.1	0.1	4.3	0.3	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Future Volume (veh/h)	180	630	100	170	580	110	110	740	130	80	560	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	186	649	103	175	598	113	113	763	134	82	577	186
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	223	894	384	211	727	137	143	1428	620	106	998	321
Arrive On Green	0.13	0.25	0.25	0.12	0.25	0.25	0.08	0.40	0.40	0.06	0.38	0.38
Sat Flow, veh/h	1774	3539	1519	1774	2953	556	1774	3539	1537	1774	2610	839
Grp Volume(v), veh/h	186	649	103	175	358	353	113	763	134	82	391	372
Grp Sat Flow(s),veh/h/ln	1774	1770	1519	1774	1770	1740	1774	1770	1537	1774	1770	1680
Q Serve(g_s), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Cycle Q Clear(g_c), s	9.9	16.2	5.3	9.3	18.5	18.6	6.0	15.9	5.5	4.4	16.9	17.0
Prop In Lane	1.00		1.00	1.00		0.32	1.00		1.00	1.00		0.50
Lane Grp Cap(c), veh/h	223	894	384	211	435	428	143	1428	620	106	677	642
V/C Ratio(X)	0.84	0.73	0.27	0.83	0.82	0.83	0.79	0.53	0.22	0.78	0.58	0.58
Avail Cap(c_a), veh/h	385	1208	518	367	586	576	275	1428	620	220	677	642
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	33.1	29.0	41.6	34.4	34.5	43.7	21.9	18.9	44.8	23.7	23.7
Incr Delay (d2), s/veh	8.0	1.4	0.4	8.1	6.8	7.2	9.4	1.4	0.8	11.5	3.6	3.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.4	8.1	2.2	5.0	9.9	9.8	3.3	8.0	2.5	2.5	8.9	8.5
LnGrp Delay(d), s/veh	49.3	34.5	29.3	49.8	41.3	41.7	53.0	23.4	19.7	56.3	27.2	27.5
LnGrp LOS	D	C	C	D	D	D	D	C	B	E	C	C
Approach Vol, veh/h		938			886			1010			845	
Approach Delay, s/veh		36.9			43.1			26.2			30.2	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	43.0	15.5	28.4	11.8	41.0	16.1	27.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	39.0	20.0	33.0	15.0	36.0	21.0	32.0
Max Q Clear Time (g_c+I1), s	6.4	17.9	11.3	18.2	8.0	19.0	11.9	20.6
Green Ext Time (p_c), s	0.1	5.7	0.3	4.1	0.1	4.3	0.3	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	10	340	20	120	20	700	290	80	660	20
Future Volume (veh/h)	0	0	10	340	20	120	20	700	290	80	660	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.89	0.91		0.90	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	0	11	366	22	129	22	753	312	86	710	22
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	70	0	454	473	69	404	430	1449	600	292	2108	65
Arrive On Green	0.00	0.00	0.32	0.32	0.32	0.32	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	1231	0	1417	1279	215	1259	720	2408	997	528	3503	109
Grp Volume(v), veh/h	0	0	11	366	0	151	22	553	512	86	359	373
Grp Sat Flow(s),veh/h/ln	1231	0	1417	1279	0	1474	720	1770	1636	528	1770	1842
Q Serve(g_s), s	0.0	0.0	0.5	28.3	0.0	8.0	1.6	18.7	18.7	11.6	10.4	10.4
Cycle Q Clear(g_c), s	0.0	0.0	0.5	28.8	0.0	8.0	12.1	18.7	18.7	30.3	10.4	10.4
Prop In Lane	1.00		1.00	1.00		0.85	1.00		0.61	1.00		0.06
Lane Grp Cap(c), veh/h	70	0	454	473	0	473	430	1065	984	292	1065	1108
V/C Ratio(X)	0.00	0.00	0.02	0.77	0.00	0.32	0.05	0.52	0.52	0.29	0.34	0.34
Avail Cap(c_a), veh/h	272	0	687	683	0	715	430	1065	984	292	1065	1108
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	24.0	33.8	0.0	26.5	13.3	11.9	11.9	20.7	10.3	10.3
Incr Delay (d2), s/veh	0.0	0.0	0.0	3.4	0.0	0.4	0.2	1.8	2.0	2.6	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.2	10.4	0.0	3.3	0.4	9.6	8.9	1.9	5.3	5.5
LnGrp Delay(d), s/veh	0.0	0.0	24.0	37.2	0.0	26.9	13.5	13.7	13.9	23.3	11.1	11.1
LnGrp LOS			C	D		C	B	B	B	C	B	B
Approach Vol, veh/h		11			517			1087			818	
Approach Delay, s/veh		24.0			34.2			13.8			12.4	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		37.1		66.0		37.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		50.0		62.0		50.0
Max Q Clear Time (g_c+I1), s		20.7		2.5		32.3		30.8
Green Ext Time (p_c), s		9.1		0.0		6.1		2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	460	790	150	240	1220	240	140	450	160	210	510	410
Future Volume (veh/h)	460	790	150	240	1220	240	140	450	160	210	510	410
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.92	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	474	814	155	247	1258	247	144	464	165	216	526	423
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	488	1481	633	278	1261	248	231	503	177	236	796	333
Arrive On Green	0.28	0.42	0.42	0.16	0.30	0.30	0.07	0.20	0.20	0.09	0.22	0.22
Sat Flow, veh/h	1774	3539	1512	1774	4203	825	1774	2517	885	1774	3539	1479
Grp Volume(v), veh/h	474	814	155	247	1015	490	144	325	304	216	526	423
Grp Sat Flow(s),veh/h/ln	1774	1770	1512	1774	1695	1638	1774	1770	1632	1774	1770	1479
Q Serve(g_s), s	31.7	20.8	8.0	16.4	35.9	35.9	7.8	21.6	22.0	11.0	16.2	27.0
Cycle Q Clear(g_c), s	31.7	20.8	8.0	16.4	35.9	35.9	7.8	21.6	22.0	11.0	16.2	27.0
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	488	1481	633	278	1017	491	231	354	326	236	796	333
V/C Ratio(X)	0.97	0.55	0.24	0.89	1.00	1.00	0.62	0.92	0.93	0.92	0.66	1.27
Avail Cap(c_a), veh/h	488	1481	633	384	1017	491	231	354	326	236	796	333
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.0	26.3	22.6	49.6	42.0	42.0	36.1	47.0	47.2	37.0	42.3	46.5
Incr Delay (d2), s/veh	33.4	0.4	0.2	17.1	27.6	40.0	5.1	30.9	35.2	36.6	4.3	143.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.1	10.3	3.3	9.3	20.7	21.7	4.1	13.6	13.1	8.0	8.4	24.3
LnGrp Delay(d), s/veh	76.4	26.8	22.8	66.7	69.6	81.9	41.2	77.9	82.4	73.6	46.6	190.1
LnGrp LOS	E	C	C	E	E	F	D	E	F	E	D	F
Approach Vol, veh/h		1443			1752			773			1165	
Approach Delay, s/veh		42.7			72.6			72.8			103.7	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	28.0	22.8	54.2	12.0	31.0	37.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	24.0	26.0	43.0	8.0	27.0	33.0	36.0
Max Q Clear Time (g_c+I1), s	13.0	24.0	18.4	22.8	9.8	29.0	33.7	37.9
Green Ext Time (p_c), s	0.0	0.0	0.4	6.1	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	71.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	210	320	60	170	160	200	300	20	90	750	120
Future Volume (veh/h)	240	210	320	60	170	160	200	300	20	90	750	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	253	221	337	63	179	168	211	316	21	95	789	126
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	299	254	388	126	341	320	288	1804	119	566	1632	261
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.54	0.54	0.54	0.54	0.54	0.54
Sat Flow, veh/h	1020	650	991	840	871	817	602	3330	220	1026	3014	481
Grp Volume(v), veh/h	253	0	558	63	0	347	211	165	172	95	459	456
Grp Sat Flow(s),veh/h/ln	1020	0	1640	840	0	1688	602	1752	1798	1026	1752	1742
Q Serve(g_s), s	28.1	0.0	37.6	9.0	0.0	18.9	40.2	5.7	5.8	6.2	19.5	19.5
Cycle Q Clear(g_c), s	47.0	0.0	37.6	46.6	0.0	18.9	59.7	5.7	5.8	12.0	19.5	19.5
Prop In Lane	1.00		0.60	1.00		0.48	1.00		0.12	1.00		0.28
Lane Grp Cap(c), veh/h	299	0	643	126	0	661	288	949	974	566	949	944
V/C Ratio(X)	0.85	0.00	0.87	0.50	0.00	0.52	0.73	0.17	0.18	0.17	0.48	0.48
Avail Cap(c_a), veh/h	299	0	643	126	0	661	288	949	974	566	949	944
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.7	0.0	33.7	55.1	0.0	27.9	35.6	13.9	13.9	17.0	17.1	17.1
Incr Delay (d2), s/veh	19.6	0.0	12.2	3.1	0.0	0.8	15.2	0.4	0.4	0.6	1.8	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	0.0	19.2	2.2	0.0	8.9	7.9	2.9	3.0	1.9	9.9	9.8
LnGrp Delay(d), s/veh	66.4	0.0	45.8	58.3	0.0	28.7	50.8	14.3	14.3	17.6	18.8	18.8
LnGrp LOS	E		D	E		C	D	B	B	B	B	B
Approach Vol, veh/h		811			410			548			1010	
Approach Delay, s/veh		52.2			33.2			28.4			18.7	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		51.0		69.0		51.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		61.7		49.0		21.5		48.6
Green Ext Time (p_c), s		1.2		0.0		7.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	80	90	20	170	30	310	40	190	890	20
Future Volume (veh/h)	30	30	80	90	20	170	30	310	40	190	890	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.98		0.94	1.00		0.96	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	32	32	85	96	21	181	32	330	43	202	947	21
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	113	74	195	191	27	233	350	1401	1148	762	1401	1175
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1160	425	1128	1228	156	1346	573	1845	1513	991	1845	1547
Grp Volume(v), veh/h	32	0	117	96	0	202	32	330	43	202	947	21
Grp Sat Flow(s),veh/h/ln	1160	0	1552	1228	0	1502	573	1845	1513	991	1845	1547
Q Serve(g_s), s	3.2	0.0	8.0	9.0	0.0	15.2	3.5	6.2	0.8	8.9	30.1	0.4
Cycle Q Clear(g_c), s	18.4	0.0	8.0	17.0	0.0	15.2	33.6	6.2	0.8	15.1	30.1	0.4
Prop In Lane	1.00		0.73	1.00		0.90	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	113	0	269	191	0	260	350	1401	1148	762	1401	1175
V/C Ratio(X)	0.28	0.00	0.44	0.50	0.00	0.78	0.09	0.24	0.04	0.27	0.68	0.02
Avail Cap(c_a), veh/h	127	0	288	206	0	279	350	1401	1148	762	1401	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	0.0	43.8	51.4	0.0	46.8	15.4	4.2	3.5	6.4	7.1	3.5
Incr Delay (d2), s/veh	1.4	0.0	1.1	2.0	0.0	12.2	0.5	0.4	0.1	0.9	2.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	3.5	3.1	0.0	7.2	0.6	3.3	0.4	2.6	16.0	0.2
LnGrp Delay(d), s/veh	57.0	0.0	44.9	53.5	0.0	59.0	15.9	4.6	3.6	7.2	9.7	3.5
LnGrp LOS	E		D	D		E	B	A	A	A	A	A
Approach Vol, veh/h		149			298			405			1170	
Approach Delay, s/veh		47.5			57.2			5.4			9.2	
Approach LOS		D			E			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		94.0		24.5		94.0		24.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		90.0		22.0		90.0		22.0
Max Q Clear Time (g_c+I1), s		35.6		20.4		32.1		19.0
Green Ext Time (p_c), s		2.6		0.1		11.6		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Future Volume (veh/h)	100	240	220	70	200	70	70	210	50	80	910	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.88	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	102	245	224	71	204	71	71	214	51	82	929	112
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	501	396	212	342	119	339	1206	994	733	2057	248
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	1085	1845	1458	904	1260	439	534	1845	1520	1095	3147	379
Grp Volume(v), veh/h	102	245	224	71	0	275	71	214	51	82	517	524
Grp Sat Flow(s),veh/h/ln	1085	1845	1458	904	0	1699	534	1845	1520	1095	1752	1774
Q Serve(g_s), s	9.7	11.9	14.2	7.7	0.0	15.1	8.1	4.9	1.3	3.4	15.5	15.5
Cycle Q Clear(g_c), s	24.7	11.9	14.2	19.6	0.0	15.1	23.6	4.9	1.3	8.3	15.5	15.5
Prop In Lane	1.00		1.00	1.00		0.26	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	209	501	396	212	0	462	339	1206	994	733	1145	1160
V/C Ratio(X)	0.49	0.49	0.57	0.33	0.00	0.60	0.21	0.18	0.05	0.11	0.45	0.45
Avail Cap(c_a), veh/h	340	723	572	321	0	666	339	1206	994	733	1145	1160
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.6	32.8	33.6	41.0	0.0	33.9	14.9	7.3	6.6	8.9	9.1	9.1
Incr Delay (d2), s/veh	1.8	0.7	1.3	0.9	0.0	1.2	1.4	0.3	0.1	0.3	1.3	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	6.2	5.8	2.0	0.0	7.2	1.3	2.5	0.6	1.1	7.9	8.0
LnGrp Delay(d), s/veh	46.4	33.5	34.8	41.9	0.0	35.1	16.3	7.6	6.7	9.2	10.4	10.4
LnGrp LOS	D	C	C	D		D	B	A	A	A	B	B
Approach Vol, veh/h		571			346			336			1123	
Approach Delay, s/veh		36.3			36.5			9.3			10.3	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		33.1		74.0		33.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		25.6		26.7		17.5		21.6
Green Ext Time (p_c), s		2.3		2.4		9.0		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Future Volume (veh/h)	180	460	110	100	390	90	100	490	60	100	860	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	191	489	117	106	415	96	106	521	64	106	915	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	292	679	299	235	532	230	363	2022	247	526	1849	150
Arrive On Green	0.11	0.19	0.19	0.07	0.15	0.15	0.04	0.63	0.63	0.55	0.55	0.55
Sat Flow, veh/h	1792	3574	1574	1792	3574	1546	1792	3196	391	830	3341	270
Grp Volume(v), veh/h	191	489	117	106	415	96	106	290	295	106	489	500
Grp Sat Flow(s),veh/h/ln	1792	1787	1574	1792	1787	1546	1792	1787	1800	830	1787	1824
Q Serve(g_s), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Cycle Q Clear(g_c), s	9.3	13.8	7.0	5.3	12.0	6.1	2.6	7.7	7.7	7.0	18.1	18.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.22	1.00		0.15
Lane Grp Cap(c), veh/h	292	679	299	235	532	230	363	1130	1139	526	989	1009
V/C Ratio(X)	0.65	0.72	0.39	0.45	0.78	0.42	0.29	0.26	0.26	0.20	0.49	0.49
Avail Cap(c_a), veh/h	383	964	425	301	765	331	471	1130	1139	526	989	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.8	40.8	38.1	35.7	44.1	41.5	10.8	8.7	8.7	12.3	14.8	14.8
Incr Delay (d2), s/veh	2.5	1.5	0.8	1.4	3.3	1.2	0.4	0.5	0.6	0.9	1.8	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	6.9	3.1	2.7	6.2	2.7	1.3	4.0	4.0	1.7	9.3	9.5
LnGrp Delay(d), s/veh	35.3	42.4	38.9	37.1	47.4	42.7	11.3	9.2	9.2	13.2	16.5	16.5
LnGrp LOS	D	D	D	D	D	D	B	A	A	B	B	B
Approach Vol, veh/h		797			617			691			1095	
Approach Delay, s/veh		40.2			44.9			9.5			16.2	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		72.0	11.1	24.4	8.5	63.5	15.5	20.0
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	11.0	29.0	11.0	53.0	17.0	23.0
Max Q Clear Time (g_c+I1), s		9.7	7.3	15.8	4.6	20.1	11.3	14.0
Green Ext Time (p_c), s		3.9	0.1	2.9	0.1	8.3	0.2	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Future Volume (veh/h)	190	200	190	80	250	150	130	470	100	100	650	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.98		0.93	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	217	207	87	272	163	141	511	109	109	707	185
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	290	404	331	265	330	189	308	1795	381	496	1160	1143
Arrive On Green	0.11	0.22	0.22	0.05	0.16	0.16	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	1774	1863	1524	1774	2108	1208	621	2883	611	798	1863	1545
Grp Volume(v), veh/h	207	217	207	87	226	209	141	313	307	109	707	185
Grp Sat Flow(s),veh/h/ln	1774	1863	1524	1774	1770	1546	621	1770	1724	798	1863	1545
Q Serve(g_s), s	10.6	11.6	13.8	4.6	13.9	14.8	20.1	9.1	9.2	8.2	25.9	4.0
Cycle Q Clear(g_c), s	10.6	11.6	13.8	4.6	13.9	14.8	46.0	9.1	9.2	17.4	25.9	4.0
Prop In Lane	1.00		1.00	1.00		0.78	1.00		0.35	1.00		1.00
Lane Grp Cap(c), veh/h	290	404	331	265	277	242	308	1102	1074	496	1160	1143
V/C Ratio(X)	0.71	0.54	0.63	0.33	0.82	0.86	0.46	0.28	0.29	0.22	0.61	0.16
Avail Cap(c_a), veh/h	372	530	434	265	315	275	308	1102	1074	496	1160	1143
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.8	39.0	39.9	37.0	45.9	46.2	26.9	9.7	9.7	13.7	12.9	4.4
Incr Delay (d2), s/veh	4.6	1.1	1.9	0.7	13.9	21.5	4.9	0.6	0.7	1.0	2.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.1	6.0	2.3	7.9	7.8	3.9	4.6	4.6	1.9	13.9	1.8
LnGrp Delay(d), s/veh	38.4	40.1	41.8	37.7	59.8	67.7	31.7	10.4	10.4	14.7	15.3	4.7
LnGrp LOS	D	D	D	D	E	E	C	B	B	B	B	A
Approach Vol, veh/h		631			522			761			1001	
Approach Delay, s/veh		40.1			59.3			14.3			13.3	
Approach LOS		D			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		74.0	10.0	28.4		74.0	16.8	21.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		70.0	6.0	32.0		70.0	18.0	20.0
Max Q Clear Time (g_c+I1), s		48.0	6.6	15.8		27.9	12.6	16.8
Green Ext Time (p_c), s		5.2	0.0	1.7		7.5	0.3	0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Future Volume (veh/h)	270	770	340	250	590	60	170	760	170	130	1040	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.92	1.00		0.92	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	290	828	366	269	634	65	183	817	183	140	1118	215
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	955	393	310	837	86	244	1134	254	263	1367	560
Arrive On Green	0.14	0.27	0.27	0.13	0.26	0.26	0.08	0.40	0.40	0.06	0.39	0.39
Sat Flow, veh/h	1774	3539	1457	1774	3213	329	1774	2822	632	1774	3539	1449
Grp Volume(v), veh/h	290	828	366	269	349	350	183	512	488	140	1118	215
Grp Sat Flow(s),veh/h/ln	1774	1770	1457	1774	1770	1772	1774	1770	1684	1774	1770	1449
Q Serve(g_s), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Cycle Q Clear(g_c), s	13.8	26.1	28.7	12.8	21.2	21.3	7.2	28.5	28.5	5.5	33.1	12.5
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.38	1.00		1.00
Lane Grp Cap(c), veh/h	363	955	393	310	461	462	244	711	677	263	1367	560
V/C Ratio(X)	0.80	0.87	0.93	0.87	0.76	0.76	0.75	0.72	0.72	0.53	0.82	0.38
Avail Cap(c_a), veh/h	408	968	398	341	461	462	271	711	677	272	1367	560
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	40.7	41.6	29.5	39.8	39.9	26.0	29.5	29.5	23.3	32.2	25.9
Incr Delay (d2), s/veh	9.7	8.3	28.3	19.1	7.0	7.2	10.0	6.2	6.5	1.9	5.5	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	13.9	14.6	7.8	11.3	11.3	4.1	15.2	14.5	2.8	17.2	5.3
LnGrp Delay(d), s/veh	38.1	49.0	69.9	48.6	46.8	47.0	36.0	35.7	36.0	25.1	37.7	27.8
LnGrp LOS	D	D	E	D	D	D	D	D	D	C	D	C
Approach Vol, veh/h		1484			968			1183			1473	
Approach Delay, s/veh		52.1			47.4			35.9			35.1	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	51.0	19.0	35.6	13.3	49.2	20.0	34.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	47.0	17.0	32.0	11.0	44.0	19.0	30.0
Max Q Clear Time (g_c+I1), s	7.5	30.5	14.8	30.7	9.2	35.1	15.8	23.3
Green Ext Time (p_c), s	0.0	6.0	0.2	0.9	0.1	5.3	0.3	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Future Volume (veh/h)	290	1130	220	150	1110	90	250	670	110	210	1390	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.91	1.00		0.88	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	299	1165	227	155	1144	93	258	691	113	216	1433	289
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1149	222	164	1132	447	241	1237	199	343	1455	421
Arrive On Green	0.17	0.39	0.39	0.09	0.32	0.32	0.10	0.28	0.28	0.10	0.28	0.28
Sat Flow, veh/h	1792	2933	566	1792	3574	1411	1792	4410	710	1792	5136	1487
Grp Volume(v), veh/h	299	705	687	155	1144	93	258	534	270	216	1433	289
Grp Sat Flow(s),veh/h/ln	1792	1787	1712	1792	1787	1411	1792	1712	1696	1792	1712	1487
Q Serve(g_s), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Cycle Q Clear(g_c), s	20.0	47.0	47.0	10.3	38.0	5.8	12.0	16.0	16.3	10.1	33.3	20.7
Prop In Lane	1.00		0.33	1.00		1.00	1.00		0.42	1.00		1.00
Lane Grp Cap(c), veh/h	299	700	670	164	1132	447	241	960	476	343	1455	421
V/C Ratio(X)	1.00	1.01	1.02	0.94	1.01	0.21	1.07	0.56	0.57	0.63	0.98	0.69
Avail Cap(c_a), veh/h	299	700	670	164	1132	447	241	960	476	397	1455	421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	36.5	36.5	54.2	41.0	30.0	33.4	36.8	36.9	27.6	42.7	38.2
Incr Delay (d2), s/veh	52.4	35.8	41.1	53.7	29.4	0.2	78.1	2.3	4.8	2.5	20.2	8.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	30.1	29.8	7.6	23.3	2.3	13.2	7.9	8.3	5.2	18.4	9.5
LnGrp Delay(d), s/veh	102.4	72.4	77.6	107.9	70.4	30.2	111.6	39.1	41.8	30.1	63.0	47.0
LnGrp LOS	F	F	F	F	F	C	F	D	D	C	E	D
Approach Vol, veh/h		1691			1392			1062			1938	
Approach Delay, s/veh		79.8			71.9			57.4			56.9	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.3	37.7	15.0	51.0	16.0	38.0	24.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	30.0	11.0	47.0	12.0	34.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	12.1	18.3	12.3	49.0	14.0	35.3	22.0	40.0
Green Ext Time (p_c), s	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Future Volume (veh/h)	130	550	220	170	510	270	170	520	150	250	810	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.88	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	133	561	224	173	520	276	173	531	153	255	827	61
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	166	787	306	211	875	346	211	1234	341	297	1765	129
Arrive On Green	0.09	0.22	0.22	0.12	0.25	0.25	0.12	0.32	0.32	0.17	0.37	0.37
Sat Flow, veh/h	1774	3539	1376	1774	3539	1397	1774	3872	1070	1774	4804	352
Grp Volume(v), veh/h	133	561	224	173	520	276	173	462	222	255	582	306
Grp Sat Flow(s),veh/h/ln	1774	1770	1376	1774	1770	1397	1774	1695	1552	1774	1695	1766
Q Serve(g_s), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Cycle Q Clear(g_c), s	6.8	13.6	14.0	8.8	12.0	17.1	8.8	9.9	10.5	12.9	12.1	12.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.69	1.00		0.20
Lane Grp Cap(c), veh/h	166	787	306	211	875	346	211	1080	495	297	1246	649
V/C Ratio(X)	0.80	0.71	0.73	0.82	0.59	0.80	0.82	0.43	0.45	0.86	0.47	0.47
Avail Cap(c_a), veh/h	307	1071	416	403	1262	498	403	1080	495	556	1246	649
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.1	33.3	33.4	39.8	30.7	32.7	39.8	24.9	25.1	37.4	22.4	22.4
Incr Delay (d2), s/veh	8.6	1.4	4.3	7.7	0.6	5.8	7.7	1.2	2.9	7.1	1.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	6.8	5.7	4.8	5.9	7.1	4.8	4.8	4.9	6.9	5.9	6.4
LnGrp Delay(d), s/veh	49.6	34.7	37.7	47.6	31.4	38.5	47.6	26.1	28.0	44.6	23.6	24.8
LnGrp LOS	D	C	D	D	C	D	D	C	C	D	C	C
Approach Vol, veh/h		918			969			857			1143	
Approach Delay, s/veh		37.6			36.3			30.9			28.6	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.5	33.5	15.0	24.6	15.0	38.0	12.7	26.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	26.0	21.0	28.0	21.0	34.0	16.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	12.5	10.8	16.0	10.8	14.3	8.8	19.1
Green Ext Time (p_c), s	0.6	3.6	0.3	3.5	0.3	5.4	0.2	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Future Volume (veh/h)	260	970	160	410	1210	140	170	490	90	270	900	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	268	1000	165	423	1247	144	175	505	93	278	928	113
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	332	1570	258	502	1443	628	236	1270	375	346	1288	156
Arrive On Green	0.10	0.36	0.36	0.15	0.41	0.41	0.07	0.25	0.25	0.10	0.28	0.28
Sat Flow, veh/h	3442	4379	721	3442	3539	1540	3442	5085	1500	3442	4570	554
Grp Volume(v), veh/h	268	774	391	423	1247	144	175	505	93	278	687	354
Grp Sat Flow(s),veh/h/ln	1721	1695	1710	1721	1770	1540	1721	1695	1500	1721	1695	1734
Q Serve(g_s), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Cycle Q Clear(g_c), s	8.4	20.9	21.0	13.2	35.4	6.7	5.5	9.1	5.5	8.7	20.1	20.2
Prop In Lane	1.00		0.42	1.00		1.00	1.00		1.00	1.00		0.32
Lane Grp Cap(c), veh/h	332	1215	613	502	1443	628	236	1270	375	346	955	489
V/C Ratio(X)	0.81	0.64	0.64	0.84	0.86	0.23	0.74	0.40	0.25	0.80	0.72	0.72
Avail Cap(c_a), veh/h	407	1294	653	688	1641	714	282	1270	375	469	955	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	29.3	29.4	45.8	29.8	21.3	50.3	34.4	33.0	48.4	35.6	35.6
Incr Delay (d2), s/veh	9.5	1.0	1.9	6.9	4.6	0.2	8.4	0.9	1.6	7.1	4.7	9.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	9.9	10.2	6.8	18.2	2.9	2.9	4.4	2.4	4.5	10.0	10.9
LnGrp Delay(d), s/veh	58.2	30.3	31.3	52.7	34.4	21.5	58.7	35.3	34.6	55.5	40.3	44.7
LnGrp LOS	E	C	C	D	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1433			1814			773			1319	
Approach Delay, s/veh		35.8			37.6			40.5			44.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	31.5	20.1	43.4	11.5	35.0	14.6	48.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	25.0	22.0	42.0	9.0	31.0	13.0	51.0
Max Q Clear Time (g_c+I1), s	10.7	11.1	15.2	23.0	7.5	22.2	10.4	37.4
Green Ext Time (p_c), s	0.4	3.0	0.9	7.4	0.1	4.2	0.2	7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Future Volume (veh/h)	180	90	290	20	100	60	180	730	10	40	1390	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	205	102	330	23	114	68	205	830	11	45	1580	216
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	524	36	156	524	235	2760	37	58	1948	265
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.13	0.53	0.53	0.03	0.43	0.43
Sat Flow, veh/h	0	0	1562	0	465	1560	1792	5219	69	1792	4529	617
Grp Volume(v), veh/h	307	0	330	137	0	68	205	544	297	45	1193	603
Grp Sat Flow(s),veh/h/ln	0	0	1562	465	0	1560	1792	1712	1864	1792	1712	1722
Q Serve(g_s), s	0.0	0.0	20.7	0.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Cycle Q Clear(g_c), s	39.0	0.0	20.7	39.0	0.0	3.5	13.0	10.4	10.4	2.9	35.4	35.7
Prop In Lane	0.67		1.00	0.17		1.00	1.00		0.04	1.00		0.36
Lane Grp Cap(c), veh/h	52	0	524	192	0	524	235	1811	986	58	1473	741
V/C Ratio(X)	5.94	0.00	0.63	0.71	0.00	0.13	0.87	0.30	0.30	0.78	0.81	0.81
Avail Cap(c_a), veh/h	52	0	524	192	0	524	293	1811	986	123	1473	741
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.1	0.0	32.5	31.4	0.0	26.8	49.6	15.3	15.3	55.8	29.0	29.0
Incr Delay (d2), s/veh	2265.5	0.0	2.4	11.7	0.0	0.1	20.6	0.4	0.8	19.4	4.9	9.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	34.2	0.0	9.3	3.8	0.0	1.5	7.8	4.9	5.5	1.8	17.7	18.9
LnGrp Delay(d), s/veh	2323.6	0.0	34.9	43.1	0.0	26.9	70.1	15.8	16.1	75.3	33.9	38.6
LnGrp LOS	F		C	D		C	E	B	B	E	C	D
Approach Vol, veh/h		637			205			1046			1841	
Approach Delay, s/veh		1137.9			37.7			26.5			36.4	
Approach LOS		F			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.8	65.5		43.0	19.2	54.0		43.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	61.0		39.0	19.0	50.0		39.0
Max Q Clear Time (g_c+I1), s	4.9	12.4		41.0	15.0	37.7		41.0
Green Ext Time (p_c), s	0.0	6.0		0.0	0.2	8.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh	221.9	
HCM 2010 LOS	F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Future Volume (veh/h)	20	110	80	100	110	40	50	610	90	80	1440	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.81		0.67	0.82		0.67	1.00		0.94	0.99		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	21	117	85	106	117	43	53	649	96	85	1532	21
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	201	353	201	198	353	201	259	2350	989	545	2388	33
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.03	0.66	0.66	0.03	0.67	0.67
Sat Flow, veh/h	992	1863	1063	967	1863	1063	1774	3539	1490	1774	3571	49
Grp Volume(v), veh/h	21	117	85	106	117	43	53	649	96	85	758	795
Grp Sat Flow(s),veh/h/ln	992	1863	1063	967	1863	1063	1774	1770	1490	1774	1770	1850
Q Serve(g_s), s	2.0	5.8	7.5	11.4	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Cycle Q Clear(g_c), s	7.8	5.8	7.5	17.2	5.8	3.7	1.0	8.1	2.5	1.6	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.03
Lane Grp Cap(c), veh/h	201	353	201	198	353	201	259	2350	989	545	1183	1238
V/C Ratio(X)	0.10	0.33	0.42	0.54	0.33	0.21	0.20	0.28	0.10	0.16	0.64	0.64
Avail Cap(c_a), veh/h	310	557	318	304	557	318	306	2350	989	567	1183	1238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	37.5	38.2	44.9	37.5	36.6	9.0	7.4	6.4	5.5	10.3	10.3
Incr Delay (d2), s/veh	0.2	0.5	1.4	2.2	0.5	0.5	0.4	0.3	0.2	0.1	2.7	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.0	2.3	3.2	3.0	1.1	0.5	4.0	1.1	0.8	13.7	14.4
LnGrp Delay(d), s/veh	41.1	38.0	39.6	47.2	38.0	37.1	9.4	7.7	6.6	5.6	12.9	12.8
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	B	B
Approach Vol, veh/h		223			266			798			1638	
Approach Delay, s/veh		38.9			41.5			7.7			12.5	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.7	75.0		24.2	7.2	75.5		24.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	71.0		32.0	6.0	70.0		32.0
Max Q Clear Time (g_c+I1), s	3.6	10.1		9.8	3.0	28.7		19.2
Green Ext Time (p_c), s	0.0	5.4		1.1	0.0	16.7		1.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		15.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Future Volume (veh/h)	140	370	160	60	1100	80	160	1130	30	70	930	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	146	385	167	62	1146	83	167	1177	31	73	969	250
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	164	1549	785	355	1163	84	197	1403	37	172	1009	259
Arrive On Green	0.06	0.45	0.45	0.36	0.36	0.36	0.07	0.41	0.41	0.04	0.38	0.38
Sat Flow, veh/h	1723	3438	1491	822	3242	235	1723	3420	90	1723	2686	691
Grp Volume(v), veh/h	146	385	167	62	607	622	167	592	616	73	619	600
Grp Sat Flow(s),veh/h/ln	1723	1719	1491	822	1719	1758	1723	1719	1791	1723	1719	1658
Q Serve(g_s), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Cycle Q Clear(g_c), s	6.3	8.3	7.2	6.3	41.9	42.1	6.9	37.1	37.1	3.1	42.1	42.5
Prop In Lane	1.00		1.00	1.00		0.13	1.00		0.05	1.00		0.42
Lane Grp Cap(c), veh/h	164	1549	785	355	617	631	197	706	735	172	646	623
V/C Ratio(X)	0.89	0.25	0.21	0.17	0.98	0.99	0.85	0.84	0.84	0.42	0.96	0.96
Avail Cap(c_a), veh/h	164	1549	785	355	617	631	199	706	735	177	646	623
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	20.4	15.3	26.6	38.1	38.1	28.1	31.8	31.8	26.9	36.5	36.6
Incr Delay (d2), s/veh	40.3	0.1	0.1	0.2	32.1	32.2	27.5	11.4	11.1	1.7	26.6	28.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	4.0	3.0	1.5	25.4	26.0	4.7	19.8	20.6	1.5	24.7	24.2
LnGrp Delay(d), s/veh	69.7	20.4	15.4	26.9	70.2	70.3	55.6	43.2	42.8	28.5	63.1	64.8
LnGrp LOS	E	C	B	C	E	E	E	D	D	C	E	E
Approach Vol, veh/h		698			1291			1375			1292	
Approach Delay, s/veh		29.5			68.2			44.5			62.0	
Approach LOS		C			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	53.2		58.0	12.8	49.0	11.0	47.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0		54.0	9.0	45.0	7.0	43.0
Max Q Clear Time (g_c+I1), s	5.1	39.1		10.3	8.9	44.5	8.3	44.1
Green Ext Time (p_c), s	0.0	5.3		3.2	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	53.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Future Volume (veh/h)	150	160	140	50	740	130	300	990	30	60	820	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810	1810
Adj Flow Rate, veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
Arrive On Green	0.11	0.32	0.32	0.04	0.25	0.25	0.20	0.46	0.00	0.05	0.31	0.00
Sat Flow, veh/h	1723	3438	1537	1723	3438	1536	1723	3438	1538	1723	3438	1538
Grp Volume(v), veh/h	156	167	146	52	771	135	312	1031	0	62	854	0
Grp Sat Flow(s),veh/h/ln	1723	1719	1537	1723	1719	1536	1723	1719	1538	1723	1719	1538
Q Serve(g_s), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Cycle Q Clear(g_c), s	10.1	4.0	8.2	3.4	24.8	8.3	20.2	26.4	0.0	4.1	26.1	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	183	1088	486	66	856	383	341	1577	706	79	1055	472
V/C Ratio(X)	0.85	0.15	0.30	0.78	0.90	0.35	0.91	0.65	0.00	0.78	0.81	0.00
Avail Cap(c_a), veh/h	196	1088	486	136	904	404	393	1577	706	151	1055	472
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.1	28.0	29.4	54.4	41.5	35.3	44.8	23.9	0.0	53.9	36.5	0.0
Incr Delay (d2), s/veh	27.5	0.1	0.3	18.0	11.6	0.6	23.7	2.1	0.0	15.4	6.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	1.9	3.5	2.0	13.2	3.6	11.9	12.9	0.0	2.3	13.3	0.0
LnGrp Delay(d), s/veh	77.6	28.1	29.8	72.4	53.1	35.8	68.6	26.0	0.0	69.2	43.2	0.0
LnGrp LOS	E	C	C	E	D	D	E	C		E	D	
Approach Vol, veh/h		469			958			1343			916	
Approach Delay, s/veh		45.1			51.7			35.9			45.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.2	56.3	8.4	40.1	26.6	39.0	16.1	32.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	51.0	9.0	34.0	26.0	35.0	13.0	30.0
Max Q Clear Time (g_c+I1), s	6.1	28.4	5.4	10.2	22.2	28.1	12.1	26.8
Green Ext Time (p_c), s	0.0	7.4	0.0	1.4	0.3	3.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	180	630	200	160	790	20	220	560	100	30	550	130
Future Volume (veh/h)	180	630	200	160	790	20	220	560	100	30	550	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743	1743	1743	1900	1743	1743	1743
Adj Flow Rate, veh/h	189	663	0	168	832	21	232	589	105	32	579	137
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	9	9	9	9	9	9	9	9	9	9	9	9
Cap, veh/h	219	1002	448	198	961	426	263	1640	287	39	891	386
Arrive On Green	0.13	0.30	0.00	0.12	0.29	0.29	0.16	0.40	0.40	0.02	0.27	0.27
Sat Flow, veh/h	1660	3312	1482	1660	3312	1469	1660	4058	710	1660	3312	1435
Grp Volume(v), veh/h	189	663	0	168	832	21	232	458	236	32	579	137
Grp Sat Flow(s),veh/h/ln	1660	1656	1482	1660	1656	1469	1660	1586	1596	1660	1656	1435
Q Serve(g_s), s	11.9	18.6	0.0	10.5	25.3	1.1	14.5	10.7	11.0	2.0	16.5	8.2
Cycle Q Clear(g_c), s	11.9	18.6	0.0	10.5	25.3	1.1	14.5	10.7	11.0	2.0	16.5	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		1.00
Lane Grp Cap(c), veh/h	219	1002	448	198	961	426	263	1282	645	39	891	386
V/C Ratio(X)	0.86	0.66	0.00	0.85	0.87	0.05	0.88	0.36	0.37	0.83	0.65	0.35
Avail Cap(c_a), veh/h	297	1059	474	328	1121	497	359	1282	645	94	891	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.2	32.3	0.0	45.9	35.8	27.2	43.8	22.1	22.2	51.7	34.5	31.4
Incr Delay (d2), s/veh	17.5	1.4	0.0	10.3	6.5	0.0	17.1	0.8	1.6	33.8	3.7	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	8.7	0.0	5.4	12.4	0.5	7.9	4.8	5.1	1.3	8.0	3.5
LnGrp Delay(d), s/veh	62.7	33.8	0.0	56.1	42.3	27.2	60.9	22.8	23.8	85.5	38.1	34.0
LnGrp LOS	E	C		E	D	C	E	C	C	F	D	C
Approach Vol, veh/h		852			1021			926			748	
Approach Delay, s/veh		40.2			44.2			32.6			39.4	
Approach LOS		D			D			C			D	

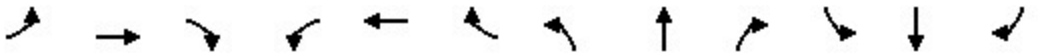
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	47.0	16.7	36.2	20.9	32.6	18.0	34.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	21.0	34.0	23.0	26.0	19.0	36.0
Max Q Clear Time (g_c+I1), s	4.0	13.0	12.5	20.6	16.5	18.5	13.9	27.3
Green Ext Time (p_c), s	0.0	4.7	0.3	3.5	0.3	2.5	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Future Volume (veh/h)	70	410	200	100	930	20	160	460	30	40	500	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	432	211	105	979	21	168	484	32	42	526	21
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	96	1152	507	135	1229	548	205	1983	130	53	1611	64
Arrive On Green	0.05	0.32	0.32	0.08	0.34	0.34	0.11	0.40	0.40	0.03	0.32	0.32
Sat Flow, veh/h	1792	3574	1573	1792	3574	1593	1792	4919	322	1792	5063	201
Grp Volume(v), veh/h	74	432	211	105	979	21	168	335	181	42	355	192
Grp Sat Flow(s),veh/h/ln	1792	1787	1573	1792	1787	1593	1792	1712	1817	1792	1712	1840
Q Serve(g_s), s	3.8	8.8	9.9	5.4	23.3	0.8	8.6	6.1	6.2	2.2	7.4	7.5
Cycle Q Clear(g_c), s	3.8	8.8	9.9	5.4	23.3	0.8	8.6	6.1	6.2	2.2	7.4	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		0.11
Lane Grp Cap(c), veh/h	96	1152	507	135	1229	548	205	1380	733	53	1089	586
V/C Ratio(X)	0.77	0.37	0.42	0.78	0.80	0.04	0.82	0.24	0.25	0.79	0.33	0.33
Avail Cap(c_a), veh/h	190	1630	717	304	1858	828	418	1380	733	133	1089	586
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	24.6	25.0	42.8	27.9	20.6	40.8	18.6	18.6	45.4	24.4	24.5
Incr Delay (d2), s/veh	12.3	0.2	0.5	9.4	1.5	0.0	7.8	0.4	0.8	22.0	0.8	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.2	4.4	4.3	3.0	11.7	0.4	4.7	3.0	3.3	1.4	3.6	4.0
LnGrp Delay(d), s/veh	56.4	24.8	25.5	52.2	29.4	20.6	48.5	19.0	19.4	67.4	25.2	26.0
LnGrp LOS	E	C	C	D	C	C	D	B	B	E	C	C
Approach Vol, veh/h		717			1105			684			589	
Approach Delay, s/veh		28.3			31.4			26.4			28.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.8	42.0	11.1	34.4	14.8	34.0	9.0	36.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	38.0	16.0	43.0	22.0	23.0	10.0	49.0
Max Q Clear Time (g_c+I1), s	4.2	8.2	7.4	11.9	10.6	9.5	5.8	25.3
Green Ext Time (p_c), s	0.0	3.2	0.1	3.6	0.3	2.7	0.0	7.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	500	0	120	1340	0	0	0	0	570	0	110
Future Volume (vph)	0	500	0	120	1340	0	0	0	0	570	0	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3374		1684	4848					3273		1509
Flt Permitted		1.00		0.38	1.00					0.95		1.00
Satd. Flow (perm)		3374		665	4848					3273		1509
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	549	0	132	1473	0	0	0	0	626	0	121
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	14
Lane Group Flow (vph)	0	549	0	132	1473	0	0	0	0	626	0	107
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		41.1		41.1	41.1					47.4		47.4
Effective Green, g (s)		41.1		41.1	41.1					47.4		47.4
Actuated g/C Ratio		0.43		0.43	0.43					0.49		0.49
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1437		283	2064					1607		741
v/s Ratio Prot		0.16			c0.30							
v/s Ratio Perm				0.20						c0.19		0.07
v/c Ratio		0.38		0.47	0.71					0.39		0.14
Uniform Delay, d1		19.0		19.8	22.8					15.4		13.4
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		1.2	1.2					0.7		0.4
Delay (s)		19.2		21.1	24.0					16.2		13.9
Level of Service		B		C	C					B		B
Approach Delay (s/veh)		19.2			23.8			0.0			15.8	
Approach LOS		B			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	96.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	48.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Future Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	139	748	147	16	871	554	159	158	0	241	683	42
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	198	1094	215	25	1168	609	231	1135	508	275	1447	635
Arrive On Green	0.06	0.37	0.37	0.01	0.33	0.33	0.07	0.32	0.00	0.15	0.40	0.40
Sat Flow, veh/h	3476	2960	581	1792	3574	1539	3476	3574	1599	1792	3574	1568
Grp Volume(v), veh/h	139	452	443	16	871	554	159	158	0	241	683	42
Grp Sat Flow(s),veh/h/ln	1738	1787	1754	1792	1787	1539	1738	1787	1599	1792	1787	1568
Q Serve(g_s), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Cycle Q Clear(g_c), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	660	648	25	1168	609	231	1135	508	275	1447	635
V/C Ratio(X)	0.70	0.68	0.68	0.64	0.75	0.91	0.69	0.14	0.00	0.88	0.47	0.07
Avail Cap(c_a), veh/h	221	660	648	65	1168	609	852	1135	508	423	1447	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	29.3	29.3	54.0	33.0	31.7	50.3	26.8	0.0	45.6	24.1	20.1
Incr Delay (d2), s/veh	8.5	2.9	3.0	23.5	2.7	17.8	3.6	0.3	0.0	12.3	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	12.1	11.9	0.6	12.2	18.8	2.5	1.8	0.0	8.1	7.8	0.8
LnGrp Delay(d), s/veh	59.6	32.2	32.3	77.6	35.7	49.5	54.0	27.1	0.0	57.9	25.2	20.3
LnGrp LOS	E	C	C	E	D	D	D	C		E	C	C
Approach Vol, veh/h		1034			1441			317			966	
Approach Delay, s/veh		35.9			41.5			40.6			33.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	48.6	5.5	44.7	20.9	39.0	10.3	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	34.0	4.0	39.0	26.0	35.0	7.0	36.0
Max Q Clear Time (g_c+I1), s	6.9	17.5	3.0	25.5	16.5	5.5	6.3	38.0
Green Ext Time (p_c), s	0.4	4.0	0.0	4.6	0.4	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Future Volume (veh/h)	160	740	40	60	1220	160	190	1090	20	210	1290	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	167	771	42	62	1271	167	198	1135	21	219	1344	333
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	164	1563	85	80	1222	161	194	1370	608	224	1430	773
Arrive On Green	0.09	0.31	0.31	0.04	0.27	0.27	0.11	0.38	0.38	0.13	0.40	0.40
Sat Flow, veh/h	1792	4981	270	1792	4583	602	1792	3574	1586	1792	3574	1567
Grp Volume(v), veh/h	167	529	284	62	949	489	198	1135	21	219	1344	333
Grp Sat Flow(s),veh/h/ln	1792	1712	1828	1792	1712	1762	1792	1787	1586	1792	1787	1567
Q Serve(g_s), s	11.0	15.1	15.1	4.1	32.0	32.0	13.0	34.4	1.0	14.6	43.4	16.5
Cycle Q Clear(g_c), s	11.0	15.1	15.1	4.1	32.0	32.0	13.0	34.4	1.0	14.6	43.4	16.5
Prop In Lane	1.00		0.15	1.00		0.34	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	1074	573	80	913	470	194	1370	608	224	1430	773
V/C Ratio(X)	1.02	0.49	0.50	0.78	1.04	1.04	1.02	0.83	0.03	0.98	0.94	0.43
Avail Cap(c_a), veh/h	164	1074	573	134	913	470	194	1370	608	224	1430	773
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	33.4	33.5	56.7	44.0	44.0	53.5	33.4	23.1	52.3	34.6	19.7
Incr Delay (d2), s/veh	74.7	0.4	0.7	14.7	40.7	52.3	69.9	5.9	0.1	53.7	13.2	1.7
Initial Q Delay(d3),s/veh	0.2	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	7.2	7.8	2.4	20.2	22.4	10.2	18.0	0.4	10.6	23.9	7.5
LnGrp Delay(d), s/veh	129.4	33.8	34.1	71.4	84.7	96.3	123.6	39.3	23.2	106.0	47.9	21.4
LnGrp LOS	F	C	C	E	F	F	F	D	C	F	D	C
Approach Vol, veh/h		980			1500			1354			1896	
Approach Delay, s/veh		50.2			87.9			51.4			49.9	
Approach LOS		D			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	50.0	9.4	41.6	17.0	52.0	15.0	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	46.0	9.0	34.0	13.0	48.0	11.0	32.0
Max Q Clear Time (g_c+I1), s	16.6	36.4	6.1	17.1	15.0	45.4	13.0	34.0
Green Ext Time (p_c), s	0.0	5.1	0.0	4.6	0.0	2.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Future Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	90	883	149	145	1386	122	83	434	58	99	546	157
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1477	248	178	1776	156	300	1611	654	404	1206	345
Arrive On Green	0.06	0.34	0.34	0.10	0.37	0.37	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1792	4408	740	1792	4800	423	747	3574	1451	893	2676	765
Grp Volume(v), veh/h	90	685	347	145	989	519	83	434	58	99	363	340
Grp Sat Flow(s),veh/h/ln	1792	1712	1724	1792	1712	1799	747	1787	1451	893	1787	1654
Q Serve(g_s), s	5.2	17.3	17.5	8.3	26.7	26.7	9.0	7.9	2.4	8.1	14.6	14.8
Cycle Q Clear(g_c), s	5.2	17.3	17.5	8.3	26.7	26.7	23.8	7.9	2.4	16.0	14.6	14.8
Prop In Lane	1.00		0.43	1.00		0.23	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	115	1147	578	178	1267	665	300	1611	654	404	805	745
V/C Ratio(X)	0.78	0.60	0.60	0.82	0.78	0.78	0.28	0.27	0.09	0.25	0.45	0.46
Avail Cap(c_a), veh/h	223	1346	678	344	1576	828	300	1611	654	404	805	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	28.8	28.9	46.0	29.1	29.1	28.0	17.9	16.4	22.9	19.7	19.8
Incr Delay (d2), s/veh	10.9	0.5	1.1	8.8	2.1	3.8	2.3	0.4	0.3	1.4	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.3	8.5	4.5	13.0	14.0	2.0	4.0	1.0	2.2	7.6	7.1
LnGrp Delay(d), s/veh	58.9	29.4	30.0	54.8	31.2	33.0	30.3	18.3	16.7	24.4	21.6	21.8
LnGrp LOS	E	C	C	D	C	C	C	B	B	C	C	C
Approach Vol, veh/h		1122			1653			575			802	
Approach Delay, s/veh		31.9			33.8			19.9			22.0	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	14.3	38.9		51.0	10.7	42.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	20.0	41.0		47.0	13.0	48.0
Max Q Clear Time (g_c+I1), s		25.8	10.3	19.5		18.0	7.2	28.7
Green Ext Time (p_c), s		3.9	0.2	6.8		5.7	0.1	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Future Volume (veh/h)	140	860	50	120	1310	80	90	370	60	310	390	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		0.88	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	151	925	54	129	1409	86	97	398	65	333	419	151
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	1642	96	157	1575	96	122	591	444	390	898	318
Arrive On Green	0.10	0.34	0.34	0.09	0.33	0.33	0.07	0.32	0.32	0.11	0.37	0.37
Sat Flow, veh/h	1757	4861	283	1757	4839	295	1757	1845	1387	3408	2458	870
Grp Volume(v), veh/h	151	638	341	129	977	518	97	398	65	333	297	273
Grp Sat Flow(s),veh/h/ln	1757	1679	1786	1757	1679	1777	1757	1845	1387	1704	1752	1575
Q Serve(g_s), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Cycle Q Clear(g_c), s	9.8	18.0	18.0	8.3	32.0	32.0	6.3	21.6	3.9	11.1	14.9	15.4
Prop In Lane	1.00		0.16	1.00		0.17	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	179	1134	603	157	1092	578	122	591	444	390	640	575
V/C Ratio(X)	0.85	0.56	0.56	0.82	0.89	0.89	0.80	0.67	0.15	0.85	0.46	0.48
Avail Cap(c_a), veh/h	213	1134	603	243	1133	600	198	591	444	413	640	575
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	31.3	31.3	51.7	37.1	37.1	53.0	34.0	28.0	50.2	28.0	28.2
Incr Delay (d2), s/veh	22.7	0.6	1.2	12.2	9.2	15.6	11.3	6.0	0.7	15.3	2.4	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	8.4	9.1	4.6	16.2	18.2	3.4	11.9	1.6	6.1	7.7	7.1
LnGrp Delay(d), s/veh	73.7	31.9	32.5	64.0	46.3	52.7	64.2	40.1	28.7	65.6	30.4	31.0
LnGrp LOS	E	C	C	E	D	D	E	D	C	E	C	C
Approach Vol, veh/h		1130			1624			560			903	
Approach Delay, s/veh		37.7			49.7			43.0			43.5	
Approach LOS		D			D			D			D	

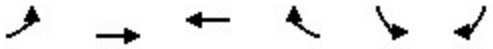
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.2	41.0	14.3	43.0	12.0	46.2	15.7	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	37.0	16.0	37.0	13.0	38.0	14.0	39.0
Max Q Clear Time (g_c+I1), s	13.1	23.6	10.3	20.0	8.3	17.4	11.8	34.0
Green Ext Time (p_c), s	0.1	2.4	0.1	5.7	0.1	3.8	0.1	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Future Volume (veh/h)	80	750	370	160	1440	90	540	340	430	210	320	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	85	798	394	170	1532	96	574	362	457	223	340	543
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	59	727	328	161	1330	83	512	1458	640	250	935	414
Arrive On Green	0.03	0.22	0.22	0.09	0.28	0.28	0.29	0.42	0.42	0.14	0.27	0.27
Sat Flow, veh/h	1757	3357	1516	1757	4835	303	1757	3505	1539	1757	3505	1554
Grp Volume(v), veh/h	85	798	394	170	1064	564	574	362	457	223	340	543
Grp Sat Flow(s),veh/h/ln	1757	1679	1516	1757	1679	1781	1757	1752	1539	1757	1752	1554
Q Serve(g_s), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Cycle Q Clear(g_c), s	4.0	26.0	26.0	11.0	33.0	33.0	35.0	8.1	29.6	15.0	9.5	32.0
Prop In Lane	1.00		1.00	1.00		0.17	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	59	727	328	161	923	490	512	1458	640	250	935	414
V/C Ratio(X)	1.45	1.10	1.20	1.06	1.15	1.15	1.12	0.25	0.71	0.89	0.36	1.31
Avail Cap(c_a), veh/h	59	727	328	161	923	490	512	1458	640	278	935	414
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.0	47.0	47.0	54.5	43.5	43.5	42.5	22.8	29.1	50.6	35.7	44.0
Incr Delay (d2), s/veh	275.9	63.0	115.5	86.4	80.9	89.9	77.1	0.4	6.7	26.5	1.1	156.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	18.4	21.4	9.2	25.6	28.4	27.9	4.0	13.8	9.1	4.7	31.7
LnGrp Delay(d), s/veh	333.9	110.0	162.5	141.0	124.4	133.4	119.6	23.2	35.8	77.0	36.8	200.1
LnGrp LOS	F	F	F	F	F	F	F	C	D	E	D	F
Approach Vol, veh/h		1277			1798			1393			1106	
Approach Delay, s/veh		141.1			128.8			67.0			125.1	
Approach LOS		F			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.1	53.9	15.0	30.0	39.0	36.0	8.0	37.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	48.0	11.0	26.0	35.0	32.0	4.0	33.0
Max Q Clear Time (g_c+I1), s	17.0	31.6	13.0	28.0	37.0	34.0	6.0	35.0
Green Ext Time (p_c), s	0.1	3.7	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		115.5
HCM 2010 LOS		F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	30	320	1050	40	30	180
Future Volume (veh/h)	30	320	1050	40	30	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1743	1743	1743	1743	1743	1743
Adj Flow Rate, veh/h	33	356	1167	44	33	200
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	9	9	9	9	9	9
Cap, veh/h	165	1528	1528	668	724	646
Arrive On Green	0.46	0.46	0.46	0.46	0.44	0.44
Sat Flow, veh/h	430	3399	3399	1448	1660	1482
Grp Volume(v), veh/h	33	356	1167	44	33	200
Grp Sat Flow(s),veh/h/ln	430	1656	1656	1448	1660	1482
Q Serve(g_s), s	5.4	5.1	22.9	1.3	0.9	6.9
Cycle Q Clear(g_c), s	28.2	5.1	22.9	1.3	0.9	6.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	165	1528	1528	668	724	646
V/C Ratio(X)	0.20	0.23	0.76	0.07	0.05	0.31
Avail Cap(c_a), veh/h	396	3313	3313	1449	724	646
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.2	12.7	17.5	11.7	12.7	14.3
Incr Delay (d2), s/veh	0.6	0.1	0.8	0.0	0.1	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	2.3	10.5	0.5	0.4	3.0
LnGrp Delay(d), s/veh	29.8	12.8	18.3	11.7	12.8	15.6
LnGrp LOS	C	B	B	B	B	B
Approach Vol, veh/h		389	1211		233	
Approach Delay, s/veh		14.2	18.0		15.2	
Approach LOS		B	B		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				40.0		38.0		40.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				78.0		34.0		78.0
Max Q Clear Time (g_c+I1), s				30.2		8.9		24.9
Green Ext Time (p_c), s				3.0		0.8		11.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Future Volume (veh/h)	90	240	50	190	730	250	90	990	140	70	630	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	97	258	54	204	785	269	97	1065	0	75	677	237
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	120	1132	499	264	851	292	121	1338	599	95	1286	551
Arrive On Green	0.07	0.33	0.33	0.08	0.34	0.34	0.07	0.39	0.00	0.06	0.38	0.38
Sat Flow, veh/h	1707	3406	1503	3312	2490	853	1707	3406	1524	1707	3406	1460
Grp Volume(v), veh/h	97	258	54	204	537	517	97	1065	0	75	677	237
Grp Sat Flow(s),veh/h/ln	1707	1703	1503	1656	1703	1640	1707	1703	1524	1707	1703	1460
Q Serve(g_s), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Cycle Q Clear(g_c), s	6.4	6.3	2.9	6.9	34.7	34.7	6.4	31.6	0.0	5.0	17.7	13.8
Prop In Lane	1.00		1.00	1.00		0.52	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	120	1132	499	264	582	561	121	1338	599	95	1286	551
V/C Ratio(X)	0.81	0.23	0.11	0.77	0.92	0.92	0.80	0.80	0.00	0.79	0.53	0.43
Avail Cap(c_a), veh/h	149	1132	499	376	609	587	194	1338	599	119	1286	551
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	27.6	26.5	51.7	36.2	36.2	52.4	30.7	0.0	53.5	27.7	26.5
Incr Delay (d2), s/veh	22.6	0.1	0.1	6.2	19.2	19.8	11.7	5.0	0.0	24.3	1.5	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	3.0	1.2	3.4	19.4	18.8	3.4	15.7	0.0	3.0	8.6	5.9
LnGrp Delay(d), s/veh	75.1	27.7	26.6	57.9	55.5	56.1	64.2	35.7	0.0	77.7	29.2	28.9
LnGrp LOS	E	C	C	E	E	E	E	D		E	C	C
Approach Vol, veh/h		409			1258			1162			989	
Approach Delay, s/veh		38.8			56.1			38.1			32.8	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.3	49.0	13.1	42.1	12.1	47.2	12.1	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	13.0	38.0	13.0	40.0	10.0	41.0
Max Q Clear Time (g_c+I1), s	7.0	33.6	8.9	8.3	8.4	19.7	8.4	36.7
Green Ext Time (p_c), s	0.0	5.4	0.2	1.8	0.1	5.2	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.7
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1.1

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	30	430	1280	50	20	20
Future Vol, veh/h	30	430	1280	50	20	20
Conflicting Peds, #/hr	1	0	0	1	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	200	-	-	25	0	25
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	9	9	9	9	9	9
Mvmt Flow	31	448	1333	52	21	21

Major/Minor	Major1			Major2			Minor2		
Conflicting Flow All	1386	0	-	0	1620	668			
Stage 1	-	-	-	-	1334	-			
Stage 2	-	-	-	-	286	-			
Critical Hdwy	4.28	-	-	-	6.98	7.08			
Critical Hdwy Stg 1	-	-	-	-	5.98	-			
Critical Hdwy Stg 2	-	-	-	-	5.98	-			
Follow-up Hdwy	2.29	-	-	-	3.59	3.39			
Pot Cap-1 Maneuver	455	-	-	-	87	385			
Stage 1	-	-	-	-	198	-			
Stage 2	-	-	-	-	717	-			
Platoon blocked, %		-	-	-					
Mov Cap-1 Maneuver	455	-	-	-	81	385			
Mov Cap-2 Maneuver	-	-	-	-	81	-			
Stage 1	-	-	-	-	184	-			
Stage 2	-	-	-	-	716	-			

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	39.6
HCM LOS			E

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	455	-	-	-	81	385
HCM Lane V/C Ratio	0.069	-	-	-	0.257	0.054
HCM Control Delay (s/veh)	13.5	-	-	-	64.2	14.9
HCM Lane LOS	B	-	-	-	F	B
HCM 95th %tile Q(veh)	0.2	-	-	-	0.9	0.2

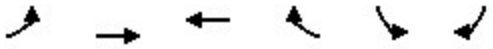
Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Future Vol, veh/h	0	470	10	0	1400	170	0	0	50	0	0	20
Conflicting Peds, #/hr	0	0	2	2	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	0	-	-	0	-	-	0
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	98	98	98	98	98	98	98	98	98	98	98	98
Heavy Vehicles, %	13	13	13	13	13	13	13	13	13	13	13	13
Mvmt Flow	0	480	10	0	1429	173	0	0	51	0	0	20

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	-	0	0	-	-	0	-	-	248	-	-	715
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	-	-	-	7.36	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	-	-	-	4.03	-	-	3.43
Pot Cap-1 Maneuver	0	-	-	0	-	-	0	0	616	0	0	349
Stage 1	0	-	-	0	-	-	0	0	-	0	0	-
Stage 2	0	-	-	0	-	-	0	0	-	0	0	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	-	-	-	-	-	-	-	-	614	-	-	349
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0	0	11.4	16
HCM LOS			B	C

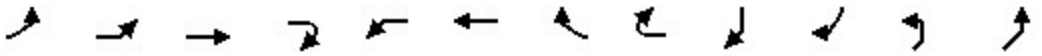
Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT	WBR	SBLn1
Capacity (veh/h)	614	-	-	-	-	349
HCM Lane V/C Ratio	0.083	-	-	-	-	0.058
HCM Control Delay (s/veh)	11.4	-	-	-	-	16
HCM Lane LOS	B	-	-	-	-	C
HCM 95th %tile Q(veh)	0.3	-	-	-	-	0.2



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	130	430	1370	510	250	70
Future Volume (veh/h)	130	430	1370	510	250	70
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	1712	1712	1712	1712	1712
Adj Flow Rate, veh/h	135	448	1427	531	260	73
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	11	11	11	11	11	11
Cap, veh/h	162	2126	1680	736	443	395
Arrive On Green	0.10	0.65	0.52	0.52	0.27	0.27
Sat Flow, veh/h	1630	3338	3338	1424	1630	1455
Grp Volume(v), veh/h	135	448	1427	531	260	73
Grp Sat Flow(s),veh/h/ln	1630	1626	1626	1424	1630	1455
Q Serve(g_s), s	8.7	5.9	40.4	30.7	14.8	4.1
Cycle Q Clear(g_c), s	8.7	5.9	40.4	30.7	14.8	4.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	162	2126	1680	736	443	395
V/C Ratio(X)	0.83	0.21	0.85	0.72	0.59	0.18
Avail Cap(c_a), veh/h	244	2528	1919	840	443	395
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	7.4	22.2	19.9	33.7	29.8
Incr Delay (d2), s/veh	13.9	0.0	3.4	2.6	5.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	2.6	18.8	12.5	7.3	3.8
LnGrp Delay(d), s/veh	61.1	7.5	25.7	22.5	39.3	30.9
LnGrp LOS	E	A	C	C	D	C
Approach Vol, veh/h		583	1958		333	
Approach Delay, s/veh		19.9	24.8		37.5	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				73.8		33.0	14.6	59.2
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				83.0		29.0	16.0	63.0
Max Q Clear Time (g_c+I1), s				7.9		16.8	10.7	42.4
Green Ext Time (p_c), s				3.1		0.9	0.1	12.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.3
HCM 2010 LOS	C



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	350	180	760	190	190	1050	160	150	180	1080	100	910
Future Volume (vph)	350	180	760	190	190	1050	160	150	180	1080	100	910
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.96	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.99	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1424		4501	1423	1656	1743	1463	1583	1304	1482	1656	3213
Flt Permitted	0.95		0.70	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1424		3169	1423	1656	1743	1463	1583	1304	1482	1656	3213
Peak-hour factor, PHF	0.91	0.92	0.91	0.91	0.91	0.91	0.91	0.92	0.91	0.91	0.91	0.91
Adj. Flow (vph)	385	196	835	209	209	1154	176	163	198	1187	110	1000
RTOR Reduction (vph)	0	0	0	78	0	0	0	107	87	64	0	0
Lane Group Flow (vph)	343	0	1073	131	209	1154	176	56	610	624	110	1000
Confl. Peds. (#/hr)				12	12							
Confl. Bikes (#/hr)				2			1					
Heavy Vehicles (%)	9%	2%	9%	9%	9%	9%	9%	2%	9%	9%	9%	9%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	pm+ov	Prot	Prot
Protected Phases	7	7	4		3	8				7!	5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	14.0		55.0	41.0	14.0	41.0	41.0	41.0	32.0	46.0	17.0	17.0
Effective Green, g (s)	14.0		55.0	41.0	14.0	41.0	41.0	41.0	32.0	46.0	17.0	17.0
Actuated g/C Ratio	0.12		0.46	0.34	0.12	0.34	0.34	0.34	0.27	0.38	0.14	0.14
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	166		1607	486	193	595	499	540	347	617	234	455
v/s Ratio Prot	c0.24		0.08		0.13	c0.66				0.12	0.07	c0.31
v/s Ratio Perm			0.23	0.09			0.12	0.04	c0.47	0.30		
v/c Ratio	2.07		1.23dl	0.27	1.08	1.94	0.35	0.10	1.76	1.01	0.47	2.20
Uniform Delay, d1	53.0		25.4	28.6	53.0	39.5	29.6	27.0	44.0	37.0	47.4	51.5
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	500.0		1.1	0.3	88.6	428.9	0.4	0.1	353.3	39.0	1.5	546.2
Delay (s)	553.0		26.4	29.0	141.6	468.4	30.0	27.0	397.3	76.0	48.8	597.7
Level of Service	F		C	C	F	F	C	C	F	E	D	F
Approach Delay (s/veh)			137.9			340.7						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	226.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	157.8%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
! Phase conflict between lane groups.
c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	750	360	80	860
Future Volume (vph)	750	360	80	860
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.95		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4691		1770	5085
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4691		1770	5085
Peak-hour factor, PHF	0.92	0.91	0.92	0.92
Adj. Flow (vph)	815	396	87	935
RTOR Reduction (vph)	72	0	0	0
Lane Group Flow (vph)	1139	0	87	935
Confl. Peds. (#/hr)		5		
Confl. Bikes (#/hr)		3		
Heavy Vehicles (%)	2%	9%	2%	2%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	40.4		8.6	32.0
Effective Green, g (s)	40.4		8.6	32.0
Actuated g/C Ratio	0.34		0.07	0.27
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	1579		126	1356
v/s Ratio Prot	0.24		0.05	0.18
v/s Ratio Perm				
v/c Ratio	0.72		0.69	0.69
Uniform Delay, d1	34.9		54.4	39.5
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	2.9		15.1	2.9
Delay (s)	37.7		69.5	42.4
Level of Service	D		E	D
Approach Delay (s/veh)	279.5			44.7
Approach LOS	F			D

Intersection Summary

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Future Volume (veh/h)	410	750	110	80	700	70	70	340	350	90	650	100
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1900	1759	1759	1759	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	461	843	124	90	787	0	79	382	393	101	730	112
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	541	1452	214	113	1334	597	100	1019	555	125	1093	424
Arrive On Green	0.17	0.50	0.50	0.07	0.40	0.00	0.06	0.21	0.21	0.07	0.23	0.23
Sat Flow, veh/h	3250	2916	429	1675	3343	1495	1675	4803	1445	1675	4803	1420
Grp Volume(v), veh/h	461	483	484	90	787	0	79	382	393	101	730	112
Grp Sat Flow(s),veh/h/ln	1625	1671	1673	1675	1671	1495	1675	1601	1445	1675	1601	1420
Q Serve(g_s), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.5
Cycle Q Clear(g_c), s	14.9	22.1	22.1	5.7	20.1	0.0	5.0	7.4	23.0	6.4	15.0	6.5
Prop In Lane	1.00		0.26	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	541	832	833	113	1334	597	100	1019	555	125	1093	424
V/C Ratio(X)	0.85	0.58	0.58	0.80	0.59	0.00	0.79	0.37	0.71	0.81	0.67	0.26
Avail Cap(c_a), veh/h	750	832	833	201	1334	597	185	1019	555	216	1108	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.9	19.2	19.2	49.8	25.6	0.0	50.3	36.6	28.8	49.4	38.1	29.3
Incr Delay (d2), s/veh	6.9	2.9	2.9	12.1	1.9	0.0	13.1	0.2	4.1	11.3	1.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.2	10.9	10.9	3.0	9.5	0.0	2.7	3.3	10.6	3.4	6.8	2.6
LnGrp Delay(d), s/veh	50.8	22.2	22.2	61.9	27.5	0.0	63.5	36.8	32.9	60.7	39.7	29.6
LnGrp LOS	D	C	C	E	C		E	D	C	E	D	C
Approach Vol, veh/h		1428			877			854			943	
Approach Delay, s/veh		31.4			31.1			37.5			40.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	58.0	12.1	27.0	22.0	47.3	10.4	28.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	54.0	14.0	23.0	25.0	42.0	12.0	25.0
Max Q Clear Time (g_c+I1), s	7.7	24.1	8.4	25.0	16.9	22.1	7.0	17.0
Green Ext Time (p_c), s	0.1	6.7	0.1	0.0	1.1	5.1	0.1	3.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Future Volume (veh/h)	130	180	50	140	190	250	100	1080	80	220	1150	580
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
Arrive On Green	0.09	0.08	0.08	0.10	0.09	0.00	0.07	0.51	0.51	0.15	0.58	0.58
Sat Flow, veh/h	1707	3406	1482	1707	3406	1524	1707	3406	1474	1707	3406	1493
Grp Volume(v), veh/h	130	180	50	140	190	0	100	1080	80	220	1150	580
Grp Sat Flow(s),veh/h/ln	1707	1703	1482	1707	1703	1524	1707	1703	1474	1707	1703	1493
Q Serve(g_s), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Cycle Q Clear(g_c), s	7.6	5.2	3.2	8.1	5.4	0.0	5.8	23.1	2.9	12.7	21.4	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	159	288	125	170	310	139	126	1731	749	254	1988	872
V/C Ratio(X)	0.82	0.62	0.40	0.82	0.61	0.00	0.80	0.62	0.11	0.86	0.58	0.67
Avail Cap(c_a), veh/h	253	539	235	270	573	256	220	1731	749	389	1988	872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.0	44.7	43.8	44.6	44.2	0.0	46.1	17.9	12.9	42.0	13.2	14.3
Incr Delay (d2), s/veh	10.5	2.2	2.0	10.5	2.0	0.0	10.8	1.7	0.3	12.1	1.2	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	2.5	1.4	4.3	2.6	0.0	3.1	11.2	1.2	6.8	10.4	11.9
LnGrp Delay(d), s/veh	55.5	46.9	45.9	55.2	46.2	0.0	56.9	19.6	13.2	54.1	14.4	18.3
LnGrp LOS	E	D	D	E	D		E	B	B	D	B	B
Approach Vol, veh/h		360			330			1260			1950	
Approach Delay, s/veh		49.9			50.0			22.2			20.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.1	55.4	14.1	12.5	11.4	63.0	13.4	13.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	49.0	16.0	16.0	13.0	59.0	15.0	17.0
Max Q Clear Time (g_c+I1), s	14.7	25.1	10.1	7.2	7.8	28.7	9.6	7.4
Green Ext Time (p_c), s	0.4	8.3	0.2	0.7	0.1	12.9	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Future Volume (veh/h)	40	100	50	30	270	120	230	1100	40	110	950	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	42	104	52	31	281	125	240	1146	0	115	990	94
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	145	303	151	335	312	139	347	1729	773	276	1594	689
Arrive On Green	0.03	0.27	0.27	0.02	0.27	0.27	0.09	0.51	0.00	0.05	0.47	0.47
Sat Flow, veh/h	1707	1119	559	1707	1173	522	1707	3406	1524	1707	3406	1472
Grp Volume(v), veh/h	42	0	156	31	0	406	240	1146	0	115	990	94
Grp Sat Flow(s),veh/h/ln	1707	0	1678	1707	0	1695	1707	1703	1524	1707	1703	1472
Q Serve(g_s), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Cycle Q Clear(g_c), s	1.9	0.0	8.1	1.4	0.0	25.0	7.5	27.1	0.0	3.8	23.6	3.9
Prop In Lane	1.00		0.33	1.00		0.31	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	145	0	454	335	0	451	347	1729	773	276	1594	689
V/C Ratio(X)	0.29	0.00	0.34	0.09	0.00	0.90	0.69	0.66	0.00	0.42	0.62	0.14
Avail Cap(c_a), veh/h	163	0	573	359	0	579	475	1729	773	314	1594	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	31.8	28.2	0.0	38.3	17.1	19.8	0.0	16.6	21.6	16.4
Incr Delay (d2), s/veh	1.1	0.0	0.4	0.1	0.0	14.4	2.6	2.0	0.0	1.0	1.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	0.0	3.8	0.7	0.0	13.5	3.7	13.1	0.0	1.8	11.4	1.7
LnGrp Delay(d), s/veh	31.9	0.0	32.2	28.3	0.0	52.7	19.6	21.8	0.0	17.6	23.5	16.8
LnGrp LOS	C		C	C		D	B	C		B	C	B
Approach Vol, veh/h		198			437			1386			1199	
Approach Delay, s/veh		32.2			51.0			21.4			22.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.6	59.0	6.4	33.3	13.9	54.7	6.9	32.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	55.0	4.0	37.0	18.0	45.0	4.0	37.0
Max Q Clear Time (g_c+I1), s	5.8	29.1	3.4	10.1	9.5	25.6	3.9	27.0
Green Ext Time (p_c), s	0.1	9.3	0.0	0.9	0.4	7.2	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Future Volume (veh/h)	270	360	100	190	810	210	50	1070	70	50	850	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1900	1792	1792	1900	1792	1792	1900
Adj Flow Rate, veh/h	281	375	104	198	844	219	52	1115	73	52	885	135
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	318	1062	281	413	939	242	66	1416	93	66	1286	196
Arrive On Green	0.14	0.28	0.28	0.10	0.24	0.24	0.04	0.44	0.44	0.04	0.44	0.44
Sat Flow, veh/h	1707	3824	1011	1707	3874	999	1707	3241	212	1707	2945	449
Grp Volume(v), veh/h	281	317	162	198	710	353	52	585	603	52	512	508
Grp Sat Flow(s),veh/h/ln	1707	1631	1573	1707	1631	1610	1707	1703	1751	1707	1703	1691
Q Serve(g_s), s	13.3	8.7	9.3	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.2	27.2
Cycle Q Clear(g_c), s	13.3	8.7	9.3	9.6	23.6	23.9	3.4	33.1	33.2	3.4	27.2	27.2
Prop In Lane	1.00		0.64	1.00		0.62	1.00		0.12	1.00		0.27
Lane Grp Cap(c), veh/h	318	906	437	413	791	390	66	744	765	66	744	739
V/C Ratio(X)	0.88	0.35	0.37	0.48	0.90	0.90	0.79	0.79	0.79	0.79	0.69	0.69
Avail Cap(c_a), veh/h	399	1018	491	448	814	402	91	744	765	91	744	739
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	32.4	32.6	27.2	41.2	41.2	53.5	27.1	27.1	53.5	25.4	25.4
Incr Delay (d2), s/veh	17.4	0.2	0.5	0.9	12.6	23.0	26.2	8.2	8.1	26.2	5.2	5.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	3.9	4.1	4.6	12.0	13.1	2.1	17.2	17.6	2.1	13.9	13.8
LnGrp Delay(d), s/veh	45.3	32.6	33.1	28.1	53.7	64.3	79.7	35.4	35.2	79.7	30.6	30.6
LnGrp LOS	D	C	C	C	D	E	E	D	D	E	C	C
Approach Vol, veh/h		760			1261			1240			1072	
Approach Delay, s/veh		37.4			52.7			37.2			33.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.3	53.0	15.7	35.2	8.3	53.0	19.7	31.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	49.0	14.0	35.0	6.0	49.0	21.0	28.0
Max Q Clear Time (g_c+I1), s	5.4	35.2	11.6	11.3	5.4	29.2	15.3	25.9
Green Ext Time (p_c), s	0.0	6.6	0.1	2.9	0.0	6.6	0.4	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.7
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	170	10	600	230	0	730
Future Volume (veh/h)	170	10	600	230	0	730
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1810	1810	0	1810
Adj Flow Rate, veh/h	191	11	674	0	0	820
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	5	5	5	5	0	5
Cap, veh/h	276	127	2871	1411	0	2871
Arrive On Green	0.08	0.08	0.84	0.00	0.00	0.84
Sat Flow, veh/h	3343	1538	3529	1538	0	3619
Grp Volume(v), veh/h	191	11	674	0	0	820
Grp Sat Flow(s),veh/h/ln	1672	1538	1719	1538	0	1719
Q Serve(g_s), s	5.4	0.6	3.9	0.0	0.0	5.0
Cycle Q Clear(g_c), s	5.4	0.6	3.9	0.0	0.0	5.0
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	276	127	2871	1411	0	2871
V/C Ratio(X)	0.69	0.09	0.23	0.00	0.00	0.29
Avail Cap(c_a), veh/h	1068	492	2871	1411	0	2871
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	43.3	41.1	1.6	0.0	0.0	1.7
Incr Delay (d2), s/veh	3.1	0.3	0.2	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	0.3	1.9	0.0	0.0	2.4
LnGrp Delay(d), s/veh	46.4	41.4	1.8	0.0	0.0	2.0
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	202		674			820
Approach Delay, s/veh	46.1		1.8			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		85.0				85.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		81.0				81.0		31.0
Max Q Clear Time (g_c+I1), s		5.9				7.0		7.4
Green Ext Time (p_c), s		5.0				6.5		0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Future Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	8	251	29	458	618	13	205	8	330	15	13	12
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	14	1617	500	502	3036	64	382	15	353	54	27	25
Arrive On Green	0.01	0.31	0.31	0.28	0.59	0.59	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1792	5136	1589	1792	5174	109	1727	67	1595	1792	894	826
Grp Volume(v), veh/h	8	251	29	458	408	223	213	0	330	15	0	25
Grp Sat Flow(s),veh/h/ln	1792	1712	1589	1792	1712	1859	1795	0	1595	1792	0	1720
Q Serve(g_s), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Cycle Q Clear(g_c), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.06	0.96		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	14	1617	500	502	2009	1091	397	0	353	54	0	52
V/C Ratio(X)	0.56	0.16	0.06	0.91	0.20	0.20	0.54	0.00	0.94	0.28	0.00	0.48
Avail Cap(c_a), veh/h	69	1617	500	793	2009	1091	397	0	353	276	0	265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	25.7	24.9	36.2	10.1	10.1	35.8	0.0	39.7	49.3	0.0	49.6
Incr Delay (d2), s/veh	30.5	0.2	0.2	10.1	0.2	0.4	1.4	0.0	31.7	2.8	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.6	14.1	2.8	3.1	5.5	0.0	12.4	0.5	0.0	0.8
LnGrp Delay(d), s/veh	81.8	25.9	25.1	46.3	10.3	10.5	37.2	0.0	71.5	52.1	0.0	56.5
LnGrp LOS	F	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		288			1089			543			40	
Approach Delay, s/veh		27.3			25.5			58.0			54.8	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	65.0		27.0	33.1	36.7		7.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	61.0		23.0	46.0	19.0		16.0
Max Q Clear Time (g_c+I1), s	2.5	7.8		23.1	27.7	5.7		3.5
Green Ext Time (p_c), s	0.0	4.7		0.0	1.4	1.2		0.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		35.4
HCM 2010 LOS		D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	190	140	560	670	360	10	1110	290	120	1320	70
Future Volume (veh/h)	30	190	140	560	670	360	10	1110	290	120	1320	70
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	32	202	149	596	713	383	11	1181	309	128	1404	74
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	40	556	240	670	1166	651	38	1363	618	155	1848	811
Arrive On Green	0.02	0.16	0.16	0.20	0.34	0.34	0.41	0.41	0.41	0.09	0.53	0.53
Sat Flow, veh/h	1740	3471	1499	3375	3471	1528	11	3348	1517	1740	3471	1524
Grp Volume(v), veh/h	32	202	149	596	713	383	634	558	309	128	1404	74
Grp Sat Flow(s),veh/h/ln	1740	1736	1499	1688	1736	1528	1780	1579	1517	1740	1736	1524
Q Serve(g_s), s	2.0	5.7	10.2	18.9	18.9	21.2	7.5	35.7	16.7	8.0	35.0	2.6
Cycle Q Clear(g_c), s	2.0	5.7	10.2	18.9	18.9	21.2	35.5	35.7	16.7	8.0	35.0	2.6
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	40	556	240	670	1166	651	758	643	618	155	1848	811
V/C Ratio(X)	0.81	0.36	0.62	0.89	0.61	0.59	0.84	0.87	0.50	0.83	0.76	0.09
Avail Cap(c_a), veh/h	79	556	240	766	1166	651	853	731	702	174	2079	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	41.3	43.1	43.0	30.6	24.3	29.7	29.9	24.3	49.4	20.2	12.7
Incr Delay (d2), s/veh	30.4	1.8	11.5	11.5	2.4	3.9	6.7	9.9	0.6	24.8	1.5	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	2.9	5.0	9.9	9.4	9.6	19.0	17.3	7.1	4.9	17.0	1.1
LnGrp Delay(d), s/veh	84.0	43.1	54.6	54.5	33.0	28.2	36.3	39.8	24.9	74.1	21.7	12.7
LnGrp LOS	F	D	D	D	C	C	D	D	C	E	C	B
Approach Vol, veh/h		383			1692			1501			1606	
Approach Delay, s/veh		51.0			39.5			35.3			25.5	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.5	41.0	13.8	48.9	25.9	21.7		62.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0	11.0	51.0	25.0	17.0		66.0
Max Q Clear Time (g_c+I1), s	4.0	23.2	10.0	37.7	20.9	12.2		37.0
Green Ext Time (p_c), s	0.0	5.0	0.0	7.2	0.9	0.7		12.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.8
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	390	220	400	870	670	20
Future Volume (vph)	390	220	400	870	670	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	1.00	
Flt Protected	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (prot)	3471	1553	1736	3471	3366	
Flt Permitted	1.00	1.00	0.95	1.00	0.95	
Satd. Flow (perm)	3471	1553	1736	3471	3366	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	398	224	408	888	684	20
RTOR Reduction (vph)	0	87	0	0	2	0
Lane Group Flow (vph)	398	137	408	888	702	0
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	39.6	68.6	31.6	75.2	29.0	
Effective Green, g (s)	39.6	68.6	31.6	75.2	29.0	
Actuated g/C Ratio	0.35	0.61	0.28	0.67	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1225	1004	488	2326	870	
v/s Ratio Prot	0.11	0.04	c0.24	c0.26	c0.21	
v/s Ratio Perm		0.05				
v/c Ratio	0.32	0.14	0.84	0.38	0.81	
Uniform Delay, d1	26.5	9.2	37.9	8.2	39.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.7	0.1	11.8	0.5	5.5	
Delay (s)	27.2	9.3	49.7	8.7	44.5	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	20.8			21.6	44.5	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	112.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	62.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	424	290	69	407	1072	266
Future Volume (veh/h)	424	290	69	407	1072	266
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	433	0	70	415	1094	271
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	850	391	288	2383	2383	1064
Arrive On Green	0.24	0.00	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3476	1599	401	3668	3668	1595
Grp Volume(v), veh/h	433	0	70	415	1094	271
Grp Sat Flow(s),veh/h/ln	1738	1599	401	1787	1787	1595
Q Serve(g_s), s	9.7	0.0	9.2	3.9	13.2	6.1
Cycle Q Clear(g_c), s	9.7	0.0	22.4	3.9	13.2	6.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	850	391	288	2383	2383	1064
V/C Ratio(X)	0.51	0.00	0.24	0.17	0.46	0.25
Avail Cap(c_a), veh/h	850	391	288	2383	2383	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	12.6	5.7	7.2	6.0
Incr Delay (d2), s/veh	2.2	0.0	0.4	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	1.0	1.9	6.6	2.8
LnGrp Delay(d), s/veh	31.5	0.0	13.0	5.7	7.8	6.6
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	433			485	1365	
Approach Delay, s/veh	31.5			6.7	7.6	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		64.0				64.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		60.0				60.0
Max Q Clear Time (g_c+I1), s		11.7		24.4				15.2
Green Ext Time (p_c), s		1.1		4.0				10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	48.4

Movement	NBL	NBR	SEL	SET	SER	NWL	NWT	NWR	SWL	SWR
Lane Configurations										
Traffic Vol, veh/h	160	0	10	880	0	0	1200	10	10	10
Future Vol, veh/h	160	0	10	880	0	0	1200	10	10	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	-	-	-	None	-	-	None	-	None
Storage Length	350	0	-	-	-	-	-	-	0	-
Veh in Median Storage, #	0	-	-	0	-	-	0	-	0	-
Grade, %	0	-	-	0	-	-	0	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	165	0	10	907	0	0	1237	10	10	10

Major/Minor	Minor1			Major1			Major2			Minor2	
Conflicting Flow All	1546	454	1247	0	-	-	-	0	1716	624	
Stage 1	927	-	-	-	-	-	-	-	1242	-	
Stage 2	619	-	-	-	-	-	-	-	474	-	
Critical Hdwy	7.6	7	4.2	-	-	-	-	-	7.6	7	
Critical Hdwy Stg 1	6.6	-	-	-	-	-	-	-	6.6	-	
Critical Hdwy Stg 2	6.6	-	-	-	-	-	-	-	6.6	-	
Follow-up Hdwy	3.55	3.35	2.25	-	-	-	-	-	3.55	3.35	
Pot Cap-1 Maneuver	~ 76	545	538	-	0	0	-	-	56	421	
Stage 1	283	-	-	-	0	0	-	-	180	-	
Stage 2	436	-	-	-	0	0	-	-	532	-	
Platoon blocked, %				-			-	-			
Mov Cap-1 Maneuver	~ 72	545	538	-	-	-	-	-	17	421	
Mov Cap-2 Maneuver	~ 72	-	-	-	-	-	-	-	17	-	
Stage 1	273	-	-	-	-	-	-	-	173	-	
Stage 2	425	-	-	-	-	-	-	-	163	-	

Approach	NB	SE	NW	SW
HCM Control Delay, s/v	236.7	0.3	0	224.1
HCM LOS	F			F

Minor Lane/Major Mvmt	NBLn1	NBLn2	NWT	NWR	SEL	SET	SWLn1
Capacity (veh/h)	72	545	-	-	538	-	33
HCM Lane V/C Ratio	2.291	0.681	-	-	0.019	-	0.625
HCM Control Delay (s/veh)	$ 714.1	24.5	-	-	11.8	0.2	224.1
HCM Lane LOS	F	C	-	-	B	A	F
HCM 95th %tile Q(veh)	15.6	5.2	-	-	0.1	-	2.1

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	1

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Vol, veh/h	20	20	20	1110	1160	60
Future Vol, veh/h	20	20	20	1110	1160	60
Conflicting Peds, #/hr	0	0	21	0	0	21
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	175	0	100	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	98	98	98	98	98	98
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	20	20	20	1133	1184	61

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1843	644	1266	0	-	0
Stage 1	1236	-	-	-	-	-
Stage 2	607	-	-	-	-	-
Critical Hdwy	6.9	7	4.2	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	2.25	-	-	-
Pot Cap-1 Maneuver	64	408	529	-	-	-
Stage 1	231	-	-	-	-	-
Stage 2	498	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	60	401	520	-	-	-
Mov Cap-2 Maneuver	60	-	-	-	-	-
Stage 1	219	-	-	-	-	-
Stage 2	490	-	-	-	-	-

Approach	SB	SE	NW
HCM Control Delay, s/v	53.9	0.2	0
HCM LOS	F		

Minor Lane/Major Mvmt	NWT	NWR	SEL	SET	SBLn1	SBLn2
Capacity (veh/h)	-	-	520	-	60	401
HCM Lane V/C Ratio	-	-	0.039	-	0.34	0.051
HCM Control Delay (s/veh)	-	-	12.2	-	93.2	14.5
HCM Lane LOS	-	-	B	-	F	B
HCM 95th %tile Q(veh)	-	-	0.1	-	1.2	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	210	1020	280	20	1080	490	80	550	460	340	560	20
Future Volume (veh/h)	210	1020	280	20	1080	490	80	550	460	340	560	20
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1690	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	226	1097	301	22	1161	527	86	591	0	366	602	22
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	241	1523	834	30	1186	607	109	897	401	394	1066	39
Arrive On Green	0.15	0.47	0.47	0.02	0.34	0.34	0.06	0.26	0.00	0.12	0.31	0.31
Sat Flow, veh/h	1609	3211	1405	1740	3471	1493	1740	3471	1553	3375	3411	125
Grp Volume(v), veh/h	226	1097	301	22	1161	527	86	591	0	366	306	318
Grp Sat Flow(s),veh/h/ln	1609	1605	1405	1740	1736	1493	1740	1736	1553	1688	1736	1800
Q Serve(g_s), s	16.7	32.7	13.4	1.5	39.7	39.0	5.9	18.3	0.0	12.9	17.7	17.7
Cycle Q Clear(g_c), s	16.7	32.7	13.4	1.5	39.7	39.0	5.9	18.3	0.0	12.9	17.7	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	241	1523	834	30	1186	607	109	897	401	394	543	563
V/C Ratio(X)	0.94	0.72	0.36	0.73	0.98	0.87	0.79	0.66	0.00	0.93	0.56	0.57
Avail Cap(c_a), veh/h	241	1523	834	72	1186	607	217	897	401	394	543	563
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	25.2	12.8	58.7	39.1	32.9	55.5	39.8	0.0	52.5	34.4	34.4
Incr Delay (d2), s/veh	40.7	1.7	0.3	28.3	21.1	12.7	12.1	3.8	0.0	28.3	4.2	4.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	14.8	5.3	1.0	22.5	18.2	3.2	9.3	0.0	7.5	9.0	9.4
LnGrp Delay(d), s/veh	91.1	26.9	13.0	87.0	60.2	45.7	67.6	43.6	0.0	80.8	38.6	38.5
LnGrp LOS	F	C	B	F	E	D	E	D		F	D	D
Approach Vol, veh/h		1624			1710			677			990	
Approach Delay, s/veh		33.2			56.1			46.6			54.2	
Approach LOS		C			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.5	41.5	6.1	60.9	18.0	35.0	22.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	30.0	5.0	54.0	14.0	31.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	7.9	19.7	3.5	34.7	14.9	20.3	18.7	41.7
Green Ext Time (p_c), s	0.1	2.8	0.0	8.6	0.0	3.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	0.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	10	460	30	60	780
Future Vol, veh/h	20	10	460	30	60	780
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	7	7	7	7	7	7
Mvmt Flow	21	10	479	31	63	813

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1014	242	0	0	512	0
Stage 1	481	-	-	-	-	-
Stage 2	533	-	-	-	-	-
Critical Hdwy	6.94	7.04	-	-	4.24	-
Critical Hdwy Stg 1	5.94	-	-	-	-	-
Critical Hdwy Stg 2	5.94	-	-	-	-	-
Follow-up Hdwy	3.57	3.37	-	-	2.27	-
Pot Cap-1 Maneuver	226	744	-	-	1015	-
Stage 1	573	-	-	-	-	-
Stage 2	539	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	212	743	-	-	1013	-
Mov Cap-2 Maneuver	212	-	-	-	-	-
Stage 1	572	-	-	-	-	-
Stage 2	506	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	19.2	0	0.6
HCM LOS	C		

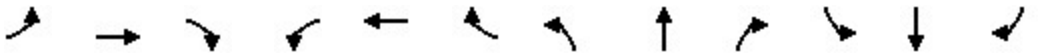
Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	212	743	1013	-
HCM Lane V/C Ratio	-	-	0.098	0.014	0.062	-
HCM Control Delay (s/veh)	-	-	23.8	9.9	8.8	-
HCM Lane LOS	-	-	C	A	A	-
HCM 95th %tile Q(veh)	-	-	0.3	0	0.2	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	60	90	430	40	80	710
Future Volume (veh/h)	60	90	430	40	80	710
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	62	94	448	42	83	740
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	144	129	2831	1266	776	2831
Arrive On Green	0.08	0.08	0.83	0.83	0.83	0.83
Sat Flow, veh/h	1707	1524	3495	1524	869	3495
Grp Volume(v), veh/h	62	94	448	42	83	740
Grp Sat Flow(s),veh/h/ln	1707	1524	1703	1524	869	1703
Q Serve(g_s), s	3.3	5.7	2.4	0.5	2.0	4.5
Cycle Q Clear(g_c), s	3.3	5.7	2.4	0.5	4.4	4.5
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	144	129	2831	1266	776	2831
V/C Ratio(X)	0.43	0.73	0.16	0.03	0.11	0.26
Avail Cap(c_a), veh/h	593	529	2831	1266	776	2831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	42.4	1.6	1.4	2.0	1.7
Incr Delay (d2), s/veh	2.0	7.6	0.1	0.0	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	2.7	1.2	0.2	0.5	2.1
LnGrp Delay(d), s/veh	43.3	50.1	1.7	1.4	2.3	2.0
LnGrp LOS	D	D	A	A	A	A
Approach Vol, veh/h	156		490			823
Approach Delay, s/veh	47.4		1.7			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		83.0				83.0		12.0
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		79.0				79.0		33.0
Max Q Clear Time (g_c+I1), s		4.4				6.5		7.7
Green Ext Time (p_c), s		3.2				6.4		0.5

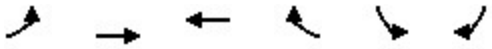
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.7
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Future Volume (vph)	180	630	20	430	1250	420	20	250	560	350	40	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.96			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.96	1.00
Satd. Flow (prot)	1703	4869		1703	4676			3391	1524	1550	3135	1492
Flt Permitted	0.95	1.00		0.95	1.00			0.92	1.00	0.95	0.58	1.00
Satd. Flow (perm)	1703	4869		1703	4676			3131	1524	1550	1878	1492
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	189	663	21	453	1316	442	21	263	589	368	42	32
RTOR Reduction (vph)	0	2	0	0	51	0	0	0	401	0	0	19
Lane Group Flow (vph)	189	682	0	453	1707	0	0	284	188	184	226	13
Confl. Peds. (#/hr)	6					6	4					4
Confl. Bikes (#/hr)			2			4						
Heavy Vehicles (%)	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%	6%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Effective Green, g (s)	14.8	24.8		35.0	45.0			28.2	28.2	15.8	48.0	48.0
Actuated g/C Ratio	0.12	0.21		0.29	0.38			0.24	0.24	0.13	0.40	0.40
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	210	1007		497	1756			737	358	204	918	597
v/s Ratio Prot	0.11	0.14		c0.27	c0.37					c0.12	0.03	
v/s Ratio Perm								0.09	c0.12		0.07	0.01
v/c Ratio	0.90	0.68		0.91	0.97			0.39	0.53	0.90	0.87dl	0.02
Uniform Delay, d1	51.8	43.8		40.9	36.8			38.5	40.0	51.2	23.9	21.7
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	36.0	1.8		20.9	15.4			1.5	5.4	37.1	0.1	0.1
Delay (s)	87.8	45.6		61.8	52.1			40.0	45.4	88.3	24.0	21.8
Level of Service	F	D		E	D			D	D	F	C	C
Approach Delay (s/veh)		54.7			54.1			43.7			50.6	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	51.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	119.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	1000	1580	80	60	30
Future Volume (veh/h)	80	1000	1580	80	60	30
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1658	1658	1792	1792	1792	1792
Adj Flow Rate, veh/h	92	1149	1816	92	69	34
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	6	6	6	6	6	6
Cap, veh/h	176	2442	2640	1156	256	228
Arrive On Green	0.78	0.78	0.78	0.78	0.15	0.15
Sat Flow, veh/h	209	3233	3495	1491	1707	1524
Grp Volume(v), veh/h	92	1149	1816	92	69	34
Grp Sat Flow(s),veh/h/ln	209	1575	1703	1491	1707	1524
Q Serve(g_s), s	40.5	13.8	27.4	1.6	3.8	2.1
Cycle Q Clear(g_c), s	67.9	13.8	27.4	1.6	3.8	2.1
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	176	2442	2640	1156	256	228
V/C Ratio(X)	0.52	0.47	0.69	0.08	0.27	0.15
Avail Cap(c_a), veh/h	202	2833	3063	1341	256	228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	4.2	5.8	2.9	40.2	39.5
Incr Delay (d2), s/veh	2.4	0.1	0.5	0.0	2.6	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	6.0	12.8	0.6	2.0	1.0
LnGrp Delay(d), s/veh	24.5	4.4	6.3	2.9	42.8	40.8
LnGrp LOS	C	A	A	A	D	D
Approach Vol, veh/h		1241	1908		103	
Approach Delay, s/veh		5.9	6.2		42.1	
Approach LOS		A	A		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				86.7		20.0		86.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				96.0		16.0		96.0
Max Q Clear Time (g_c+I1), s				69.9		5.8		29.4
Green Ext Time (p_c), s				12.8		0.2		26.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.2
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Future Volume (veh/h)	220	620	80	200	1390	120	90	540	110	70	670	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	234	660	85	213	1479	128	96	574	117	74	713	223
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	262	1623	207	244	1648	143	119	1055	466	94	1004	437
Arrive On Green	0.15	0.36	0.36	0.14	0.35	0.35	0.07	0.30	0.30	0.05	0.29	0.29
Sat Flow, veh/h	1740	4470	569	1740	4674	404	1740	3471	1533	1740	3471	1511
Grp Volume(v), veh/h	234	489	256	213	1052	555	96	574	117	74	713	223
Grp Sat Flow(s),veh/h/ln	1740	1663	1714	1740	1663	1754	1740	1736	1533	1740	1736	1511
Q Serve(g_s), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Cycle Q Clear(g_c), s	15.2	12.7	12.9	13.8	34.5	34.5	6.3	15.9	6.6	4.8	21.2	14.2
Prop In Lane	1.00		0.33	1.00		0.23	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	262	1207	622	244	1172	618	119	1055	466	94	1004	437
V/C Ratio(X)	0.89	0.41	0.41	0.87	0.90	0.90	0.81	0.54	0.25	0.79	0.71	0.51
Avail Cap(c_a), veh/h	302	1207	622	363	1212	639	136	1055	466	106	1004	437
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.0	27.4	27.5	48.5	35.3	35.3	52.9	33.4	30.2	53.8	36.6	34.1
Incr Delay (d2), s/veh	24.4	0.2	0.4	14.3	8.9	15.2	25.9	2.0	1.3	29.2	4.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	5.8	6.2	7.6	17.2	19.3	3.9	7.9	3.0	3.1	10.7	6.4
LnGrp Delay(d), s/veh	72.4	27.6	27.9	62.8	44.2	50.5	78.8	35.5	31.5	83.1	40.9	38.3
LnGrp LOS	E	C	C	E	D	D	E	D	C	F	D	D
Approach Vol, veh/h		979			1820			787			1010	
Approach Delay, s/veh		38.4			48.3			40.2			43.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.2	39.0	20.2	45.8	11.9	37.3	21.4	44.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	35.0	24.0	38.0	9.0	33.0	20.0	42.0
Max Q Clear Time (g_c+I1), s	6.8	17.9	15.8	14.9	8.3	23.2	17.2	36.5
Green Ext Time (p_c), s	0.0	3.6	0.4	4.7	0.0	3.7	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Future Volume (veh/h)	150	630	110	280	1460	140	110	1040	160	80	930	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	160	670	117	298	1553	149	117	1106	170	85	989	117
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	176	1104	190	326	1591	153	142	1140	175	88	1206	687
Arrive On Green	0.10	0.26	0.26	0.19	0.34	0.34	0.08	0.38	0.38	0.05	0.34	0.34
Sat Flow, veh/h	1757	4305	741	1757	4658	446	1757	3039	466	1757	3505	1539
Grp Volume(v), veh/h	160	520	267	298	1119	583	117	636	640	85	989	117
Grp Sat Flow(s),veh/h/ln	1757	1679	1689	1757	1679	1747	1757	1752	1752	1757	1752	1539
Q Serve(g_s), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Cycle Q Clear(g_c), s	10.8	16.4	16.7	20.0	39.5	39.6	7.9	42.8	43.1	5.8	30.9	5.5
Prop In Lane	1.00		0.44	1.00		0.26	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	176	861	433	326	1147	597	142	657	657	88	1206	687
V/C Ratio(X)	0.91	0.60	0.62	0.92	0.98	0.98	0.82	0.97	0.97	0.97	0.82	0.17
Avail Cap(c_a), veh/h	176	861	433	366	1147	597	161	657	657	88	1206	687
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.3	39.4	48.0	39.0	39.0	54.3	36.8	36.9	56.9	35.9	20.1
Incr Delay (d2), s/veh	43.3	1.2	2.6	25.4	20.8	30.9	25.6	28.2	29.1	85.0	6.3	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	7.7	8.1	12.0	21.5	24.2	4.8	25.8	26.1	4.9	16.0	2.4
LnGrp Delay(d), s/veh	96.7	40.5	42.0	73.4	59.8	70.0	80.0	65.0	66.1	141.9	42.2	20.6
LnGrp LOS	F	D	D	E	E	E	E	E	E	F	D	C
Approach Vol, veh/h		947			2000			1393			1191	
Approach Delay, s/veh		50.4			64.8			66.7			47.2	
Approach LOS		D			E			E			D	

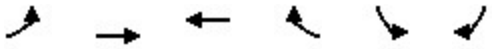
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	26.2	34.8	13.7	45.3	16.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	25.0	28.0	11.0	40.0	12.0	41.0
Max Q Clear Time (g_c+I1), s	7.8	45.1	22.0	18.7	9.9	32.9	12.8	41.6
Green Ext Time (p_c), s	0.0	0.0	0.3	3.3	0.0	3.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Future Volume (veh/h)	70	790	110	210	1550	70	570	350	480	180	360	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	73	823	115	219	1615	73	594	365	500	188	375	167
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	88	1084	150	246	1645	74	614	1373	601	331	413	181
Arrive On Green	0.05	0.24	0.24	0.14	0.33	0.33	0.31	0.39	0.39	0.09	0.18	0.18
Sat Flow, veh/h	1757	4457	619	1757	4934	223	1757	3505	1534	1757	2350	1028
Grp Volume(v), veh/h	73	619	319	219	1099	589	594	365	500	188	278	264
Grp Sat Flow(s),veh/h/ln	1757	1679	1718	1757	1679	1800	1757	1752	1534	1757	1752	1626
Q Serve(g_s), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Cycle Q Clear(g_c), s	4.9	20.5	20.7	14.7	38.9	39.0	34.8	8.5	35.3	10.5	18.6	19.2
Prop In Lane	1.00		0.36	1.00		0.12	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	88	816	418	246	1119	600	614	1373	601	331	308	286
V/C Ratio(X)	0.83	0.76	0.76	0.89	0.98	0.98	0.97	0.27	0.83	0.57	0.90	0.92
Avail Cap(c_a), veh/h	88	816	418	278	1119	600	615	1373	601	331	308	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.5	42.1	42.2	50.7	39.6	39.7	31.2	24.8	32.9	36.0	48.4	48.6
Incr Delay (d2), s/veh	46.1	4.1	8.2	25.8	22.5	32.2	28.2	0.5	12.7	2.3	31.3	36.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	10.0	10.8	8.9	21.5	24.7	24.1	4.2	17.0	5.3	11.7	11.5
LnGrp Delay(d), s/veh	102.6	46.3	50.4	76.5	62.1	71.8	59.4	25.3	45.7	38.3	79.7	85.3
LnGrp LOS	F	D	D	E	E	E	E	C	D	D	E	F
Approach Vol, veh/h		1011			1907			1459			730	
Approach Delay, s/veh		51.6			66.8			46.2			71.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	51.0	20.8	33.2	40.9	25.1	10.0	44.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	47.0	19.0	27.0	37.0	21.0	6.0	40.0
Max Q Clear Time (g_c+I1), s	12.5	37.3	16.7	22.7	36.8	21.2	6.9	41.0
Green Ext Time (p_c), s	0.0	3.3	0.1	2.2	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.5
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Traffic Volume (veh/h)	0	820	1720	0	470	520
Future Volume (veh/h)	0	820	1720	0	470	520
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1845	1845	0	1706	1706
Adj Flow Rate, veh/h	0	845	1773	0	485	536
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	3	3	0	3	3
Cap, veh/h	0	1858	1858	0	654	584
Arrive On Green	0.00	0.53	0.53	0.00	0.40	0.40
Sat Flow, veh/h	0	3689	3689	0	1625	1450
Grp Volume(v), veh/h	0	845	1773	0	485	536
Grp Sat Flow(s),veh/h/ln	0	1752	1752	0	1625	1450
Q Serve(g_s), s	0.0	17.8	57.3	0.0	30.3	41.7
Cycle Q Clear(g_c), s	0.0	17.8	57.3	0.0	30.3	41.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1858	1858	0	654	584
V/C Ratio(X)	0.00	0.45	0.95	0.00	0.74	0.92
Avail Cap(c_a), veh/h	0	1882	1882	0	654	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	17.3	26.6	0.0	30.3	33.7
Incr Delay (d2), s/veh	0.0	0.2	11.7	0.0	7.4	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.6	30.6	0.0	15.0	20.2
LnGrp Delay(d), s/veh	0.0	17.5	38.3	0.0	37.7	55.4
LnGrp LOS		B	D		D	E
Approach Vol, veh/h		845	1773		1021	
Approach Delay, s/veh		17.5	38.3		47.0	
Approach LOS		B	D		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				67.2		52.0		67.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				64.0		48.0		64.0
Max Q Clear Time (g_c+I1), s				19.8		43.7		59.3
Green Ext Time (p_c), s				6.3		1.7		3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Future Volume (veh/h)	220	820	340	140	1390	540	200	360	140	350	510	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	863	358	147	1463	568	211	379	147	368	537	326
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	217	1464	605	175	1388	617	238	492	213	348	712	310
Arrive On Green	0.13	0.42	0.42	0.10	0.40	0.40	0.14	0.14	0.14	0.20	0.21	0.21
Sat Flow, veh/h	1740	3447	1424	1740	3471	1543	1740	3471	1504	1740	3471	1513
Grp Volume(v), veh/h	232	832	389	147	1463	568	211	379	147	368	537	326
Grp Sat Flow(s),veh/h/ln	1740	1663	1547	1740	1736	1543	1740	1736	1504	1740	1736	1513
Q Serve(g_s), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Cycle Q Clear(g_c), s	15.0	23.1	23.2	10.0	48.0	41.9	14.3	12.6	11.2	24.0	17.5	24.6
Prop In Lane	1.00		0.92	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	217	1412	657	175	1388	617	238	492	213	348	712	310
V/C Ratio(X)	1.07	0.59	0.59	0.84	1.05	0.92	0.89	0.77	0.69	1.06	0.75	1.05
Avail Cap(c_a), veh/h	217	1412	657	261	1388	617	261	492	213	348	712	310
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	26.5	26.5	53.0	36.0	34.2	50.9	49.6	49.0	48.0	44.9	47.7
Incr Delay (d2), s/veh	79.8	0.6	1.4	14.4	39.7	19.2	27.3	11.1	16.8	64.2	7.3	64.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	10.6	10.1	5.5	30.6	21.1	8.7	6.8	5.6	17.7	9.1	15.9
LnGrp Delay(d), s/veh	132.3	27.1	27.9	67.5	75.7	53.4	78.2	60.7	65.8	112.2	52.1	112.6
LnGrp LOS	F	C	C	E	F	D	E	E	E	F	D	F
Approach Vol, veh/h		1453			2178			737			1231	
Approach Delay, s/veh		44.1			69.3			66.7			86.1	
Approach LOS		D			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	28.0	21.0	16.0	55.0	20.4	28.6	19.0	52.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	18.0	23.0	15.0	48.0
Max Q Clear Time (g_c+I1), s	26.0	14.6	12.0	25.2	16.3	26.6	17.0	50.0
Green Ext Time (p_c), s	0.0	0.7	0.2	7.9	0.1	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Future Volume (veh/h)	140	820	130	100	1340	250	130	500	90	260	870	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.93	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	154	901	143	110	1473	275	143	549	99	286	956	143
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	181	1732	274	136	1578	294	223	900	374	387	1103	464
Arrive On Green	0.10	0.40	0.40	0.08	0.37	0.37	0.08	0.26	0.26	0.13	0.31	0.31
Sat Flow, veh/h	1757	4373	691	1757	4261	794	1757	3505	1456	1757	3505	1473
Grp Volume(v), veh/h	154	691	353	110	1160	588	143	549	99	286	956	143
Grp Sat Flow(s),veh/h/ln	1757	1679	1706	1757	1679	1697	1757	1752	1456	1757	1752	1473
Q Serve(g_s), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Cycle Q Clear(g_c), s	10.1	18.4	18.5	7.2	39.1	39.2	7.0	16.2	6.4	13.5	30.2	8.7
Prop In Lane	1.00		0.40	1.00		0.47	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	181	1330	676	136	1244	629	223	900	374	387	1103	464
V/C Ratio(X)	0.85	0.52	0.52	0.81	0.93	0.94	0.64	0.61	0.26	0.74	0.87	0.31
Avail Cap(c_a), veh/h	209	1330	676	224	1257	635	225	900	374	407	1103	464
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	27.0	27.0	53.4	35.6	35.6	31.7	38.5	34.8	26.9	37.9	30.5
Incr Delay (d2), s/veh	24.3	0.4	0.7	10.8	12.5	21.2	5.9	3.1	1.7	6.6	9.2	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	8.6	8.9	3.9	20.2	22.0	3.7	8.2	2.7	7.2	16.0	3.7
LnGrp Delay(d), s/veh	76.1	27.3	27.7	64.2	48.0	56.8	37.6	41.5	36.5	33.5	47.1	32.3
LnGrp LOS	E	C	C	E	D	E	D	D	D	C	D	C
Approach Vol, veh/h		1198			1858			791			1385	
Approach Delay, s/veh		33.7			51.8			40.2			42.8	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.7	34.2	13.1	50.6	12.9	41.0	16.1	47.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	15.0	43.0	9.0	37.0	14.0	44.0
Max Q Clear Time (g_c+I1), s	15.5	18.2	9.2	20.5	9.0	32.2	12.1	41.2
Green Ext Time (p_c), s	0.1	2.8	0.1	7.0	0.0	2.7	0.1	2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Future Volume (veh/h)	220	850	140	30	1440	260	70	170	10	310	340	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	232	895	147	32	1516	274	74	179	11	326	358	211
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	261	2249	368	40	1674	302	306	1226	75	449	1282	565
Arrive On Green	0.15	0.51	0.51	0.02	0.39	0.39	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	1774	4395	719	1774	4324	779	839	3385	206	1187	3539	1560
Grp Volume(v), veh/h	232	689	353	32	1188	602	74	93	97	326	358	211
Grp Sat Flow(s),veh/h/ln	1774	1695	1724	1774	1695	1712	839	1770	1822	1187	1770	1560
Q Serve(g_s), s	14.9	14.5	14.6	2.1	38.3	38.6	8.0	4.1	4.2	29.6	8.3	11.6
Cycle Q Clear(g_c), s	14.9	14.5	14.6	2.1	38.3	38.6	16.3	4.1	4.2	33.8	8.3	11.6
Prop In Lane	1.00		0.42	1.00		0.45	1.00		0.11	1.00		1.00
Lane Grp Cap(c), veh/h	261	1735	882	40	1313	663	306	641	660	449	1282	565
V/C Ratio(X)	0.89	0.40	0.40	0.80	0.90	0.91	0.24	0.15	0.15	0.73	0.28	0.37
Avail Cap(c_a), veh/h	306	1754	892	92	1345	679	306	641	660	449	1282	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	17.4	17.4	56.4	33.5	33.6	32.0	24.9	24.9	36.3	26.2	27.3
Incr Delay (d2), s/veh	23.3	0.1	0.3	28.7	8.8	16.0	1.9	0.5	0.5	9.8	0.5	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.0	6.7	7.0	1.3	19.4	21.2	2.0	2.1	2.2	10.9	4.2	5.3
LnGrp Delay(d), s/veh	71.9	17.5	17.7	85.1	42.3	49.6	33.9	25.4	25.4	46.1	26.8	29.2
LnGrp LOS	E	B	B	F	D	D	C	C	C	D	C	C
Approach Vol, veh/h		1274			1822			264			895	
Approach Delay, s/veh		27.5			45.5			27.8			34.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		46.0	6.6	63.3		46.0	21.1	48.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		42.0	6.0	60.0		42.0	20.0	46.0
Max Q Clear Time (g_c+I1), s		18.3	4.1	16.6		35.8	16.9	40.6
Green Ext Time (p_c), s		1.4	0.0	8.1		2.3	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Future Volume (vph)	100	910	130	120	1310	130	100	320	40	100	610	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.98	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5027		1787	5054		1785	3574	1568	1781	3574	1573
Flt Permitted	0.95	1.00		0.95	1.00		0.30	1.00	1.00	0.51	1.00	1.00
Satd. Flow (perm)	1787	5027		1787	5054		568	3574	1568	948	3574	1573
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	106	968	138	128	1394	138	106	340	43	106	649	287
RTOR Reduction (vph)	0	15	0	0	9	0	0	0	25	0	0	169
Lane Group Flow (vph)	106	1091	0	128	1523	0	106	340	18	106	649	118
Confl. Peds. (#/hr)	6		3	3		6	2		3	3		2
Confl. Bikes (#/hr)			3			2			2			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	7			7				2			2	
Permitted Phases		8			8		2		2	2		2
Actuated Green, G (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Effective Green, g (s)	13.1	44.0		13.1	44.0		48.0	48.0	48.0	48.0	48.0	48.0
Actuated g/C Ratio	0.11	0.38		0.11	0.38		0.41	0.41	0.41	0.41	0.41	0.41
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	199	1888		199	1899		232	1465	642	388	1465	644
v/s Ratio Prot	0.06			c0.07				0.10			0.18	
v/s Ratio Perm		0.22			c0.30		c0.19		0.01	0.11		0.07
v/c Ratio	0.53	0.58		0.64	0.80		0.46	0.23	0.03	0.27	0.44	0.18
Uniform Delay, d1	49.1	29.1		49.8	32.7		25.1	22.5	20.6	23.0	24.9	22.0
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	2.7	0.4		6.9	2.5		6.4	0.4	0.1	1.7	1.0	0.6
Delay (s)	51.8	29.6		56.7	35.2		31.4	22.9	20.7	24.7	25.9	22.7
Level of Service	D	C		E	D		C	C	C	C	C	C
Approach Delay (s/veh)		31.5			36.8			24.6			24.9	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Intersection	
Int Delay, s/veh	40.2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	210	590	0	940	610	0
Future Vol, veh/h	210	590	0	940	610	0
Conflicting Peds, #/hr	0	0	3	0	0	3
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	5	5	5	5	5	5
Mvmt Flow	236	663	0	1056	685	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1213	343	-	0	-	0
Stage 1	685	-	-	-	-	-
Stage 2	528	-	-	-	-	-
Critical Hdwy	6.9	7	-	-	-	-
Critical Hdwy Stg 1	5.9	-	-	-	-	-
Critical Hdwy Stg 2	5.9	-	-	-	-	-
Follow-up Hdwy	3.55	3.35	-	-	-	-
Pot Cap-1 Maneuver	~ 170	~ 644	0	-	-	0
Stage 1	454	-	0	-	-	0
Stage 2	548	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 170	~ 644	-	-	-	-
Mov Cap-2 Maneuver	~ 170	-	-	-	-	-
Stage 1	454	-	-	-	-	-
Stage 2	548	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	118.2	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	170	644	-
HCM Lane V/C Ratio	-	1.388	1.029	-
HCM Control Delay (s/veh)	-	257.9	68.5	-
HCM Lane LOS	-	F	F	-
HCM 95th %tile Q(veh)	-	14.4	17	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Future Volume (veh/h)	10	10	20	290	10	230	10	470	130	230	820	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	12	12	25	358	12	284	12	580	160	284	1012	12
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81	0.81
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	123	127	217	462	530	449	334	2238	985	468	2238	996
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	282	442	755	1344	1845	1561	543	3505	1542	709	3505	1559
Grp Volume(v), veh/h	49	0	0	358	12	284	12	580	160	284	1012	12
Grp Sat Flow(s),veh/h/ln	1479	0	0	1344	1845	1561	543	1752	1542	709	1752	1559
Q Serve(g_s), s	0.0	0.0	0.0	24.7	0.5	17.1	1.2	7.7	4.5	31.3	15.9	0.3
Cycle Q Clear(g_c), s	2.3	0.0	0.0	27.0	0.5	17.1	17.1	7.7	4.5	39.1	15.9	0.3
Prop In Lane	0.24		0.51	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	467	0	0	462	530	449	334	2238	985	468	2238	996
V/C Ratio(X)	0.11	0.00	0.00	0.78	0.02	0.63	0.04	0.26	0.16	0.61	0.45	0.01
Avail Cap(c_a), veh/h	625	0	0	610	734	621	334	2238	985	468	2238	996
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.3	0.0	0.0	36.8	27.6	33.5	14.3	8.5	7.9	16.9	9.9	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	4.5	0.0	1.5	0.2	0.3	0.4	5.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	0.0	10.8	0.3	7.5	0.2	3.8	2.0	6.8	7.8	0.1
LnGrp Delay(d), s/veh	28.4	0.0	0.0	41.3	27.6	35.0	14.5	8.7	8.2	22.7	10.6	7.1
LnGrp LOS	C			D	C	D	B	A	A	C	B	A
Approach Vol, veh/h		49			654			752			1308	
Approach Delay, s/veh		28.4			38.3			8.7			13.2	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		73.0		35.1		73.0		35.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		69.0		43.0		69.0		43.0
Max Q Clear Time (g_c+I1), s		19.1		4.3		41.1		29.0
Green Ext Time (p_c), s		5.1		0.3		11.3		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	6.8

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	370	30	250	820	60	150
Future Vol, veh/h	370	30	250	820	60	150
Conflicting Peds, #/hr	0	0	0	0	0	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	87	87	87	87	87	87
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	425	34	287	943	69	172

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	459	0	1488	-
Stage 1	-	-	-	-	442	-
Stage 2	-	-	-	-	1046	-
Critical Hdwy	-	-	4.12	-	6.82	-
Critical Hdwy Stg 1	-	-	-	-	5.82	-
Critical Hdwy Stg 2	-	-	-	-	5.82	-
Follow-up Hdwy	-	-	2.21	-	3.51	-
Pot Cap-1 Maneuver	-	-	1105	-	116	0
Stage 1	-	-	-	-	618	0
Stage 2	-	-	-	-	302	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1105	-	86	-
Mov Cap-2 Maneuver	-	-	-	-	86	-
Stage 1	-	-	-	-	618	-
Stage 2	-	-	-	-	223	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	2.2	133
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	86	-	1105	-
HCM Lane V/C Ratio	-	-	0.802	-	0.26	-
HCM Control Delay (s/veh)	-	-	133	0	9.4	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	4.1	-	1	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Future Volume (veh/h)	80	1250	180	130	1370	150	150	210	120	200	250	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	1359	196	141	1489	163	163	228	130	217	272	33
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	111	1734	250	174	1966	215	198	692	304	255	806	359
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.11	0.20	0.20	0.15	0.23	0.23
Sat Flow, veh/h	1757	4437	640	1757	4608	504	1757	3505	1539	1757	3505	1562
Grp Volume(v), veh/h	87	1028	527	141	1085	567	163	228	130	217	272	33
Grp Sat Flow(s),veh/h/ln	1757	1679	1720	1757	1679	1755	1757	1752	1539	1757	1752	1562
Q Serve(g_s), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Cycle Q Clear(g_c), s	4.7	25.7	25.7	7.5	26.2	26.2	8.7	5.3	7.1	11.5	6.2	1.6
Prop In Lane	1.00		0.37	1.00		0.29	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	111	1312	672	174	1432	749	198	692	304	255	806	359
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.76	0.76	0.82	0.33	0.43	0.85	0.34	0.09
Avail Cap(c_a), veh/h	220	1579	809	331	1790	936	349	692	304	441	806	359
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.1	25.6	25.6	42.2	23.2	23.2	41.5	33.0	33.7	39.9	30.7	29.0
Incr Delay (d2), s/veh	11.1	2.2	4.2	8.6	1.5	2.8	8.3	1.3	4.4	7.8	1.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	12.3	12.9	4.1	12.3	13.2	4.7	2.7	3.4	6.2	3.1	0.7
LnGrp Delay(d), s/veh	55.3	27.8	29.8	50.7	24.7	26.1	49.8	34.2	38.0	47.6	31.9	29.5
LnGrp LOS	E	C	C	D	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1642			1793			521			522	
Approach Delay, s/veh		29.9			27.2			40.0			38.3	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.9	22.9	13.5	41.4	14.8	26.0	10.1	44.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	24.0	17.0	18.0	45.0	19.0	22.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	13.5	9.1	9.5	27.7	10.7	8.2	6.7	28.2
Green Ext Time (p_c), s	0.4	1.1	0.2	9.6	0.2	1.4	0.1	12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Future Volume (veh/h)	60	230	160	60	330	200	60	370	60	230	810	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	61	235	163	61	337	204	61	378	61	235	827	92
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	78	418	277	78	441	262	394	1647	718	622	2423	268
Arrive On Green	0.05	0.21	0.21	0.05	0.21	0.21	0.03	0.47	0.47	0.09	0.53	0.53
Sat Flow, veh/h	1740	1986	1318	1740	2097	1244	1740	3471	1514	1740	4551	504
Grp Volume(v), veh/h	61	204	194	61	278	263	61	378	61	235	603	316
Grp Sat Flow(s),veh/h/ln	1740	1736	1568	1740	1736	1605	1740	1736	1514	1740	1663	1729
Q Serve(g_s), s	3.1	9.5	10.0	3.1	13.6	14.0	1.6	5.8	2.0	5.8	9.3	9.4
Cycle Q Clear(g_c), s	3.1	9.5	10.0	3.1	13.6	14.0	1.6	5.8	2.0	5.8	9.3	9.4
Prop In Lane	1.00		0.84	1.00		0.78	1.00		1.00	1.00		0.29
Lane Grp Cap(c), veh/h	78	365	330	78	365	338	394	1647	718	622	1770	921
V/C Ratio(X)	0.78	0.56	0.59	0.78	0.76	0.78	0.15	0.23	0.08	0.38	0.34	0.34
Avail Cap(c_a), veh/h	251	674	609	251	674	623	488	1647	718	943	1770	921
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.6	31.9	32.1	42.6	33.5	33.6	11.4	14.0	13.0	9.2	12.0	12.1
Incr Delay (d2), s/veh	15.2	1.3	1.7	15.2	3.3	3.9	0.2	0.3	0.2	0.4	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	4.7	4.5	1.8	6.8	6.5	0.8	2.9	0.9	2.8	4.4	4.7
LnGrp Delay(d), s/veh	57.8	33.2	33.7	57.8	36.8	37.5	11.5	14.3	13.2	9.6	12.6	13.1
LnGrp LOS	E	C	C	E	D	D	B	B	B	A	B	B
Approach Vol, veh/h		459			602			500			1154	
Approach Delay, s/veh		36.7			39.2			13.8			12.1	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	46.8	8.1	23.0	7.1	52.0	8.1	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	25.0	31.0	13.0	35.0	8.0	48.0	13.0	35.0
Max Q Clear Time (g_c+I1), s	7.8	7.8	5.1	12.0	3.6	11.4	5.1	16.0
Green Ext Time (p_c), s	0.6	2.7	0.1	2.2	0.0	7.4	0.1	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Future Volume (veh/h)	30	310	90	170	490	160	80	510	60	220	770	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	715	1845	1543	928	1845	1528	561	3505	1528	778	3505	1530
Grp Volume(v), veh/h	34	348	101	191	551	180	90	573	67	247	865	124
Grp Sat Flow(s),veh/h/ln	715	1845	1543	928	1845	1528	561	1752	1528	778	1752	1530
Q Serve(g_s), s	5.1	16.7	5.0	23.0	30.7	9.6	13.3	10.2	2.4	29.1	17.2	4.6
Cycle Q Clear(g_c), s	35.8	16.7	5.0	39.7	30.7	9.6	30.4	10.2	2.4	39.4	17.2	4.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	146	704	589	282	704	583	288	1927	840	421	1927	841
V/C Ratio(X)	0.23	0.49	0.17	0.68	0.78	0.31	0.31	0.30	0.08	0.59	0.45	0.15
Avail Cap(c_a), veh/h	168	761	636	311	761	630	288	1927	840	421	1927	841
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	27.4	23.8	42.6	31.8	25.2	24.8	14.1	12.3	24.7	15.7	12.8
Incr Delay (d2), s/veh	0.8	0.5	0.1	5.1	5.0	0.3	2.8	0.4	0.2	5.9	0.8	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.6	2.2	6.3	16.6	4.1	2.3	5.0	1.0	6.9	8.5	2.0
LnGrp Delay(d), s/veh	48.3	28.0	24.0	47.7	36.7	25.5	27.6	14.5	12.5	30.6	16.4	13.2
LnGrp LOS	D	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		483			922			730			1236	
Approach Delay, s/veh		28.6			36.8			15.9			18.9	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		68.0		48.4		68.0		48.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		64.0		48.0		64.0		48.0
Max Q Clear Time (g_c+I1), s		32.4		37.8		41.4		41.7
Green Ext Time (p_c), s		5.2		1.8		8.2		2.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	7

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	10	350	270	430	770	40
Future Vol, veh/h	10	350	270	430	770	40
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	11	393	303	483	865	45

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1713	433	910	0	-	0
Stage 1	865	-	-	-	-	-
Stage 2	848	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	81	571	744	-	-	-
Stage 1	373	-	-	-	-	-
Stage 2	380	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	48	571	744	-	-	-
Mov Cap-2 Maneuver	48	-	-	-	-	-
Stage 1	221	-	-	-	-	-
Stage 2	380	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	26.3	5.1	0
HCM LOS	D		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	744	-	48	571	-	-
HCM Lane V/C Ratio	0.408	-	0.234	0.689	-	-
HCM Control Delay (s/veh)	13.1	-	101.6	24.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2	-	0.8	5.4	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Future Volume (veh/h)	40	540	220	240	1000	50	250	640	180	70	950	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	41	557	227	247	1031	52	258	660	186	72	979	72
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	52	623	246	276	1491	75	288	1657	728	92	1267	555
Arrive On Green	0.03	0.18	0.18	0.16	0.30	0.30	0.16	0.47	0.47	0.05	0.36	0.36
Sat Flow, veh/h	1757	3535	1398	1757	4905	247	1757	3505	1540	1757	3505	1536
Grp Volume(v), veh/h	41	528	256	247	705	378	258	660	186	72	979	72
Grp Sat Flow(s),veh/h/ln	1757	1679	1575	1757	1679	1795	1757	1752	1540	1757	1752	1536
Q Serve(g_s), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Cycle Q Clear(g_c), s	2.6	17.4	18.1	15.6	21.0	21.0	16.3	13.9	8.2	4.6	28.1	3.6
Prop In Lane	1.00		0.89	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	52	592	278	276	1021	546	288	1657	728	92	1267	555
V/C Ratio(X)	0.79	0.89	0.92	0.89	0.69	0.69	0.90	0.40	0.26	0.78	0.77	0.13
Avail Cap(c_a), veh/h	108	592	278	325	1021	546	341	1657	728	155	1267	555
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	45.7	45.9	46.9	34.8	34.8	46.5	19.4	17.9	53.1	32.1	24.3
Incr Delay (d2), s/veh	22.3	15.8	33.9	23.0	2.0	3.7	22.6	0.7	0.8	13.4	4.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	9.4	10.5	9.4	10.0	11.0	9.8	6.9	3.7	2.6	14.4	1.6
LnGrp Delay(d), s/veh	77.0	61.4	79.8	69.8	36.8	38.5	69.1	20.1	18.8	66.5	36.7	24.7
LnGrp LOS	E	E	E	E	D	D	E	C	B	E	D	C
Approach Vol, veh/h		825			1330			1104			1123	
Approach Delay, s/veh		67.9			43.4			31.3			37.9	
Approach LOS		E			D			C			D	

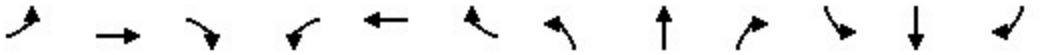
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	57.6	21.9	24.0	22.6	45.0	7.4	38.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	53.0	21.0	20.0	22.0	41.0	7.0	34.0
Max Q Clear Time (g_c+I1), s	6.6	15.9	17.6	20.1	18.3	30.1	4.6	23.0
Green Ext Time (p_c), s	0.0	5.5	0.2	0.0	0.3	4.8	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Future Volume (veh/h)	90	80	180	90	130	80	150	940	40	40	1230	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	98	87	196	98	141	87	163	1022	43	43	1337	109
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	47	28	443	44	38	443	191	2043	891	55	1771	769
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.11	0.58	0.58	0.03	0.51	0.51
Sat Flow, veh/h	0	99	1565	0	133	1565	1757	3505	1528	1757	3505	1521
Grp Volume(v), veh/h	185	0	196	239	0	87	163	1022	43	43	1337	109
Grp Sat Flow(s),veh/h/ln	99	0	1565	133	0	1565	1757	1752	1528	1757	1752	1521
Q Serve(g_s), s	0.0	0.0	12.0	0.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Cycle Q Clear(g_c), s	33.0	0.0	12.0	33.0	0.0	4.9	10.6	20.0	1.4	2.8	35.6	4.5
Prop In Lane	0.53		1.00	0.41		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	75	0	443	81	0	443	191	2043	891	55	1771	769
V/C Ratio(X)	2.46	0.00	0.44	2.94	0.00	0.20	0.85	0.50	0.05	0.78	0.76	0.14
Avail Cap(c_a), veh/h	75	0	443	81	0	443	256	2043	891	105	1771	769
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	34.3	43.6	0.0	31.8	51.0	14.3	10.4	56.1	23.1	15.4
Incr Delay (d2), s/veh	693.8	0.0	0.7	907.6	0.0	0.2	18.2	0.9	0.1	21.1	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.9	0.0	5.2	23.1	0.0	2.1	6.1	9.9	0.6	1.7	17.8	2.0
LnGrp Delay(d), s/veh	740.1	0.0	35.0	951.2	0.0	32.0	69.2	15.2	10.5	77.2	26.1	15.8
LnGrp LOS	F		C	F		C	E	B	B	E	C	B
Approach Vol, veh/h		381			326			1228			1489	
Approach Delay, s/veh		377.4			705.9			22.2			26.9	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	72.0		37.0	16.7	62.9		37.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	68.0		33.0	17.0	58.0		33.0
Max Q Clear Time (g_c+I1), s	4.8	22.0		35.0	12.6	37.6		35.0
Green Ext Time (p_c), s	0.0	8.5		0.0	0.1	9.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		128.8
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Future Volume (veh/h)	100	750	80	260	910	180	170	860	60	100	1300	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
Arrive On Green	0.07	0.22	0.22	0.15	0.31	0.31	0.10	0.42	0.42	0.07	0.39	0.39
Sat Flow, veh/h	1757	3505	1526	1757	3505	1531	1757	3505	1534	1757	3505	1528
Grp Volume(v), veh/h	105	789	84	274	958	189	179	905	63	105	1368	95
Grp Sat Flow(s),veh/h/ln	1757	1752	1526	1757	1752	1531	1757	1752	1534	1757	1752	1528
Q Serve(g_s), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Cycle Q Clear(g_c), s	7.1	27.0	5.4	18.0	31.2	11.7	12.0	24.3	3.0	7.1	46.7	4.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	117	789	343	264	1081	472	176	1464	641	130	1373	598
V/C Ratio(X)	0.90	1.00	0.24	1.04	0.89	0.40	1.02	0.62	0.10	0.81	1.00	0.16
Avail Cap(c_a), veh/h	117	789	343	264	1081	472	176	1464	641	205	1373	598
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.6	46.5	38.1	51.0	39.5	32.7	54.0	27.4	21.2	54.7	36.4	23.7
Incr Delay (d2), s/veh	52.5	32.2	0.4	66.2	9.1	0.5	72.9	2.0	0.3	12.1	23.5	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	16.6	2.3	13.6	16.4	5.0	9.4	12.1	1.3	3.9	27.1	2.1
LnGrp Delay(d), s/veh	108.0	78.7	38.5	117.2	48.6	33.3	127.1	29.4	21.5	66.8	59.9	24.2
LnGrp LOS	F	F	D	F	D	C	F	C	C	E	E	C
Approach Vol, veh/h		978			1421			1147			1568	
Approach Delay, s/veh		78.4			59.8			44.2			58.2	
Approach LOS		E			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.9	54.1	22.0	31.0	16.0	51.0	12.0	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	45.0	18.0	27.0	12.0	47.0	8.0	37.0
Max Q Clear Time (g_c+I1), s	9.1	26.3	20.0	29.0	14.0	48.7	9.1	33.2
Green Ext Time (p_c), s	0.1	5.9	0.0	0.0	0.0	0.0	0.0	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.4
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Future Volume (veh/h)	10	70	100	140	130	160	90	890	50	100	1470	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	71	101	141	131	162	91	899	0	101	1485	20
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	156	139	175	313	280	117	1962	878	129	2901	39
Arrive On Green	0.01	0.09	0.09	0.10	0.18	0.18	0.07	0.57	0.00	0.07	0.57	0.57
Sat Flow, veh/h	1740	1736	1553	1740	1736	1553	1740	3471	1553	1740	5070	68
Grp Volume(v), veh/h	10	71	101	141	131	162	91	899	0	101	974	531
Grp Sat Flow(s),veh/h/ln	1740	1736	1553	1740	1736	1553	1740	1736	1553	1740	1663	1814
Q Serve(g_s), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Cycle Q Clear(g_c), s	0.5	3.6	5.9	7.4	6.3	9.0	4.8	14.2	0.0	5.4	16.6	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.04
Lane Grp Cap(c), veh/h	17	156	139	175	313	280	117	1962	878	129	1903	1038
V/C Ratio(X)	0.59	0.46	0.73	0.81	0.42	0.58	0.78	0.46	0.00	0.79	0.51	0.51
Avail Cap(c_a), veh/h	74	296	265	371	592	530	278	1962	878	278	1903	1038
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.2	40.5	41.6	41.3	34.1	35.2	43.1	12.0	0.0	42.7	12.1	12.1
Incr Delay (d2), s/veh	28.2	2.1	7.0	8.4	0.9	1.9	10.7	0.8	0.0	10.0	1.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	1.8	2.8	4.0	3.1	4.0	2.7	7.0	0.0	2.9	7.8	8.8
LnGrp Delay(d), s/veh	74.5	42.6	48.5	49.7	35.0	37.0	53.8	12.7	0.0	52.7	13.1	13.9
LnGrp LOS	E	D	D	D	C	D	D	B		D	B	B
Approach Vol, veh/h		182			434			990			1606	
Approach Delay, s/veh		47.6			40.5			16.5			15.9	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	57.0	13.4	12.4	10.3	57.6	4.9	20.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	53.0	20.0	16.0	15.0	53.0	4.0	32.0
Max Q Clear Time (g_c+I1), s	7.4	16.2	9.4	7.9	6.8	18.6	2.5	11.0
Green Ext Time (p_c), s	0.1	6.7	0.2	0.5	0.1	12.2	0.0	1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Future Volume (veh/h)	10	10	80	20	10	10	100	930	30	20	1520	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1810	1810	1900	1810	1810	1810	1810	1810	1810	1810	1900
Adj Flow Rate, veh/h	11	11	87	22	11	11	109	1011	33	22	1652	54
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	62	44	173	74	26	173	136	2599	1137	31	3413	112
Arrive On Green	0.11	0.11	0.11	0.11	0.11	0.11	0.08	0.76	0.76	0.02	0.70	0.70
Sat Flow, veh/h	96	394	1534	157	230	1534	1723	3438	1504	1723	4909	160
Grp Volume(v), veh/h	22	0	87	33	0	11	109	1011	33	22	1108	598
Grp Sat Flow(s),veh/h/ln	490	0	1534	387	0	1534	1723	1719	1504	1723	1647	1777
Q Serve(g_s), s	0.1	0.0	5.6	1.2	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Cycle Q Clear(g_c), s	10.6	0.0	5.6	11.1	0.0	0.7	6.6	10.8	0.6	1.3	16.4	16.4
Prop In Lane	0.50		1.00	0.67		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	106	0	173	100	0	173	136	2599	1137	31	2289	1235
V/C Ratio(X)	0.21	0.00	0.50	0.33	0.00	0.06	0.80	0.39	0.03	0.71	0.48	0.48
Avail Cap(c_a), veh/h	224	0	290	207	0	290	326	2599	1137	130	2289	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	44.2	46.3	0.0	41.9	48.0	4.5	3.2	51.7	7.4	7.4
Incr Delay (d2), s/veh	1.0	0.0	2.2	1.9	0.0	0.2	10.5	0.4	0.0	26.2	0.7	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	2.5	1.0	0.0	0.3	3.5	5.2	0.3	0.9	7.6	8.4
LnGrp Delay(d), s/veh	43.5	0.0	46.4	48.2	0.0	42.1	58.5	4.9	3.3	77.9	8.1	8.8
LnGrp LOS	D		D	D		D	E	A	A	E	A	A
Approach Vol, veh/h		109			44			1153			1728	
Approach Delay, s/veh		45.8			46.7			9.9			9.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	84.0		16.5	12.4	77.5		16.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	80.0		20.0	20.0	68.0		20.0
Max Q Clear Time (g_c+I1), s	3.3	12.8		12.6	8.6	18.4		13.1
Green Ext Time (p_c), s	0.0	8.5		0.1	0.2	16.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.4
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	730	110	150	1100	120	90
Future Volume (veh/h)	730	110	150	1100	120	90
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1900	1827	1827	1827	1827
Adj Flow Rate, veh/h	785	118	161	1183	129	97
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	1211	181	207	2263	750	670
Arrive On Green	0.28	0.28	0.12	0.45	0.43	0.43
Sat Flow, veh/h	4530	651	1740	5152	1740	1553
Grp Volume(v), veh/h	596	307	161	1183	129	97
Grp Sat Flow(s),veh/h/ln	1663	1691	1740	1663	1740	1553
Q Serve(g_s), s	11.0	11.1	6.3	11.8	3.2	2.6
Cycle Q Clear(g_c), s	11.0	11.1	6.3	11.8	3.2	2.6
Prop In Lane		0.38	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	923	469	207	2263	750	670
V/C Ratio(X)	0.65	0.65	0.78	0.52	0.17	0.14
Avail Cap(c_a), veh/h	2199	1118	800	5879	750	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.2	29.8	13.6	12.2	12.0
Incr Delay (d2), s/veh	0.8	1.5	6.2	0.2	0.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	5.4	3.4	5.4	1.6	1.2
LnGrp Delay(d), s/veh	22.9	23.7	36.0	13.8	12.6	12.5
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	903			1344	226	
Approach Delay, s/veh	23.2			16.5	12.6	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		34.0	12.3	23.3				35.6
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		30.0	32.0	46.0				82.0
Max Q Clear Time (g_c+I1), s		5.2	8.3	13.1				13.8
Green Ext Time (p_c), s		0.6	0.4	6.2				10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	23.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Future Vol, veh/h	20	170	30	50	160	140	30	110	80	90	130	30
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	4	4	4	4	4	4	4	4	4	4	4	4
Mvmt Flow	24	200	35	59	188	165	35	129	94	106	153	35
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

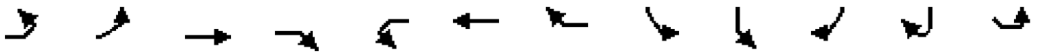
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	18.7	37.8	13.6	14.6
HCM LOS	C	E	B	B

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	14%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	85%	46%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	15%	40%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	110	80	20	200	350	90	130	30
LT Vol	30	0	0	20	0	50	90	0	0
Through Vol	0	110	0	0	170	160	0	130	0
RT Vol	0	0	80	0	30	140	0	0	30
Lane Flow Rate	35	129	94	24	235	412	106	153	35
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.088	0.304	0.202	0.057	0.527	0.837	0.26	0.354	0.074
Departure Headway (Hd)	8.973	8.452	7.723	8.686	8.068	7.431	8.832	8.324	7.596
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	401	427	466	414	449	490	408	434	474
Service Time	6.701	6.18	5.451	6.395	5.778	5.131	6.559	6.039	5.311
HCM Lane V/C Ratio	0.087	0.302	0.202	0.058	0.523	0.841	0.26	0.353	0.074
HCM Control Delay, s/veh	12.6	14.8	12.4	11.9	19.4	37.8	14.6	15.5	10.9
HCM Lane LOS	B	B	B	B	C	E	B	C	B
HCM 95th-tile Q	0.3	1.3	0.7	0.2	3	8.3	1	1.6	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Future Volume (veh/h)	90	850	110	40	1090	80	40	30	20	70	40	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	96	904	117	43	1160	85	43	32	21	74	43	74
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	125	1681	736	55	1542	676	75	36	517	78	28	510
Arrive On Green	0.07	0.48	0.48	0.03	0.44	0.44	0.33	0.33	0.33	0.33	0.33	0.33
Sat Flow, veh/h	1757	3505	1534	1757	3505	1535	0	110	1565	0	86	1545
Grp Volume(v), veh/h	96	904	117	43	1160	85	75	0	21	117	0	74
Grp Sat Flow(s),veh/h/ln	1757	1752	1534	1757	1752	1535	110	0	1565	86	0	1545
Q Serve(g_s), s	4.1	13.7	3.3	1.8	21.0	2.5	0.0	0.0	0.7	0.0	0.0	2.5
Cycle Q Clear(g_c), s	4.1	13.7	3.3	1.8	21.0	2.5	25.0	0.0	0.7	25.0	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	0.57		1.00	0.63		1.00
Lane Grp Cap(c), veh/h	125	1681	736	55	1542	676	111	0	517	106	0	510
V/C Ratio(X)	0.77	0.54	0.16	0.78	0.75	0.13	0.67	0.00	0.04	1.10	0.00	0.14
Avail Cap(c_a), veh/h	395	3427	1500	209	3056	1339	111	0	517	106	0	510
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.5	13.8	11.1	36.4	17.7	12.6	26.1	0.0	17.2	31.3	0.0	17.8
Incr Delay (d2), s/veh	9.5	0.3	0.1	20.5	0.8	0.1	28.2	0.0	0.1	118.2	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	6.6	1.4	1.2	10.2	1.1	2.4	0.0	0.3	5.7	0.0	1.2
LnGrp Delay(d), s/veh	44.1	14.1	11.2	56.9	18.5	12.6	54.3	0.0	17.3	149.5	0.0	18.4
LnGrp LOS	D	B	B	E	B	B	D		B	F		B
Approach Vol, veh/h		1117			1288			96			191	
Approach Delay, s/veh		16.3			19.4			46.2			98.7	
Approach LOS		B			B			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		29.0	6.4	40.3		29.0	9.4	37.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		25.0	9.0	74.0		25.0	17.0	66.0
Max Q Clear Time (g_c+I1), s		27.0	3.8	15.7		27.0	6.1	23.0
Green Ext Time (p_c), s		0.0	0.0	7.6		0.0	0.1	10.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.7
HCM 2010 LOS	C



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL2
Lane Configurations												
Traffic Volume (vph)	60	90	490	110	10	1220	80	10	10	10	10	20
Future Volume (vph)	60	90	490	110	10	1220	80	10	10	10	10	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%			15%			
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00	1.00		
Frpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	0.98		
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Frt		1.00	0.97		1.00	0.99			1.00	0.85		
Flt Protected		0.95	1.00		0.95	1.00			0.95	1.00		
Satd. Flow (prot)		1787	4983		1787	5088			1653	1453		
Flt Permitted		0.95	1.00		0.40	1.00			0.95	1.00		
Satd. Flow (perm)		1787	4983		744	5088			1653	1453		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	97	527	118	11	1312	86	11	11	11	11	22
RTOR Reduction (vph)	0	0	26	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	162	619	0	11	1398	0	0	22	22	0	0
Confl. Peds. (#/hr)									2	3		
Confl. Bikes (#/hr)				1								
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Prot	Perm		Perm
Protected Phases	7	7	4		3	8		9	9			
Permitted Phases					8					10		6
Actuated Green, G (s)		12.9	49.3		37.8	37.1			1.4	3.0		
Effective Green, g (s)		12.9	49.3		37.8	37.1			1.4	3.0		
Actuated g/C Ratio		0.12	0.47		0.36	0.36			0.01	0.03		
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0	3.0		
Lane Grp Cap (vph)		221	2359		277	1813			22	41		
v/s Ratio Prot		c0.09	0.12		0.00	c0.27			c0.01			
v/s Ratio Perm					0.01					c0.02		
v/c Ratio		0.73	0.26		0.04	0.77			1.00	0.54		
Uniform Delay, d1		43.9	16.5		21.2	29.7			51.4	49.9		
Progression Factor		1.00	1.00		1.00	1.00			1.00	1.00		
Incremental Delay, d2		11.8	0.1		0.1	2.1			191.9	12.8		
Delay (s)		55.8	16.5		21.3	31.8			243.2	62.7		
Level of Service		E	B		C	C			F	E		
Approach Delay (s/veh)			24.4			31.7			153.0			
Approach LOS			C			C			F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	104.1	Sum of lost time (s)	20.0
Intersection Capacity Utilization	72.0%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NWR2
Lane Configurations							
Traffic Volume (vph)	10	120	150	200	210	40	10
Future Volume (vph)	10	120	150	200	210	40	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1787	1881	1599	1787	1881	1599	
Flt Permitted	0.48	1.00	1.00	0.63	1.00	1.00	
Satd. Flow (perm)	900	1881	1599	1194	1881	1599	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	11	129	161	215	226	43	11
RTOR Reduction (vph)	0	0	115	0	0	39	0
Lane Group Flow (vph)	33	129	46	215	226	15	0
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		6			2		
Permitted Phases	6		6	2		2	
Actuated Green, G (s)	29.7	29.7	29.7	29.7	29.7	29.7	
Effective Green, g (s)	29.7	29.7	29.7	29.7	29.7	29.7	
Actuated g/C Ratio	0.29	0.29	0.29	0.29	0.29	0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	256	536	456	340	536	456	
v/s Ratio Prot		0.07			0.12		
v/s Ratio Perm	0.04		0.03	c0.18		0.01	
v/c Ratio	0.13	0.24	0.10	0.63	0.42	0.03	
Uniform Delay, d1	27.6	28.5	27.4	32.4	30.2	26.8	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.2	0.2	0.1	8.7	2.4	0.1	
Delay (s)	27.8	28.8	27.5	41.1	32.6	27.0	
Level of Service	C	C	C	D	C	C	
Approach Delay (s/veh)		28.0			35.7		
Approach LOS		C			D		

Intersection Summary

HCM Unsignalized Intersection Capacity Analysis
147: Dodds Avenue (East) & Stage Road

04/21/2025

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	680	10	10	1010	10	10	10	170	10	10	30
Future Volume (Veh/h)	10	680	10	10	1010	10	10	10	170	10	10	30
Sign Control		Free			Free			Stop			Yield	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Hourly flow rate (vph)	11	764	11	11	1135	11	11	11	191	11	11	34
Pedestrians		1						3			2	
Lane Width (ft)		12.0						12.0			12.0	
Walking Speed (ft/s)		4.0						4.0			4.0	
Percent Blockage		0						0			0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					499							
pX, platoon unblocked												
vC, conflicting volume	1148			778			1425	1965	391	1765	1965	576
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	1148			778			1425	1965	391	1765	1965	576
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	98			99			85	82	69	64	82	93
cM capacity (veh/h)	609			839			75	61	610	31	61	462

Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	NE 2	SW 1
Volume Total	393	393	579	579	86	127	56
Volume Left	11	0	11	0	11	0	11
Volume Right	0	11	0	11	64	127	34
cSH	609	1700	839	1700	198	610	92
Volume to Capacity	0.02	0.23	0.01	0.34	0.43	0.21	0.61
Queue Length 95th (ft)	1	0	1	0	50	20	72
Control Delay (s/veh)	0.6	0.0	0.4	0.0	36.3	12.5	92.3
Lane LOS	A		A		E	B	F
Approach Delay (s/veh)	0.3		0.2		22.0		92.3
Approach LOS					C		F

Intersection Summary				
Average Delay	4.7			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	390	1570	50	10	2490	510	250	20	460	340	50	20
Future Volume (vph)	390	1570	50	10	2490	510	250	20	460	340	50	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.86	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5055		1766	5085	1583	1766	1509	1485	1770	1863	1559
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.72	1.00	1.00	0.44	1.00	1.00
Satd. Flow (perm)	3433	5055		1766	5085	1583	1342	1509	1485	819	1863	1559
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	424	1707	54	11	2707	554	272	22	500	370	54	22
RTOR Reduction (vph)	0	3	0	0	0	179	0	93	93	0	0	15
Lane Group Flow (vph)	424	1758	0	11	2707	375	272	169	167	370	54	8
Confl. Peds. (#/hr)			6	6			1					1
Confl. Bikes (#/hr)			1						1			2
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	12.0	68.4		0.8	57.2	57.2	42.0	42.0	42.0	42.0	42.0	42.0
Effective Green, g (s)	12.0	68.4		0.8	57.2	57.2	42.0	42.0	42.0	42.0	42.0	42.0
Actuated g/C Ratio	0.10	0.56		0.01	0.46	0.46	0.34	0.34	0.34	0.34	0.34	0.34
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	334	2806		11	2360	734	457	514	506	279	635	531
v/s Ratio Prot	c0.12	0.35		0.01	c0.53			0.11			0.03	
v/s Ratio Perm						0.24	0.20		0.11	c0.45		0.00
v/c Ratio	1.27	0.63		1.00	1.15	0.51	0.60	0.33	0.33	1.33	0.09	0.01
Uniform Delay, d1	55.6	18.7		61.2	33.0	23.2	33.6	30.1	30.2	40.6	27.6	26.9
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	142.8	1.1		271.4	71.7	2.5	2.1	0.4	0.4	169.5	0.1	0.0
Delay (s)	198.4	19.8		332.6	104.7	25.7	35.7	30.5	30.5	210.1	27.6	26.9
Level of Service	F	B		F	F	C	D	C	C	F	C	C
Approach Delay (s/veh)		54.4			92.1			32.3			179.0	
Approach LOS		D			F			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	78.5	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.23		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	101.9%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	60	220	80	190	20	640	630	10	10	1010	480
Future Volume (veh/h)	220	60	220	80	190	20	640	630	10	10	1010	480
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	229	62	229	83	198	21	667	656	0	10	1052	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	291	305	259	106	230	24	753	2237	1001	17	1497	670
Arrive On Green	0.08	0.16	0.16	0.06	0.14	0.14	0.22	0.63	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3476	1881	1596	1792	1672	177	3476	3574	1599	1792	3574	1599
Grp Volume(v), veh/h	229	62	229	83	0	219	667	656	0	10	1052	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1596	1792	0	1849	1738	1787	1599	1792	1787	1599
Q Serve(g_s), s	7.2	3.2	15.7	5.1	0.0	13.0	20.8	9.4	0.0	0.6	27.1	0.0
Cycle Q Clear(g_c), s	7.2	3.2	15.7	5.1	0.0	13.0	20.8	9.4	0.0	0.6	27.1	0.0
Prop In Lane	1.00		1.00	1.00		0.10	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	291	305	259	106	0	255	753	2237	1001	17	1497	670
V/C Ratio(X)	0.79	0.20	0.88	0.78	0.00	0.86	0.89	0.29	0.00	0.58	0.70	0.00
Avail Cap(c_a), veh/h	342	320	271	176	0	314	901	2237	1001	64	1497	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	50.3	40.6	45.8	51.9	0.0	47.2	42.5	9.6	0.0	55.2	26.8	0.0
Incr Delay (d2), s/veh	10.0	0.3	26.6	11.8	0.0	17.8	9.3	0.3	0.0	27.8	2.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	1.7	8.8	2.9	0.0	7.9	11.0	4.8	0.0	0.4	13.9	0.0
LnGrp Delay(d), s/veh	60.3	40.9	72.5	63.7	0.0	64.9	51.7	9.9	0.0	83.0	29.5	0.0
LnGrp LOS	E	D	E	E		E	D	A		F	C	
Approach Vol, veh/h		520			302			1323			1062	
Approach Delay, s/veh		63.3			64.6			31.0			30.0	
Approach LOS		E			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.1	74.0	10.6	22.1	28.2	50.8	13.4	19.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	70.0	11.0	19.0	29.0	45.0	11.0	19.0
Max Q Clear Time (g_c+I1), s	2.6	11.4	7.1	17.7	22.8	29.1	9.2	15.0
Green Ext Time (p_c), s	0.0	4.8	0.1	0.2	1.4	6.4	0.1	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.1
HCM 2010 LOS	D

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	390	1340	360	180	1860	300	120	730	570	510	670	70
Future Volume (veh/h)	390	1340	360	180	1860	300	120	730	570	510	670	70
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	415	1426	383	191	1979	319	128	777	606	543	713	74
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	471	2052	626	219	1983	689	186	720	532	496	1372	141
Arrive On Green	0.14	0.40	0.40	0.12	0.39	0.39	0.05	0.20	0.20	0.14	0.29	0.29
Sat Flow, veh/h	3476	5136	1567	1792	5136	1563	3476	3574	1565	3476	4722	486
Grp Volume(v), veh/h	415	1426	383	191	1979	319	128	777	606	543	515	272
Grp Sat Flow(s),veh/h/ln	1738	1712	1567	1792	1712	1563	1738	1787	1565	1738	1712	1784
Q Serve(g_s), s	14.0	27.5	23.1	12.5	45.9	17.1	4.3	24.0	24.0	17.0	15.0	15.2
Cycle Q Clear(g_c), s	14.0	27.5	23.1	12.5	45.9	17.1	4.3	24.0	24.0	17.0	15.0	15.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	471	2052	626	219	1983	689	186	720	532	496	995	518
V/C Ratio(X)	0.88	0.69	0.61	0.87	1.00	0.46	0.69	1.08	1.14	1.09	0.52	0.52
Avail Cap(c_a), veh/h	496	2052	626	241	1983	689	379	720	532	496	995	518
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	29.7	28.4	51.4	36.5	23.5	55.4	47.6	39.6	51.1	35.3	35.4
Incr Delay (d2), s/veh	16.2	2.0	4.4	26.4	19.8	2.2	4.4	56.9	83.5	68.7	0.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	13.3	10.7	7.8	25.3	7.8	2.2	17.5	29.8	12.9	7.2	7.6
LnGrp Delay(d), s/veh	66.8	31.7	32.8	77.8	56.3	25.7	59.8	104.5	123.1	119.8	35.8	36.3
LnGrp LOS	E	C	C	E	E	C	E	F	F	F	D	D
Approach Vol, veh/h		2224			2489			1511			1330	
Approach Delay, s/veh		38.4			54.0			108.2			70.2	
Approach LOS		D			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	51.6	21.0	28.0	20.1	50.0	10.4	38.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	47.0	17.0	24.0	17.0	46.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	14.5	29.5	19.0	26.0	16.0	47.9	6.3	17.2
Green Ext Time (p_c), s	0.1	10.0	0.0	0.0	0.2	0.0	0.2	3.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	10	10	70	20	1800	10	40	2660	210
Future Volume (veh/h)	110	20	20	10	10	70	20	1800	10	40	2660	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	115	21	21	10	10	73	21	1875	10	42	2771	219
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	56	2	275	46	32	279	30	3601	19	54	3383	260
Arrive On Green	0.18	0.18	0.18	0.18	0.18	0.18	0.02	0.69	0.69	0.03	0.70	0.70
Sat Flow, veh/h	0	12	1547	0	177	1567	1774	5219	28	1774	4809	369
Grp Volume(v), veh/h	136	0	21	20	0	73	21	1218	667	42	1930	1060
Grp Sat Flow(s),veh/h/ln	12	0	1547	177	0	1567	1774	1695	1857	1774	1695	1788
Q Serve(g_s), s	0.0	0.0	1.3	0.0	0.0	4.7	1.4	20.5	20.5	2.8	46.2	51.0
Cycle Q Clear(g_c), s	21.0	0.0	1.3	21.0	0.0	4.7	1.4	20.5	20.5	2.8	46.2	51.0
Prop In Lane	0.85		1.00	0.50		1.00	1.00		0.01	1.00		0.21
Lane Grp Cap(c), veh/h	59	0	275	77	0	279	30	2339	1281	54	2385	1258
V/C Ratio(X)	2.32	0.00	0.08	0.26	0.00	0.26	0.70	0.52	0.52	0.78	0.81	0.84
Avail Cap(c_a), veh/h	59	0	275	77	0	279	60	2339	1281	105	2385	1258
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	0.0	40.4	41.8	0.0	41.8	57.7	8.8	8.8	56.8	12.0	12.7
Incr Delay (d2), s/veh	645.6	0.0	0.1	1.7	0.0	0.5	25.7	0.8	1.5	21.2	3.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	0.0	0.6	0.6	0.0	2.1	0.9	9.7	10.9	1.7	22.2	27.2
LnGrp Delay(d), s/veh	703.8	0.0	40.5	43.6	0.0	42.3	83.4	9.7	10.4	78.0	15.1	19.7
LnGrp LOS	F		D	D		D	F	A	B	E	B	B
Approach Vol, veh/h		157			93			1906			3032	
Approach Delay, s/veh		615.1			42.6			10.7			17.6	
Approach LOS		F			D			B			B	

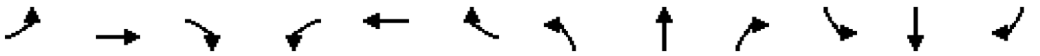
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.6	85.4		25.0	6.0	87.0		25.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	80.0		21.0	4.0	83.0		21.0
Max Q Clear Time (g_c+I1), s	4.8	22.5		23.0	3.4	53.0		23.0
Green Ext Time (p_c), s	0.0	21.7		0.0	0.0	26.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		33.6
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	370	520	70	60	570	120	90	1410	60	100	2040	420
Future Volume (veh/h)	370	520	70	60	570	120	90	1410	60	100	2040	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	378	531	71	61	582	122	92	1439	61	102	2082	429
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	402	927	411	102	619	270	115	2653	112	153	2299	456
Arrive On Green	0.12	0.26	0.26	0.03	0.17	0.17	0.03	0.53	0.53	0.04	0.54	0.54
Sat Flow, veh/h	3442	3539	1569	3442	3539	1541	3442	5002	212	3442	4244	842
Grp Volume(v), veh/h	378	531	71	61	582	122	92	975	525	102	1647	864
Grp Sat Flow(s),veh/h/ln	1721	1770	1569	1721	1770	1541	1721	1695	1824	1721	1695	1695
Q Serve(g_s), s	13.1	15.6	4.2	2.1	19.5	8.5	3.2	22.8	22.8	3.5	52.0	57.2
Cycle Q Clear(g_c), s	13.1	15.6	4.2	2.1	19.5	8.5	3.2	22.8	22.8	3.5	52.0	57.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.12	1.00		0.50
Lane Grp Cap(c), veh/h	402	927	411	102	619	270	115	1798	967	153	1836	918
V/C Ratio(X)	0.94	0.57	0.17	0.60	0.94	0.45	0.80	0.54	0.54	0.66	0.90	0.94
Avail Cap(c_a), veh/h	402	927	411	143	619	270	115	1798	967	201	1836	918
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.6	38.5	34.2	57.5	48.9	44.3	57.6	18.6	18.6	56.4	24.5	25.7
Incr Delay (d2), s/veh	30.4	0.9	0.2	5.4	22.4	1.2	32.2	1.2	2.2	5.1	7.4	18.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.9	7.8	1.8	1.1	11.5	3.7	2.0	10.9	12.0	1.8	26.1	31.3
LnGrp Delay(d), s/veh	83.0	39.3	34.4	62.9	71.3	45.5	89.8	19.8	20.8	61.6	31.9	44.1
LnGrp LOS	F	D	C	E	E	D	F	B	C	E	C	D
Approach Vol, veh/h		980			765			1592			2613	
Approach Delay, s/veh		55.8			66.5			24.1			37.1	
Approach LOS		E			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	67.6	7.6	35.4	8.0	69.0	18.0	25.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	62.0	5.0	30.0	4.0	65.0	14.0	21.0
Max Q Clear Time (g_c+I1), s	5.5	24.8	4.1	17.6	5.2	59.2	15.1	21.5
Green Ext Time (p_c), s	0.0	13.1	0.0	2.8	0.0	5.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	750	380	1010	740	10	180	220	370	10	160	10
Future Volume (vph)	10	750	380	1010	740	10	180	220	370	10	160	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00		1.00	
Satd. Flow (prot)	1787	3574	1570	3467	3567		1698	1780	1579		1860	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.52	0.97	1.00		0.98	
Satd. Flow (perm)	1787	3574	1570	3467	3567		925	1735	1579		1825	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	11	789	400	1063	779	11	189	232	389	11	168	11
RTOR Reduction (vph)	0	0	178	0	1	0	0	0	277	0	2	0
Lane Group Flow (vph)	11	789	222	1063	789	0	170	251	112	0	188	0
Confl. Peds. (#/hr)			2	2								
Confl. Bikes (#/hr)			2						1			1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	0.8	33.1	33.1	39.4	71.7		34.1	34.1	34.1		34.1	
Effective Green, g (s)	0.8	33.1	33.1	39.4	71.7		34.1	34.1	34.1		34.1	
Actuated g/C Ratio	0.01	0.28	0.28	0.33	0.60		0.29	0.29	0.29		0.29	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	12	997	438	1151	2156		265	498	453		524	
v/s Ratio Prot	0.01	c0.22		c0.31	0.22							
v/s Ratio Perm			0.14				c0.18	0.14	0.07		0.10	
v/c Ratio	0.92	0.79	0.51	0.92	0.37		0.64	0.50	0.25		0.36	
Uniform Delay, d1	58.9	39.6	35.9	38.1	11.9		36.9	35.2	32.4		33.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	212.2	4.4	0.9	12.2	0.1		11.4	3.6	1.3		1.9	
Delay (s)	271.0	43.9	36.8	50.3	12.0		48.3	38.8	33.7		35.5	
Level of Service	F	D	D	D	B		D	D	C		D	
Approach Delay (s/veh)		43.6			34.0			38.3			35.5	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.8	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	118.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	84.0%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	190	10	30	10	650	120	160	1280	10
Future Volume (veh/h)	10	10	10	190	10	30	10	650	120	160	1280	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	0.99		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	11	11	207	11	33	11	707	130	174	1391	11
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	215	199	337	303	13	38	19	1947	851	209	2326	1017
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.01	0.55	0.55	0.12	0.66	0.66
Sat Flow, veh/h	756	927	1570	1112	59	177	1774	3539	1548	1774	3539	1548
Grp Volume(v), veh/h	22	0	11	251	0	0	11	707	130	174	1391	11
Grp Sat Flow(s),veh/h/ln	1683	0	1570	1349	0	0	1774	1770	1548	1774	1770	1548
Q Serve(g_s), s	0.0	0.0	0.6	17.5	0.0	0.0	0.6	11.4	4.2	9.8	22.6	0.3
Cycle Q Clear(g_c), s	1.0	0.0	0.6	18.5	0.0	0.0	0.6	11.4	4.2	9.8	22.6	0.3
Prop In Lane	0.50		1.00	0.82		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	414	0	337	354	0	0	19	1947	851	209	2326	1017
V/C Ratio(X)	0.05	0.00	0.03	0.71	0.00	0.00	0.59	0.36	0.15	0.83	0.60	0.01
Avail Cap(c_a), veh/h	647	0	570	563	0	0	70	1947	851	383	2326	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.8	0.0	31.7	39.2	0.0	0.0	50.2	12.9	11.3	44.0	9.9	6.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	2.6	0.0	0.0	26.3	0.5	0.4	8.4	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.0	0.2	7.1	0.0	0.0	0.4	5.7	1.9	5.3	11.4	0.1
LnGrp Delay(d), s/veh	31.9	0.0	31.7	41.8	0.0	0.0	76.5	13.4	11.6	52.4	11.0	6.0
LnGrp LOS	C		C	D			E	B	B	D	B	A
Approach Vol, veh/h		33			251			848			1576	
Approach Delay, s/veh		31.8			41.8			14.0			15.5	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	16.0	60.1		25.9	5.1	71.0		25.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	22.0	49.0		37.0	4.0	67.0		37.0
Max Q Clear Time (g_c+I1), s	11.8	13.4		3.0	2.6	24.6		20.5
Green Ext Time (p_c), s	0.3	5.6		0.1	0.0	13.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	360	150	30	230	10	70	280	80	30	540	490
Future Volume (veh/h)	360	360	150	30	230	10	70	280	80	30	540	490
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	396	396	165	33	253	11	77	308	88	33	593	538
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	504	733	301	207	362	16	307	1975	862	582	1975	870
Arrive On Green	0.22	0.30	0.30	0.02	0.10	0.10	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1792	2460	1011	1792	3490	151	501	3574	1560	993	3574	1575
Grp Volume(v), veh/h	396	286	275	33	129	135	77	308	88	33	593	538
Grp Sat Flow(s),veh/h/ln	1792	1787	1683	1792	1787	1853	501	1787	1560	993	1787	1575
Q Serve(g_s), s	17.9	12.8	13.1	1.6	6.7	6.7	9.4	4.0	2.6	1.6	8.5	22.3
Cycle Q Clear(g_c), s	17.9	12.8	13.1	1.6	6.7	6.7	17.9	4.0	2.6	5.7	8.5	22.3
Prop In Lane	1.00		0.60	1.00		0.08	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	504	532	502	207	185	192	307	1975	862	582	1975	870
V/C Ratio(X)	0.79	0.54	0.55	0.16	0.70	0.70	0.25	0.16	0.10	0.06	0.30	0.62
Avail Cap(c_a), veh/h	804	950	895	238	335	348	307	1975	862	582	1975	870
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.2	28.1	28.2	37.1	41.5	41.5	16.3	10.5	10.2	11.9	11.5	14.6
Incr Delay (d2), s/veh	2.7	0.8	0.9	0.4	4.6	4.6	2.0	0.2	0.2	0.2	0.4	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	6.5	6.2	0.8	3.5	3.7	1.4	2.0	1.2	0.5	4.3	10.3
LnGrp Delay(d), s/veh	29.9	29.0	29.2	37.5	46.2	46.1	18.3	10.7	10.4	12.1	11.9	17.9
LnGrp LOS	C	C	C	D	D	D	B	B	B	B	B	B
Approach Vol, veh/h		957			297			473			1164	
Approach Delay, s/veh		29.4			45.2			11.9			14.7	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	6.3	32.6		57.0	25.0	14.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	4.0	51.0		53.0	37.0	18.0
Max Q Clear Time (g_c+I1), s		19.9	3.6	15.1		24.3	19.9	8.7
Green Ext Time (p_c), s		3.4	0.0	3.5		6.7	1.1	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	550	110	340	600	10	170	30	190	30	60	20
Future Volume (veh/h)	10	550	110	340	600	10	170	30	190	30	60	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	11	618	124	382	674	11	191	34	213	34	67	22
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	302	780	156	455	1558	25	590	651	543	441	734	229
Arrive On Green	0.01	0.26	0.26	0.18	0.43	0.43	0.10	0.35	0.35	0.03	0.28	0.28
Sat Flow, veh/h	1792	2959	592	1792	3597	59	1792	1881	1569	1792	2667	832
Grp Volume(v), veh/h	11	373	369	382	335	350	191	34	213	34	44	45
Grp Sat Flow(s),veh/h/ln	1792	1787	1764	1792	1787	1869	1792	1881	1569	1792	1787	1712
Q Serve(g_s), s	0.4	16.8	16.9	12.5	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Cycle Q Clear(g_c), s	0.4	16.8	16.9	12.5	11.3	11.3	6.3	1.0	8.9	1.2	1.6	1.7
Prop In Lane	1.00		0.34	1.00		0.03	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	302	471	465	455	774	809	590	651	543	441	492	471
V/C Ratio(X)	0.04	0.79	0.79	0.84	0.43	0.43	0.32	0.05	0.39	0.08	0.09	0.10
Avail Cap(c_a), veh/h	366	721	712	856	1360	1422	686	651	543	477	492	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.0	29.7	29.7	18.8	17.1	17.2	17.9	18.9	21.5	21.6	23.4	23.4
Incr Delay (d2), s/veh	0.0	3.4	3.5	4.2	0.4	0.4	0.3	0.2	2.1	0.1	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.2	8.7	8.7	6.7	5.7	5.9	3.1	0.6	4.1	0.6	0.8	0.9
LnGrp Delay(d), s/veh	23.0	33.1	33.2	23.0	17.5	17.5	18.2	19.0	23.6	21.7	23.7	23.8
LnGrp LOS	C	C	C	C	B	B	B	B	C	C	C	C
Approach Vol, veh/h		753			1067			438			123	
Approach Delay, s/veh		33.0			19.5			20.9			23.2	
Approach LOS		C			B			C			C	

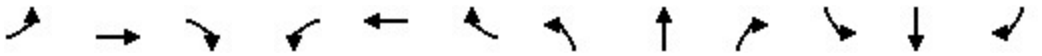
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.2	34.0	19.6	26.9	12.4	27.9	4.9	41.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	30.0	35.0	35.0	13.0	21.0	4.0	66.0
Max Q Clear Time (g_c+I1), s	3.2	10.9	14.5	18.9	8.3	3.7	2.4	13.3
Green Ext Time (p_c), s	0.0	0.8	1.1	4.0	0.2	0.3	0.0	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	340	80	40	430	140	100	160	30	220	320	160
Future Volume (veh/h)	120	340	80	40	430	140	100	160	30	220	320	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	136	386	91	45	489	159	114	182	34	250	364	182
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	172	1079	472	57	628	203	146	925	169	296	903	443
Arrive On Green	0.10	0.30	0.30	0.03	0.24	0.24	0.08	0.31	0.31	0.17	0.39	0.39
Sat Flow, veh/h	1774	3539	1547	1774	2615	844	1774	2979	545	1774	2286	1123
Grp Volume(v), veh/h	136	386	91	45	330	318	114	107	109	250	280	266
Grp Sat Flow(s),veh/h/ln	1774	1770	1547	1774	1770	1689	1774	1770	1755	1774	1770	1639
Q Serve(g_s), s	6.5	7.3	3.7	2.2	15.0	15.2	5.4	3.8	4.0	11.8	9.8	10.1
Cycle Q Clear(g_c), s	6.5	7.3	3.7	2.2	15.0	15.2	5.4	3.8	4.0	11.8	9.8	10.1
Prop In Lane	1.00		1.00	1.00		0.50	1.00		0.31	1.00		0.68
Lane Grp Cap(c), veh/h	172	1079	472	57	425	406	146	549	545	296	699	647
V/C Ratio(X)	0.79	0.36	0.19	0.79	0.78	0.78	0.78	0.19	0.20	0.85	0.40	0.41
Avail Cap(c_a), veh/h	391	1850	809	165	699	667	350	549	545	639	699	647
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	23.3	22.1	41.4	30.6	30.6	38.7	21.8	21.8	34.8	18.7	18.8
Incr Delay (d2), s/veh	7.9	0.2	0.2	21.2	3.1	3.4	8.7	0.8	0.8	6.6	1.7	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.6	1.6	1.4	7.7	7.5	3.0	2.0	2.0	6.3	5.1	4.9
LnGrp Delay(d), s/veh	45.9	23.5	22.3	62.6	33.6	34.0	47.4	22.6	22.7	41.4	20.4	20.7
LnGrp LOS	D	C	C	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		613			693			330			796	
Approach Delay, s/veh		28.3			35.7			31.2			27.1	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.4	30.7	6.8	30.3	11.1	38.0	12.3	24.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	20.0	8.0	45.0	17.0	34.0	19.0	34.0
Max Q Clear Time (g_c+I1), s	13.8	6.0	4.2	9.3	7.4	12.1	8.5	17.2
Green Ext Time (p_c), s	0.6	0.9	0.0	2.8	0.2	3.2	0.2	3.5

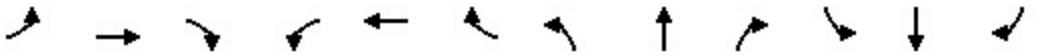
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Future Volume (vph)	450	440	30	60	260	210	40	430	80	440	270	700
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		0.99		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.99		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1610	3319		1770	3539	1572		3426		1681	1747	2739
Flt Permitted	0.95	0.64		0.95	1.00	1.00		0.89		0.95	0.47	1.00
Satd. Flow (perm)	1610	2163		1770	3539	1572		3057		1681	823	2739
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	489	478	33	65	283	228	43	467	87	478	293	761
RTOR Reduction (vph)	0	3	0	0	0	49	0	11	0	0	0	39
Lane Group Flow (vph)	328	669	0	65	283	179	0	586	0	378	393	722
Confl. Peds. (#/hr)	2		2	2		2	1		12	12		1
Confl. Bikes (#/hr)			3			2			9			2
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Effective Green, g (s)	27.5	51.0		4.0	19.5	47.9		28.6		28.4	61.0	88.5
Actuated g/C Ratio	0.23	0.43		0.03	0.16	0.40		0.24		0.24	0.51	0.74
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	368	1184		59	575	679		728		397	637	2111
v/s Ratio Prot	c0.20	0.13		0.04	0.08	0.06				c0.22	0.15	0.08
v/s Ratio Perm		c0.11				0.05		c0.19			0.17	0.19
v/c Ratio	0.89	0.57		1.10	0.49	0.26		0.80		0.95	0.62	0.34
Uniform Delay, d1	44.8	26.1		58.0	45.7	24.2		43.1		45.1	21.1	5.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	22.6	0.6		148.0	0.7	0.2		9.2		32.9	1.8	0.1
Delay (s)	67.4	26.7		206.0	46.4	24.4		52.3		78.0	22.9	5.6
Level of Service	E	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		40.1			55.7			52.3			27.9	
Approach LOS		D			E			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Future Volume (vph)	10	520	580	530	360	10	370	10	490	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1753	3539	1567	1770	3520		1681	1689	1552	1740	1723	
Flt Permitted	0.52	1.00	1.00	0.17	1.00		0.95	0.61	1.00	0.95	1.00	
Satd. Flow (perm)	967	3539	1567	317	3520		1681	1086	1552	1740	1723	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	10	542	604	552	375	10	385	10	510	10	10	10
RTOR Reduction (vph)	0	0	270	0	2	0	0	0	46	0	8	0
Lane Group Flow (vph)	10	542	334	552	383	0	196	199	464	10	12	0
Confl. Peds. (#/hr)	9		2	2		9			11	11		
Confl. Bikes (#/hr)			3			4			4			
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Effective Green, g (s)	24.0	23.3	41.3	60.8	56.1		18.0	44.6	73.4	0.7	22.6	
Actuated g/C Ratio	0.21	0.21	0.36	0.54	0.49		0.16	0.39	0.65	0.01	0.20	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	209	727	625	599	1741		266	522	1059	10	343	
v/s Ratio Prot	0.00	0.15	c0.08	c0.27	0.11		c0.12	0.06	c0.13	0.01	0.01	
v/s Ratio Perm	0.01		0.13	c0.22				0.09	0.17			
v/c Ratio	0.05	0.75	0.53	0.92	0.22		0.74	0.38	0.44	1.00	0.03	
Uniform Delay, d1	35.4	42.3	28.5	28.4	16.2		45.4	24.6	9.8	56.4	36.6	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	4.2	0.9	19.7	0.1		10.2	0.5	0.3	284.6	0.2	
Delay (s)	35.5	46.4	29.3	48.1	16.3		55.6	25.0	10.1	341.0	36.8	
Level of Service	D	D	C	D	B		E	C	B	F	D	
Approach Delay (s/veh)		37.4			35.1			23.3			138.2	
Approach LOS		D			D			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.83		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Future Volume (veh/h)	130	310	130	810	570	530	70	560	170	170	820	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.96	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	140	333	140	871	613	570	75	602	183	183	882	54
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	270	321	132	814	840	724	131	623	189	200	930	57
Arrive On Green	0.08	0.13	0.13	0.43	0.47	0.47	0.03	0.23	0.23	0.08	0.28	0.28
Sat Flow, veh/h	1774	2410	989	1774	1770	1525	1774	2671	810	1774	3383	207
Grp Volume(v), veh/h	140	242	231	871	613	570	75	398	387	183	461	475
Grp Sat Flow(s),veh/h/ln	1774	1770	1629	1774	1770	1525	1774	1770	1711	1774	1770	1821
Q Serve(g_s), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Cycle Q Clear(g_c), s	8.1	16.0	16.0	51.0	33.4	37.6	3.9	26.7	26.8	9.0	30.7	30.7
Prop In Lane	1.00		0.61	1.00		1.00	1.00		0.47	1.00		0.11
Lane Grp Cap(c), veh/h	270	236	217	814	840	724	131	413	399	200	487	501
V/C Ratio(X)	0.52	1.03	1.06	1.07	0.73	0.79	0.57	0.97	0.97	0.92	0.95	0.95
Avail Cap(c_a), veh/h	300	236	217	814	840	724	131	413	399	200	487	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.0	52.0	52.0	28.9	25.3	26.4	36.8	45.5	45.6	34.9	42.7	42.7
Incr Delay (d2), s/veh	1.5	65.7	78.4	52.0	3.2	5.8	6.0	36.4	37.7	41.1	29.7	29.2
Initial Q Delay(d3),s/veh	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	12.1	11.9	38.7	17.1	17.0	2.1	17.2	16.9	3.9	19.0	19.5
LnGrp Delay(d), s/veh	41.5	117.8	130.4	80.9	28.6	32.2	42.8	81.9	83.3	76.0	72.4	71.8
LnGrp LOS	D	F	F	F	C	C	D	F	F	E	E	E
Approach Vol, veh/h		613			2054			860			1119	
Approach Delay, s/veh		105.1			51.8			79.1			72.7	
Approach LOS		F			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	32.0	55.0	20.0	8.0	37.0	14.0	61.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	28.0	51.0	16.0	4.0	33.0	12.0	55.0
Max Q Clear Time (g_c+I1), s	11.0	28.8	53.0	18.0	5.9	32.7	10.1	39.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.2	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Future Volume (veh/h)	240	1050	260	590	810	70	90	750	460	110	850	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1129	280	634	871	75	97	806	495	118	914	269
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	731	2497	619	463	3124	970	75	1162	511	115	681	200
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.04	0.32	0.32	0.25	0.25	0.25
Sat Flow, veh/h	1156	4104	1018	745	5136	1594	1792	3574	1572	426	2724	800
Grp Volume(v), veh/h	258	942	467	634	871	75	97	806	495	118	599	584
Grp Sat Flow(s),veh/h/ln	578	1712	1698	373	1712	1594	1792	1787	1572	426	1787	1737
Q Serve(g_s), s	16.3	17.8	17.8	55.2	9.6	2.3	5.0	23.6	37.2	15.4	30.0	30.0
Cycle Q Clear(g_c), s	25.9	17.8	17.8	73.0	9.6	2.3	5.0	23.6	37.2	30.0	30.0	30.0
Prop In Lane	1.00		0.60	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
V/C Ratio(X)	0.35	0.45	0.45	1.37	0.28	0.08	1.30	0.69	0.97	1.03	1.34	1.35
Avail Cap(c_a), veh/h	731	2083	1033	463	3124	970	75	1162	511	115	447	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	17.2	12.7	12.7	39.6	11.1	9.7	57.5	35.3	39.9	56.3	45.0	45.0
Incr Delay (d2), s/veh	0.3	0.2	0.3	180.2	0.0	0.0	203.9	3.4	32.8	91.9	167.7	170.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	8.4	8.4	19.2	4.5	1.0	6.7	12.2	20.7	6.7	35.6	34.9
LnGrp Delay(d), s/veh	17.5	12.9	13.0	219.7	11.1	9.7	261.4	38.7	72.7	148.7	212.7	215.1
LnGrp LOS	B	B	B	F	B	A	F	D	E	F	F	F
Approach Vol, veh/h		1667			1580			1398			1301	
Approach Delay, s/veh		13.6			94.8			66.2			208.0	
Approach LOS		B			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		43.0		77.0	9.0	34.0		77.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		39.0		73.0	5.0	30.0		73.0
Max Q Clear Time (g_c+I1), s		39.2		27.9	7.0	32.0		75.0
Green Ext Time (p_c), s		0.0		17.2	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		90.1
HCM 2010 LOS		F

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	280	70	60	1020	1480	220
Future Volume (veh/h)	280	70	60	1020	1480	220
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	292	73	62	1062	1542	229
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	329	293	80	2630	2047	298
Arrive On Green	0.19	0.19	0.04	0.74	0.66	0.66
Sat Flow, veh/h	1774	1583	1774	3632	3184	450
Grp Volume(v), veh/h	292	73	62	1062	870	901
Grp Sat Flow(s),veh/h/ln	1774	1583	1774	1770	1770	1772
Q Serve(g_s), s	17.9	4.4	3.9	12.3	36.5	39.0
Cycle Q Clear(g_c), s	17.9	4.4	3.9	12.3	36.5	39.0
Prop In Lane	1.00	1.00	1.00			0.25
Lane Grp Cap(c), veh/h	329	293	80	2630	1172	1174
V/C Ratio(X)	0.89	0.25	0.78	0.40	0.74	0.77
Avail Cap(c_a), veh/h	461	411	111	2630	1172	1174
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.4	38.9	52.8	5.3	12.5	12.9
Incr Delay (d2), s/veh	14.4	0.4	20.2	0.5	4.3	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	4.1	2.3	6.1	19.0	20.3
LnGrp Delay(d), s/veh	58.8	39.3	73.0	5.7	16.8	17.8
LnGrp LOS	E	D	E	A	B	B
Approach Vol, veh/h	365			1124	1771	
Approach Delay, s/veh	54.9			9.4	17.3	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		87.0		24.7	9.0	78.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		83.0		29.0	7.0	72.0		
Max Q Clear Time (g_c+I1), s		14.3		19.9	5.9	41.0		
Green Ext Time (p_c), s		9.4		0.8	0.0	16.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Future Volume (veh/h)	230	720	0	0	620	10	10	140	20	580	0	390
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1900	1863	1900	1863	0	1863
Adj Flow Rate, veh/h	250	783	0	0	674	0	11	152	22	630	0	424
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2	2	0	2
Cap, veh/h	450	1721	0	0	997	446	40	554	80	0	0	0
Arrive On Green	0.13	0.49	0.00	0.00	0.28	0.00	0.37	0.37	0.37	0.00	0.00	0.00
Sat Flow, veh/h	1774	3632	0	0	3632	1583	108	1488	215		0	
Grp Volume(v), veh/h	250	783	0	0	674	0	185	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1774	1770	0	0	1770	1583	1811	0	0			
Q Serve(g_s), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Cycle Q Clear(g_c), s	5.1	8.2	0.0	0.0	9.5	0.0	4.0	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.06		0.12			
Lane Grp Cap(c), veh/h	450	1721	0	0	997	446	674	0	0			
V/C Ratio(X)	0.56	0.46	0.00	0.00	0.68	0.00	0.27	0.00	0.00			
Avail Cap(c_a), veh/h	905	3574	0	0	1944	870	674	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	11.7	9.6	0.0	0.0	18.0	0.0	12.4	0.0	0.0			
Incr Delay (d2), s/veh	1.1	0.2	0.0	0.0	0.8	0.0	1.0	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.5	4.0	0.0	0.0	4.7	0.0	2.2	0.0	0.0			
LnGrp Delay(d), s/veh	12.7	9.8	0.0	0.0	18.8	0.0	13.4	0.0	0.0			
LnGrp LOS	B	A			B		B					
Approach Vol, veh/h		1033			674			185				
Approach Delay, s/veh		10.5			18.8			13.4				
Approach LOS		B			B			B				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		25.0		31.4			11.5	19.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		57.0			22.0	31.0
Max Q Clear Time (g_c+I1), s		6.0		10.2			7.1	11.5
Green Ext Time (p_c), s		0.8		6.3			0.6	4.4

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		13.7
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Future Volume (veh/h)	150	720	190	120	1380	50	430	490	90	90	650	350
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	155	742	196	124	1423	52	443	505	93	93	670	361
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	174	1229	321	150	1481	54	478	1474	657	142	704	379
Arrive On Green	0.10	0.31	0.31	0.09	0.30	0.30	0.14	0.42	0.42	0.04	0.32	0.32
Sat Flow, veh/h	1740	3920	1023	1740	4938	180	3375	3471	1546	3375	2165	1166
Grp Volume(v), veh/h	155	628	310	124	958	517	443	505	93	93	537	494
Grp Sat Flow(s),veh/h/ln	1740	1663	1618	1740	1663	1793	1688	1736	1546	1688	1736	1596
Q Serve(g_s), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Cycle Q Clear(g_c), s	10.6	19.2	19.5	8.4	34.0	34.0	15.6	11.8	4.4	3.3	36.3	36.3
Prop In Lane	1.00		0.63	1.00		0.10	1.00		1.00	1.00		0.73
Lane Grp Cap(c), veh/h	174	1043	507	150	998	538	478	1474	657	142	564	519
V/C Ratio(X)	0.89	0.60	0.61	0.82	0.96	0.96	0.93	0.34	0.14	0.65	0.95	0.95
Avail Cap(c_a), veh/h	174	1043	507	232	998	538	478	1474	657	197	564	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.4	34.8	35.0	53.9	41.3	41.3	50.9	23.2	21.1	56.6	39.6	39.6
Incr Delay (d2), s/veh	39.0	1.0	2.1	13.1	19.6	29.0	24.2	0.6	0.5	5.0	27.7	29.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	8.9	9.0	4.6	18.3	21.1	8.9	5.7	2.0	1.6	21.6	20.1
LnGrp Delay(d), s/veh	92.4	35.8	37.1	67.0	60.9	70.3	75.1	23.9	21.6	61.6	67.3	68.9
LnGrp LOS	F	D	D	E	E	E	E	C	C	E	E	E
Approach Vol, veh/h		1093			1599			1041			1124	
Approach Delay, s/veh		44.2			64.4			45.5			67.6	
Approach LOS		D			E			D			E	

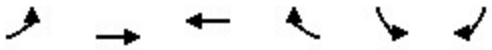
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.1	54.9	14.4	41.6	21.0	43.0	16.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	49.0	16.0	32.0	17.0	39.0	12.0	36.0
Max Q Clear Time (g_c+I1), s	5.3	13.8	10.4	21.5	17.6	38.3	12.6	36.0
Green Ext Time (p_c), s	0.0	3.6	0.1	4.3	0.0	0.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Future Volume (veh/h)	70	660	170	230	1350	110	240	760	270	240	840	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	74	695	179	242	1421	116	253	800	284	253	884	137
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	94	1176	596	272	1586	129	282	1095	719	282	1095	566
Arrive On Green	0.05	0.23	0.23	0.16	0.34	0.34	0.16	0.31	0.31	0.16	0.31	0.31
Sat Flow, veh/h	1757	5036	1477	1757	4734	386	1757	3505	1522	1757	3505	1544
Grp Volume(v), veh/h	74	695	179	242	1008	529	253	800	284	253	884	137
Grp Sat Flow(s),veh/h/ln	1757	1679	1477	1757	1679	1763	1757	1752	1522	1757	1752	1544
Q Serve(g_s), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Cycle Q Clear(g_c), s	4.8	14.1	9.6	15.6	32.9	32.9	16.3	23.4	14.1	16.3	26.7	7.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	94	1176	596	272	1125	591	282	1095	719	282	1095	566
V/C Ratio(X)	0.79	0.59	0.30	0.89	0.90	0.90	0.90	0.73	0.40	0.90	0.81	0.24
Avail Cap(c_a), veh/h	107	1176	596	351	1165	612	320	1095	719	320	1095	566
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	39.3	24.1	47.7	36.4	36.4	47.5	35.3	20.1	47.5	36.4	25.4
Incr Delay (d2), s/veh	28.5	0.8	0.3	19.5	9.1	15.5	24.7	4.3	1.6	24.7	6.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	6.6	4.0	9.0	16.7	18.6	9.8	12.0	6.2	9.8	13.9	3.2
LnGrp Delay(d), s/veh	82.3	40.1	24.4	67.2	45.5	51.9	72.1	39.6	21.7	72.1	42.9	26.4
LnGrp LOS	F	D	C	E	D	D	E	D	C	E	D	C
Approach Vol, veh/h		948			1779			1337			1274	
Approach Delay, s/veh		40.4			50.4			42.0			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	22.5	40.0	21.9	30.9	22.5	40.0	10.2	42.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	36.0	23.0	24.0	21.0	36.0	7.0	40.0
Max Q Clear Time (g_c+I1), s	18.3	25.4	17.6	16.1	18.3	28.7	6.8	34.9
Green Ext Time (p_c), s	0.2	4.6	0.3	3.1	0.2	3.5	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.7
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	320	850	730	500	100	100
Future Volume (vph)	320	850	730	500	100	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.95	1.00	1.00
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	0.96	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.96	1.00
Satd. Flow (prot)	1584	3195	3195	1362	3020	1301
Flt Permitted	0.33	1.00	1.00	1.00	0.96	1.00
Satd. Flow (perm)	556	3195	3195	1362	3020	1301
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	340	904	777	532	106	106
RTOR Reduction (vph)	0	0	0	172	30	52
Lane Group Flow (vph)	340	904	777	360	115	15
Confl. Peds. (#/hr)	11			11	1	
Heavy Vehicles (%)	13%	13%	13%	13%	13%	13%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	53.6	53.6	53.6	53.6	17.7	17.7
Effective Green, g (s)	53.6	53.6	53.6	53.6	17.7	17.7
Actuated g/C Ratio	0.68	0.68	0.68	0.68	0.22	0.22
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	375	2159	2159	920	674	290
v/s Ratio Prot		0.28	0.24		c0.04	
v/s Ratio Perm	c0.61			0.26		0.01
v/c Ratio	0.91	0.42	0.36	0.39	0.17	0.05
Uniform Delay, d1	10.8	5.8	5.5	5.7	24.9	24.2
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	24.7	0.1	0.1	0.3	0.6	0.3
Delay (s)	35.4	5.9	5.6	5.9	25.4	24.5
Level of Service	D	A	A	A	C	C
Approach Delay (s/veh)		14.0	5.7		25.1	
Approach LOS		B	A		C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	79.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	56.5%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Future Volume (veh/h)	20	780	60	70	1680	90	110	90	80	60	30	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	21	830	64	74	1787	96	117	96	85	64	32	21
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	152	2629	202	363	2698	145	541	657	549	462	657	549
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.36	0.36	0.36	0.36	0.36	0.36
Sat Flow, veh/h	238	4760	365	614	4886	262	1329	1845	1543	1184	1845	1543
Grp Volume(v), veh/h	21	584	310	74	1227	656	117	96	85	64	32	21
Grp Sat Flow(s),veh/h/ln	238	1679	1769	614	1679	1791	1329	1845	1543	1184	1845	1543
Q Serve(g_s), s	6.0	8.2	8.3	6.5	22.5	22.6	5.5	3.1	3.3	3.4	1.0	0.8
Cycle Q Clear(g_c), s	28.5	8.2	8.3	14.8	22.5	22.6	6.5	3.1	3.3	6.5	1.0	0.8
Prop In Lane	1.00		0.21	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1854	977	363	1854	989	541	657	549	462	657	549
V/C Ratio(X)	0.14	0.32	0.32	0.20	0.66	0.66	0.22	0.15	0.15	0.14	0.05	0.04
Avail Cap(c_a), veh/h	242	3123	1645	595	3123	1665	541	657	549	462	657	549
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.9	10.6	10.6	14.6	13.8	13.8	20.5	19.1	19.1	21.2	18.4	18.3
Incr Delay (d2), s/veh	0.4	0.1	0.2	0.3	0.4	0.8	0.9	0.5	0.6	0.6	0.1	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	3.8	4.1	1.1	10.5	11.3	2.2	1.7	1.5	1.2	0.5	0.3
LnGrp Delay(d), s/veh	24.3	10.7	10.8	14.9	14.2	14.6	21.4	19.5	19.7	21.9	18.5	18.4
LnGrp LOS	C	B	B	B	B	B	C	B	B	C	B	B
Approach Vol, veh/h		915			1957			298			117	
Approach Delay, s/veh		11.0			14.3			20.3			20.3	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		35.0		52.1		35.0		52.1
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		31.0		81.0		31.0		81.0
Max Q Clear Time (g_c+I1), s		8.5		30.5		8.5		24.6
Green Ext Time (p_c), s		1.2		7.5		0.4		23.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.2
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	570	10	10	10	10	10	10	500	10	60	870
Future Volume (veh/h)	10	570	10	10	10	10	10	10	500	10	60	870
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1854	1845	1863	1845	1845	1845	1845	1863
Adj Flow Rate, veh/h	12	663	12	12	12	12	12	12	581	12	70	1012
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Percent Heavy Veh, %	2	2	2	3	2	3	2	3	3	3	3	2
Cap, veh/h	31	505	715	46	32	708	20	1524	667	19	1524	688
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.01	0.43	0.43	0.01	0.43	0.43
Sat Flow, veh/h	0	1118	1583	0	70	1568	1774	3505	1534	1757	3505	1583
Grp Volume(v), veh/h	675	0	12	24	0	12	12	12	581	12	70	1012
Grp Sat Flow(s),veh/h/ln	1118	0	1583	70	0	1568	1774	1752	1534	1757	1752	1583
Q Serve(g_s), s	0.0	0.0	0.5	0.0	0.0	0.5	0.8	0.2	40.4	0.8	1.4	51.0
Cycle Q Clear(g_c), s	53.0	0.0	0.5	53.0	0.0	0.5	0.8	0.2	40.4	0.8	1.4	51.0
Prop In Lane	0.02		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	536	0	715	78	0	708	20	1524	667	19	1524	688
V/C Ratio(X)	1.26	0.00	0.02	0.31	0.00	0.02	0.61	0.01	0.87	0.62	0.05	1.47
Avail Cap(c_a), veh/h	536	0	715	78	0	708	60	1524	667	60	1524	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.1	0.0	17.8	28.9	0.0	17.8	57.8	18.8	30.2	57.8	19.1	33.1
Incr Delay (d2), s/veh	130.9	0.0	0.0	2.2	0.0	0.0	27.2	0.0	14.6	28.0	0.1	219.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.8	0.0	0.2	0.5	0.0	0.2	0.5	0.1	19.8	0.5	0.7	64.1
LnGrp Delay(d), s/veh	169.0	0.0	17.8	31.2	0.0	17.8	85.0	18.8	44.7	85.8	19.2	252.5
LnGrp LOS	F		B	C		B	F	B	D	F	B	F
Approach Vol, veh/h		687			36			605			1094	
Approach Delay, s/veh		166.4			26.7			45.0			235.8	
Approach LOS		F			C			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.3	55.0		57.0	5.3	55.0		57.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	51.0		53.0	4.0	51.0		53.0
Max Q Clear Time (g_c+I1), s	2.8	42.4		55.0	2.8	53.0		55.0
Green Ext Time (p_c), s	0.0	1.7		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		165.3
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Future Volume (veh/h)	10	10	100	50	10	10	40	330	40	10	480	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	11	11	114	57	11	11	45	375	45	11	545	11
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	31	326	55	6	315	137	1123	1112	40	1332	1116
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	0	149	1563	0	29	1510	143	1548	1534	13	1837	1539
Grp Volume(v), veh/h	22	0	114	68	0	11	420	0	45	556	0	11
Grp Sat Flow(s),veh/h/ln	149	0	1563	29	0	1510	1692	0	1534	1850	0	1539
Q Serve(g_s), s	0.0	0.0	7.5	0.0	0.0	0.7	0.0	0.0	1.0	0.0	0.0	0.2
Cycle Q Clear(g_c), s	25.0	0.0	7.5	25.0	0.0	0.7	9.6	0.0	1.0	14.0	0.0	0.2
Prop In Lane	0.50		1.00	0.84		1.00	0.11		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
V/C Ratio(X)	0.29	0.00	0.35	1.11	0.00	0.03	0.33	0.00	0.04	0.41	0.00	0.01
Avail Cap(c_a), veh/h	76	0	326	61	0	315	1260	0	1112	1372	0	1116
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	40.3	0.0	40.6	57.6	0.0	37.9	5.9	0.0	4.7	6.5	0.0	4.6
Incr Delay (d2), s/veh	2.1	0.0	0.6	149.2	0.0	0.0	0.7	0.0	0.1	0.9	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.3	4.6	0.0	0.3	5.1	0.0	0.4	7.4	0.0	0.1
LnGrp Delay(d), s/veh	42.3	0.0	41.2	207.8	0.0	37.9	6.6	0.0	4.7	7.4	0.0	4.6
LnGrp LOS	D		D	F		D	A		A	A		A
Approach Vol, veh/h		136			79			465			567	
Approach Delay, s/veh		41.4			184.2			6.4			7.3	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		91.0		29.0		91.0		29.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		87.0		25.0		87.0		25.0
Max Q Clear Time (g_c+I1), s		11.6		27.0		16.0		27.0
Green Ext Time (p_c), s		3.6		0.0		4.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Future Volume (veh/h)	40	40	60	110	190	60	270	1160	40	30	980	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	44	44	66	121	209	66	297	1275	44	33	1077	110
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	56	236	367	150	242	77	373	2101	72	42	1831	807
Arrive On Green	0.03	0.13	0.13	0.09	0.18	0.18	0.11	0.61	0.61	0.02	0.52	0.52
Sat Flow, veh/h	1757	1845	1528	1757	1333	421	3408	3454	119	1757	3505	1545
Grp Volume(v), veh/h	44	44	66	121	0	275	297	646	673	33	1077	110
Grp Sat Flow(s),veh/h/ln	1757	1845	1528	1757	0	1755	1704	1752	1820	1757	1752	1545
Q Serve(g_s), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Cycle Q Clear(g_c), s	2.6	2.2	3.6	7.0	0.0	15.8	8.8	23.7	23.8	1.9	21.9	3.8
Prop In Lane	1.00		1.00	1.00		0.24	1.00		0.07	1.00		1.00
Lane Grp Cap(c), veh/h	56	236	367	150	0	319	373	1066	1107	42	1831	807
V/C Ratio(X)	0.79	0.19	0.18	0.80	0.00	0.86	0.80	0.61	0.61	0.79	0.59	0.14
Avail Cap(c_a), veh/h	119	338	452	271	0	474	559	1066	1107	102	1831	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.3	31.5	46.5	0.0	41.1	45.0	12.6	12.6	50.3	17.0	12.7
Incr Delay (d2), s/veh	21.1	0.4	0.2	9.6	0.0	10.3	4.8	2.6	2.5	27.7	1.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	1.1	1.5	3.8	0.0	8.6	4.4	12.1	12.5	1.3	11.0	1.7
LnGrp Delay(d), s/veh	70.9	40.7	31.7	56.1	0.0	51.4	49.7	15.2	15.1	78.0	18.4	13.1
LnGrp LOS	E	D	C	E		D	D	B	B	E	B	B
Approach Vol, veh/h		154			396			1616			1220	
Approach Delay, s/veh		45.5			52.9			21.5			19.6	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.5	67.0	12.9	17.3	15.3	58.1	7.3	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	63.0	16.0	19.0	17.0	52.0	7.0	28.0
Max Q Clear Time (g_c+I1), s	3.9	25.8	9.0	5.6	10.8	23.9	4.6	17.8
Green Ext Time (p_c), s	0.0	11.0	0.1	0.3	0.5	8.9	0.0	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	24.2
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Future Vol, veh/h	30	50	90	120	120	10	90	240	40	10	310	60
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	34	57	102	136	136	11	102	273	45	11	352	68
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	12.9	22.3	29.2	25.5
HCM LOS	B	C	D	D

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	27%	0%	38%	0%	50%	0%	3%	0%
Vol Thru, %	73%	0%	63%	0%	50%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	330	40	80	90	240	10	320	60
LT Vol	90	0	30	0	120	0	10	0
Through Vol	240	0	50	0	120	0	310	0
RT Vol	0	40	0	90	0	10	0	60
Lane Flow Rate	375	45	91	102	273	11	364	68
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.774	0.083	0.212	0.213	0.611	0.022	0.739	0.125
Departure Headway (Hd)	7.431	6.572	8.402	7.483	8.061	7.082	7.321	6.586
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	484	542	425	477	447	503	491	541
Service Time	5.212	4.353	6.201	5.281	5.846	4.865	5.103	4.368
HCM Lane V/C Ratio	0.775	0.083	0.214	0.214	0.611	0.022	0.741	0.126
HCM Control Delay, s/veh	31.5	10	13.5	12.3	22.8	10	28.3	10.3
HCM Lane LOS	D	A	B	B	C	A	D	B
HCM 95th-tile Q	6.8	0.3	0.8	0.8	4	0.1	6.1	0.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	640	130	70	900	220	160	530	70	180	730	290
Future Volume (veh/h)	210	640	130	70	900	220	160	530	70	180	730	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	228	696	141	76	978	239	174	576	76	196	793	315
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	225	1906	830	338	1906	850	177	1271	167	269	1430	640
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.40	0.40	0.40	0.40	0.40	0.40
Sat Flow, veh/h	461	3574	1557	660	3574	1594	512	3176	418	785	3574	1599
Grp Volume(v), veh/h	228	696	141	76	978	239	174	323	329	196	793	315
Grp Sat Flow(s),veh/h/ln	461	1787	1557	660	1787	1594	512	1787	1807	785	1787	1599
Q Serve(g_s), s	42.9	13.5	5.6	9.0	21.1	9.9	27.5	15.9	16.0	29.3	20.5	17.7
Cycle Q Clear(g_c), s	64.0	13.5	5.6	22.6	21.1	9.9	48.0	15.9	16.0	45.3	20.5	17.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	225	1906	830	338	1906	850	177	715	723	269	1430	640
V/C Ratio(X)	1.01	0.37	0.17	0.23	0.51	0.28	0.98	0.45	0.45	0.73	0.55	0.49
Avail Cap(c_a), veh/h	225	1906	830	338	1906	850	177	715	723	269	1430	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.3	16.2	14.4	22.8	18.0	15.4	50.8	26.4	26.4	43.0	27.8	26.9
Incr Delay (d2), s/veh	63.5	0.1	0.1	0.3	0.2	0.2	63.2	2.1	2.1	15.8	1.6	2.7
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.4	6.7	2.4	1.7	10.4	4.4	8.9	8.2	8.4	7.5	10.4	8.3
LnGrp Delay(d), s/veh	107.9	16.3	14.5	23.1	18.2	15.6	113.9	28.4	28.5	58.8	29.3	29.6
LnGrp LOS	F	B	B	C	B	B	F	C	C	E	C	C
Approach Vol, veh/h		1065			1293			826			1304	
Approach Delay, s/veh		35.7			18.0			46.5			33.8	
Approach LOS		D			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		52.0		68.0		52.0		68.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		48.0		64.0		48.0		64.0
Max Q Clear Time (g_c+I1), s		50.0		66.0		47.3		24.6
Green Ext Time (p_c), s		0.0		0.0		0.5		9.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	640	100	270	1090	130	180	880	210	150	1140	370
Future Volume (veh/h)	200	640	100	270	1090	130	180	880	210	150	1140	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1810
Adj Flow Rate, veh/h	211	674	105	284	1147	137	189	926	221	158	1200	389
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	215	876	135	311	1152	138	223	1052	251	172	1433	629
Arrive On Green	0.13	0.20	0.20	0.18	0.26	0.26	0.07	0.38	0.38	0.10	0.42	0.42
Sat Flow, veh/h	1723	4312	664	1723	4461	532	3343	2744	654	1723	3438	1509
Grp Volume(v), veh/h	211	513	266	284	847	437	189	580	567	158	1200	389
Grp Sat Flow(s),veh/h/ln	1723	1647	1683	1723	1647	1700	1672	1719	1679	1723	1719	1509
Q Serve(g_s), s	14.6	17.6	18.0	19.4	30.8	30.8	6.7	37.6	37.8	10.9	37.5	24.3
Cycle Q Clear(g_c), s	14.6	17.6	18.0	19.4	30.8	30.8	6.7	37.6	37.8	10.9	37.5	24.3
Prop In Lane	1.00		0.39	1.00		0.31	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	215	669	342	311	851	439	223	659	644	172	1433	629
V/C Ratio(X)	0.98	0.77	0.78	0.91	1.00	1.00	0.85	0.88	0.88	0.92	0.84	0.62
Avail Cap(c_a), veh/h	215	669	342	345	851	439	223	659	644	172	1433	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	45.1	45.3	48.3	44.4	44.4	55.4	34.4	34.5	53.5	31.4	27.5
Incr Delay (d2), s/veh	55.3	5.3	10.9	26.5	29.6	41.8	25.1	15.5	16.0	45.3	6.0	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	8.5	9.4	11.5	17.5	19.6	3.9	20.7	20.4	7.3	18.9	10.8
LnGrp Delay(d), s/veh	107.6	50.5	56.2	74.8	74.0	86.3	80.5	49.9	50.5	98.8	37.4	32.0
LnGrp LOS	F	D	E	E	E	F	F	D	D	F	D	C
Approach Vol, veh/h		990			1568			1336			1747	
Approach Delay, s/veh		64.2			77.6			54.5			41.7	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	50.0	25.6	28.4	12.0	54.0	19.0	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	46.0	24.0	22.0	8.0	50.0	15.0	31.0
Max Q Clear Time (g_c+I1), s	12.9	39.8	21.4	20.0	8.7	39.5	16.6	32.8
Green Ext Time (p_c), s	0.0	3.5	0.2	0.9	0.0	6.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Future Volume (veh/h)	70	250	40	310	300	160	30	1270	280	60	1870	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	74	266	43	330	319	170	32	1351	298	64	1989	85
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	95	393	206	405	391	203	41	2398	528	83	2994	128
Arrive On Green	0.05	0.11	0.11	0.12	0.18	0.18	0.02	0.57	0.57	0.05	0.60	0.60
Sat Flow, veh/h	1774	3539	1526	3442	2230	1158	1774	4170	919	1774	5002	213
Grp Volume(v), veh/h	74	266	43	330	251	238	32	1098	551	64	1347	727
Grp Sat Flow(s),veh/h/ln	1774	1770	1526	1721	1770	1618	1774	1695	1698	1774	1695	1825
Q Serve(g_s), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Cycle Q Clear(g_c), s	4.4	7.7	2.7	10.0	14.6	15.2	1.9	21.8	21.8	3.8	28.3	28.5
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.54	1.00		0.12
Lane Grp Cap(c), veh/h	95	393	206	405	310	284	41	1949	977	83	2029	1092
V/C Ratio(X)	0.78	0.68	0.21	0.81	0.81	0.84	0.79	0.56	0.56	0.78	0.66	0.67
Avail Cap(c_a), veh/h	166	530	265	579	397	363	100	1949	977	166	2029	1092
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	45.7	41.3	46.0	42.4	42.6	52.0	14.3	14.3	50.4	14.3	14.3
Incr Delay (d2), s/veh	12.8	2.1	0.5	5.9	9.5	12.8	27.3	1.2	2.4	14.2	1.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	3.9	1.2	5.1	7.9	7.8	1.3	10.4	10.7	2.2	13.6	15.1
LnGrp Delay(d), s/veh	62.7	47.8	41.8	51.9	51.9	55.4	79.3	15.5	16.7	64.7	16.0	17.5
LnGrp LOS	E	D	D	D	D	E	E	B	B	E	B	B
Approach Vol, veh/h		383			819			1681			2138	
Approach Delay, s/veh		50.0			52.9			17.1			18.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	65.5	16.6	15.9	6.5	68.0	9.7	22.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	60.0	18.0	16.0	6.0	64.0	10.0	24.0
Max Q Clear Time (g_c+I1), s	5.8	23.8	12.0	9.7	3.9	30.5	6.4	17.2
Green Ext Time (p_c), s	0.0	15.9	0.6	0.8	0.0	20.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	160	200	10	30	30
Future Vol, veh/h	20	160	200	10	30	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	174	217	11	33	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	228	0	-	0	435	217
Stage 1	-	-	-	-	217	-
Stage 2	-	-	-	-	218	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1340	-	-	-	578	823
Stage 1	-	-	-	-	819	-
Stage 2	-	-	-	-	818	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1340	-	-	-	568	823
Mov Cap-2 Maneuver	-	-	-	-	568	-
Stage 1	-	-	-	-	804	-
Stage 2	-	-	-	-	818	-

Approach	EB	WB	SB
HCM Control Delay, s/v	0.9	0	10.6
HCM LOS			B

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1340	-	-	-	568	823
HCM Lane V/C Ratio	0.016	-	-	-	0.057	0.04
HCM Control Delay (s/veh)	7.7	0	-	-	11.7	9.6
HCM Lane LOS	A	A	-	-	B	A
HCM 95th %tile Q(veh)	0	-	-	-	0.2	0.1

Intersection	
Int Delay, s/veh	2.8

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	30	0	50	20	10	10	20	350	20	80	490	10
Future Vol, veh/h	30	0	50	20	10	10	20	350	20	80	490	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	33	0	54	22	11	11	22	380	22	87	533	11

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	881	1153	201	947	1159	272	544	0	0	402	0	0
Stage 1	435	435	-	713	713	-	-	-	-	-	-	-
Stage 2	446	718	-	234	446	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	241	196	806	216	194	726	1021	-	-	1153	-	-
Stage 1	570	579	-	389	434	-	-	-	-	-	-	-
Stage 2	561	431	-	748	572	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	210	177	806	187	176	726	1021	-	-	1153	-	-
Mov Cap-2 Maneuver	210	177	-	187	176	-	-	-	-	-	-	-
Stage 1	557	566	-	380	401	-	-	-	-	-	-	-
Stage 2	497	399	-	683	559	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	15.1	24.8	0.4	1.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	210	390	806	1153	-	-	1021	-	-	225
HCM Lane V/C Ratio	0.104	0.074	0.045	0.075	-	-	0.021	-	-	0.193
HCM Control Delay (s/veh)	24.1	15	9.7	8.4	-	-	8.6	-	-	24.8
HCM Lane LOS	C	C	A	A	-	-	A	-	-	C
HCM 95th %tile Q(veh)	0.3	0.2	0.1	0.2	-	-	0.1	-	-	0.7

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	140	10	10	380	50	50	10	10	60	10	20
Future Volume (veh/h)	120	140	10	10	380	50	50	10	10	60	10	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	130	152	11	11	413	54	54	11	11	65	11	22
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	269	470	34	58	918	118	805	156	954	651	116	199
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	584	1578	114	28	3085	395	1203	262	1599	959	194	334
Grp Volume(v), veh/h	130	0	163	254	0	224	65	0	11	98	0	0
Grp Sat Flow(s),veh/h/ln	584	0	1692	1866	0	1642	1465	0	1599	1486	0	0
Q Serve(g_s), s	10.0	0.0	5.7	0.0	0.0	8.4	0.0	0.0	0.2	0.9	0.0	0.0
Cycle Q Clear(g_c), s	18.3	0.0	5.7	8.3	0.0	8.4	1.1	0.0	0.2	2.0	0.0	0.0
Prop In Lane	1.00		0.07	0.04		0.24	0.83		1.00	0.66		0.22
Lane Grp Cap(c), veh/h	269	0	504	605	0	489	961	0	954	966	0	0
V/C Ratio(X)	0.48	0.00	0.32	0.42	0.00	0.46	0.07	0.00	0.01	0.10	0.00	0.00
Avail Cap(c_a), veh/h	819	0	1502	1691	0	1458	961	0	954	966	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	29.0	0.0	20.6	21.5	0.0	21.6	6.4	0.0	6.2	6.5	0.0	0.0
Incr Delay (d2), s/veh	1.3	0.0	0.4	0.5	0.0	0.7	0.1	0.0	0.0	0.2	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	0.0	2.7	4.4	0.0	3.9	0.6	0.0	0.1	0.9	0.0	0.0
LnGrp Delay(d), s/veh	30.4	0.0	21.0	22.0	0.0	22.2	6.5	0.0	6.2	6.7	0.0	0.0
LnGrp LOS	C		C	C		C	A		A	A		
Approach Vol, veh/h		293			478			76			98	
Approach Delay, s/veh		25.1			22.1			6.5			6.7	
Approach LOS		C			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		26.5		49.0		26.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0		45.0		67.0
Max Q Clear Time (g_c+I1), s		3.1		20.3		4.0		10.4
Green Ext Time (p_c), s		0.4		2.1		0.6		2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	120	10	10	470	30	10	10	10	20	10	10
Future Volume (veh/h)	10	120	10	10	470	30	10	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	130	11	11	511	33	11	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	99	753	62	77	804	51	374	373	328	541	271	236
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	89	3100	255	26	3307	211	467	615	541	725	447	390
Grp Volume(v), veh/h	80	0	72	293	0	262	33	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1777	0	1667	1868	0	1675	1624	0	0	1562	0	0
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	7.4	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	1.8	0.0	1.8	7.4	0.0	7.4	0.4	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.14		0.15	0.04		0.13	0.33		0.33	0.50		0.25
Lane Grp Cap(c), veh/h	509	0	405	525	0	407	1074	0	0	1048	0	0
V/C Ratio(X)	0.16	0.00	0.18	0.56	0.00	0.64	0.03	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	2569	0	2523	2871	0	2535	1074	0	0	1048	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	15.8	0.0	15.8	17.9	0.0	17.9	4.2	0.0	0.0	4.2	0.0	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.2	0.9	0.0	1.7	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.8	4.0	0.0	3.6	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	16.0	0.0	16.0	18.9	0.0	19.6	4.2	0.0	0.0	4.3	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		152			555			33			44	
Approach Delay, s/veh		16.0			19.2			4.2			4.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		16.8		36.0		16.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		80.0		32.0		80.0
Max Q Clear Time (g_c+I1), s		2.4		3.8		2.5		9.4
Green Ext Time (p_c), s		0.1		0.9		0.2		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	120	10	10	470	20	150	10	10	10	10	10
Future Volume (veh/h)	10	120	10	10	470	20	150	10	10	10	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	130	11	11	511	22	163	11	11	11	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	67	588	50	52	705	30	953	65	59	403	402	373
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	74	2820	238	28	3382	144	1255	93	85	496	581	538
Grp Volume(v), veh/h	75	0	77	286	0	258	185	0	0	33	0	0
Grp Sat Flow(s),veh/h/ln	1463	0	1670	1867	0	1686	1434	0	0	1615	0	0
Q Serve(g_s), s	0.1	0.0	3.1	1.3	0.0	11.5	3.1	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	11.7	0.0	3.1	11.5	0.0	11.5	3.5	0.0	0.0	0.5	0.0	0.0
Prop In Lane	0.15		0.14	0.04		0.09	0.88		0.06	0.33		0.33
Lane Grp Cap(c), veh/h	356	0	348	435	0	351	1077	0	0	1178	0	0
V/C Ratio(X)	0.21	0.00	0.22	0.66	0.00	0.73	0.17	0.00	0.00	0.03	0.00	0.00
Avail Cap(c_a), veh/h	1136	0	1157	1329	0	1168	1077	0	0	1178	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	26.4	0.0	26.6	29.9	0.0	29.9	4.3	0.0	0.0	3.9	0.0	0.0
Incr Delay (d2), s/veh	0.3	0.0	0.3	1.7	0.0	3.0	0.3	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	0.0	1.5	6.2	0.0	5.7	1.5	0.0	0.0	0.2	0.0	0.0
LnGrp Delay(d), s/veh	26.7	0.0	26.9	31.6	0.0	32.9	4.7	0.0	0.0	3.9	0.0	0.0
LnGrp LOS	C		C	C		C	A			A		
Approach Vol, veh/h		152			544			185			33	
Approach Delay, s/veh		26.8			32.2			4.7			3.9	
Approach LOS		C			C			A			A	

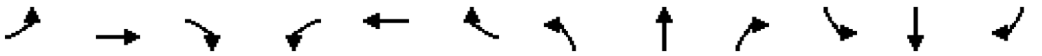
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		20.8		60.0		20.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s		5.5		13.7		2.5		13.5
Green Ext Time (p_c), s		1.3		0.9		0.2		3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	130	10	10	520	10	30	10	30	30	10	10
Future Volume (veh/h)	10	130	10	10	520	10	30	10	30	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1900	1900	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	11	141	11	11	565	11	33	11	33	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	88	753	57	69	846	16	467	172	414	634	212	187
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.62	0.62	0.62	0.62	0.62	0.62
Sat Flow, veh/h	82	3093	236	24	3478	67	611	276	665	864	340	301
Grp Volume(v), veh/h	85	0	78	308	0	279	77	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1740	0	1670	1869	0	1700	1552	0	0	1506	0	0
Q Serve(g_s), s	0.0	0.0	2.2	0.0	0.0	8.8	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.8	0.0	2.2	8.8	0.0	8.8	1.0	0.0	0.0	0.7	0.0	0.0
Prop In Lane	0.13		0.14	0.04		0.04	0.43		0.43	0.60		0.20
Lane Grp Cap(c), veh/h	492	0	407	518	0	414	1052	0	0	1034	0	0
V/C Ratio(X)	0.17	0.00	0.19	0.60	0.00	0.67	0.07	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	2143	0	2106	2397	0	2144	1052	0	0	1034	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	17.8	0.0	17.9	20.4	0.0	20.4	4.4	0.0	0.0	4.4	0.0	0.0
Incr Delay (d2), s/veh	0.2	0.0	0.2	1.1	0.0	1.9	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	1.0	4.7	0.0	4.3	0.5	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	18.0	0.0	18.1	21.5	0.0	22.3	4.6	0.0	0.0	4.5	0.0	0.0
LnGrp LOS	B		B	C		C	A			A		
Approach Vol, veh/h		163			587			77			55	
Approach Delay, s/veh		18.0			21.9			4.6			4.5	
Approach LOS		B			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		41.0		18.5		41.0		18.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		37.0		75.0		37.0		75.0
Max Q Clear Time (g_c+I1), s		3.0		10.8		2.7		10.8
Green Ext Time (p_c), s		0.4		1.0		0.3		3.6

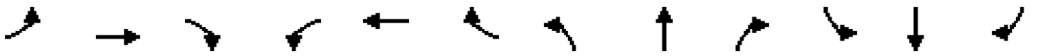
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.6
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	400	10	10	420	340	10	10	10	50	30	70
Future Volume (vph)	10	400	10	10	420	340	10	10	10	50	30	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0			4.0		4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95			1.00		0.95	0.91	0.95
Frt		1.00		1.00	0.93			0.96		1.00	0.95	0.85
Flt Protected		1.00		0.95	1.00			0.98		0.95	1.00	1.00
Satd. Flow (prot)		3557		1787	3334			1767		1698	1611	1519
Flt Permitted		0.93		0.95	1.00			0.95		0.95	0.99	1.00
Satd. Flow (perm)		3310		1787	3334			1698		1698	1607	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	435	11	11	457	370	11	11	11	54	33	76
RTOR Reduction (vph)	0	2	0	0	192	0	0	6	0	0	8	22
Lane Group Flow (vph)	0	455	0	11	635	0	0	27	0	49	52	32
Turn Type	Perm	NA		Prot	NA		Perm	NA		Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		18.9		1.2	24.1			38.1		4.9	47.0	47.0
Effective Green, g (s)		18.9		1.2	24.1			38.1		4.9	47.0	47.0
Actuated g/C Ratio		0.24		0.02	0.30			0.48		0.06	0.59	0.59
Clearance Time (s)		4.0		4.0	4.0			4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0			3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		790		27	1015			817		105	955	902
v/s Ratio Prot				0.01	c0.19					c0.03	0.00	0.02
v/s Ratio Perm		0.14						0.02			c0.03	
v/c Ratio		0.58		0.41	0.63			0.03		0.47	0.05	0.04
Uniform Delay, d1		26.6		38.6	23.6			10.8		35.8	6.7	6.7
Progression Factor		1.00		1.00	1.00			1.00		1.00	1.00	1.00
Incremental Delay, d2		1.0		9.7	1.2			0.1		3.3	0.0	0.1
Delay (s)		27.6		48.3	24.8			10.9		39.1	6.8	6.7
Level of Service		C		D	C			B		D	A	A
Approach Delay (s/veh)		27.6			25.1			10.9			16.5	
Approach LOS		C			C			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.31		
Actuated Cycle Length (s)	79.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	39.2%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	350	10	10	530	820	10	10	20	380	10	140
Future Volume (vph)	340	350	10	10	530	820	10	10	20	380	10	140
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1599	1787	3574	1599		1733		1698	1623	1519
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.92		0.78	0.75	1.00
Satd. Flow (perm)	1787	3574	1599	1787	3574	1599		1616		1395	1276	1519
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	380	11	11	576	891	11	11	22	413	11	152
RTOR Reduction (vph)	0	0	4	0	0	375	0	16	0	0	2	100
Lane Group Flow (vph)	370	380	7	11	576	516	0	28	0	219	218	37
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	25.4	66.0	66.0	0.7	41.3	41.3		29.0		29.0	29.0	29.0
Effective Green, g (s)	25.4	66.0	66.0	0.7	41.3	41.3		29.0		29.0	29.0	29.0
Actuated g/C Ratio	0.24	0.61	0.61	0.01	0.38	0.38		0.27		0.27	0.27	0.27
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	421	2190	979	11	1370	613		435		375	343	409
v/s Ratio Prot	c0.21	0.11		0.01	0.16							
v/s Ratio Perm			0.00			c0.32		0.02		0.16	c0.17	0.02
v/c Ratio	0.88	0.17	0.01	1.00	0.42	0.84		0.06		0.58	0.64	0.09
Uniform Delay, d1	39.7	9.0	8.1	53.5	24.4	30.2		29.3		34.1	34.7	29.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	18.4	0.0	0.0	271.4	0.2	10.2		0.3		6.5	8.7	0.4
Delay (s)	58.0	9.1	8.1	324.9	24.6	40.4		29.5		40.6	43.4	29.9
Level of Service	E	A	A	F	C	D		C		D	D	C
Approach Delay (s/veh)		32.9			36.4			29.5			39.1	
Approach LOS		C			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.79		
Actuated Cycle Length (s)	107.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	82.9%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	90	60	230	10	50	180	1060	130	20	970	10
Future Volume (veh/h)	10	90	60	230	10	50	180	1060	130	20	970	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	11	98	65	250	11	54	196	1152	141	22	1054	11
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	40	244	388	71	0	388	363	2419	1082	297	2452	26
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	0	1007	1599	0	0	1599	533	3574	1599	429	3624	38
Grp Volume(v), veh/h	109	0	65	261	0	54	196	1152	141	22	520	545
Grp Sat Flow(s),veh/h/ln	1007	0	1599	0	0	1599	533	1787	1599	429	1787	1875
Q Serve(g_s), s	0.0	0.0	3.2	0.0	0.0	2.6	26.3	15.2	3.1	2.6	13.1	13.1
Cycle Q Clear(g_c), s	24.0	0.0	3.2	24.0	0.0	2.6	39.4	15.2	3.1	17.8	13.1	13.1
Prop In Lane	0.10		1.00	0.96		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	284	0	388	71	0	388	363	2419	1082	297	1209	1269
V/C Ratio(X)	0.38	0.00	0.17	3.67	0.00	0.14	0.54	0.48	0.13	0.07	0.43	0.43
Avail Cap(c_a), veh/h	284	0	388	71	0	388	363	2419	1082	297	1209	1269
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.8	0.0	29.6	49.5	0.0	29.4	16.3	7.6	5.7	11.9	7.3	7.3
Incr Delay (d2), s/veh	0.8	0.0	0.2	1233.5	0.0	0.2	5.7	0.7	0.2	0.5	1.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	0.0	1.4	26.3	0.0	1.2	4.4	7.6	1.4	0.3	6.7	7.0
LnGrp Delay(d), s/veh	31.6	0.0	29.8	1283.0	0.0	29.6	21.9	8.3	5.9	12.4	8.4	8.4
LnGrp LOS	C		C	F		C	C	A	A	B	A	A
Approach Vol, veh/h		174			315			1489			1087	
Approach Delay, s/veh		31.0			1068.1			9.9			8.5	
Approach LOS		C			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		28.0		71.0		28.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		17.0		67.0		24.0
Max Q Clear Time (g_c+I1), s		41.4		26.0		19.8		26.0
Green Ext Time (p_c), s		12.3		0.0		9.6		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	119.3
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	5.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	30	490	510	20	30
Future Vol, veh/h	10	30	490	510	20	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	10	31	510	531	21	31

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	41	0	1577	26
Stage 1	-	-	-	-	26	-
Stage 2	-	-	-	-	1551	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1581	-	122	1056
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	194	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1581	-	66	1056
Mov Cap-2 Maneuver	-	-	-	-	66	-
Stage 1	-	-	-	-	1002	-
Stage 2	-	-	-	-	105	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	4.1	38.3
HCM LOS			E

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	66	1056	-	-	1581	-
HCM Lane V/C Ratio	0.316	0.03	-	-	0.323	-
HCM Control Delay (s/veh)	82.9	8.5	-	-	8.4	0
HCM Lane LOS	F	A	-	-	A	A
HCM 95th %tile Q(veh)	1.2	0.1	-	-	1.4	-

Intersection	
Int Delay, s/veh	7.8

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	90	940	50	50	870
Future Vol, veh/h	60	90	940	50	50	870
Conflicting Peds, #/hr	0	0	0	2	2	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	63	94	979	52	52	906

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1564	518	0	0	1033	0
Stage 1	1007	-	-	-	-	-
Stage 2	557	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	103	505	-	-	674	-
Stage 1	316	-	-	-	-	-
Stage 2	540	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	87	504	-	-	673	-
Mov Cap-2 Maneuver	87	-	-	-	-	-
Stage 1	315	-	-	-	-	-
Stage 2	456	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	98.5	0	1.3
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	173	673	-
HCM Lane V/C Ratio	-	-	0.903	0.077	-
HCM Control Delay (s/veh)	-	-	98.5	10.8	0.8
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	6.7	0.3	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	20	60	40	320	1220	40
Future Volume (veh/h)	20	60	40	320	1220	40
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	21	64	43	340	1298	43
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	358	320	297	2621	2587	86
Arrive On Green	0.20	0.20	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1792	1599	410	3668	3622	117
Grp Volume(v), veh/h	21	64	43	340	657	684
Grp Sat Flow(s),veh/h/ln	1792	1599	410	1787	1787	1857
Q Serve(g_s), s	1.1	4.0	5.9	3.4	18.6	18.7
Cycle Q Clear(g_c), s	1.1	4.0	24.6	3.4	18.6	18.7
Prop In Lane	1.00	1.00	1.00			0.06
Lane Grp Cap(c), veh/h	358	320	297	2621	1311	1362
V/C Ratio(X)	0.06	0.20	0.14	0.13	0.50	0.50
Avail Cap(c_a), veh/h	358	320	297	2621	1311	1362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	40.0	11.9	4.7	6.7	6.8
Incr Delay (d2), s/veh	0.3	1.4	1.0	0.1	1.4	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	1.9	0.8	1.7	9.6	10.0
LnGrp Delay(d), s/veh	39.2	41.4	13.0	4.8	8.1	8.1
LnGrp LOS	D	D	B	A	A	A
Approach Vol, veh/h	85			383	1341	
Approach Delay, s/veh	40.9			5.7	8.1	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				92.0		28.0		92.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				88.0		24.0		88.0
Max Q Clear Time (g_c+I1), s				26.6		6.0		20.7
Green Ext Time (p_c), s				3.0		0.2		11.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	9.1
HCM 2010 LOS	A

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Movement	EBU	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Future Volume (vph)	0	20	660	470	170	950	30	700	0	190	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Lane Util. Factor			0.91	0.91	1.00	0.95		0.97		1.00		
Frpb, ped/bikes			0.99	0.94	1.00	1.00		1.00		0.96		
Flpb, ped/bikes			1.00	1.00	1.00	1.00		1.00		1.00		
Frt			0.98	0.85	1.00	1.00		1.00		0.85		
Flt Protected			1.00	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (prot)			3337	1372	1787	3555		3467		1532		
Flt Permitted			0.90	1.00	0.95	1.00		0.95		1.00		
Satd. Flow (perm)			3014	1372	1787	3555		3467		1532		
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	22	725	516	187	1044	33	769	0	209	0	0
RTOR Reduction (vph)	0	0	8	281	0	2	0	0	0	117	0	0
Lane Group Flow (vph)	0	0	837	137	187	1075	0	769	0	92	0	0
Confl. Peds. (#/hr)		2		18	18		2			13	13	
Confl. Bikes (#/hr)				11						5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	Perm	NA	Perm	Prot	NA		Prot		Perm		
Protected Phases	7		4		3	8		5				
Permitted Phases		4		4						2		
Actuated Green, G (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Effective Green, g (s)			37.9	37.9	14.9	56.8		28.3		51.2		
Actuated g/C Ratio			0.33	0.33	0.13	0.49		0.24		0.44		
Clearance Time (s)			4.0	4.0	4.0	4.0		4.0		4.0		
Vehicle Extension (s)			3.0	3.0	3.0	3.0		3.0		3.0		
Lane Grp Cap (vph)			984	448	229	1740		845		676		
v/s Ratio Prot					c0.10	0.30		c0.22				
v/s Ratio Perm			c0.28	0.10						c0.06		
v/c Ratio			0.85	0.30	0.82	0.62		0.91		0.14		
Uniform Delay, d1			36.4	29.2	49.2	21.7		42.6		19.3		
Progression Factor			1.00	1.00	1.00	1.00		1.00		1.00		
Incremental Delay, d2			7.2	0.4	19.7	0.7		13.8		0.4		
Delay (s)			43.6	29.6	68.9	22.3		56.4		19.7		
Level of Service			D	C	E	C		E		B		
Approach Delay (s/veh)			38.9			29.2			48.5			40.7
Approach LOS			D			C			D			D

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	116.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	81.3%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	SBR
Lane Configurations	
Traffic Volume (vph)	10
Future Volume (vph)	10
Ideal Flow (vphpl)	1900
Total Lost time (s)	4.0
Lane Util. Factor	1.00
Frpb, ped/bikes	1.00
Flpb, ped/bikes	1.00
Frt	0.87
Flt Protected	1.00
Satd. Flow (prot)	1627
Flt Permitted	1.00
Satd. Flow (perm)	1627
Peak-hour factor, PHF	0.91
Adj. Flow (vph)	11
RTOR Reduction (vph)	9
Lane Group Flow (vph)	2
Confl. Peds. (#/hr)	
Confl. Bikes (#/hr)	
Heavy Vehicles (%)	1%
Turn Type	Perm
Protected Phases	
Permitted Phases	6
Actuated Green, G (s)	18.9
Effective Green, g (s)	18.9
Actuated g/C Ratio	0.16
Clearance Time (s)	4.0
Vehicle Extension (s)	3.0
Lane Grp Cap (vph)	265
v/s Ratio Prot	
v/s Ratio Perm	0.00
v/c Ratio	0.01
Uniform Delay, d1	40.7
Progression Factor	1.00
Incremental Delay, d2	0.0
Delay (s)	40.7
Level of Service	D
Approach Delay (s/veh)	
Approach LOS	

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBU	NBL	NBT	NBR	SBL	SBT
Lane Configurations												
Traffic Volume (vph)	0	0	60	90	10	20	110	0	1000	50	0	600
Future Volume (vph)	0	0	60	90	10	20	110	0	1000	50	0	600
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)			4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor			1.00	1.00	1.00		1.00		0.95	1.00		0.95
Frpb, ped/bikes			0.94	1.00	0.96		1.00		1.00	0.94		1.00
Flpb, ped/bikes			1.00	0.96	1.00		1.00		1.00	1.00		1.00
Frt			0.87	1.00	0.90		1.00		1.00	0.85		1.00
Flt Protected			1.00	0.95	1.00		0.95		1.00	1.00		1.00
Satd. Flow (prot)			1522	1713	1624		1787		3574	1510		3574
Flt Permitted			1.00	0.95	1.00		0.41		1.00	1.00		1.00
Satd. Flow (perm)			1522	1713	1624		767		3574	1510		3574
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	64	96	11	21	117	0	1064	53	0	638
RTOR Reduction (vph)	0	0	57	0	19	0	0	0	0	9	0	0
Lane Group Flow (vph)	0	0	7	96	13	0	117	0	1064	44	0	638
Confl. Peds. (#/hr)	25		20	20		25		8		10	10	
Confl. Bikes (#/hr)			6			1				5		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type			Perm	Perm	NA		Perm		NA	Perm	Perm	NA
Protected Phases					8				2			6
Permitted Phases			4	8			2			2	6	
Actuated Green, G (s)			11.5	11.5	11.5		90.7		90.7	90.7		90.7
Effective Green, g (s)			11.5	11.5	11.5		90.7		90.7	90.7		90.7
Actuated g/C Ratio			0.10	0.10	0.10		0.82		0.82	0.82		0.82
Clearance Time (s)			4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)			3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)			158	178	169		631		2941	1242		2941
v/s Ratio Prot					0.01				c0.30			0.18
v/s Ratio Perm			0.00	c0.06			0.15			0.03		
v/c Ratio			0.04	0.54	0.08		0.19		0.36	0.04		0.22
Uniform Delay, d1			44.4	46.8	44.6		2.0		2.5	1.8		2.1
Progression Factor			1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2			0.1	3.1	0.2		0.6		0.3	0.1		0.2
Delay (s)			44.5	50.0	44.8		2.7		2.8	1.8		2.3
Level of Service			D	D	D		A		A	A		A
Approach Delay (s/veh)		44.5			48.7				2.8			2.3
Approach LOS		D			D				A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	6.7	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.38		
Actuated Cycle Length (s)	110.2	Sum of lost time (s)	8.0
Intersection Capacity Utilization	50.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	930	130	310	1280	280	140	700	230	240	380	80
Future Volume (veh/h)	120	930	130	310	1280	280	140	700	230	240	380	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	126	979	137	326	1347	295	147	737	242	253	400	84
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	153	1122	157	356	1514	331	418	1056	460	329	1216	666
Arrive On Green	0.09	0.25	0.25	0.20	0.36	0.36	0.07	0.30	0.30	0.11	0.34	0.34
Sat Flow, veh/h	1774	4491	627	1774	4154	908	1774	3539	1541	1774	3539	1544
Grp Volume(v), veh/h	126	738	378	326	1099	543	147	737	242	253	400	84
Grp Sat Flow(s),veh/h/ln	1774	1695	1727	1774	1695	1672	1774	1770	1541	1774	1770	1544
Q Serve(g_s), s	8.1	24.3	24.4	21.0	35.5	35.6	6.7	21.5	15.2	11.1	9.7	3.8
Cycle Q Clear(g_c), s	8.1	24.3	24.4	21.0	35.5	35.6	6.7	21.5	15.2	11.1	9.7	3.8
Prop In Lane	1.00		0.36	1.00		0.54	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	153	847	432	356	1236	609	418	1056	460	329	1216	666
V/C Ratio(X)	0.83	0.87	0.87	0.92	0.89	0.89	0.35	0.70	0.53	0.77	0.33	0.13
Avail Cap(c_a), veh/h	183	847	432	411	1281	632	418	1056	460	371	1216	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	41.9	41.9	45.6	34.8	34.8	25.5	36.2	34.0	26.2	28.3	20.0
Incr Delay (d2), s/veh	22.3	9.8	17.8	23.2	7.9	14.5	0.5	3.8	4.3	8.5	0.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	12.5	13.8	12.5	18.0	18.9	3.3	11.1	7.0	6.2	4.9	1.7
LnGrp Delay(d), s/veh	74.7	51.7	59.7	68.8	42.7	49.3	26.0	40.1	38.3	34.7	29.0	20.4
LnGrp LOS	E	D	E	E	D	D	C	D	D	C	C	C
Approach Vol, veh/h		1242			1968			1126			737	
Approach Delay, s/veh		56.5			48.8			37.8			30.0	
Approach LOS		E			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.3	38.7	27.4	33.1	12.0	44.0	14.0	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	32.0	27.0	29.0	8.0	40.0	12.0	44.0
Max Q Clear Time (g_c+I1), s	13.1	23.5	23.0	26.4	8.7	11.7	10.1	37.6
Green Ext Time (p_c), s	0.2	3.7	0.4	1.6	0.0	2.9	0.0	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	190	30	220	200	130	80	950	260	110	700	70
Future Volume (veh/h)	50	190	30	220	200	130	80	950	260	110	700	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	53	200	32	232	211	137	84	1000	274	116	737	74
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	234	520	83	333	348	226	383	2105	910	253	1925	193
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.59	0.59	0.59	0.59	0.59	0.59
Sat Flow, veh/h	1029	1561	250	1141	1044	678	670	3539	1530	433	3237	325
Grp Volume(v), veh/h	53	0	232	232	0	348	84	1000	274	116	403	408
Grp Sat Flow(s),veh/h/ln	1029	0	1811	1141	0	1722	670	1770	1530	433	1770	1792
Q Serve(g_s), s	5.0	0.0	10.9	21.7	0.0	18.7	8.3	17.7	9.8	22.9	13.2	13.3
Cycle Q Clear(g_c), s	23.8	0.0	10.9	32.5	0.0	18.7	21.6	17.7	9.8	40.6	13.2	13.3
Prop In Lane	1.00		0.14	1.00		0.39	1.00		1.00	1.00		0.18
Lane Grp Cap(c), veh/h	234	0	603	333	0	574	383	2105	910	253	1053	1066
V/C Ratio(X)	0.23	0.00	0.38	0.70	0.00	0.61	0.22	0.47	0.30	0.46	0.38	0.38
Avail Cap(c_a), veh/h	318	0	751	426	0	714	383	2105	910	253	1053	1066
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.9	0.0	28.3	40.7	0.0	30.9	17.5	12.7	11.1	24.2	11.8	11.8
Incr Delay (d2), s/veh	0.5	0.0	0.4	3.5	0.0	1.0	1.3	0.8	0.8	5.9	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	0.0	5.5	7.2	0.0	9.1	1.7	8.8	4.3	3.2	6.7	6.8
LnGrp Delay(d), s/veh	41.4	0.0	28.7	44.2	0.0	32.0	18.8	13.5	11.9	30.0	12.8	12.8
LnGrp LOS	D		C	D		C	B	B	B	C	B	B
Approach Vol, veh/h		285			580			1358			927	
Approach Delay, s/veh		31.1			36.9			13.5			15.0	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		40.9		70.0		40.9
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		23.6		25.8		42.6		34.5
Green Ext Time (p_c), s		11.5		1.4		7.2		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	10	50	0	10	10	90	1210	60	10	850	180
Future Volume (veh/h)	130	10	50	0	10	10	90	1210	60	10	850	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.94	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	135	10	52	0	10	10	94	1260	62	10	885	188
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	35	184	69	118	118	427	2763	1199	342	2254	479
Arrive On Green	0.14	0.14	0.14	0.00	0.14	0.14	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1334	248	1292	1335	829	829	523	3539	1536	413	2888	613
Grp Volume(v), veh/h	135	0	62	0	0	20	94	1260	62	10	542	531
Grp Sat Flow(s),veh/h/ln	1334	0	1540	1335	0	1657	523	1770	1536	413	1770	1732
Q Serve(g_s), s	10.1	0.0	3.7	0.0	0.0	1.1	7.2	12.6	1.0	0.9	10.1	10.1
Cycle Q Clear(g_c), s	11.2	0.0	3.7	0.0	0.0	1.1	17.3	12.6	1.0	13.5	10.1	10.1
Prop In Lane	1.00		0.84	1.00		0.50	1.00		1.00	1.00		0.35
Lane Grp Cap(c), veh/h	245	0	219	69	0	236	427	2763	1199	342	1381	1352
V/C Ratio(X)	0.55	0.00	0.28	0.00	0.00	0.08	0.22	0.46	0.05	0.03	0.39	0.39
Avail Cap(c_a), veh/h	454	0	460	278	0	495	427	2763	1199	342	1381	1352
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	0.0	39.8	0.0	0.0	38.6	6.3	3.9	2.6	6.2	3.6	3.6
Incr Delay (d2), s/veh	1.9	0.0	0.7	0.0	0.0	0.2	1.2	0.5	0.1	0.2	0.8	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	0.0	1.6	0.0	0.0	0.5	1.2	6.2	0.4	0.1	5.1	5.0
LnGrp Delay(d), s/veh	45.4	0.0	40.5	0.0	0.0	38.8	7.5	4.4	2.7	6.3	4.4	4.5
LnGrp LOS	D		D			D	A	A	A	A	A	A
Approach Vol, veh/h		197			20			1416			1083	
Approach Delay, s/veh		43.9			38.8			4.6			4.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.0		18.8		85.0		18.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		81.0		31.0		81.0		31.0
Max Q Clear Time (g_c+I1), s		19.3		13.2		15.5		3.1
Green Ext Time (p_c), s		16.0		0.6		9.4		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.6
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Future Volume (veh/h)	40	150	60	140	170	60	110	1210	170	50	810	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.96	0.99		0.95	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	43	161	65	151	183	65	118	1301	183	54	871	32
Adj No. of Lanes	1	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	334	135	248	499	404	402	2331	1000	229	2331	999
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	1116	1245	502	1143	1863	1508	614	3539	1518	354	3539	1517
Grp Volume(v), veh/h	43	0	226	151	183	65	118	1301	183	54	871	32
Grp Sat Flow(s),veh/h/ln	1116	0	1747	1143	1863	1508	614	1770	1518	354	1770	1517
Q Serve(g_s), s	3.6	0.0	11.9	14.0	8.7	3.6	11.8	21.7	5.1	10.6	12.2	0.8
Cycle Q Clear(g_c), s	12.3	0.0	11.9	25.9	8.7	3.6	23.9	21.7	5.1	32.3	12.2	0.8
Prop In Lane	1.00		0.29	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	276	0	468	248	499	404	402	2331	1000	229	2331	999
V/C Ratio(X)	0.16	0.00	0.48	0.61	0.37	0.16	0.29	0.56	0.18	0.24	0.37	0.03
Avail Cap(c_a), veh/h	385	0	639	360	682	552	402	2331	1000	229	2331	999
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.4	0.0	33.6	44.5	32.5	30.6	13.9	10.1	7.2	18.8	8.4	6.5
Incr Delay (d2), s/veh	0.3	0.0	0.8	2.4	0.4	0.2	1.8	1.0	0.4	2.4	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.1	0.0	5.8	4.6	4.5	1.5	2.2	10.8	2.2	1.2	6.1	0.4
LnGrp Delay(d), s/veh	37.7	0.0	34.4	46.9	32.9	30.8	15.7	11.0	7.6	21.2	8.9	6.6
LnGrp LOS	D		C	D	C	C	B	B	A	C	A	A
Approach Vol, veh/h		269			399			1602			957	
Approach Delay, s/veh		34.9			37.9			11.0			9.5	
Approach LOS		C			D			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		33.3		76.0		33.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		25.9		14.3		34.3		27.9
Green Ext Time (p_c), s		16.8		1.5		8.8		1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Future Volume (veh/h)	190	640	150	220	930	130	160	750	220	160	690	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	196	660	155	227	959	134	165	773	227	165	711	309
Adj No. of Lanes	1	2	1	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	222	1067	466	257	997	139	192	1133	494	193	763	331
Arrive On Green	0.12	0.30	0.30	0.14	0.32	0.32	0.11	0.32	0.32	0.11	0.32	0.32
Sat Flow, veh/h	1792	3574	1560	1792	3139	438	1792	3574	1558	1792	2401	1043
Grp Volume(v), veh/h	196	660	155	227	546	547	165	773	227	165	529	491
Grp Sat Flow(s),veh/h/ln	1792	1787	1560	1792	1787	1790	1792	1787	1558	1792	1787	1657
Q Serve(g_s), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Cycle Q Clear(g_c), s	12.9	19.0	9.3	14.9	35.9	35.9	10.8	22.5	13.9	10.8	34.3	34.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		0.63
Lane Grp Cap(c), veh/h	222	1067	466	257	567	568	192	1133	494	193	568	526
V/C Ratio(X)	0.88	0.62	0.33	0.88	0.96	0.96	0.86	0.68	0.46	0.86	0.93	0.93
Avail Cap(c_a), veh/h	225	1067	466	329	568	569	195	1133	494	225	568	526
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	36.1	32.7	50.3	40.1	40.1	52.5	35.6	32.7	52.5	39.6	39.6
Incr Delay (d2), s/veh	30.5	1.1	0.4	19.9	28.4	28.5	30.0	3.3	3.1	23.8	24.3	25.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	9.5	4.1	8.8	22.2	22.3	7.0	11.6	6.4	6.6	20.7	19.4
LnGrp Delay(d), s/veh	82.0	37.2	33.1	70.2	68.5	68.6	82.5	38.9	35.7	76.3	63.8	65.2
LnGrp LOS	F	D	C	E	E	E	F	D	D	E	E	E
Approach Vol, veh/h		1011			1320			1165			1185	
Approach Delay, s/veh		45.3			68.8			44.5			66.1	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.9	41.9	21.1	39.7	16.8	42.0	18.9	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	36.0	22.0	31.0	13.0	38.0	15.0	38.0
Max Q Clear Time (g_c+I1), s	12.8	24.5	16.9	21.0	12.8	36.4	14.9	37.9
Green Ext Time (p_c), s	0.1	4.6	0.3	3.5	0.0	1.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	220	30	90	10	880	170	80	780	40
Future Volume (veh/h)	0	0	0	220	30	90	10	880	170	80	780	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	0.93		0.91	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	0	0	0	237	32	97	11	946	183	86	839	43
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	75	326	0	363	66	201	499	2233	432	392	2602	133
Arrive On Green	0.00	0.00	0.00	0.17	0.17	0.17	0.75	0.75	0.75	0.75	0.75	0.75
Sat Flow, veh/h	1281	1900	0	1683	387	1174	639	2996	579	506	3490	179
Grp Volume(v), veh/h	0	0	0	237	0	129	11	570	559	86	434	448
Grp Sat Flow(s),veh/h/ln	1281	1900	0	1683	0	1561	639	1805	1769	506	1805	1863
Q Serve(g_s), s	0.0	0.0	0.0	13.1	0.0	7.2	0.6	11.3	11.4	7.4	7.8	7.8
Cycle Q Clear(g_c), s	0.0	0.0	0.0	13.1	0.0	7.2	8.3	11.3	11.4	18.7	7.8	7.8
Prop In Lane	1.00		0.00	1.00		0.75	1.00		0.33	1.00		0.10
Lane Grp Cap(c), veh/h	75	326	0	363	0	268	499	1346	1319	392	1346	1389
V/C Ratio(X)	0.00	0.00	0.00	0.65	0.00	0.48	0.02	0.42	0.42	0.22	0.32	0.32
Avail Cap(c_a), veh/h	385	787	0	772	0	646	499	1346	1319	392	1346	1389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	0.0	0.0	38.6	0.0	36.1	5.5	4.6	4.6	8.1	4.1	4.1
Incr Delay (d2), s/veh	0.0	0.0	0.0	2.0	0.0	1.3	0.1	1.0	1.0	1.3	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.0	0.0	6.3	0.0	3.2	0.1	5.9	5.8	1.2	4.1	4.2
LnGrp Delay(d), s/veh	0.0	0.0	0.0	40.5	0.0	37.5	5.6	5.5	5.6	9.3	4.8	4.7
LnGrp LOS				D		D	A	A	A	A	A	A
Approach Vol, veh/h		0			366			1140			968	
Approach Delay, s/veh		0.0			39.5			5.6			5.2	
Approach LOS					D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		20.6		76.0		20.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		13.4		0.0		20.7		15.1
Green Ext Time (p_c), s		10.0		0.0		8.1		1.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	990	210	150	1330	300	310	480	150	300	420	400
Future Volume (veh/h)	400	990	210	150	1330	300	310	480	150	300	420	400
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.95	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	440	1088	231	165	1462	330	341	527	165	330	462	440
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	403	1549	921	194	1315	295	370	485	151	314	596	609
Arrive On Green	0.22	0.43	0.43	0.11	0.32	0.32	0.16	0.18	0.18	0.14	0.17	0.17
Sat Flow, veh/h	1792	3574	1540	1792	4153	933	1792	2646	824	1792	3574	1495
Grp Volume(v), veh/h	440	1088	231	165	1204	588	341	355	337	330	462	440
Grp Sat Flow(s),veh/h/ln	1792	1787	1540	1792	1712	1662	1792	1787	1682	1792	1787	1495
Q Serve(g_s), s	27.0	29.7	8.6	10.9	38.0	38.0	19.0	22.0	22.0	17.0	14.8	20.0
Cycle Q Clear(g_c), s	27.0	29.7	8.6	10.9	38.0	38.0	19.0	22.0	22.0	17.0	14.8	20.0
Prop In Lane	1.00		1.00	1.00		0.56	1.00		0.49	1.00		1.00
Lane Grp Cap(c), veh/h	403	1549	921	194	1084	526	370	328	308	314	596	609
V/C Ratio(X)	1.09	0.70	0.25	0.85	1.11	1.12	0.92	1.08	1.09	1.05	0.78	0.72
Avail Cap(c_a), veh/h	403	1549	921	269	1084	526	370	328	308	314	596	609
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	27.7	11.8	52.6	41.0	41.0	35.3	49.0	49.0	36.9	47.9	31.4
Incr Delay (d2), s/veh	71.7	1.4	0.1	16.8	62.9	75.5	27.8	73.8	78.4	65.0	9.5	7.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.4	15.0	3.7	6.3	27.4	28.4	12.1	17.5	16.9	14.2	8.1	13.7
LnGrp Delay(d), s/veh	118.2	29.1	11.9	69.4	103.9	116.5	63.1	122.8	127.4	101.9	57.4	38.6
LnGrp LOS	F	C	B	E	F	F	E	F	F	F	E	D
Approach Vol, veh/h		1759			1957			1033			1232	
Approach Delay, s/veh		49.2			104.8			104.6			62.6	
Approach LOS		D			F			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.0	26.0	17.0	56.0	23.0	24.0	31.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	22.0	18.0	47.0	19.0	20.0	27.0	38.0
Max Q Clear Time (g_c+I1), s	19.0	24.0	12.9	31.7	21.0	22.0	29.0	40.0
Green Ext Time (p_c), s	0.0	0.0	0.2	7.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	79.7
HCM 2010 LOS	E

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	150	250	40	270	120	290	640	50	90	250	220
Future Volume (veh/h)	150	150	250	40	270	120	290	640	50	90	250	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	155	155	258	41	278	124	299	660	52	93	258	227
Adj No. of Lanes	1	1	0	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	245	231	385	220	453	202	507	1882	148	399	1028	871
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	989	627	1043	979	1230	548	914	3349	264	742	1830	1549
Grp Volume(v), veh/h	155	0	413	41	0	402	299	352	360	93	252	233
Grp Sat Flow(s),veh/h/ln	989	0	1669	979	0	1778	914	1787	1825	742	1787	1591
Q Serve(g_s), s	17.5	0.0	24.0	4.2	0.0	21.3	28.8	12.4	12.5	9.0	8.3	8.7
Cycle Q Clear(g_c), s	38.9	0.0	24.0	28.2	0.0	21.3	37.5	12.4	12.5	21.5	8.3	8.7
Prop In Lane	1.00		0.62	1.00		0.31	1.00		0.14	1.00		0.97
Lane Grp Cap(c), veh/h	245	0	616	220	0	656	507	1004	1026	399	1004	894
V/C Ratio(X)	0.63	0.00	0.67	0.19	0.00	0.61	0.59	0.35	0.35	0.23	0.25	0.26
Avail Cap(c_a), veh/h	282	0	678	257	0	723	507	1004	1026	399	1004	894
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.6	0.0	30.6	42.5	0.0	29.8	22.6	13.8	13.8	19.7	12.9	13.0
Incr Delay (d2), s/veh	3.7	0.0	2.3	0.4	0.0	1.3	5.0	1.0	0.9	1.4	0.6	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	0.0	11.4	1.2	0.0	10.7	7.9	6.3	6.5	2.0	4.2	4.0
LnGrp Delay(d), s/veh	49.3	0.0	32.9	42.9	0.0	31.1	27.6	14.8	14.8	21.0	13.5	13.7
LnGrp LOS	D		C	D		C	C	B	B	C	B	B
Approach Vol, veh/h		568			443			1011			578	
Approach Delay, s/veh		37.4			32.2			18.6			14.8	
Approach LOS		D			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		46.7		69.0		46.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		47.0		65.0		47.0
Max Q Clear Time (g_c+I1), s		39.5		40.9		23.5		30.2
Green Ext Time (p_c), s		6.6		1.8		4.1		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	0	250	60	10	220	130	740	120	90	540	10
Future Volume (veh/h)	20	0	250	60	10	220	130	740	120	90	540	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	21	0	266	64	11	234	138	787	128	96	574	11
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	168	0	365	147	17	352	532	1312	1088	355	1312	1088
Arrive On Green	0.23	0.00	0.23	0.23	0.23	0.23	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1141	0	1555	1120	70	1499	835	1881	1561	614	1881	1561
Grp Volume(v), veh/h	21	0	266	64	0	245	138	787	128	96	574	11
Grp Sat Flow(s),veh/h/ln	1141	0	1555	1120	0	1569	835	1881	1561	614	1881	1561
Q Serve(g_s), s	2.0	0.0	18.6	6.6	0.0	16.7	10.1	25.6	3.2	11.4	15.6	0.3
Cycle Q Clear(g_c), s	18.7	0.0	18.6	25.1	0.0	16.7	25.8	25.6	3.2	37.0	15.6	0.3
Prop In Lane	1.00		1.00	1.00		0.96	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	168	0	365	147	0	368	532	1312	1088	355	1312	1088
V/C Ratio(X)	0.13	0.00	0.73	0.43	0.00	0.66	0.26	0.60	0.12	0.27	0.44	0.01
Avail Cap(c_a), veh/h	191	0	397	170	0	400	532	1312	1088	355	1312	1088
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	0.0	41.5	53.1	0.0	40.8	13.4	9.3	5.9	18.9	7.8	5.4
Incr Delay (d2), s/veh	0.3	0.0	6.1	2.0	0.0	3.7	1.2	2.0	0.2	1.9	1.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	8.6	2.1	0.0	7.6	2.5	13.9	1.4	2.1	8.4	0.1
LnGrp Delay(d), s/veh	49.6	0.0	47.6	55.2	0.0	44.5	14.6	11.3	6.1	20.8	8.8	5.4
LnGrp LOS	D		D	E		D	B	B	A	C	A	A
Approach Vol, veh/h		287			309			1053			681	
Approach Delay, s/veh		47.8			46.7			11.1			10.5	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.0		31.6		86.0		31.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		82.0		30.0		82.0		30.0
Max Q Clear Time (g_c+I1), s		27.8		20.7		39.0		27.1
Green Ext Time (p_c), s		8.8		1.1		5.4		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Future Volume (veh/h)	80	260	110	30	160	40	130	700	110	50	320	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	84	274	116	32	168	42	137	737	116	53	337	53
Adj No. of Lanes	1	1	1	1	1	0	1	1	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	187	391	324	138	300	75	749	1353	1124	416	2222	346
Arrive On Green	0.21	0.21	0.21	0.21	0.21	0.21	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1175	1881	1561	999	1442	361	999	1881	1563	651	3090	481
Grp Volume(v), veh/h	84	274	116	32	0	210	137	737	116	53	193	197
Grp Sat Flow(s),veh/h/ln	1175	1881	1561	999	0	1803	999	1881	1563	651	1787	1783
Q Serve(g_s), s	7.6	14.8	7.0	3.4	0.0	11.5	5.5	19.9	2.5	4.5	3.7	3.8
Cycle Q Clear(g_c), s	19.0	14.8	7.0	18.2	0.0	11.5	9.3	19.9	2.5	24.4	3.7	3.8
Prop In Lane	1.00		1.00	1.00		0.20	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	187	391	324	138	0	375	749	1353	1124	416	1285	1283
V/C Ratio(X)	0.45	0.70	0.36	0.23	0.00	0.56	0.18	0.54	0.10	0.13	0.15	0.15
Avail Cap(c_a), veh/h	296	565	469	231	0	542	749	1353	1124	416	1285	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	40.3	37.2	48.8	0.0	39.0	6.3	7.1	4.7	12.7	4.9	4.9
Incr Delay (d2), s/veh	1.7	2.3	0.7	0.8	0.0	1.3	0.5	1.6	0.2	0.6	0.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.9	3.1	1.0	0.0	5.9	1.6	10.8	1.1	0.9	1.9	1.9
LnGrp Delay(d), s/veh	49.2	42.6	37.9	49.6	0.0	40.3	6.9	8.7	4.9	13.4	5.1	5.1
LnGrp LOS	D	D	D	D		D	A	A	A	B	A	A
Approach Vol, veh/h		474			242			990			443	
Approach Delay, s/veh		42.6			41.5			8.0			6.1	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		83.0		26.8		83.0		26.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		79.0		33.0		79.0		33.0
Max Q Clear Time (g_c+I1), s		21.9		21.0		26.4		20.2
Green Ext Time (p_c), s		7.2		1.8		3.0		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Future Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	467	130	98	435	98	261	967	76	130	707	217
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	306	741	318	243	517	219	418	2103	165	321	1355	416
Arrive On Green	0.12	0.21	0.21	0.06	0.14	0.14	0.09	0.63	0.63	0.51	0.51	0.51
Sat Flow, veh/h	1792	3574	1533	1792	3574	1515	1792	3352	263	543	2677	822
Grp Volume(v), veh/h	228	467	130	98	435	98	261	516	527	130	472	452
Grp Sat Flow(s),veh/h/ln	1792	1787	1533	1792	1787	1515	1792	1787	1828	543	1787	1711
Q Serve(g_s), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	18.9	20.3	20.3
Cycle Q Clear(g_c), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	22.3	20.3	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.48
Lane Grp Cap(c), veh/h	306	741	318	243	517	219	418	1121	1147	321	904	866
V/C Ratio(X)	0.74	0.63	0.41	0.40	0.84	0.45	0.62	0.46	0.46	0.40	0.52	0.52
Avail Cap(c_a), veh/h	351	903	387	244	592	251	481	1121	1147	321	904	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	41.5	39.4	38.5	47.8	44.9	14.0	11.2	11.2	20.7	19.0	19.0
Incr Delay (d2), s/veh	7.2	1.0	0.8	1.1	9.5	1.4	2.0	1.4	1.3	3.7	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.8	3.6	2.7	7.4	2.9	3.9	8.9	9.1	3.2	10.5	10.1
LnGrp Delay(d), s/veh	42.2	42.5	40.2	39.6	57.3	46.3	16.0	12.5	12.5	24.4	21.2	21.3
LnGrp LOS	D	D	D	D	E	D	B	B	B	C	C	C
Approach Vol, veh/h		825			631			1304			1054	
Approach Delay, s/veh		42.0			52.8			13.2			21.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		76.0	11.0	27.8	13.9	62.1	18.1	20.6
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		72.0	7.0	29.0	14.0	54.0	17.0	19.0
Max Q Clear Time (g_c+I1), s		19.3	7.3	15.7	9.6	24.3	14.0	15.6
Green Ext Time (p_c), s		8.4	0.0	2.9	0.3	8.7	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Future Volume (veh/h)	240	120	160	100	440	210	110	630	50	90	460	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	253	126	168	105	463	221	116	663	53	95	484	242
Adj No. of Lanes	1	1	1	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	338	600	498	424	567	268	330	1740	139	367	979	1017
Arrive On Green	0.12	0.32	0.32	0.05	0.24	0.24	0.52	0.52	0.52	0.52	0.52	0.52
Sat Flow, veh/h	1810	1900	1577	1810	2355	1115	740	3376	270	746	1900	1582
Grp Volume(v), veh/h	253	126	168	105	354	330	116	354	362	95	484	242
Grp Sat Flow(s),veh/h/ln	1810	1900	1577	1810	1805	1665	740	1805	1841	746	1900	1582
Q Serve(g_s), s	10.1	4.9	8.2	4.4	18.7	18.9	12.2	11.9	12.0	8.9	16.7	6.6
Cycle Q Clear(g_c), s	10.1	4.9	8.2	4.4	18.7	18.9	28.9	11.9	12.0	20.8	16.7	6.6
Prop In Lane	1.00		1.00	1.00		0.67	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	338	600	498	424	435	401	330	930	949	367	979	1017
V/C Ratio(X)	0.75	0.21	0.34	0.25	0.81	0.82	0.35	0.38	0.38	0.26	0.49	0.24
Avail Cap(c_a), veh/h	525	961	797	424	590	545	330	930	949	367	979	1017
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	25.3	26.4	27.0	36.2	36.3	25.3	14.7	14.7	21.0	15.9	7.7
Incr Delay (d2), s/veh	3.3	0.2	0.4	0.3	6.3	7.3	2.9	1.2	1.2	1.7	1.8	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	2.6	3.6	2.2	10.1	9.5	2.7	6.2	6.3	2.0	9.2	3.0
LnGrp Delay(d), s/veh	28.5	25.4	26.8	27.3	42.5	43.6	28.2	15.9	15.9	22.7	17.7	8.3
LnGrp LOS	C	C	C	C	D	D	C	B	B	C	B	A
Approach Vol, veh/h		547			789			832			821	
Approach Delay, s/veh		27.3			40.9			17.6			15.5	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	9.0	35.9		56.0	16.6	28.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	5.0	51.0		52.0	23.0	33.0
Max Q Clear Time (g_c+I1), s		30.9	6.4	10.2		22.8	12.1	20.9
Green Ext Time (p_c), s		5.3	0.0	1.3		4.9	0.5	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Future Volume (veh/h)	260	620	480	580	790	100	440	1010	160	120	810	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.95	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	274	653	505	611	832	105	463	1063	168	126	853	295
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	344	625	258	538	954	120	403	1152	182	169	834	347
Arrive On Green	0.14	0.17	0.17	0.27	0.30	0.30	0.19	0.38	0.38	0.05	0.23	0.23
Sat Flow, veh/h	1792	3574	1473	1792	3172	400	1792	3071	484	1792	3574	1487
Grp Volume(v), veh/h	274	653	505	611	469	468	463	618	613	126	853	295
Grp Sat Flow(s),veh/h/ln	1792	1787	1473	1792	1787	1785	1792	1787	1768	1792	1787	1487
Q Serve(g_s), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Cycle Q Clear(g_c), s	14.8	21.0	21.0	32.0	29.8	29.8	23.0	39.6	39.9	6.0	28.0	22.8
Prop In Lane	1.00		1.00	1.00		0.22	1.00		0.27	1.00		1.00
Lane Grp Cap(c), veh/h	344	625	258	538	537	537	403	670	663	169	834	347
V/C Ratio(X)	0.80	1.04	1.96	1.14	0.87	0.87	1.15	0.92	0.93	0.75	1.02	0.85
Avail Cap(c_a), veh/h	360	625	258	538	537	537	403	670	663	169	834	347
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.6	49.5	49.5	35.0	39.8	39.8	36.8	35.8	35.9	37.6	46.0	44.0
Incr Delay (d2), s/veh	11.4	48.0	445.4	82.1	14.6	14.6	91.6	20.1	20.8	16.4	37.1	22.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	14.5	40.4	30.0	16.9	16.9	23.6	23.3	23.3	3.9	18.1	11.5
LnGrp Delay(d), s/veh	46.0	97.5	494.9	117.1	54.4	54.4	128.5	55.9	56.7	53.9	83.1	66.1
LnGrp LOS	D	F	F	F	D	D	F	E	E	D	F	E
Approach Vol, veh/h		1432			1548			1694			1274	
Approach Delay, s/veh		227.8			79.1			76.0			76.3	
Approach LOS		F			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	49.0	36.0	25.0	27.0	32.0	20.9	40.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	45.0	32.0	21.0	23.0	28.0	18.0	35.0
Max Q Clear Time (g_c+I1), s	8.0	41.9	34.0	23.0	25.0	30.0	16.8	31.8
Green Ext Time (p_c), s	0.0	2.1	0.0	0.0	0.0	0.0	0.1	1.7

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		113.4	
HCM 2010 LOS		F	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Future Volume (veh/h)	320	990	140	150	1410	190	350	1190	160	120	960	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.90	1.00		0.89	1.00		0.93	1.00		0.90
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	333	1031	146	156	1469	198	365	1240	167	125	1000	271
Adj No. of Lanes	1	2	0	1	2	1	1	3	0	1	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	299	1334	189	183	1311	520	314	1322	178	144	984	276
Arrive On Green	0.17	0.43	0.43	0.10	0.37	0.37	0.14	0.29	0.29	0.04	0.19	0.19
Sat Flow, veh/h	1792	3096	438	1792	3574	1418	1792	4532	610	1792	5136	1441
Grp Volume(v), veh/h	333	594	583	156	1469	198	365	937	470	125	1000	271
Grp Sat Flow(s),veh/h/ln	1792	1787	1746	1792	1787	1418	1792	1712	1719	1792	1712	1441
Q Serve(g_s), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Cycle Q Clear(g_c), s	20.0	34.0	34.2	10.3	44.0	12.3	17.0	32.0	32.0	5.0	23.0	22.5
Prop In Lane	1.00		0.25	1.00		1.00	1.00		0.36	1.00		1.00
Lane Grp Cap(c), veh/h	299	770	753	183	1311	520	314	999	501	144	984	276
V/C Ratio(X)	1.12	0.77	0.77	0.85	1.12	0.38	1.16	0.94	0.94	0.87	1.02	0.98
Avail Cap(c_a), veh/h	299	770	753	209	1311	520	314	999	501	144	984	276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.0	29.1	29.1	53.0	38.0	28.0	35.0	41.4	41.4	44.7	48.5	48.3
Incr Delay (d2), s/veh	86.7	4.8	5.0	24.8	65.1	0.5	102.7	17.0	27.4	38.9	32.7	49.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.1	17.7	17.4	6.3	33.5	4.9	19.3	17.4	19.0	4.9	13.8	12.8
LnGrp Delay(d), s/veh	136.7	33.9	34.2	77.7	103.1	28.4	137.6	58.4	68.9	83.6	81.2	97.9
LnGrp LOS	F	C	C	E	F	C	F	E	E	F	F	F
Approach Vol, veh/h		1510			1823			1772			1396	
Approach Delay, s/veh		56.7			92.8			77.5			84.7	
Approach LOS		E			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	39.0	16.3	55.7	21.0	27.0	24.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	35.0	14.0	50.0	17.0	23.0	20.0	44.0
Max Q Clear Time (g_c+I1), s	7.0	34.0	12.3	36.2	19.0	25.0	22.0	46.0
Green Ext Time (p_c), s	0.0	0.8	0.1	6.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	78.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Future Volume (veh/h)	190	460	200	330	970	370	340	950	130	290	760	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.90	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	200	484	211	347	1021	389	358	1000	137	305	800	137
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	226	779	308	376	1077	436	385	1135	155	331	965	163
Arrive On Green	0.13	0.22	0.22	0.21	0.30	0.30	0.21	0.25	0.25	0.19	0.22	0.22
Sat Flow, veh/h	1792	3574	1411	1792	3574	1445	1792	4493	613	1792	4332	732
Grp Volume(v), veh/h	200	484	211	347	1021	389	358	761	376	305	630	307
Grp Sat Flow(s),veh/h/ln	1792	1787	1411	1792	1787	1445	1792	1712	1683	1792	1712	1640
Q Serve(g_s), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Cycle Q Clear(g_c), s	13.0	14.5	16.3	22.5	33.2	30.6	23.3	25.4	25.5	19.9	20.8	21.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.36	1.00		0.45
Lane Grp Cap(c), veh/h	226	779	308	376	1077	436	385	865	425	331	763	366
V/C Ratio(X)	0.88	0.62	0.69	0.92	0.95	0.89	0.93	0.88	0.88	0.92	0.83	0.84
Avail Cap(c_a), veh/h	226	779	308	422	1083	438	407	865	425	347	763	366
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	42.0	42.7	46.0	40.6	39.7	45.8	42.7	42.7	47.5	44.0	44.1
Incr Delay (d2), s/veh	31.1	1.5	6.2	24.3	16.3	20.1	27.2	12.4	22.6	28.3	9.9	20.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	7.4	6.9	13.7	18.7	14.6	14.4	13.4	14.6	12.4	10.9	11.7
LnGrp Delay(d), s/veh	82.1	43.5	48.9	70.3	56.9	59.7	72.9	55.1	65.3	75.9	53.9	64.3
LnGrp LOS	F	D	D	E	E	E	E	E	E	E	D	E
Approach Vol, veh/h		895			1757			1495			1242	
Approach Delay, s/veh		53.4			60.2			61.9			61.9	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	34.0	28.9	29.9	29.5	30.5	19.0	39.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	30.0	28.0	23.0	27.0	26.0	15.0	36.0
Max Q Clear Time (g_c+I1), s	21.9	27.5	24.5	18.3	25.3	23.2	15.0	35.2
Green Ext Time (p_c), s	0.1	1.6	0.4	1.6	0.2	1.5	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	59.9
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Future Volume (veh/h)	350	1070	150	370	1280	250	490	910	140	320	780	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	354	1081	152	374	1293	253	495	919	141	323	788	172
Adj No. of Lanes	2	3	0	2	2	1	2	3	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	378	1639	230	440	1362	572	523	1372	399	379	941	203
Arrive On Green	0.11	0.36	0.36	0.13	0.38	0.38	0.15	0.27	0.27	0.11	0.23	0.23
Sat Flow, veh/h	3476	4514	634	3476	3574	1500	3476	5136	1492	3476	4167	898
Grp Volume(v), veh/h	354	820	413	374	1293	253	495	919	141	323	646	314
Grp Sat Flow(s),veh/h/ln	1738	1712	1724	1738	1787	1500	1738	1712	1492	1738	1712	1642
Q Serve(g_s), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Cycle Q Clear(g_c), s	12.1	24.0	24.0	12.6	41.9	15.0	16.9	19.1	9.1	10.9	21.5	21.9
Prop In Lane	1.00		0.37	1.00		1.00	1.00		1.00	1.00		0.55
Lane Grp Cap(c), veh/h	378	1243	626	440	1362	572	523	1372	399	379	773	371
V/C Ratio(X)	0.94	0.66	0.66	0.85	0.95	0.44	0.95	0.67	0.35	0.85	0.84	0.85
Avail Cap(c_a), veh/h	378	1243	626	552	1375	577	523	1372	399	407	773	371
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	31.9	31.9	51.1	35.9	27.5	50.3	39.1	35.4	52.3	44.2	44.3
Incr Delay (d2), s/veh	30.6	1.3	2.6	9.9	13.9	0.5	26.4	2.6	2.4	15.0	10.3	20.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	11.5	11.8	6.6	23.3	6.3	10.0	9.4	4.1	6.0	11.2	12.1
LnGrp Delay(d), s/veh	83.5	33.2	34.5	61.0	49.8	28.1	76.7	41.7	37.9	67.3	54.5	65.1
LnGrp LOS	F	C	C	E	D	C	E	D	D	E	D	E
Approach Vol, veh/h		1587			1920			1555			1283	
Approach Delay, s/veh		44.7			49.1			52.5			60.3	
Approach LOS		D			D			D			E	

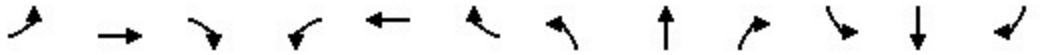
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	36.0	19.1	47.4	22.0	31.0	17.0	49.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	31.0	19.0	40.0	18.0	27.0	13.0	46.0
Max Q Clear Time (g_c+I1), s	12.9	21.1	14.6	26.0	18.9	23.9	14.1	43.9
Green Ext Time (p_c), s	0.1	4.5	0.6	6.7	0.0	1.7	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Future Volume (veh/h)	270	30	180	10	30	30	190	1330	20	30	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	287	32	191	11	32	32	202	1415	21	32	777	202
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	59	0	632	39	94	643	234	2457	36	40	1468	377
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.13	0.47	0.47	0.02	0.36	0.36
Sat Flow, veh/h	0	0	1568	0	233	1595	1792	5211	77	1792	4038	1038
Grp Volume(v), veh/h	319	0	191	43	0	32	202	930	506	32	658	321
Grp Sat Flow(s),veh/h/ln	0	0	1568	233	0	1595	1792	1712	1865	1792	1712	1652
Q Serve(g_s), s	0.0	0.0	9.7	0.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Cycle Q Clear(g_c), s	47.0	0.0	9.7	47.0	0.0	1.4	12.9	23.0	23.0	2.1	17.6	17.9
Prop In Lane	0.90		1.00	0.26		1.00	1.00		0.04	1.00		0.63
Lane Grp Cap(c), veh/h	59	0	632	133	0	643	234	1615	879	40	1245	600
V/C Ratio(X)	5.44	0.00	0.30	0.32	0.00	0.05	0.86	0.58	0.58	0.79	0.53	0.54
Avail Cap(c_a), veh/h	59	0	632	133	0	643	384	1615	879	92	1245	600
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	23.7	28.5	0.0	21.2	49.7	22.4	22.4	56.7	29.2	29.3
Incr Delay (d2), s/veh	2035.1	0.0	0.3	1.4	0.0	0.0	10.6	1.5	2.7	28.1	1.6	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	35.0	0.0	4.2	0.9	0.0	0.6	7.1	11.2	12.5	1.3	8.6	8.8
LnGrp Delay(d), s/veh	2093.4	0.0	23.9	29.9	0.0	21.2	60.3	23.9	25.1	84.8	30.8	32.7
LnGrp LOS	F		C	C		C	E	C	C	F	C	C
Approach Vol, veh/h		510			75			1638			1011	
Approach Delay, s/veh		1318.4			26.2			28.7			33.2	
Approach LOS		F			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	59.0		51.0	19.2	46.4		51.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	55.0		47.0	25.0	36.0		47.0
Max Q Clear Time (g_c+I1), s	4.1	25.0		49.0	14.9	19.9		49.0
Green Ext Time (p_c), s	0.0	11.4		0.0	0.4	5.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		233.4
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Future Volume (veh/h)	40	70	120	120	120	70	150	1200	90	60	910	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	0.95		0.91	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	42	73	125	125	125	73	156	1250	94	62	948	52
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	319	246	223	319	248	462	2447	1049	336	2296	126
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.05	0.68	0.68	0.03	0.67	0.67
Sat Flow, veh/h	1142	1881	1453	1135	1881	1462	1792	3574	1532	1792	3437	188
Grp Volume(v), veh/h	42	73	125	125	125	73	156	1250	94	62	493	507
Grp Sat Flow(s),veh/h/ln	1142	1881	1453	1135	1881	1462	1792	1787	1532	1792	1787	1838
Q Serve(g_s), s	3.6	3.5	8.2	11.3	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Cycle Q Clear(g_c), s	9.8	3.5	8.2	14.8	6.2	4.6	2.8	17.8	2.2	1.1	13.3	13.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.10
Lane Grp Cap(c), veh/h	194	319	246	223	319	248	462	2447	1049	336	1194	1228
V/C Ratio(X)	0.22	0.23	0.51	0.56	0.39	0.29	0.34	0.51	0.09	0.18	0.41	0.41
Avail Cap(c_a), veh/h	305	501	387	332	501	389	648	2447	1049	415	1194	1228
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.2	37.7	39.7	44.1	38.9	38.2	5.8	8.0	5.6	6.4	8.0	8.0
Incr Delay (d2), s/veh	0.5	0.4	1.6	2.2	0.8	0.7	0.4	0.8	0.2	0.3	1.1	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	1.9	3.4	3.7	3.3	1.9	1.4	8.9	1.0	0.6	6.8	7.0
LnGrp Delay(d), s/veh	43.8	38.1	41.3	46.3	39.6	38.8	6.2	8.8	5.7	6.6	9.1	9.0
LnGrp LOS	D	D	D	D	D	D	A	A	A	A	A	A
Approach Vol, veh/h		240			323			1500			1062	
Approach Delay, s/veh		40.8			42.0			8.3			8.9	
Approach LOS		D			D			A			A	

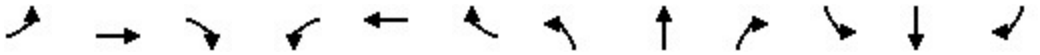
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	76.0		21.8	9.1	74.3		21.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	8.0	72.0		28.0	16.0	64.0		28.0
Max Q Clear Time (g_c+I1), s	3.1	19.8		11.8	4.8	15.3		16.8
Green Ext Time (p_c), s	0.0	13.2		0.9	0.3	8.3		1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1170	500	40	730	60	160	1080	30	150	1080	140
Future Volume (veh/h)	210	1170	500	40	730	60	160	1080	30	150	1080	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	219	1219	521	42	760	62	167	1125	31	156	1125	146
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	259	1369	706	79	834	68	235	1538	42	261	1361	176
Arrive On Green	0.10	0.39	0.39	0.25	0.25	0.25	0.07	0.44	0.44	0.07	0.44	0.44
Sat Flow, veh/h	1757	3505	1527	274	3272	267	1757	3482	96	1757	3112	403
Grp Volume(v), veh/h	219	1219	521	42	407	415	167	566	590	156	632	639
Grp Sat Flow(s),veh/h/ln	1757	1752	1527	274	1752	1787	1757	1752	1825	1757	1752	1762
Q Serve(g_s), s	10.5	38.3	32.9	7.7	26.5	26.6	6.1	31.4	31.4	5.7	37.4	37.6
Cycle Q Clear(g_c), s	10.5	38.3	32.9	30.0	26.5	26.6	6.1	31.4	31.4	5.7	37.4	37.6
Prop In Lane	1.00		1.00	1.00		0.15	1.00		0.05	1.00		0.23
Lane Grp Cap(c), veh/h	259	1369	706	79	447	455	235	774	806	261	767	771
V/C Ratio(X)	0.84	0.89	0.74	0.53	0.91	0.91	0.71	0.73	0.73	0.60	0.82	0.83
Avail Cap(c_a), veh/h	259	1369	706	79	447	455	306	774	806	294	767	771
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.6	33.5	26.0	57.2	42.6	42.6	25.0	27.1	27.1	22.0	29.1	29.2
Incr Delay (d2), s/veh	21.7	7.6	4.1	6.6	22.7	22.5	5.3	6.0	5.8	2.7	9.8	10.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	19.9	14.6	1.5	15.7	16.0	3.3	16.4	17.0	2.9	20.2	20.4
LnGrp Delay(d), s/veh	52.3	41.1	30.1	63.8	65.3	65.1	30.2	33.1	32.9	24.6	39.0	39.2
LnGrp LOS	D	D	C	E	E	E	C	C	C	C	D	D
Approach Vol, veh/h		1959			864			1323			1427	
Approach Delay, s/veh		39.4			65.1			32.7			37.5	
Approach LOS		D			E			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.7	56.0		50.0	12.2	55.5	16.0	34.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	52.0		46.0	13.0	49.0	12.0	30.0
Max Q Clear Time (g_c+I1), s	7.7	33.4		40.3	8.1	39.6	12.5	32.0
Green Ext Time (p_c), s	0.1	7.4		4.3	0.2	5.4	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		41.3
HCM 2010 LOS		D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	580	500	240	830	300	210	930	30	120	1460	110
Future Volume (veh/h)	190	580	500	240	830	300	210	930	30	120	1460	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	198	604	521	250	865	312	219	969	0	125	1521	0
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	190	701	308	249	818	360	205	1537	688	152	1431	640
Arrive On Green	0.11	0.20	0.20	0.14	0.23	0.23	0.12	0.44	0.00	0.09	0.41	0.00
Sat Flow, veh/h	1757	3505	1541	1757	3505	1544	1757	3505	1568	1757	3505	1568
Grp Volume(v), veh/h	198	604	521	250	865	312	219	969	0	125	1521	0
Grp Sat Flow(s),veh/h/ln	1757	1752	1541	1757	1752	1544	1757	1752	1568	1757	1752	1568
Q Serve(g_s), s	13.0	20.0	24.0	17.0	28.0	23.3	14.0	25.7	0.0	8.4	49.0	0.0
Cycle Q Clear(g_c), s	13.0	20.0	24.0	17.0	28.0	23.3	14.0	25.7	0.0	8.4	49.0	0.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	190	701	308	249	818	360	205	1537	688	152	1431	640
V/C Ratio(X)	1.04	0.86	1.69	1.00	1.06	0.87	1.07	0.63	0.00	0.82	1.06	0.00
Avail Cap(c_a), veh/h	190	701	308	249	818	360	205	1537	688	234	1431	640
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	53.5	46.4	48.0	51.5	46.0	44.2	53.0	26.1	0.0	53.9	35.5	0.0
Incr Delay (d2), s/veh	76.2	10.7	324.4	58.2	47.9	19.3	82.2	2.0	0.0	12.9	42.4	0.0
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	10.7	38.0	12.3	19.0	11.9	11.5	12.8	0.0	4.6	32.1	0.0
LnGrp Delay(d), s/veh	129.8	57.1	372.4	109.7	93.9	63.5	135.2	28.1	0.0	66.8	77.9	0.0
LnGrp LOS	F	E	F	F	F	E	F	C		E	F	
Approach Vol, veh/h		1323			1427			1188			1646	
Approach Delay, s/veh		192.1			90.0			47.8			77.1	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	56.6	21.0	28.0	18.0	53.0	17.0	32.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	47.0	17.0	24.0	14.0	49.0	13.0	28.0
Max Q Clear Time (g_c+I1), s	10.4	27.7	19.0	26.0	16.0	51.0	15.0	30.0
Green Ext Time (p_c), s	0.1	6.4	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	101.4
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	170	1180	90	40	850	130	130	560	150	150	420	160
Future Volume (veh/h)	170	1180	90	40	850	130	130	560	150	150	420	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759	1759	1759	1900	1759	1759	1759
Adj Flow Rate, veh/h	173	1204	0	41	867	133	133	571	153	153	429	163
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	8	8	8	8	8	8	8	8	8	8	8	8
Cap, veh/h	206	1437	643	50	1126	490	163	1002	262	185	932	404
Arrive On Green	0.12	0.43	0.00	0.03	0.34	0.34	0.10	0.27	0.27	0.11	0.28	0.28
Sat Flow, veh/h	1675	3343	1495	1675	3343	1455	1675	3768	984	1675	3343	1450
Grp Volume(v), veh/h	173	1204	0	41	867	133	133	483	241	153	429	163
Grp Sat Flow(s),veh/h/ln	1675	1671	1495	1675	1671	1455	1675	1601	1549	1675	1671	1450
Q Serve(g_s), s	9.9	31.4	0.0	2.4	22.7	6.5	7.6	12.7	13.2	8.7	10.4	8.9
Cycle Q Clear(g_c), s	9.9	31.4	0.0	2.4	22.7	6.5	7.6	12.7	13.2	8.7	10.4	8.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.63	1.00		1.00
Lane Grp Cap(c), veh/h	206	1437	643	50	1126	490	163	852	412	185	932	404
V/C Ratio(X)	0.84	0.84	0.00	0.81	0.77	0.27	0.82	0.57	0.58	0.83	0.46	0.40
Avail Cap(c_a), veh/h	343	1847	826	103	1368	596	291	852	412	309	932	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	24.8	0.0	47.1	29.0	23.6	43.2	31.0	31.2	42.6	29.1	28.6
Incr Delay (d2), s/veh	9.0	2.8	0.0	25.6	2.2	0.3	9.5	2.7	6.0	9.1	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	14.9	0.0	1.5	10.8	2.7	3.9	6.0	6.3	4.5	5.0	3.9
LnGrp Delay(d), s/veh	50.9	27.7	0.0	72.7	31.2	23.9	52.7	33.7	37.1	51.7	30.8	31.6
LnGrp LOS	D	C		E	C	C	D	C	D	D	C	C
Approach Vol, veh/h		1377			1041			857			745	
Approach Delay, s/veh		30.6			31.9			37.6			35.2	
Approach LOS		C			C			D			D	

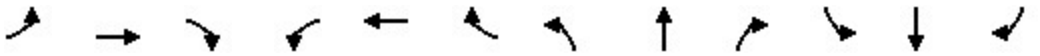
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.8	30.0	6.9	46.0	13.5	31.3	16.0	36.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	26.0	6.0	54.0	17.0	27.0	20.0	40.0
Max Q Clear Time (g_c+I1), s	10.7	15.2	4.4	33.4	9.6	12.4	11.9	24.7
Green Ext Time (p_c), s	0.2	3.3	0.0	8.6	0.2	2.8	0.3	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	730	100	130	600	40	120	560	50	60	410	20
Future Volume (veh/h)	60	730	100	130	600	40	120	560	50	60	410	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1776	1776	1776	1776	1776	1776	1776	1776	1900	1776	1776	1900
Adj Flow Rate, veh/h	65	793	109	141	652	43	130	609	54	65	446	22
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	7	7	7	7	7	7	7	7	7	7	7	7
Cap, veh/h	82	1036	456	176	1223	545	164	1577	138	82	1419	69
Arrive On Green	0.05	0.31	0.31	0.10	0.36	0.36	0.10	0.35	0.35	0.05	0.30	0.30
Sat Flow, veh/h	1691	3374	1484	1691	3374	1504	1691	4530	398	1691	4729	231
Grp Volume(v), veh/h	65	793	109	141	652	43	130	433	230	65	304	164
Grp Sat Flow(s),veh/h/ln	1691	1687	1484	1691	1687	1504	1691	1616	1696	1691	1616	1729
Q Serve(g_s), s	3.2	17.7	4.6	6.8	12.7	1.6	6.3	8.4	8.5	3.2	6.0	6.1
Cycle Q Clear(g_c), s	3.2	17.7	4.6	6.8	12.7	1.6	6.3	8.4	8.5	3.2	6.0	6.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.13
Lane Grp Cap(c), veh/h	82	1036	456	176	1223	545	164	1125	590	82	970	519
V/C Ratio(X)	0.79	0.77	0.24	0.80	0.53	0.08	0.79	0.38	0.39	0.79	0.31	0.32
Avail Cap(c_a), veh/h	244	1741	766	406	2065	921	386	1125	590	244	970	519
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	26.2	21.6	36.5	21.0	17.4	36.8	20.5	20.5	39.2	22.5	22.6
Incr Delay (d2), s/veh	15.2	1.2	0.3	8.1	0.4	0.1	8.4	1.0	1.9	15.2	0.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	8.4	1.9	3.6	5.9	0.7	3.3	3.9	4.3	1.8	2.8	3.2
LnGrp Delay(d), s/veh	54.4	27.4	21.9	44.5	21.4	17.5	45.2	21.4	22.4	54.4	23.4	24.2
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		967			836			793			533	
Approach Delay, s/veh		28.6			25.1			25.6			27.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.1	33.0	12.7	29.6	12.1	29.0	8.1	34.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	29.0	20.0	43.0	19.0	22.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	5.2	10.5	8.8	19.7	8.3	8.1	5.2	14.7
Green Ext Time (p_c), s	0.1	3.8	0.2	5.8	0.2	2.3	0.1	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Future Volume (vph)	0	411	0	111	1126	0	0	0	0	563	0	108
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0		4.0
Lane Util. Factor		0.95		1.00	0.91					0.97		1.00
Frpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Flpb, ped/bikes		1.00		1.00	1.00					1.00		1.00
Frt		1.00		1.00	1.00					1.00		0.85
Flt Protected		1.00		0.95	1.00					0.95		1.00
Satd. Flow (prot)		3574		1783	5136					3467		1599
Flt Permitted		1.00		0.41	1.00					0.95		1.00
Satd. Flow (perm)		3574		778	5136					3467		1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	119
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	0	0	0	18
Lane Group Flow (vph)	0	452	0	122	1237	0	0	0	0	619	0	101
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			1			2						
Turn Type		NA		Perm	NA					Perm		Perm
Protected Phases		4			8							
Permitted Phases				8						6		6
Actuated Green, G (s)		32.2		32.2	32.2					51.2		51.2
Effective Green, g (s)		32.2		32.2	32.2					51.2		51.2
Actuated g/C Ratio		0.35		0.35	0.35					0.56		0.56
Clearance Time (s)		4.0		4.0	4.0					4.0		4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0		3.0
Lane Grp Cap (vph)		1259		274	1809					1942		895
v/s Ratio Prot		0.13			c0.24							
v/s Ratio Perm				0.16						c0.18		0.06
v/c Ratio		0.36		0.45	0.68					0.32		0.11
Uniform Delay, d1		21.9		22.7	25.3					10.8		9.4
Progression Factor		1.00		1.00	1.00					1.00		1.00
Incremental Delay, d2		0.2		1.2	1.1					0.4		0.3
Delay (s)		22.1		23.9	26.3					11.2		9.7
Level of Service		C		C	C					B		A
Approach Delay (s/veh)		22.1			26.1			0.0			11.0	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.46		
Actuated Cycle Length (s)	91.4	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Future Volume (veh/h)	132	711	140	15	827	526	151	150	201	229	649	40
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	139	748	147	16	871	554	159	158	0	241	683	42
Adj No. of Lanes	2	2	0	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	198	1094	215	25	1168	609	231	1135	508	275	1447	635
Arrive On Green	0.06	0.37	0.37	0.01	0.33	0.33	0.07	0.32	0.00	0.15	0.40	0.40
Sat Flow, veh/h	3476	2960	581	1792	3574	1539	3476	3574	1599	1792	3574	1568
Grp Volume(v), veh/h	139	452	443	16	871	554	159	158	0	241	683	42
Grp Sat Flow(s),veh/h/ln	1738	1787	1754	1792	1787	1539	1738	1787	1599	1792	1787	1568
Q Serve(g_s), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Cycle Q Clear(g_c), s	4.3	23.5	23.5	1.0	23.9	36.0	4.9	3.5	0.0	14.5	15.5	1.8
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	198	660	648	25	1168	609	231	1135	508	275	1447	635
V/C Ratio(X)	0.70	0.68	0.68	0.64	0.75	0.91	0.69	0.14	0.00	0.88	0.47	0.07
Avail Cap(c_a), veh/h	221	660	648	65	1168	609	852	1135	508	423	1447	635
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.1	29.3	29.3	54.0	33.0	31.7	50.3	26.8	0.0	45.6	24.1	20.1
Incr Delay (d2), s/veh	8.5	2.9	3.0	23.5	2.7	17.8	3.6	0.3	0.0	12.3	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	12.1	11.9	0.6	12.2	18.8	2.5	1.8	0.0	8.1	7.8	0.8
LnGrp Delay(d), s/veh	59.6	32.2	32.3	77.6	35.7	49.5	54.0	27.1	0.0	57.9	25.2	20.3
LnGrp LOS	E	C	C	E	D	D	D	C		E	C	C
Approach Vol, veh/h		1034			1441			317			966	
Approach Delay, s/veh		35.9			41.5			40.6			33.2	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	48.6	5.5	44.7	20.9	39.0	10.3	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	34.0	4.0	39.0	26.0	35.0	7.0	36.0
Max Q Clear Time (g_c+I1), s	6.9	17.5	3.0	25.5	16.5	5.5	6.3	38.0
Green Ext Time (p_c), s	0.4	4.0	0.0	4.6	0.4	0.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	900	50	50	820	370	40	1940	70	490	1060	340
Future Volume (veh/h)	400	900	50	50	820	370	40	1940	70	490	1060	340
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	417	938	52	52	854	385	42	2021	73	510	1104	354
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	254	1389	77	67	603	271	54	1370	608	299	1858	1043
Arrive On Green	0.14	0.28	0.28	0.04	0.17	0.17	0.03	0.38	0.38	0.17	0.52	0.52
Sat Flow, veh/h	1792	4975	275	1792	3445	1547	1792	3574	1586	1792	3574	1570
Grp Volume(v), veh/h	417	645	345	52	849	390	42	2021	73	510	1104	354
Grp Sat Flow(s),veh/h/ln	1792	1712	1827	1792	1712	1568	1792	1787	1586	1792	1787	1570
Q Serve(g_s), s	17.0	20.1	20.2	3.5	21.0	21.0	2.8	46.0	3.6	20.0	25.8	11.8
Cycle Q Clear(g_c), s	17.0	20.1	20.2	3.5	21.0	21.0	2.8	46.0	3.6	20.0	25.8	11.8
Prop In Lane	1.00		0.15	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	254	956	510	67	599	274	54	1370	608	299	1858	1043
V/C Ratio(X)	1.64	0.67	0.68	0.77	1.42	1.42	0.78	1.48	0.12	1.71	0.59	0.34
Avail Cap(c_a), veh/h	254	956	510	134	599	274	105	1370	608	299	1858	1043
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	38.4	38.4	57.2	49.5	49.5	57.8	37.0	23.9	50.0	20.0	8.9
Incr Delay (d2), s/veh	306.4	1.9	3.6	16.9	197.2	209.9	20.8	217.8	0.4	332.5	1.4	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.0	9.7	10.7	2.0	26.3	25.1	1.7	64.1	1.6	37.5	13.1	5.3
LnGrp Delay(d), s/veh	357.9	40.3	42.0	74.1	246.7	259.4	78.6	254.8	24.3	382.5	21.4	9.8
LnGrp LOS	F	D	D	E	F	F	E	F	C	F	C	A
Approach Vol, veh/h		1407			1291			2136			1968	
Approach Delay, s/veh		134.9			243.6			243.4			112.9	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	50.0	8.5	37.5	7.6	66.4	21.0	25.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	46.0	9.0	29.0	7.0	59.0	17.0	21.0
Max Q Clear Time (g_c+I1), s	22.0	48.0	5.5	22.2	4.8	27.8	19.0	23.0
Green Ext Time (p_c), s	0.0	0.0	0.0	3.3	0.0	10.8	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	183.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Future Volume (veh/h)	84	821	139	135	1289	113	77	404	54	92	508	146
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.91	0.98		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	90	883	149	145	1386	122	83	434	58	99	546	157
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	115	1477	248	178	1776	156	300	1611	654	404	1206	345
Arrive On Green	0.06	0.34	0.34	0.10	0.37	0.37	0.45	0.45	0.45	0.45	0.45	0.45
Sat Flow, veh/h	1792	4408	740	1792	4800	423	747	3574	1451	893	2676	765
Grp Volume(v), veh/h	90	685	347	145	989	519	83	434	58	99	363	340
Grp Sat Flow(s),veh/h/ln	1792	1712	1724	1792	1712	1799	747	1787	1451	893	1787	1654
Q Serve(g_s), s	5.2	17.3	17.5	8.3	26.7	26.7	9.0	7.9	2.4	8.1	14.6	14.8
Cycle Q Clear(g_c), s	5.2	17.3	17.5	8.3	26.7	26.7	23.8	7.9	2.4	16.0	14.6	14.8
Prop In Lane	1.00		0.43	1.00		0.23	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	115	1147	578	178	1267	665	300	1611	654	404	805	745
V/C Ratio(X)	0.78	0.60	0.60	0.82	0.78	0.78	0.28	0.27	0.09	0.25	0.45	0.46
Avail Cap(c_a), veh/h	223	1346	678	344	1576	828	300	1611	654	404	805	745
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.1	28.8	28.9	46.0	29.1	29.1	28.0	17.9	16.4	22.9	19.7	19.8
Incr Delay (d2), s/veh	10.9	0.5	1.1	8.8	2.1	3.8	2.3	0.4	0.3	1.4	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	8.3	8.5	4.5	13.0	14.0	2.0	4.0	1.0	2.2	7.6	7.1
LnGrp Delay(d), s/veh	58.9	29.4	30.0	54.8	31.2	33.0	30.3	18.3	16.7	24.4	21.6	21.8
LnGrp LOS	E	C	C	D	C	C	C	B	B	C	C	C
Approach Vol, veh/h		1122			1653			575			802	
Approach Delay, s/veh		31.9			33.8			19.9			22.0	
Approach LOS		C			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	14.3	38.9		51.0	10.7	42.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	20.0	41.0		47.0	13.0	48.0
Max Q Clear Time (g_c+I1), s		25.8	10.3	19.5		18.0	7.2	28.7
Green Ext Time (p_c), s		3.9	0.2	6.8		5.7	0.1	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Future Volume (veh/h)	90	1480	110	140	990	160	100	260	100	300	270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	1542	115	146	1031	167	104	271	104	312	281	83
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	2	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	119	1840	137	176	1814	293	131	484	393	381	798	230
Arrive On Green	0.07	0.38	0.38	0.10	0.41	0.41	0.07	0.26	0.26	0.11	0.30	0.30
Sat Flow, veh/h	1774	4827	360	1774	4387	709	1774	1863	1514	3442	2686	774
Grp Volume(v), veh/h	94	1083	574	146	796	402	104	271	104	312	183	181
Grp Sat Flow(s),veh/h/ln	1774	1695	1796	1774	1695	1706	1774	1863	1514	1721	1770	1691
Q Serve(g_s), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Cycle Q Clear(g_c), s	5.6	31.3	31.3	8.7	19.4	19.5	6.2	13.6	5.9	9.5	8.7	9.1
Prop In Lane	1.00		0.20	1.00		0.42	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	119	1293	685	176	1402	706	131	484	393	381	526	502
V/C Ratio(X)	0.79	0.84	0.84	0.83	0.57	0.57	0.80	0.56	0.26	0.82	0.35	0.36
Avail Cap(c_a), veh/h	214	1416	750	264	1511	760	214	484	393	479	526	502
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	30.3	30.3	47.6	24.2	24.2	49.1	34.5	31.7	46.8	29.7	29.8
Incr Delay (d2), s/veh	10.9	4.3	7.8	12.7	0.4	0.9	10.4	4.6	1.6	8.7	1.8	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	15.4	16.9	4.9	9.2	9.3	3.4	7.6	2.6	5.0	4.5	4.5
LnGrp Delay(d), s/veh	60.4	34.6	38.1	60.2	24.6	25.1	59.5	39.1	33.3	55.5	31.5	31.8
LnGrp LOS	E	C	D	E	C	C	E	D	C	E	C	C
Approach Vol, veh/h		1751			1344			479			676	
Approach Delay, s/veh		37.1			28.6			42.3			42.7	
Approach LOS		D			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.9	32.0	14.7	45.1	11.9	36.0	11.2	48.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	28.0	16.0	45.0	13.0	30.0	13.0	48.0
Max Q Clear Time (g_c+I1), s	11.5	15.6	10.7	33.3	8.2	11.1	7.6	21.5
Green Ext Time (p_c), s	0.4	1.6	0.2	7.8	0.1	2.2	0.1	8.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Future Volume (veh/h)	240	1260	450	190	1010	140	290	620	300	230	300	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	253	1326	474	200	1063	147	305	653	316	242	316	337
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	281	1334	473	224	1487	205	332	834	365	268	706	313
Arrive On Green	0.16	0.36	0.36	0.13	0.33	0.33	0.19	0.23	0.23	0.15	0.20	0.20
Sat Flow, veh/h	1792	3720	1321	1792	4550	628	1792	3574	1565	1792	3574	1584
Grp Volume(v), veh/h	253	1220	580	200	799	411	305	653	316	242	316	337
Grp Sat Flow(s),veh/h/ln	1792	1712	1617	1792	1712	1755	1792	1787	1565	1792	1787	1584
Q Serve(g_s), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Cycle Q Clear(g_c), s	16.6	42.6	43.0	13.2	24.6	24.7	20.0	20.5	23.3	15.9	9.3	23.7
Prop In Lane	1.00		0.82	1.00		0.36	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1228	580	224	1119	574	332	834	365	268	706	313
V/C Ratio(X)	0.90	0.99	1.00	0.89	0.71	0.72	0.92	0.78	0.86	0.90	0.45	1.08
Avail Cap(c_a), veh/h	314	1228	580	224	1119	574	359	834	365	269	706	313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	38.3	38.5	51.7	35.4	35.5	48.0	43.1	44.1	50.1	42.4	48.1
Incr Delay (d2), s/veh	25.7	24.0	37.6	33.0	2.2	4.2	26.9	7.2	22.9	31.0	2.0	72.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.2	24.3	25.2	8.6	12.0	12.7	12.4	11.0	12.4	10.2	4.8	16.7
LnGrp Delay(d), s/veh	75.4	62.4	76.1	84.6	37.6	39.7	74.9	50.3	67.1	81.1	44.4	120.9
LnGrp LOS	E	E	F	F	D	D	E	D	E	F	D	F
Approach Vol, veh/h		2053			1410			1274			895	
Approach Delay, s/veh		67.9			44.9			60.4			83.1	
Approach LOS		E			D			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.9	32.0	19.0	47.0	26.2	27.7	22.8	43.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	28.0	15.0	43.0	24.0	22.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	17.9	25.3	15.2	45.0	22.0	25.7	18.6	26.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.2	0.0	0.2	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.8
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	100	1220	40	30	70	60
Future Volume (veh/h)	100	1220	40	30	70	60
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	105	1284	42	32	74	63
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	764	1775	1775	777	583	520
Arrive On Green	0.53	0.53	0.53	0.53	0.35	0.35
Sat Flow, veh/h	1247	3431	3431	1462	1675	1495
Grp Volume(v), veh/h	105	1284	42	32	74	63
Grp Sat Flow(s),veh/h/ln	1247	1671	1671	1462	1675	1495
Q Serve(g_s), s	2.9	19.3	0.4	0.7	2.0	1.9
Cycle Q Clear(g_c), s	3.3	19.3	0.4	0.7	2.0	1.9
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	764	1775	1775	777	583	520
V/C Ratio(X)	0.14	0.72	0.02	0.04	0.13	0.12
Avail Cap(c_a), veh/h	1780	4500	4500	1969	583	520
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.1	11.8	7.4	7.4	14.7	14.7
Incr Delay (d2), s/veh	0.1	0.6	0.0	0.0	0.4	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.0	8.9	0.2	0.3	1.0	0.9
LnGrp Delay(d), s/veh	8.2	12.4	7.4	7.5	15.2	15.2
LnGrp LOS	A	B	A	A	B	B
Approach Vol, veh/h		1389	74		137	
Approach Delay, s/veh		12.1	7.4		15.2	
Approach LOS		B	A		B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				39.1		27.0		39.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				89.0		23.0		89.0
Max Q Clear Time (g_c+I1), s				21.3		4.0		2.7
Green Ext Time (p_c), s				13.8		0.3		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1390	70	250	320	280	40	930	890	1260	1310	90
Future Volume (veh/h)	90	1390	70	250	320	280	40	930	890	1260	1310	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	95	1463	74	263	337	295	42	979	0	1326	1379	95
Adj No. of Lanes	1	2	1	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	118	810	356	141	362	310	53	1012	453	522	1947	815
Arrive On Green	0.07	0.23	0.23	0.04	0.21	0.21	0.03	0.29	0.00	0.30	0.56	0.56
Sat Flow, veh/h	1740	3471	1527	3375	1744	1494	1740	3471	1553	1740	3471	1452
Grp Volume(v), veh/h	95	1463	74	263	335	297	42	979	0	1326	1379	95
Grp Sat Flow(s),veh/h/ln	1740	1736	1527	1688	1736	1502	1740	1736	1553	1740	1736	1452
Q Serve(g_s), s	6.5	28.0	4.7	5.0	22.8	23.4	2.9	33.4	0.0	36.0	34.7	3.7
Cycle Q Clear(g_c), s	6.5	28.0	4.7	5.0	22.8	23.4	2.9	33.4	0.0	36.0	34.7	3.7
Prop In Lane	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	810	356	141	360	312	53	1012	453	522	1947	815
V/C Ratio(X)	0.81	1.81	0.21	1.87	0.93	0.95	0.79	0.97	0.00	2.54	0.71	0.12
Avail Cap(c_a), veh/h	130	810	356	141	360	312	101	1012	453	522	1947	815
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	46.0	37.1	57.5	46.7	47.0	57.8	41.9	0.0	42.0	19.2	12.4
Incr Delay (d2), s/veh	27.9	367.8	0.3	417.3	30.5	38.3	21.9	21.4	0.0	698.8	2.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	54.8	2.0	10.5	13.9	13.0	1.7	18.9	0.0	118.6	17.1	1.5
LnGrp Delay(d), s/veh	83.0	413.8	37.3	474.8	77.2	85.3	79.7	63.3	0.0	740.8	21.4	12.7
LnGrp LOS	F	F	D	F	E	F	E	E		F	C	B
Approach Vol, veh/h		1632			895			1021			2800	
Approach Delay, s/veh		377.4			196.7			64.0			361.8	
Approach LOS		F			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	40.0	39.0	9.0	32.0	7.7	71.3	12.1	28.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	36.0	35.0	5.0	28.0	7.0	64.0	9.0	24.0
Max Q Clear Time (g_c+I1), s	38.0	35.4	7.0	30.0	4.9	36.7	8.5	25.4
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	12.1	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		294.6
HCM 2010 LOS		F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	90	1500	710	120	1140	160
Future Volume (veh/h)	90	1500	710	120	1140	160
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1759	1759	1759	1759	1759	1759
Adj Flow Rate, veh/h	96	1596	755	128	1213	170
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	8	8	8	8	8	8
Cap, veh/h	118	1226	879	384	949	847
Arrive On Green	0.07	0.37	0.26	0.26	0.57	0.57
Sat Flow, veh/h	1675	3431	3431	1461	1675	1495
Grp Volume(v), veh/h	96	1596	755	128	1213	170
Grp Sat Flow(s),veh/h/ln	1675	1671	1671	1461	1675	1495
Q Serve(g_s), s	6.8	44.0	25.8	8.5	68.0	6.7
Cycle Q Clear(g_c), s	6.8	44.0	25.8	8.5	68.0	6.7
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	118	1226	879	384	949	847
V/C Ratio(X)	0.82	1.30	0.86	0.33	1.28	0.20
Avail Cap(c_a), veh/h	126	1226	879	384	949	847
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.0	38.0	42.1	35.7	26.0	12.7
Incr Delay (d2), s/veh	31.1	142.0	8.5	0.5	133.1	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	44.4	13.0	3.5	66.2	8.2
LnGrp Delay(d), s/veh	86.1	180.0	50.6	36.2	159.1	13.2
LnGrp LOS	F	F	D	D	F	B
Approach Vol, veh/h		1692	883		1383	
Approach Delay, s/veh		174.7	48.5		141.2	
Approach LOS		F	D		F	

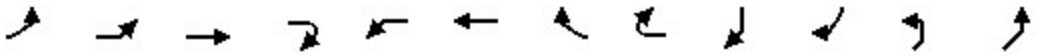
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				48.0		72.0	12.4	35.6
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				44.0		68.0	9.0	31.0
Max Q Clear Time (g_c+I1), s				46.0		70.0	8.8	27.8
Green Ext Time (p_c), s				0.0		0.0	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	134.8
HCM 2010 LOS	F

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	360	810	80	110	720	70	60	200	340	90	560	90
Future Volume (veh/h)	360	810	80	110	720	70	60	200	340	90	560	90
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1900	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	367	827	82	112	735	0	61	204	347	92	571	92
Adj No. of Lanes	2	2	0	1	2	1	1	3	1	1	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	454	1569	156	140	1522	681	78	945	502	116	1056	443
Arrive On Green	0.14	0.50	0.50	0.08	0.45	0.00	0.05	0.19	0.19	0.07	0.22	0.22
Sat Flow, veh/h	3312	3124	310	1707	3406	1524	1707	4893	1516	1707	4893	1478
Grp Volume(v), veh/h	367	451	458	112	735	0	61	204	347	92	571	92
Grp Sat Flow(s),veh/h/ln	1656	1703	1731	1707	1703	1524	1707	1631	1516	1707	1631	1478
Q Serve(g_s), s	11.1	18.6	18.6	6.7	15.8	0.0	3.7	3.6	20.0	5.5	10.7	4.8
Cycle Q Clear(g_c), s	11.1	18.6	18.6	6.7	15.8	0.0	3.7	3.6	20.0	5.5	10.7	4.8
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	454	855	869	140	1522	681	78	945	502	116	1056	443
V/C Ratio(X)	0.81	0.53	0.53	0.80	0.48	0.00	0.78	0.22	0.69	0.79	0.54	0.21
Avail Cap(c_a), veh/h	864	855	869	280	1522	681	198	945	502	247	1087	453
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	17.4	17.4	46.7	20.2	0.0	48.9	35.2	30.1	47.5	36.0	27.2
Incr Delay (d2), s/veh	3.5	2.3	2.3	10.1	1.1	0.0	15.6	0.1	4.0	11.3	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	9.2	9.3	3.5	7.6	0.0	2.1	1.7	9.2	2.9	4.9	2.0
LnGrp Delay(d), s/veh	46.8	19.8	19.7	56.8	21.3	0.0	64.5	35.3	34.1	58.8	36.6	27.5
LnGrp LOS	D	B	B	E	C		E	D	C	E	D	C
Approach Vol, veh/h		1276			847			612			755	
Approach Delay, s/veh		27.5			26.0			37.5			38.2	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.5	56.0	11.1	24.0	18.2	50.3	8.7	26.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	52.0	15.0	20.0	27.0	42.0	12.0	23.0
Max Q Clear Time (g_c+I1), s	8.7	20.6	7.5	22.0	13.1	17.8	5.7	12.7
Green Ext Time (p_c), s	0.1	6.2	0.1	0.0	1.1	5.0	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.2
HCM 2010 LOS	C



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	SBR	SBR2	NEL2	NEL
Lane Configurations												
Traffic Volume (vph)	1070	270	1340	790	200	550	160	220	0	250	70	850
Future Volume (vph)	1070	270	1340	790	200	550	160	220	0	250	70	850
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.86		0.86	1.00	1.00	1.00	1.00	1.00	0.88	1.00	1.00	0.97
Frpb, ped/bikes	1.00		1.00	0.97	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00		1.00	0.85	1.00	1.00	0.85	0.85	0.85	0.85	1.00	1.00
Flt Protected	0.95		0.98	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (prot)	1451		4505	1467	1687	1776	1488	1509	1328	1509	1687	3273
Flt Permitted	0.95		0.74	1.00	0.95	1.00	1.00	1.00	1.00	1.00	0.95	0.95
Satd. Flow (perm)	1451		3396	1467	1687	1776	1488	1509	1328	1509	1687	3273
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	1092	276	1367	806	204	561	163	224	0	255	71	867
RTOR Reduction (vph)	0	0	0	91	0	0	0	172	106	68	0	0
Lane Group Flow (vph)	666	0	2069	715	204	561	163	52	22	59	71	867
Confl. Peds. (#/hr)				7	7							
Confl. Bikes (#/hr)				1			2					
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%	7%
Turn Type	Prot	Prot	NA	Perm	Prot	NA	Perm	Perm	Perm	pm+ov	Prot	Prot
Protected Phases	7	7	4		3	8				7!	5	5
Permitted Phases				4			8	8	6	6		
Actuated Green, G (s)	35.0		67.0	53.0	10.0	28.0	28.0	28.0	20.8	55.8	21.0	21.0
Effective Green, g (s)	35.0		67.0	53.0	10.0	28.0	28.0	28.0	20.8	55.8	21.0	21.0
Actuated g/C Ratio	0.29		0.55	0.44	0.08	0.23	0.23	0.23	0.17	0.46	0.17	0.17
Clearance Time (s)	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	420		2204	643	139	411	344	349	228	747	293	568
v/s Ratio Prot	c0.46		0.27		0.12	c0.32				0.02	0.04	c0.26
v/s Ratio Perm			0.25	0.49			0.11	0.03	0.02	0.02		
v/c Ratio	1.59		1.50dl	1.11	1.47	1.36	0.47	0.15	0.10	0.08	0.24	1.53
Uniform Delay, d1	42.9		25.0	33.9	55.4	46.4	40.0	36.9	42.1	18.1	43.0	49.9
Progression Factor	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	274.7		8.5	70.4	245.3	179.2	1.0	0.2	0.8	0.0	0.4	245.7
Delay (s)	317.6		33.5	104.3	300.7	225.6	41.1	37.1	42.9	18.2	43.5	295.6
Level of Service	F		C	F	F	F	D	D	D	B	D	F
Approach Delay (s/veh)			103.0			176.2						
Approach LOS			F			F						

Intersection Summary			
HCM 2000 Control Delay (s/veh)	124.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.40		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	122.8%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
! Phase conflict between lane groups.
c Critical Lane Group



Movement	NET	NER	SWL	SWT
Lane Configurations				
Traffic Volume (vph)	580	250	80	850
Future Volume (vph)	580	250	80	850
Ideal Flow (vphpl)	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0	4.0
Lane Util. Factor	0.91		1.00	0.91
Frpb, ped/bikes	0.99		1.00	1.00
Flpb, ped/bikes	1.00		1.00	1.00
Frt	0.95		1.00	1.00
Flt Protected	1.00		0.95	1.00
Satd. Flow (prot)	4600		1687	4848
Flt Permitted	1.00		0.95	1.00
Satd. Flow (perm)	4600		1687	4848
Peak-hour factor, PHF	0.98	0.98	0.98	0.98
Adj. Flow (vph)	592	255	82	867
RTOR Reduction (vph)	62	0	0	0
Lane Group Flow (vph)	785	0	82	867
Confl. Peds. (#/hr)		4		
Confl. Bikes (#/hr)				
Heavy Vehicles (%)	7%	7%	7%	7%
Turn Type	NA		Prot	NA
Protected Phases	2		1	6
Permitted Phases				
Actuated Green, G (s)	32.9		8.9	20.8
Effective Green, g (s)	32.9		8.9	20.8
Actuated g/C Ratio	0.27		0.07	0.17
Clearance Time (s)	4.0		4.0	4.0
Vehicle Extension (s)	3.0		3.0	3.0
Lane Grp Cap (vph)	1252		124	834
v/s Ratio Prot	0.17		0.05	c0.18
v/s Ratio Perm				
v/c Ratio	0.63		0.66	1.04
Uniform Delay, d1	38.6		54.5	50.0
Progression Factor	1.00		1.00	1.00
Incremental Delay, d2	2.4		12.5	41.9
Delay (s)	41.0		67.0	91.9
Level of Service	D		E	F
Approach Delay (s/veh)	164.8			89.7
Approach LOS	F			F

Intersection Summary

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	230	770	90	50	280	120	200	980	140	260	1210	210
Future Volume (veh/h)	230	770	90	50	280	120	200	980	140	260	1210	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	242	811	95	53	295	0	211	1032	147	274	1274	221
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	269	884	388	68	482	216	238	1378	597	302	1506	660
Arrive On Green	0.15	0.25	0.25	0.04	0.14	0.00	0.14	0.40	0.40	0.17	0.43	0.43
Sat Flow, veh/h	1740	3471	1524	1740	3471	1553	1740	3471	1505	1740	3471	1521
Grp Volume(v), veh/h	242	811	95	53	295	0	211	1032	147	274	1274	221
Grp Sat Flow(s),veh/h/ln	1740	1736	1524	1740	1736	1553	1740	1736	1505	1740	1736	1521
Q Serve(g_s), s	16.1	26.7	5.8	3.6	9.4	0.0	14.0	30.0	7.7	18.2	38.6	11.3
Cycle Q Clear(g_c), s	16.1	26.7	5.8	3.6	9.4	0.0	14.0	30.0	7.7	18.2	38.6	11.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	269	884	388	68	482	216	238	1378	597	302	1506	660
V/C Ratio(X)	0.90	0.92	0.24	0.78	0.61	0.00	0.89	0.75	0.25	0.91	0.85	0.33
Avail Cap(c_a), veh/h	296	915	402	74	482	216	252	1378	597	340	1506	660
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.8	42.6	34.8	56.0	47.6	0.0	49.9	30.4	23.7	47.7	29.8	22.0
Incr Delay (d2), s/veh	26.8	13.6	0.3	38.5	2.3	0.0	28.6	3.8	1.0	25.4	6.0	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.7	14.5	2.5	2.4	4.7	0.0	8.6	15.1	3.3	10.9	19.7	5.0
LnGrp Delay(d), s/veh	75.6	56.2	35.1	94.5	49.9	0.0	78.5	34.2	24.7	73.0	35.8	23.4
LnGrp LOS	E	E	D	F	D		E	C	C	E	D	C
Approach Vol, veh/h		1148			348			1390			1769	
Approach Delay, s/veh		58.5			56.7			39.9			40.0	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.4	50.7	8.6	33.9	20.1	55.0	22.2	20.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	23.0	45.0	5.0	31.0	17.0	51.0	20.0	16.0
Max Q Clear Time (g_c+I1), s	20.2	32.0	5.6	28.7	16.0	40.6	18.1	11.4
Green Ext Time (p_c), s	0.2	6.0	0.0	1.2	0.1	6.5	0.1	0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	480	180	40	150	170	60	980	50	270	1170	90
Future Volume (veh/h)	210	480	180	40	150	170	60	980	50	270	1170	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	495	186	41	155	175	62	1010	0	278	1206	93
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	378	487	183	104	242	273	165	1152	515	304	1459	634
Arrive On Green	0.10	0.39	0.39	0.02	0.31	0.31	0.03	0.33	0.00	0.12	0.42	0.42
Sat Flow, veh/h	1740	1260	473	1740	776	876	1740	3471	1553	1740	3471	1508
Grp Volume(v), veh/h	216	0	681	41	0	330	62	1010	0	278	1206	93
Grp Sat Flow(s),veh/h/ln	1740	0	1733	1740	0	1652	1740	1736	1553	1740	1736	1508
Q Serve(g_s), s	9.6	0.0	46.0	1.9	0.0	20.4	2.8	32.6	0.0	12.4	36.7	4.5
Cycle Q Clear(g_c), s	9.6	0.0	46.0	1.9	0.0	20.4	2.8	32.6	0.0	12.4	36.7	4.5
Prop In Lane	1.00		0.27	1.00		0.53	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	378	0	670	104	0	515	165	1152	515	304	1459	634
V/C Ratio(X)	0.57	0.00	1.02	0.39	0.00	0.64	0.38	0.88	0.00	0.91	0.83	0.15
Avail Cap(c_a), veh/h	438	0	670	119	0	515	165	1152	515	326	1459	634
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.9	0.0	36.5	32.6	0.0	35.2	28.2	37.5	0.0	28.0	30.6	21.3
Incr Delay (d2), s/veh	1.4	0.0	38.9	2.4	0.0	2.7	1.4	9.5	0.0	28.0	5.5	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	0.0	29.2	1.0	0.0	9.7	1.4	17.1	0.0	11.3	18.7	2.0
LnGrp Delay(d), s/veh	26.2	0.0	75.4	35.0	0.0	37.9	29.6	47.0	0.0	56.0	36.1	21.8
LnGrp LOS	C		F	C		D	C	D		E	D	C
Approach Vol, veh/h		897			371			1072			1577	
Approach Delay, s/veh		63.5			37.6			46.0			38.8	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	43.5	7.0	50.0	8.0	54.0	15.9	41.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	38.0	4.0	46.0	4.0	50.0	16.0	34.0
Max Q Clear Time (g_c+I1), s	14.4	34.6	3.9	48.0	4.8	38.7	11.6	22.4
Green Ext Time (p_c), s	0.1	2.0	0.0	0.0	0.0	6.4	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1000	90	110	330	50	40	910	120	190	1100	70
Future Volume (veh/h)	160	1000	90	110	330	50	40	910	120	190	1100	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1810	1810	1900	1810	1810	1900	1810	1810	1900	1810	1810	1900
Adj Flow Rate, veh/h	167	1042	94	115	344	52	42	948	125	198	1146	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	5	5	5	5	5	5	5	5	5	5	5	5
Cap, veh/h	370	1158	104	192	990	146	53	1254	165	227	1678	107
Arrive On Green	0.09	0.25	0.25	0.07	0.23	0.23	0.03	0.41	0.41	0.13	0.51	0.51
Sat Flow, veh/h	1723	4594	414	1723	4343	639	1723	3048	402	1723	3276	208
Grp Volume(v), veh/h	167	746	390	115	259	137	42	535	538	198	601	618
Grp Sat Flow(s),veh/h/ln	1723	1647	1715	1723	1647	1688	1723	1719	1731	1723	1719	1765
Q Serve(g_s), s	8.3	25.3	25.3	5.8	7.6	7.9	2.8	30.6	30.6	13.0	30.2	30.3
Cycle Q Clear(g_c), s	8.3	25.3	25.3	5.8	7.6	7.9	2.8	30.6	30.6	13.0	30.2	30.3
Prop In Lane	1.00		0.24	1.00		0.38	1.00		0.23	1.00		0.12
Lane Grp Cap(c), veh/h	370	830	432	192	751	385	53	707	712	227	880	904
V/C Ratio(X)	0.45	0.90	0.90	0.60	0.34	0.36	0.79	0.76	0.76	0.87	0.68	0.68
Avail Cap(c_a), veh/h	409	858	446	198	751	385	105	707	712	284	880	904
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	41.7	41.7	33.5	37.3	37.4	55.5	29.0	29.0	49.1	21.1	21.1
Incr Delay (d2), s/veh	0.9	12.2	20.8	4.7	0.3	0.6	22.4	7.4	7.3	21.0	4.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	12.9	14.5	3.0	3.5	3.7	1.7	16.0	16.1	7.5	15.4	15.8
LnGrp Delay(d), s/veh	30.3	53.8	62.5	38.2	37.5	37.9	77.9	36.3	36.3	70.1	25.3	25.3
LnGrp LOS	C	D	E	D	D	D	E	D	D	E	C	C
Approach Vol, veh/h		1303			511			1115			1417	
Approach Delay, s/veh		53.4			37.8			37.9			31.6	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.2	51.4	11.6	33.0	7.5	63.0	14.4	30.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	47.0	8.0	30.0	7.0	59.0	13.0	25.0
Max Q Clear Time (g_c+I1), s	15.0	32.6	7.8	27.3	4.8	32.3	10.3	9.9
Green Ext Time (p_c), s	0.2	6.0	0.0	1.7	0.0	9.3	0.1	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.5
HCM 2010 LOS	D



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	200	10	750	260	0	640
Future Volume (veh/h)	200	10	750	260	0	640
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	0	1827
Adj Flow Rate, veh/h	215	11	806	0	0	688
Adj No. of Lanes	2	1	2	1	0	2
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	0	4
Cap, veh/h	304	140	2872	1424	0	2872
Arrive On Green	0.09	0.09	0.83	0.00	0.00	0.83
Sat Flow, veh/h	3375	1553	3563	1553	0	3654
Grp Volume(v), veh/h	215	11	806	0	0	688
Grp Sat Flow(s),veh/h/ln	1688	1553	1736	1553	0	1736
Q Serve(g_s), s	6.0	0.6	5.0	0.0	0.0	4.1
Cycle Q Clear(g_c), s	6.0	0.6	5.0	0.0	0.0	4.1
Prop In Lane	1.00	1.00		1.00	0.00	
Lane Grp Cap(c), veh/h	304	140	2872	1424	0	2872
V/C Ratio(X)	0.71	0.08	0.28	0.00	0.00	0.24
Avail Cap(c_a), veh/h	1117	514	2872	1424	0	2872
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	42.8	40.3	1.9	0.0	0.0	1.8
Incr Delay (d2), s/veh	3.0	0.2	0.2	0.0	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	0.3	2.4	0.0	0.0	2.0
LnGrp Delay(d), s/veh	45.8	40.6	2.1	0.0	0.0	2.0
LnGrp LOS	D	D	A			A
Approach Vol, veh/h	226		806			688
Approach Delay, s/veh	45.5		2.1			2.0
Approach LOS	D		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		84.0				84.0		12.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		80.0				80.0		32.0
Max Q Clear Time (g_c+I1), s		7.0				6.1		8.0
Green Ext Time (p_c), s		6.3				5.2		0.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.8
HCM 2010 LOS	A

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Future Volume (veh/h)	7	231	27	421	569	12	189	7	304	14	12	11
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1900	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	8	251	29	458	618	13	205	8	330	15	13	12
Adj No. of Lanes	1	3	1	1	3	0	0	1	1	1	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	14	1617	500	502	3036	64	382	15	353	54	27	25
Arrive On Green	0.01	0.31	0.31	0.28	0.59	0.59	0.22	0.22	0.22	0.03	0.03	0.03
Sat Flow, veh/h	1792	5136	1589	1792	5174	109	1727	67	1595	1792	894	826
Grp Volume(v), veh/h	8	251	29	458	408	223	213	0	330	15	0	25
Grp Sat Flow(s),veh/h/ln	1792	1712	1589	1792	1712	1859	1795	0	1595	1792	0	1720
Q Serve(g_s), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Cycle Q Clear(g_c), s	0.5	3.7	1.3	25.7	5.8	5.8	10.9	0.0	21.1	0.9	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.06	0.96		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	14	1617	500	502	2009	1091	397	0	353	54	0	52
V/C Ratio(X)	0.56	0.16	0.06	0.91	0.20	0.20	0.54	0.00	0.94	0.28	0.00	0.48
Avail Cap(c_a), veh/h	69	1617	500	793	2009	1091	397	0	353	276	0	265
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	25.7	24.9	36.2	10.1	10.1	35.8	0.0	39.7	49.3	0.0	49.6
Incr Delay (d2), s/veh	30.5	0.2	0.2	10.1	0.2	0.4	1.4	0.0	31.7	2.8	0.0	6.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	1.8	0.6	14.1	2.8	3.1	5.5	0.0	12.4	0.5	0.0	0.8
LnGrp Delay(d), s/veh	81.8	25.9	25.1	46.3	10.3	10.5	37.2	0.0	71.5	52.1	0.0	56.5
LnGrp LOS	F	C	C	D	B	B	D		E	D		E
Approach Vol, veh/h		288			1089			543			40	
Approach Delay, s/veh		27.3			25.5			58.0			54.8	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	4.8	65.0		27.0	33.1	36.7		7.1
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	61.0		23.0	46.0	19.0		16.0
Max Q Clear Time (g_c+I1), s	2.5	7.8		23.1	27.7	5.7		3.5
Green Ext Time (p_c), s	0.0	4.7		0.0	1.4	1.2		0.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		35.4
HCM 2010 LOS		D

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	30	600	310	360	340	450	10	930	380	120	960	50
Future Volume (veh/h)	30	600	310	360	340	450	10	930	380	120	960	50
Number	1	6	16	5	2	12	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	31	625	323	375	354	469	10	969	396	125	1000	52
Adj No. of Lanes	1	2	1	2	2	1	0	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	39	984	428	445	1363	737	39	1163	523	153	1636	718
Arrive On Green	0.02	0.28	0.28	0.13	0.39	0.39	0.35	0.35	0.35	0.09	0.47	0.47
Sat Flow, veh/h	1740	3471	1509	3375	3471	1529	12	3364	1514	1740	3471	1522
Grp Volume(v), veh/h	31	625	323	375	354	469	522	457	396	125	1000	52
Grp Sat Flow(s),veh/h/ln	1740	1736	1509	1688	1736	1529	1797	1579	1514	1740	1736	1522
Q Serve(g_s), s	1.9	16.7	20.7	11.5	7.3	24.3	4.6	28.2	24.5	7.5	22.6	2.0
Cycle Q Clear(g_c), s	1.9	16.7	20.7	11.5	7.3	24.3	28.0	28.2	24.5	7.5	22.6	2.0
Prop In Lane	1.00		1.00	1.00		1.00	0.02		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	39	984	428	445	1363	737	656	546	523	153	1636	718
V/C Ratio(X)	0.79	0.64	0.76	0.84	0.26	0.64	0.80	0.84	0.76	0.82	0.61	0.07
Avail Cap(c_a), veh/h	99	984	428	542	1363	737	778	657	629	214	2001	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	33.1	34.6	44.9	21.7	20.6	31.7	31.9	30.7	47.4	20.8	15.3
Incr Delay (d2), s/veh	28.4	3.1	11.7	9.9	0.5	4.2	4.9	8.0	4.3	15.4	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	8.4	10.0	6.0	3.6	11.0	14.8	13.5	10.9	4.2	10.9	0.8
LnGrp Delay(d), s/veh	79.8	36.3	46.3	54.7	22.2	24.8	36.7	39.9	35.0	62.8	21.1	15.4
LnGrp LOS	E	D	D	D	C	C	D	D	D	E	C	B
Approach Vol, veh/h		979			1198			1375			1177	
Approach Delay, s/veh		41.0			33.4			37.3			25.3	
Approach LOS		D			C			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.4	45.6	13.3	40.6	17.9	34.0		53.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	41.0	13.0	44.0	17.0	30.0		61.0
Max Q Clear Time (g_c+I1), s	3.9	26.3	9.5	30.2	13.5	22.7		24.6
Green Ext Time (p_c), s	0.0	3.4	0.1	6.4	0.5	3.0		8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.1
HCM 2010 LOS	C



Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (vph)	830	300	390	670	480	30
Future Volume (vph)	830	300	390	670	480	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	1.00	1.00	0.95	0.97	
Frt	1.00	0.85	1.00	1.00	0.99	
Flt Protected	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (prot)	3505	1568	1752	3505	3387	
Flt Permitted	1.00	1.00	0.95	1.00	0.96	
Satd. Flow (perm)	3505	1568	1752	3505	3387	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	874	316	411	705	505	32
RTOR Reduction (vph)	0	86	0	0	4	0
Lane Group Flow (vph)	874	230	411	705	533	0
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA	pm+ov	Prot	NA	Prot	
Protected Phases	6	4	5	2	4	
Permitted Phases		6				
Actuated Green, G (s)	49.7	72.7	32.4	86.1	23.0	
Effective Green, g (s)	49.7	72.7	32.4	86.1	23.0	
Actuated g/C Ratio	0.42	0.62	0.28	0.74	0.20	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	1487	1027	484	2577	665	
v/s Ratio Prot	c0.25	0.04	c0.23	0.20	c0.16	
v/s Ratio Perm		0.10				
v/c Ratio	0.59	0.22	0.85	0.27	0.80	
Uniform Delay, d1	25.8	9.8	40.0	5.1	44.9	
Progression Factor	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.7	0.1	13.1	0.3	6.9	
Delay (s)	27.6	9.9	53.1	5.4	51.8	
Level of Service	C	A	D	A	D	
Approach Delay (s/veh)	22.9			23.0	51.8	
Approach LOS	C			C	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	117.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	424	290	69	407	1072	266
Future Volume (veh/h)	424	290	69	407	1072	266
Number	5	12	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	433	0	70	415	1094	271
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	850	391	288	2383	2383	1064
Arrive On Green	0.24	0.00	0.67	0.67	0.67	0.67
Sat Flow, veh/h	3476	1599	401	3668	3668	1595
Grp Volume(v), veh/h	433	0	70	415	1094	271
Grp Sat Flow(s),veh/h/ln	1738	1599	401	1787	1787	1595
Q Serve(g_s), s	9.7	0.0	9.2	3.9	13.2	6.1
Cycle Q Clear(g_c), s	9.7	0.0	22.4	3.9	13.2	6.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	850	391	288	2383	2383	1064
V/C Ratio(X)	0.51	0.00	0.24	0.17	0.46	0.25
Avail Cap(c_a), veh/h	850	391	288	2383	2383	1064
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	0.0	12.6	5.7	7.2	6.0
Incr Delay (d2), s/veh	2.2	0.0	0.4	0.0	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	0.0	1.0	1.9	6.6	2.8
LnGrp Delay(d), s/veh	31.5	0.0	13.0	5.7	7.8	6.6
LnGrp LOS	C		B	A	A	A
Approach Vol, veh/h	433			485	1365	
Approach Delay, s/veh	31.5			6.7	7.6	
Approach LOS	C			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		26.0		64.0				64.0
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		22.0		60.0				60.0
Max Q Clear Time (g_c+I1), s		11.7		24.4				15.2
Green Ext Time (p_c), s		1.1		4.0				10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Future Volume (veh/h)	140	1180	500	130	930	230	180	980	550	300	430	30
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1706	1706	1706	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	147	1242	526	137	979	242	189	1032	0	316	453	32
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	1243	690	132	1238	742	218	1081	483	341	942	66
Arrive On Green	0.10	0.38	0.38	0.08	0.35	0.35	0.12	0.31	0.00	0.10	0.28	0.28
Sat Flow, veh/h	1625	3242	1422	1757	3505	1550	1757	3505	1568	3408	3316	233
Grp Volume(v), veh/h	147	1242	526	137	979	242	189	1032	0	316	239	246
Grp Sat Flow(s),veh/h/ln	1625	1621	1422	1757	1752	1550	1757	1752	1568	1704	1752	1797
Q Serve(g_s), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Cycle Q Clear(g_c), s	10.7	46.0	36.4	9.0	30.1	11.6	12.7	34.6	0.0	11.0	13.5	13.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	171	1243	690	132	1238	742	218	1081	483	341	498	511
V/C Ratio(X)	0.86	1.00	0.76	1.04	0.79	0.33	0.87	0.95	0.00	0.93	0.48	0.48
Avail Cap(c_a), veh/h	176	1243	690	132	1238	742	307	1081	483	341	498	511
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	37.0	25.4	55.5	34.8	19.4	51.6	40.7	0.0	53.6	35.6	35.6
Incr Delay (d2), s/veh	32.1	25.4	5.0	89.4	3.5	0.3	16.6	18.5	0.0	30.7	3.3	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.3	24.9	15.1	7.6	15.2	5.0	7.1	19.5	0.0	6.6	7.0	7.2
LnGrp Delay(d), s/veh	85.0	62.4	30.4	145.3	38.4	19.7	68.2	59.2	0.0	84.3	38.9	38.9
LnGrp LOS	F	E	C	F	D	B	E	E		F	D	D
Approach Vol, veh/h		1915			1358			1221			801	
Approach Delay, s/veh		55.3			45.8			60.6			56.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.9	38.1	13.0	50.0	16.0	41.0	16.6	46.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	28.0	9.0	46.0	12.0	37.0	13.0	42.0
Max Q Clear Time (g_c+I1), s	14.7	15.6	11.0	48.0	13.0	36.6	12.7	32.1
Green Ext Time (p_c), s	0.3	2.3	0.0	0.0	0.0	0.2	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	30	40	690	20	30	1270
Future Vol, veh/h	30	40	690	20	30	1270
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	50	0	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	97	97	97	97	97	97
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	31	41	711	21	31	1309

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1431	359	0	0	735	0
Stage 1	714	-	-	-	-	-
Stage 2	717	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	4.16	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	2.23	-
Pot Cap-1 Maneuver	124	635	-	-	860	-
Stage 1	444	-	-	-	-	-
Stage 2	442	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	119	633	-	-	858	-
Mov Cap-2 Maneuver	119	-	-	-	-	-
Stage 1	443	-	-	-	-	-
Stage 2	426	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	25.9	0	0.2
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	119	633	858	-
HCM Lane V/C Ratio	-	-	0.26	0.065	0.036	-
HCM Control Delay (s/veh)	-	-	45.6	11.1	9.4	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1	0.2	0.1	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	80	110	600	50	400	920
Future Volume (veh/h)	80	110	600	50	400	920
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	82	113	619	52	412	948
Adj No. of Lanes	1	1	2	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	158	141	2912	1297	664	2912
Arrive On Green	0.09	0.09	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1740	1553	3563	1546	748	3563
Grp Volume(v), veh/h	82	113	619	52	412	948
Grp Sat Flow(s),veh/h/ln	1740	1553	1736	1546	748	1736
Q Serve(g_s), s	5.1	8.2	4.0	0.6	27.5	6.9
Cycle Q Clear(g_c), s	5.1	8.2	4.0	0.6	31.5	6.9
Prop In Lane	1.00	1.00		1.00	1.00	
Lane Grp Cap(c), veh/h	158	141	2912	1297	664	2912
V/C Ratio(X)	0.52	0.80	0.21	0.04	0.62	0.33
Avail Cap(c_a), veh/h	243	217	2912	1297	664	2912
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	51.0	1.8	1.5	4.9	2.0
Incr Delay (d2), s/veh	2.6	11.2	0.2	0.1	4.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	4.0	2.0	0.3	6.3	3.4
LnGrp Delay(d), s/veh	52.2	62.2	2.0	1.6	9.2	2.3
LnGrp LOS	D	E	A	A	A	A
Approach Vol, veh/h	195		671			1360
Approach Delay, s/veh	58.0		1.9			4.4
Approach LOS	E		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		100.0				100.0		14.4
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		96.0				96.0		16.0
Max Q Clear Time (g_c+I1), s		6.0				33.5		10.2
Green Ext Time (p_c), s		4.7				14.2		0.3

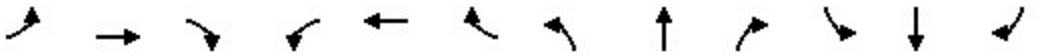
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.4
HCM 2010 LOS	A

Intersection	
Intersection Delay, s/veh	16.7
Intersection LOS	C

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	40	500	50	40	50	30
Future Vol, veh/h	40	500	50	40	50	30
Peak Hour Factor	0.85	0.85	0.85	0.85	0.85	0.85
Heavy Vehicles, %	11	11	11	11	11	11
Mvmt Flow	47	588	59	47	59	35
Number of Lanes	1	1	0	1	1	1

Approach	EB	NB	SB
Opposing Approach		SB	NB
Opposing Lanes	0	2	1
Conflicting Approach Left	SB	EB	
Conflicting Lanes Left	2	2	0
Conflicting Approach Right	NB		EB
Conflicting Lanes Right	1	0	2
HCM Control Delay, s/veh	18.8	10.7	9.5
HCM LOS	C	B	A

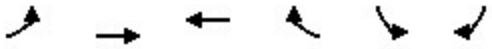
Lane	NBLn1	EBLn1	EBLn2	SBLn1	SBLn2
Vol Left, %	56%	100%	0%	0%	0%
Vol Thru, %	44%	0%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	40	500	50	30
LT Vol	50	40	0	0	0
Through Vol	40	0	0	50	0
RT Vol	0	0	500	0	30
Lane Flow Rate	106	47	588	59	35
Geometry Grp	4	7	7	7	7
Degree of Util (X)	0.182	0.076	0.747	0.103	0.055
Departure Headway (Hd)	6.198	5.778	4.573	6.331	5.621
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	574	619	788	561	630
Service Time	4.291	3.523	2.318	4.131	3.42
HCM Lane V/C Ratio	0.185	0.076	0.746	0.105	0.056
HCM Control Delay, s/veh	10.7	9	19.6	9.9	8.8
HCM Lane LOS	B	A	C	A	A
HCM 95th-tile Q	0.7	0.2	6.9	0.3	0.2



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Future Volume (vph)	360	1080	10	730	630	600	20	290	850	150	30	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91			0.95	1.00	0.91	0.91	1.00
Frpb, ped/bikes	1.00	1.00		1.00	0.99			1.00	1.00	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	0.93			1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00			1.00	1.00	0.95	0.97	1.00
Satd. Flow (prot)	1752	5029		1752	4609			3493	1568	1595	3242	1538
Flt Permitted	0.95	1.00		0.95	1.00			0.93	1.00	0.95	0.62	1.00
Satd. Flow (perm)	1752	5029		1752	4609			3271	1568	1595	2089	1538
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	367	1102	10	745	643	612	20	296	867	153	31	10
RTOR Reduction (vph)	0	1	0	0	140	0	0	0	501	0	0	7
Lane Group Flow (vph)	367	1111	0	745	1115	0	0	316	366	76	108	3
Confl. Peds. (#/hr)	6					6	3					3
Confl. Bikes (#/hr)						1						1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8			2		1	6	
Permitted Phases							2		2			6
Actuated Green, G (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Effective Green, g (s)	27.9	23.0		47.0	42.1			28.0	28.0	6.0	38.0	38.0
Actuated g/C Ratio	0.23	0.19		0.39	0.35			0.23	0.23	0.05	0.32	0.32
Clearance Time (s)	4.0	4.0		4.0	4.0			4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0			3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	407	963		686	1616			763	365	79	719	487
v/s Ratio Prot	0.21	c0.22		c0.43	0.24					c0.05	0.01	
v/s Ratio Perm								0.10	c0.23		0.04	0.00
v/c Ratio	0.90	1.15		1.09	0.90dr			0.41	1.00	0.96	0.93dl	0.01
Uniform Delay, d1	44.7	48.5		36.5	33.4			39.0	46.0	56.9	29.4	28.1
Progression Factor	1.00	1.00		1.00	1.00			1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	22.6	81.2		60.1	1.3			1.7	47.5	87.9	0.1	0.0
Delay (s)	67.3	129.7		96.6	34.7			40.7	93.5	144.8	29.5	28.1
Level of Service	E	F		F	C			D	F	F	C	C
Approach Delay (s/veh)		114.2			57.7			79.4			74.6	
Approach LOS		F			E			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	80.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.07		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	97.1%	ICU Level of Service	F
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
dr Defacto Right Lane. Recode with 1 though lane as a right lane.
c Critical Lane Group



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	50	1360	1130	40	320	190
Future Volume (veh/h)	50	1360	1130	40	320	190
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1690	1690	1827	1827	1827	1827
Adj Flow Rate, veh/h	53	1447	1202	43	340	202
Adj No. of Lanes	1	2	2	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4
Cap, veh/h	190	1734	1875	838	664	593
Arrive On Green	0.54	0.54	0.54	0.54	0.38	0.38
Sat Flow, veh/h	404	3295	3563	1551	1740	1553
Grp Volume(v), veh/h	53	1447	1202	43	340	202
Grp Sat Flow(s),veh/h/ln	404	1605	1736	1551	1740	1553
Q Serve(g_s), s	10.9	38.6	24.9	1.3	15.4	9.5
Cycle Q Clear(g_c), s	35.8	38.6	24.9	1.3	15.4	9.5
Prop In Lane	1.00			1.00	1.00	1.00
Lane Grp Cap(c), veh/h	190	1734	1875	838	664	593
V/C Ratio(X)	0.28	0.83	0.64	0.05	0.51	0.34
Avail Cap(c_a), veh/h	260	2293	2479	1108	664	593
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.1	19.7	16.5	11.1	24.3	22.5
Incr Delay (d2), s/veh	0.8	2.1	0.4	0.0	2.8	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	17.4	11.9	0.6	7.9	4.3
LnGrp Delay(d), s/veh	29.9	21.8	16.9	11.1	27.1	24.0
LnGrp LOS	C	C	B	B	C	C
Approach Vol, veh/h		1500	1245		542	
Approach Delay, s/veh		22.1	16.7		26.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.2		43.0		59.2
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				73.0		39.0		73.0
Max Q Clear Time (g_c+I1), s				40.6		17.4		26.9
Green Ext Time (p_c), s				14.7		1.8		11.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Future Volume (veh/h)	250	1310	160	160	740	110	40	1010	160	180	860	270
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	266	1394	170	170	787	117	43	1074	170	191	915	287
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	293	1413	172	177	1087	160	55	1209	535	207	1512	661
Arrive On Green	0.17	0.31	0.31	0.10	0.24	0.24	0.03	0.34	0.34	0.12	0.43	0.43
Sat Flow, veh/h	1774	4583	559	1774	4472	660	1774	3539	1565	1774	3539	1548
Grp Volume(v), veh/h	266	1031	533	170	595	309	43	1074	170	191	915	287
Grp Sat Flow(s),veh/h/ln	1774	1695	1752	1774	1695	1742	1774	1770	1565	1774	1770	1548
Q Serve(g_s), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Cycle Q Clear(g_c), s	17.7	36.3	36.3	11.4	19.3	19.6	2.9	34.4	9.6	12.8	24.0	15.6
Prop In Lane	1.00		0.32	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	293	1045	540	177	824	423	55	1209	535	207	1512	661
V/C Ratio(X)	0.91	0.99	0.99	0.96	0.72	0.73	0.78	0.89	0.32	0.92	0.61	0.43
Avail Cap(c_a), veh/h	325	1045	540	177	824	423	103	1209	535	207	1512	661
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.2	41.2	41.3	53.8	41.7	41.8	57.7	37.3	29.2	52.5	26.5	24.2
Incr Delay (d2), s/veh	26.2	24.4	35.2	55.2	3.1	6.3	20.7	9.9	1.6	41.6	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	20.4	22.7	8.3	9.5	10.2	1.7	18.4	4.4	8.7	12.1	7.1
LnGrp Delay(d), s/veh	75.4	65.7	76.4	109.0	44.9	48.1	78.4	47.2	30.7	94.1	28.4	26.2
LnGrp LOS	E	E	E	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1830			1074			1287			1393	
Approach Delay, s/veh		70.2			55.9			46.1			36.9	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	45.0	16.0	41.0	7.7	55.3	23.8	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	41.0	12.0	37.0	7.0	48.0	22.0	27.0
Max Q Clear Time (g_c+I1), s	14.8	36.4	13.4	38.3	4.9	26.0	19.7	21.6
Green Ext Time (p_c), s	0.0	2.8	0.0	0.0	0.0	7.2	0.2	2.6

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		53.6
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Future Volume (veh/h)	210	1300	170	220	820	130	90	910	120	130	1040	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	216	1340	175	227	845	134	93	938	124	134	1072	103
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	245	1360	178	237	1298	204	103	1098	145	148	1327	795
Arrive On Green	0.14	0.30	0.30	0.13	0.30	0.30	0.06	0.35	0.35	0.08	0.38	0.38
Sat Flow, veh/h	1774	4535	592	1774	4397	692	1774	3137	415	1774	3539	1537
Grp Volume(v), veh/h	216	1002	513	227	650	329	93	529	533	134	1072	103
Grp Sat Flow(s),veh/h/ln	1774	1695	1736	1774	1695	1699	1774	1770	1782	1774	1770	1537
Q Serve(g_s), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Cycle Q Clear(g_c), s	14.3	35.2	35.2	15.3	20.1	20.3	6.3	33.3	33.3	9.0	32.6	4.2
Prop In Lane	1.00		0.34	1.00		0.41	1.00		0.23	1.00		1.00
Lane Grp Cap(c), veh/h	245	1017	521	237	1001	502	103	619	624	148	1327	795
V/C Ratio(X)	0.88	0.99	0.99	0.96	0.65	0.66	0.90	0.85	0.85	0.91	0.81	0.13
Avail Cap(c_a), veh/h	310	1017	521	237	1001	502	103	619	624	148	1327	795
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.8	41.7	41.7	51.7	36.9	37.0	56.1	36.2	36.2	54.5	33.6	15.2
Incr Delay (d2), s/veh	20.7	24.5	35.5	47.1	1.5	3.1	57.4	14.0	14.0	47.4	5.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	19.9	22.0	10.6	9.6	9.9	4.7	18.6	18.7	6.3	16.9	1.9
LnGrp Delay(d), s/veh	71.4	66.2	77.2	98.8	38.4	40.0	113.6	50.2	50.1	101.9	39.0	15.6
LnGrp LOS	E	E	E	F	D	D	F	D	D	F	D	B
Approach Vol, veh/h		1731			1206			1155			1309	
Approach Delay, s/veh		70.1			50.2			55.3			43.6	
Approach LOS		E			D			E			D	

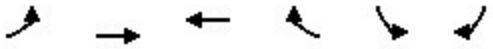
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	46.0	20.0	40.0	11.0	49.0	20.6	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	42.0	16.0	36.0	7.0	45.0	21.0	31.0
Max Q Clear Time (g_c+I1), s	11.0	35.3	17.3	37.2	8.3	34.6	16.3	22.3
Green Ext Time (p_c), s	0.0	3.5	0.0	0.0	0.0	5.3	0.2	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.1
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Future Volume (veh/h)	150	1340	490	790	900	180	230	220	160	130	500	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.94	0.98		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	153	1367	500	806	918	184	235	224	163	133	510	153
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	181	1034	374	591	2171	433	178	649	274	303	486	145
Arrive On Green	0.10	0.28	0.28	0.33	0.51	0.51	0.07	0.18	0.18	0.07	0.18	0.18
Sat Flow, veh/h	1774	3649	1320	1774	4221	842	1774	3539	1494	1774	2649	789
Grp Volume(v), veh/h	153	1269	598	806	736	366	235	224	163	133	339	324
Grp Sat Flow(s),veh/h/ln	1774	1695	1578	1774	1695	1672	1774	1770	1494	1774	1770	1669
Q Serve(g_s), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Cycle Q Clear(g_c), s	10.2	34.0	34.0	40.0	16.2	16.3	8.0	6.6	12.0	7.3	22.0	22.0
Prop In Lane	1.00		0.84	1.00		0.50	1.00		1.00	1.00		0.47
Lane Grp Cap(c), veh/h	181	961	447	591	1744	860	178	649	274	303	324	306
V/C Ratio(X)	0.84	1.32	1.34	1.36	0.42	0.42	1.32	0.35	0.60	0.44	1.05	1.06
Avail Cap(c_a), veh/h	266	961	447	591	1744	860	178	649	274	303	324	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	43.0	43.0	40.0	18.1	18.1	42.8	42.7	44.9	36.7	49.0	49.0
Incr Delay (d2), s/veh	14.8	151.9	166.3	174.1	0.2	0.3	177.0	1.5	9.2	1.0	62.6	67.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.7	36.1	35.4	48.1	7.6	7.6	8.8	3.4	5.6	3.6	16.4	15.8
LnGrp Delay(d), s/veh	67.7	194.9	209.3	214.1	18.2	18.4	219.8	44.2	54.1	37.7	111.6	116.4
LnGrp LOS	E	F	F	F	B	B	F	D	D	D	F	F
Approach Vol, veh/h		2020			1908			622			796	
Approach Delay, s/veh		189.5			101.0			113.1			101.2	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	26.0	44.0	38.0	12.0	26.0	16.3	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	22.0	40.0	34.0	8.0	22.0	18.0	56.0
Max Q Clear Time (g_c+I1), s	9.3	14.0	42.0	36.0	10.0	24.0	12.2	18.3
Green Ext Time (p_c), s	0.0	1.3	0.0	0.0	0.0	0.0	0.2	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	135.9
HCM 2010 LOS	F



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑	↑↑		↖	↗
Traffic Volume (veh/h)	0	1490	1200	0	340	270
Future Volume (veh/h)	0	1490	1200	0	340	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1863	0	1723	1723
Adj Flow Rate, veh/h	0	1568	1263	0	358	284
Adj No. of Lanes	0	2	2	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	2	2	0	2	2
Cap, veh/h	0	1847	1847	0	661	590
Arrive On Green	0.00	0.52	0.52	0.00	0.40	0.40
Sat Flow, veh/h	0	3725	3725	0	1641	1465
Grp Volume(v), veh/h	0	1568	1263	0	358	284
Grp Sat Flow(s),veh/h/ln	0	1770	1770	0	1641	1465
Q Serve(g_s), s	0.0	40.6	28.3	0.0	17.8	15.3
Cycle Q Clear(g_c), s	0.0	40.6	28.3	0.0	17.8	15.3
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	1847	1847	0	661	590
V/C Ratio(X)	0.00	0.85	0.68	0.00	0.54	0.48
Avail Cap(c_a), veh/h	0	2289	2289	0	661	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.9	19.0	0.0	24.3	23.6
Incr Delay (d2), s/veh	0.0	2.7	0.6	0.0	3.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	20.3	13.8	0.0	8.6	6.6
LnGrp Delay(d), s/veh	0.0	24.6	19.6	0.0	27.5	26.4
LnGrp LOS		C	B		C	C
Approach Vol, veh/h		1568	1263		642	
Approach Delay, s/veh		24.6	19.6		27.0	
Approach LOS		C	B		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				59.7		47.0		59.7
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				69.0		43.0		69.0
Max Q Clear Time (g_c+I1), s				42.6		19.8		30.3
Green Ext Time (p_c), s				13.1		2.1		11.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Future Volume (veh/h)	230	1190	390	210	940	270	200	550	150	400	540	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	235	1214	398	214	959	276	204	561	153	408	551	296
Adj No. of Lanes	1	3	0	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	251	1199	392	222	1062	458	232	678	294	414	1042	455
Arrive On Green	0.14	0.32	0.32	0.13	0.30	0.30	0.13	0.19	0.19	0.23	0.29	0.29
Sat Flow, veh/h	1774	3785	1239	1774	3539	1526	1774	3539	1535	1774	3539	1547
Grp Volume(v), veh/h	235	1087	525	214	959	276	204	561	153	408	551	296
Grp Sat Flow(s),veh/h/ln	1774	1695	1634	1774	1770	1526	1774	1770	1535	1774	1770	1547
Q Serve(g_s), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Cycle Q Clear(g_c), s	15.7	38.0	38.0	14.4	31.2	18.5	13.6	18.3	10.7	27.5	15.6	20.0
Prop In Lane	1.00		0.76	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	1074	518	222	1062	458	232	678	294	414	1042	455
V/C Ratio(X)	0.94	1.01	1.01	0.97	0.90	0.60	0.88	0.83	0.52	0.99	0.53	0.65
Avail Cap(c_a), veh/h	251	1074	518	222	1062	458	266	678	294	414	1042	455
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.0	41.0	41.0	52.2	40.3	35.9	51.2	46.6	43.5	45.8	35.4	36.9
Incr Delay (d2), s/veh	39.4	30.6	43.1	50.4	10.8	2.2	24.8	11.1	6.4	40.3	1.9	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.3	23.3	10.2	16.8	8.1	8.2	10.0	5.1	18.1	7.9	9.4
LnGrp Delay(d), s/veh	90.4	71.6	84.1	102.6	51.1	38.1	76.0	57.7	50.0	86.1	37.3	44.0
LnGrp LOS	F	F	F	F	D	D	E	E	D	F	D	D
Approach Vol, veh/h		1847			1449			918			1255	
Approach Delay, s/veh		77.6			56.2			60.5			54.7	
Approach LOS		E			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	32.0	27.0	19.0	42.0	19.7	39.3	21.0	40.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	28.0	23.0	15.0	38.0	18.0	33.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	29.5	20.3	16.4	40.0	15.6	22.0	17.7	33.2
Green Ext Time (p_c), s	0.0	1.2	0.0	0.0	0.1	3.5	0.0	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Future Volume (veh/h)	170	990	120	170	780	290	110	850	90	190	830	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	177	1031	125	177	812	302	115	885	94	198	865	156
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	208	1214	147	208	963	356	284	1338	581	315	1443	626
Arrive On Green	0.12	0.27	0.27	0.12	0.27	0.27	0.06	0.38	0.38	0.09	0.41	0.41
Sat Flow, veh/h	1757	4543	550	1757	3604	1330	1757	3505	1520	1757	3505	1522
Grp Volume(v), veh/h	177	761	395	177	756	358	115	885	94	198	865	156
Grp Sat Flow(s),veh/h/ln	1757	1679	1736	1757	1679	1577	1757	1752	1520	1757	1752	1522
Q Serve(g_s), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Cycle Q Clear(g_c), s	10.8	23.5	23.6	10.8	23.3	23.5	4.3	22.8	4.5	7.2	21.1	7.3
Prop In Lane	1.00		0.32	1.00		0.84	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	208	897	464	208	897	421	284	1338	581	315	1443	626
V/C Ratio(X)	0.85	0.85	0.85	0.85	0.84	0.85	0.40	0.66	0.16	0.63	0.60	0.25
Avail Cap(c_a), veh/h	289	983	508	289	983	462	330	1338	581	389	1443	626
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.2	38.0	38.0	47.2	37.9	38.0	20.3	27.9	22.3	20.8	25.1	21.1
Incr Delay (d2), s/veh	15.7	6.6	12.2	15.7	6.3	13.1	0.9	2.6	0.6	2.2	1.8	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.7	12.9	6.2	11.6	11.8	2.1	11.5	2.0	3.6	10.6	3.3
LnGrp Delay(d), s/veh	63.0	44.6	50.2	63.0	44.2	51.1	21.2	30.5	22.9	23.0	27.0	22.0
LnGrp LOS	E	D	D	E	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1333			1291			1094			1219	
Approach Delay, s/veh		48.7			48.7			28.9			25.7	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.4	45.7	16.9	33.2	10.2	49.0	16.9	33.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	40.0	18.0	32.0	9.0	45.0	18.0	32.0
Max Q Clear Time (g_c+I1), s	9.2	24.8	12.8	25.6	6.3	23.1	12.8	25.5
Green Ext Time (p_c), s	0.2	5.5	0.2	3.6	0.1	6.5	0.2	3.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Future Volume (veh/h)	270	1140	70	40	800	260	130	360	30	320	250	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	276	1163	71	41	816	265	133	367	31	327	255	214
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1853	113	52	896	289	475	1615	136	479	1731	774
Arrive On Green	0.17	0.38	0.38	0.03	0.24	0.24	0.49	0.49	0.49	0.49	0.49	0.49
Sat Flow, veh/h	1774	4897	299	1774	3794	1223	920	3301	277	982	3539	1582
Grp Volume(v), veh/h	276	805	429	41	729	352	133	196	202	327	255	214
Grp Sat Flow(s),veh/h/ln	1774	1695	1805	1774	1695	1626	920	1770	1809	982	1770	1582
Q Serve(g_s), s	17.8	22.6	22.6	2.7	24.4	24.6	10.8	7.4	7.5	33.5	4.6	9.3
Cycle Q Clear(g_c), s	17.8	22.6	22.6	2.7	24.4	24.6	15.5	7.4	7.5	40.9	4.6	9.3
Prop In Lane	1.00		0.17	1.00		0.75	1.00		0.15	1.00		1.00
Lane Grp Cap(c), veh/h	305	1283	683	52	800	384	475	865	885	479	1731	774
V/C Ratio(X)	0.91	0.63	0.63	0.78	0.91	0.92	0.28	0.23	0.23	0.68	0.15	0.28
Avail Cap(c_a), veh/h	350	1283	683	107	814	391	475	865	885	479	1731	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.3	29.5	29.5	56.2	43.3	43.4	20.7	17.1	17.1	28.9	16.4	17.6
Incr Delay (d2), s/veh	24.1	1.0	1.8	21.8	14.1	26.0	1.5	0.6	0.6	7.7	0.2	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	10.7	11.5	1.6	13.0	13.8	2.9	3.7	3.9	10.1	2.3	4.3
LnGrp Delay(d), s/veh	71.4	30.5	31.4	78.0	57.4	69.4	22.1	17.7	17.7	36.6	16.6	18.5
LnGrp LOS	E	C	C	E	E	E	C	B	B	D	B	B
Approach Vol, veh/h		1510			1122			531			796	
Approach Delay, s/veh		38.2			61.9			18.8			25.3	
Approach LOS		D			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		61.0	7.4	48.1		61.0	24.0	31.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		57.0	7.0	44.0		57.0	23.0	28.0
Max Q Clear Time (g_c+I1), s		17.5	4.7	24.6		42.9	19.8	26.6
Green Ext Time (p_c), s		3.1	0.0	7.9		3.4	0.3	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Future Volume (vph)	170	1250	90	70	810	100	120	560	170	130	470	130
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		1.00	0.95	1.00	1.00	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	0.99	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.99		1.00	0.98		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1787	5078		1787	5051		1784	3574	1576	1786	3574	1574
Flt Permitted	0.95	1.00		0.95	1.00		0.44	1.00	1.00	0.39	1.00	1.00
Satd. Flow (perm)	1787	5078		1787	5051		823	3574	1576	725	3574	1574
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	177	1302	94	73	844	104	125	583	177	135	490	135
RTOR Reduction (vph)	0	8	0	0	13	0	0	0	21	0	0	63
Lane Group Flow (vph)	177	1388	0	73	935	0	125	583	156	135	490	72
Confl. Peds. (#/hr)			1	1			2		1	1		2
Confl. Bikes (#/hr)			4						1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Perm	NA	Perm	Perm	NA	Perm
Protected Phases	4!			7!	8!			2			6	
Permitted Phases		4!					2		2	6		6
Actuated Green, G (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Effective Green, g (s)	40.9	40.9		8.3	28.6		56.3	56.3	56.3	56.3	56.3	56.3
Actuated g/C Ratio	0.39	0.39		0.08	0.27		0.54	0.54	0.54	0.54	0.54	0.54
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	694	1974		140	1373		440	1912	843	387	1912	842
v/s Ratio Prot	0.10			0.04	0.19			0.16			0.14	
v/s Ratio Perm		c0.27					0.15		0.10	c0.19		0.05
v/c Ratio	0.26	0.70		0.52	0.68		0.28	0.30	0.19	0.35	0.26	0.09
Uniform Delay, d1	21.8	27.0		46.5	34.2		13.4	13.6	12.6	14.0	13.2	11.9
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	0.2	1.2		3.5	1.4		1.6	0.4	0.5	2.5	0.3	0.2
Delay (s)	22.0	28.2		50.0	35.6		15.0	14.0	13.1	16.4	13.5	12.1
Level of Service	C	C		D	D		B	B	B	B	B	B
Approach Delay (s/veh)		27.5			36.7			14.0			13.8	
Approach LOS		C			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.4	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	105.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	66.1%	ICU Level of Service	C
Analysis Period (min)	15		

! Phase conflict between lane groups.
c Critical Lane Group

Intersection	
Int Delay, s/veh	160.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	370	750	0	1060	680	0
Future Vol, veh/h	370	750	0	1060	680	0
Conflicting Peds, #/hr	0	0	4	0	0	4
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	200	0	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	407	824	0	1165	747	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1330	374	-	0	-	0
Stage 1	747	-	-	-	-	-
Stage 2	583	-	-	-	-	-
Critical Hdwy	6.86	6.96	-	-	-	-
Critical Hdwy Stg 1	5.86	-	-	-	-	-
Critical Hdwy Stg 2	5.86	-	-	-	-	-
Follow-up Hdwy	3.53	3.33	-	-	-	-
Pot Cap-1 Maneuver	~ 145	~ 621	0	-	-	0
Stage 1	426	-	0	-	-	0
Stage 2	518	-	0	-	-	0
Platoon blocked, %				-	-	
Mov Cap-1 Maneuver	~ 145	~ 621	-	-	-	-
Mov Cap-2 Maneuver	~ 145	-	-	-	-	-
Stage 1	426	-	-	-	-	-
Stage 2	518	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	$ 409.9	0	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	EBLn1	EBLn2	SBT
Capacity (veh/h)	-	145	621	-
HCM Lane V/C Ratio	-	2.804	1.327	-
HCM Control Delay (s/veh)	-	$ 878.6	178.7	-
HCM Lane LOS	-	F	F	-
HCM 95th %tile Q(veh)	-	36.8	34.4	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	9

Movement	NBT	NBR	SBL	SBT	NWL	NWR
Lane Configurations						
Traffic Vol, veh/h	560	20	200	1150	70	220
Future Vol, veh/h	560	20	200	1150	70	220
Conflicting Peds, #/hr	0	7	7	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	Free
Storage Length	-	-	100	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	596	21	213	1223	74	234

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	624	0	1652	-
Stage 1	-	-	-	-	614	-
Stage 2	-	-	-	-	1038	-
Critical Hdwy	-	-	4.1	-	6.8	-
Critical Hdwy Stg 1	-	-	-	-	5.8	-
Critical Hdwy Stg 2	-	-	-	-	5.8	-
Follow-up Hdwy	-	-	2.2	-	3.5	-
Pot Cap-1 Maneuver	-	-	967	-	91	0
Stage 1	-	-	-	-	508	0
Stage 2	-	-	-	-	307	0
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	961	-	~ 70	-
Mov Cap-2 Maneuver	-	-	-	-	~ 70	-
Stage 1	-	-	-	-	505	-
Stage 2	-	-	-	-	239	-

Approach	NB	SB	NW
HCM Control Delay, s/v	0	1.5	228.4
HCM LOS			F

Minor Lane/Major Mvmt	NBT	NBR	NWLn1	NWLn2	SBL	SBT
Capacity (veh/h)	-	-	70	-	961	-
HCM Lane V/C Ratio	-	-	1.064	-	0.221	-
HCM Control Delay (s/veh)	-	-	228.4	0	9.8	-
HCM Lane LOS	-	-	F	A	A	-
HCM 95th %tile Q(veh)	-	-	5.6	-	0.8	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	12.6

Movement	SEL	SER	NEL	NET	SWT	SWR
Lane Configurations						
Traffic Vol, veh/h	40	340	360	820	600	20
Future Vol, veh/h	40	340	360	820	600	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	150	0	200	-	-	100
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	91	91	91	91	91	91
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	44	374	396	901	659	22

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1902	330	681	0	-	0
Stage 1	659	-	-	-	-	-
Stage 2	1243	-	-	-	-	-
Critical Hdwy	6.84	6.94	4.14	-	-	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	2.22	-	-	-
Pot Cap-1 Maneuver	61	666	907	-	-	-
Stage 1	476	-	-	-	-	-
Stage 2	235	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 34	666	907	-	-	-
Mov Cap-2 Maneuver	~ 34	-	-	-	-	-
Stage 1	268	-	-	-	-	-
Stage 2	235	-	-	-	-	-

Approach	SE	NE	SW
HCM Control Delay, s/v	60.9	3.7	0
HCM LOS	F		

Minor Lane/Major Mvmt	NEL	NET	SELn1	SELn2	SWT	SWR
Capacity (veh/h)	907	-	34	666	-	-
HCM Lane V/C Ratio	0.436	-	1.293	0.561	-	-
HCM Control Delay (s/veh)	12	-	$ 433.6	17.1	-	-
HCM Lane LOS	B	-	F	C	-	-
HCM 95th %tile Q(veh)	2.2	-	4.7	3.5	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Future Volume (veh/h)	10	10	10	330	0	230	10	650	80	230	930	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.98	0.98		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	11	11	11	359	0	250	11	707	87	250	1011	11
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	164	162	141	460	532	447	339	2269	1001	441	2269	1014
Arrive On Green	0.29	0.29	0.29	0.29	0.00	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	420	569	494	1361	1863	1565	550	3539	1562	681	3539	1581
Grp Volume(v), veh/h	33	0	0	359	0	250	11	707	87	250	1011	11
Grp Sat Flow(s),veh/h/ln	1483	0	0	1361	1863	1565	550	1770	1562	681	1770	1581
Q Serve(g_s), s	0.0	0.0	0.0	25.9	0.0	14.8	1.1	9.8	2.3	28.4	15.7	0.3
Cycle Q Clear(g_c), s	1.5	0.0	0.0	27.4	0.0	14.8	16.8	9.8	2.3	38.2	15.7	0.3
Prop In Lane	0.33		0.33	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	468	0	0	460	532	447	339	2269	1001	441	2269	1014
V/C Ratio(X)	0.07	0.00	0.00	0.78	0.00	0.56	0.03	0.31	0.09	0.57	0.45	0.01
Avail Cap(c_a), veh/h	611	0	0	595	717	602	339	2269	1001	441	2269	1014
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.4	0.0	0.0	37.5	0.0	33.2	14.1	8.8	7.4	17.4	9.8	7.1
Incr Delay (d2), s/veh	0.1	0.0	0.0	5.0	0.0	1.1	0.2	0.4	0.2	5.2	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	0.0	0.0	11.0	0.0	6.5	0.2	4.8	1.0	5.9	7.8	0.1
LnGrp Delay(d), s/veh	28.5	0.0	0.0	42.5	0.0	34.3	14.2	9.1	7.6	22.5	10.5	7.1
LnGrp LOS	C			D		C	B	A	A	C	B	A
Approach Vol, veh/h		33			609			805			1272	
Approach Delay, s/veh		28.5			39.1			9.0			12.8	
Approach LOS		C			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		35.2		74.0		35.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		18.8		3.5		40.2		29.4
Green Ext Time (p_c), s		6.1		0.2		11.3		1.8

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		17.8
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Future Volume (veh/h)	50	1150	170	130	1340	110	170	140	100	130	210	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	57	1307	193	148	1523	125	193	159	114	148	239	114
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	73	1680	248	182	2094	172	231	888	396	182	792	348
Arrive On Green	0.04	0.38	0.38	0.10	0.44	0.44	0.13	0.25	0.25	0.10	0.22	0.22
Sat Flow, veh/h	1774	4464	659	1774	4784	392	1774	3539	1578	1774	3539	1553
Grp Volume(v), veh/h	57	993	507	148	1079	569	193	159	114	148	239	114
Grp Sat Flow(s),veh/h/ln	1774	1695	1733	1774	1695	1786	1774	1770	1578	1774	1770	1553
Q Serve(g_s), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Cycle Q Clear(g_c), s	3.0	24.7	24.7	7.8	25.1	25.1	10.2	3.4	5.6	7.8	5.4	5.9
Prop In Lane	1.00		0.38	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	73	1276	652	182	1484	782	231	888	396	182	792	348
V/C Ratio(X)	0.78	0.78	0.78	0.81	0.73	0.73	0.84	0.18	0.29	0.81	0.30	0.33
Avail Cap(c_a), veh/h	167	1560	797	334	1879	990	408	888	396	334	792	348
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.4	26.3	26.3	42.0	22.2	22.2	40.6	28.1	28.9	42.0	30.9	31.1
Incr Delay (d2), s/veh	15.9	2.1	4.0	8.4	1.1	2.0	7.8	0.4	1.8	8.4	1.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.9	12.6	4.2	11.9	12.8	5.5	1.7	2.6	4.2	2.7	2.8
LnGrp Delay(d), s/veh	61.3	28.4	30.3	50.4	23.2	24.2	48.5	28.5	30.8	50.4	31.9	33.6
LnGrp LOS	E	C	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1557			1796			466			501	
Approach Delay, s/veh		30.2			25.8			37.3			37.7	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	28.0	13.8	40.0	16.4	25.4	8.0	45.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	24.0	18.0	44.0	22.0	20.0	9.0	53.0
Max Q Clear Time (g_c+I1), s	9.8	7.6	9.8	26.7	12.2	7.9	5.0	27.1
Green Ext Time (p_c), s	0.2	1.1	0.2	9.3	0.3	1.4	0.0	13.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Future Volume (veh/h)	40	160	80	130	390	270	120	820	120	190	710	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	43	174	87	141	424	293	130	891	130	207	772	130
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	55	425	202	172	498	341	411	1714	764	377	2225	371
Arrive On Green	0.03	0.19	0.19	0.10	0.25	0.25	0.05	0.49	0.49	0.08	0.51	0.51
Sat Flow, veh/h	1757	2292	1091	1757	1978	1354	1757	3505	1562	1757	4337	724
Grp Volume(v), veh/h	43	131	130	141	375	342	130	891	130	207	596	306
Grp Sat Flow(s),veh/h/ln	1757	1752	1631	1757	1752	1580	1757	1752	1562	1757	1679	1704
Q Serve(g_s), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	11.3	11.4
Cycle Q Clear(g_c), s	2.6	7.1	7.6	8.4	21.9	22.1	3.9	18.7	5.0	6.1	11.3	11.4
Prop In Lane	1.00		0.67	1.00		0.86	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	55	325	302	172	442	398	411	1714	764	377	1722	874
V/C Ratio(X)	0.79	0.40	0.43	0.82	0.85	0.86	0.32	0.52	0.17	0.55	0.35	0.35
Avail Cap(c_a), veh/h	115	360	335	295	539	486	462	1714	764	501	1722	874
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.6	38.4	38.7	47.5	38.2	38.3	12.5	18.8	15.3	13.9	15.5	15.5
Incr Delay (d2), s/veh	21.5	0.8	1.0	9.4	10.5	12.3	0.4	1.1	0.5	1.2	0.6	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	3.5	3.5	4.6	11.8	11.0	1.9	9.3	2.2	3.0	5.3	5.6
LnGrp Delay(d), s/veh	73.1	39.3	39.6	56.8	48.6	50.6	13.0	19.9	15.8	15.1	16.0	16.6
LnGrp LOS	E	D	D	E	D	D	B	B	B	B	B	B
Approach Vol, veh/h		304			858			1151			1109	
Approach Delay, s/veh		44.2			50.8			18.6			16.0	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.4	56.4	14.5	23.9	9.9	59.0	7.3	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	48.0	18.0	22.0	9.0	55.0	7.0	33.0
Max Q Clear Time (g_c+I1), s	8.1	20.7	10.4	9.6	5.9	13.4	4.6	24.1
Green Ext Time (p_c), s	0.3	7.7	0.2	1.1	0.1	7.4	0.0	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Future Volume (veh/h)	100	390	70	70	430	220	100	800	70	210	630	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	746	1845	1546	898	1845	1533	691	3505	1567	601	3505	1567
Grp Volume(v), veh/h	105	411	74	74	453	232	105	842	74	221	663	105
Grp Sat Flow(s),veh/h/ln	746	1845	1546	898	1845	1533	691	1752	1567	601	1752	1567
Q Serve(g_s), s	16.6	22.4	3.9	9.0	25.4	13.9	11.1	15.8	2.5	38.2	11.7	3.6
Cycle Q Clear(g_c), s	42.0	22.4	3.9	31.4	25.4	13.9	22.7	15.8	2.5	54.1	11.7	3.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
V/C Ratio(X)	0.64	0.64	0.14	0.36	0.70	0.43	0.27	0.41	0.08	0.67	0.32	0.11
Avail Cap(c_a), veh/h	163	646	541	207	646	536	396	2044	914	332	2044	914
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.8	32.6	26.6	45.7	33.6	29.9	18.7	13.7	10.9	28.5	12.8	11.2
Incr Delay (d2), s/veh	8.3	2.1	0.1	1.0	3.4	0.6	1.6	0.6	0.2	10.2	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	11.8	1.7	2.3	13.6	5.9	2.3	7.8	1.1	7.3	5.7	1.6
LnGrp Delay(d), s/veh	60.1	34.7	26.7	46.8	37.0	30.4	20.3	14.3	11.1	38.7	13.3	11.4
LnGrp LOS	E	C	C	D	D	C	C	B	B	D	B	B
Approach Vol, veh/h		590			759			1021			989	
Approach Delay, s/veh		38.2			35.9			14.7			18.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		74.0		46.0		74.0		46.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		70.0		42.0		70.0		42.0
Max Q Clear Time (g_c+I1), s		24.7		44.0		56.1		33.4
Green Ext Time (p_c), s		7.9		0.0		5.6		2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Future Volume (veh/h)	110	940	270	250	550	70	260	970	190	80	740	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	111	949	273	253	556	71	263	980	192	81	747	61
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	138	1031	296	282	1576	198	292	1348	590	103	970	420
Arrive On Green	0.08	0.26	0.26	0.16	0.35	0.35	0.16	0.38	0.38	0.06	0.27	0.27
Sat Flow, veh/h	1774	3908	1121	1774	4565	574	1774	3539	1549	1774	3539	1533
Grp Volume(v), veh/h	111	823	399	253	411	216	263	980	192	81	747	61
Grp Sat Flow(s),veh/h/ln	1774	1695	1638	1774	1695	1749	1774	1770	1549	1774	1770	1533
Q Serve(g_s), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Cycle Q Clear(g_c), s	7.1	27.3	27.4	16.2	10.4	10.7	16.8	27.4	10.1	5.2	22.4	3.5
Prop In Lane	1.00		0.68	1.00		0.33	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	138	895	432	282	1171	604	292	1348	590	103	970	420
V/C Ratio(X)	0.81	0.92	0.92	0.90	0.35	0.36	0.90	0.73	0.33	0.79	0.77	0.15
Avail Cap(c_a), veh/h	230	910	440	322	1171	604	338	1348	590	123	970	420
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	41.3	41.4	47.7	28.2	28.3	47.3	30.6	25.3	53.7	38.6	31.7
Incr Delay (d2), s/veh	10.5	14.1	24.8	24.3	0.2	0.4	23.7	3.5	1.5	24.4	5.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	14.6	15.4	9.8	4.9	5.2	10.2	14.0	4.5	3.3	11.8	1.6
LnGrp Delay(d), s/veh	63.0	55.4	66.2	71.9	28.4	28.6	71.0	34.1	26.7	78.1	44.5	32.4
LnGrp LOS	E	E	E	E	C	C	E	C	C	E	D	C
Approach Vol, veh/h		1333			880			1435			889	
Approach Delay, s/veh		59.3			40.9			39.9			46.7	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.7	48.0	22.4	34.5	23.0	35.7	13.0	43.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	44.0	21.0	31.0	22.0	30.0	15.0	37.0
Max Q Clear Time (g_c+I1), s	7.2	29.4	18.2	29.4	18.8	24.4	9.1	12.7
Green Ext Time (p_c), s	0.0	6.3	0.2	1.1	0.2	2.3	0.1	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Future Volume (veh/h)	190	80	180	50	90	60	120	1310	50	40	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	83	188	52	94	62	125	1365	52	42	1167	83
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	53	0	570	42	58	562	153	1792	781	54	1595	695
Arrive On Green	0.36	0.36	0.36	0.36	0.36	0.36	0.09	0.51	0.51	0.03	0.45	0.45
Sat Flow, veh/h	0	0	1582	0	160	1559	1774	3539	1543	1774	3539	1542
Grp Volume(v), veh/h	281	0	188	146	0	62	125	1365	52	42	1167	83
Grp Sat Flow(s),veh/h/ln	0	0	1582	160	0	1559	1774	1770	1543	1774	1770	1542
Q Serve(g_s), s	0.0	0.0	10.1	0.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Cycle Q Clear(g_c), s	42.0	0.0	10.1	42.0	0.0	3.1	8.1	36.1	2.0	2.7	31.5	3.6
Prop In Lane	0.70		1.00	0.36		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	53	0	570	100	0	562	153	1792	781	54	1595	695
V/C Ratio(X)	5.34	0.00	0.33	1.46	0.00	0.11	0.82	0.76	0.07	0.78	0.73	0.12
Avail Cap(c_a), veh/h	53	0	570	100	0	562	244	1792	781	107	1595	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.3	0.0	27.0	35.0	0.0	24.8	52.4	23.1	14.7	56.1	26.2	18.6
Incr Delay (d2), s/veh	1992.4	0.0	0.3	255.6	0.0	0.1	11.1	3.1	0.2	21.3	3.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	30.8	0.0	4.4	10.3	0.0	1.3	4.4	18.4	0.9	1.7	16.1	1.6
LnGrp Delay(d), s/veh	2050.6	0.0	27.4	290.6	0.0	24.9	63.5	26.2	14.9	77.4	29.2	18.9
LnGrp LOS	F		C	F		C	E	C	B	E	C	B
Approach Vol, veh/h		469			208			1542			1292	
Approach Delay, s/veh		1239.6			211.4			28.9			30.1	
Approach LOS		F			F			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	7.5	63.0		46.0	14.0	56.5		46.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	7.0	59.0		42.0	16.0	50.0		42.0
Max Q Clear Time (g_c+I1), s	4.7	38.1		44.0	10.1	33.5		44.0
Green Ext Time (p_c), s	0.0	9.9		0.0	0.1	7.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		201.9
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Future Volume (veh/h)	150	900	90	180	740	190	100	1130	60	190	1040	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
Arrive On Green	0.10	0.27	0.27	0.12	0.29	0.29	0.07	0.35	0.35	0.12	0.40	0.40
Sat Flow, veh/h	1774	3539	1548	1774	3539	1554	1774	3539	1551	1774	3539	1555
Grp Volume(v), veh/h	153	918	92	184	755	194	102	1153	61	194	1061	51
Grp Sat Flow(s),veh/h/ln	1774	1770	1548	1774	1770	1554	1774	1770	1551	1774	1770	1555
Q Serve(g_s), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Cycle Q Clear(g_c), s	10.1	30.4	5.5	12.2	23.0	12.1	6.8	37.5	3.2	12.9	30.5	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	180	970	424	208	1025	450	126	1243	545	220	1430	629
V/C Ratio(X)	0.85	0.95	0.22	0.89	0.74	0.43	0.81	0.93	0.11	0.88	0.74	0.08
Avail Cap(c_a), veh/h	208	976	427	208	1025	450	148	1243	545	222	1430	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	42.6	33.5	52.0	38.4	34.5	54.8	37.4	26.2	51.5	30.3	22.0
Incr Delay (d2), s/veh	24.5	17.3	0.3	33.5	2.8	0.7	24.1	13.2	0.4	30.7	3.5	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	17.1	2.4	7.9	11.6	5.3	4.2	20.5	1.4	8.2	15.6	1.1
LnGrp Delay(d), s/veh	77.3	59.9	33.8	85.6	41.2	35.1	78.8	50.6	26.6	82.3	33.8	22.2
LnGrp LOS	E	E	C	F	D	D	E	D	C	F	C	C
Approach Vol, veh/h		1163			1133			1316			1306	
Approach Delay, s/veh		60.1			47.4			51.7			40.6	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.8	46.0	18.0	36.8	12.5	52.3	16.1	38.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	42.0	14.0	33.0	10.0	47.0	14.0	33.0
Max Q Clear Time (g_c+I1), s	14.9	39.5	14.2	32.4	8.8	32.5	12.1	25.0
Green Ext Time (p_c), s	0.0	1.7	0.0	0.4	0.0	6.1	0.1	3.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Future Volume (veh/h)	10	140	160	80	120	110	90	1170	140	110	1170	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	10	146	167	83	125	115	94	1219	0	115	1219	21
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	17	230	201	106	327	276	119	1996	893	143	2973	51
Arrive On Green	0.01	0.13	0.13	0.06	0.18	0.18	0.07	0.58	0.00	0.08	0.59	0.59
Sat Flow, veh/h	1740	1736	1514	1740	1782	1501	1740	3471	1553	1740	5049	87
Grp Volume(v), veh/h	10	146	167	83	121	119	94	1219	0	115	803	437
Grp Sat Flow(s),veh/h/ln	1740	1736	1514	1740	1736	1548	1740	1736	1553	1740	1663	1811
Q Serve(g_s), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Cycle Q Clear(g_c), s	0.6	8.5	11.5	5.0	6.6	7.2	5.7	24.6	0.0	7.0	14.0	14.0
Prop In Lane	1.00		1.00	1.00		0.97	1.00		1.00	1.00		0.05
Lane Grp Cap(c), veh/h	17	230	201	106	319	284	119	1996	893	143	1958	1067
V/C Ratio(X)	0.60	0.63	0.83	0.79	0.38	0.42	0.79	0.61	0.00	0.81	0.41	0.41
Avail Cap(c_a), veh/h	65	260	227	195	389	347	211	1996	893	244	1958	1067
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.8	43.9	45.2	49.6	38.3	38.6	49.1	14.9	0.0	48.3	11.9	11.9
Incr Delay (d2), s/veh	29.7	4.1	20.4	12.0	0.7	1.0	11.2	1.4	0.0	10.2	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	4.4	6.0	2.8	3.2	3.2	3.1	12.1	0.0	3.8	6.5	7.3
LnGrp Delay(d), s/veh	82.5	48.1	65.6	61.6	39.1	39.6	60.3	16.3	0.0	58.4	12.6	13.1
LnGrp LOS	F	D	E	E	D	D	E	B		E	B	B
Approach Vol, veh/h		323			323			1313			1355	
Approach Delay, s/veh		58.2			45.0			19.4			16.6	
Approach LOS		E			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.8	65.5	10.5	18.2	11.3	67.0	5.0	23.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	61.0	12.0	16.0	13.0	63.0	4.0	24.0
Max Q Clear Time (g_c+I1), s	9.0	26.6	7.0	13.5	7.7	16.0	2.6	9.2
Green Ext Time (p_c), s	0.1	10.2	0.1	0.4	0.1	9.8	0.0	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Future Volume (veh/h)	40	0	90	40	0	20	50	1310	20	10	1360	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	42	0	94	42	0	21	52	1365	21	10	1417	31
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	63	0	264	63	0	268	67	2473	1079	17	3433	75
Arrive On Green	0.17	0.00	0.17	0.17	0.00	0.17	0.04	0.71	0.71	0.01	0.68	0.68
Sat Flow, veh/h	0	0	1519	0	0	1539	1740	3471	1514	1740	5022	110
Grp Volume(v), veh/h	42	0	94	42	0	21	52	1365	21	10	938	510
Grp Sat Flow(s),veh/h/ln	0	0	1519	0	0	1539	1740	1736	1514	1740	1663	1807
Q Serve(g_s), s	0.0	0.0	6.3	0.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Cycle Q Clear(g_c), s	20.0	0.0	6.3	20.0	0.0	1.3	3.4	21.4	0.5	0.7	14.3	14.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.06
Lane Grp Cap(c), veh/h	63	0	264	63	0	268	67	2473	1079	17	2273	1235
V/C Ratio(X)	0.67	0.00	0.36	0.67	0.00	0.08	0.78	0.55	0.02	0.60	0.41	0.41
Avail Cap(c_a), veh/h	63	0	264	63	0	268	197	2473	1079	91	2273	1235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.5	0.0	41.9	57.5	0.0	39.8	54.9	7.8	4.8	56.8	8.0	8.0
Incr Delay (d2), s/veh	24.5	0.0	0.8	24.5	0.0	0.1	17.4	0.9	0.0	30.6	0.6	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	0.0	2.7	1.8	0.0	0.6	2.0	10.4	0.2	0.5	6.7	7.4
LnGrp Delay(d), s/veh	82.0	0.0	42.7	82.0	0.0	40.0	72.3	8.7	4.9	87.4	8.6	9.0
LnGrp LOS	F		D	F		D	E	A	A	F	A	A
Approach Vol, veh/h		136			63			1438			1458	
Approach Delay, s/veh		54.8			68.0			11.0			9.3	
Approach LOS		D			E			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	86.0		24.0	8.4	82.7		24.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	82.0		20.0	13.0	75.0		20.0
Max Q Clear Time (g_c+I1), s	2.7	23.4		22.0	5.4	16.3		22.0
Green Ext Time (p_c), s	0.0	13.7		0.0	0.0	12.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.3
HCM 2010 LOS	B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	970	140	70	830	170	190
Future Volume (veh/h)	970	140	70	830	170	190
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.98	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1900	1845	1845	1845	1845
Adj Flow Rate, veh/h	1102	159	80	943	193	216
Adj No. of Lanes	3	0	1	3	1	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	1589	229	104	2353	762	680
Arrive On Green	0.36	0.36	0.06	0.47	0.43	0.43
Sat Flow, veh/h	4598	639	1757	5202	1757	1568
Grp Volume(v), veh/h	835	426	80	943	193	216
Grp Sat Flow(s),veh/h/ln	1679	1713	1757	1679	1757	1568
Q Serve(g_s), s	17.1	17.2	3.6	9.9	5.6	7.3
Cycle Q Clear(g_c), s	17.1	17.2	3.6	9.9	5.6	7.3
Prop In Lane		0.37	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1204	614	104	2353	762	680
V/C Ratio(X)	0.69	0.69	0.77	0.40	0.25	0.32
Avail Cap(c_a), veh/h	2287	1167	392	4804	762	680
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	22.1	22.1	37.4	14.1	14.5	15.0
Incr Delay (d2), s/veh	0.7	1.4	11.2	0.1	0.8	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	8.3	2.1	4.6	2.9	3.4
LnGrp Delay(d), s/veh	22.8	23.5	48.6	14.2	15.3	16.2
LnGrp LOS	C	C	D	B	B	B
Approach Vol, veh/h	1261			1023	409	
Approach Delay, s/veh	23.1			16.9	15.8	
Approach LOS	C			B	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		39.0	8.8	32.9				41.7
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		35.0	18.0	55.0				77.0
Max Q Clear Time (g_c+I1), s		9.3	5.6	19.2				11.9
Green Ext Time (p_c), s		1.2	0.1	9.8				7.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	19.6
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Future Vol, veh/h	20	250	20	60	150	110	30	130	50	150	160	30
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	21	260	21	63	156	115	31	135	52	156	167	31
Number of Lanes	1	1	0	0	1	0	1	1	1	1	1	1

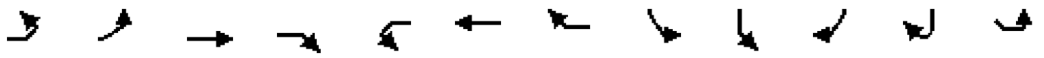
Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	2	3	3
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	3	3	2	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	3	3	1	2
HCM Control Delay, s/veh	21.5	26.2	13.8	15.3
HCM LOS	C	D	B	C

Lane	NBLn1	NBLn2	NBLn3	EBLn1	EBLn2	WBLn1	SBLn1	SBLn2	SBLn3
Vol Left, %	100%	0%	0%	100%	0%	19%	100%	0%	0%
Vol Thru, %	0%	100%	0%	0%	93%	47%	0%	100%	0%
Vol Right, %	0%	0%	100%	0%	7%	34%	0%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	30	130	50	20	270	320	150	160	30
LT Vol	30	0	0	20	0	60	150	0	0
Through Vol	0	130	0	0	250	150	0	160	0
RT Vol	0	0	50	0	20	110	0	0	30
Lane Flow Rate	31	135	52	21	281	333	156	167	31
Geometry Grp	8	8	8	8	8	8	8	8	8
Degree of Util (X)	0.077	0.316	0.111	0.048	0.61	0.699	0.368	0.369	0.063
Departure Headway (Hd)	8.908	8.388	7.66	8.375	7.814	7.55	8.486	7.968	7.243
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	400	427	465	426	458	477	422	448	491
Service Time	6.708	6.187	5.458	6.166	5.604	5.333	6.279	5.76	5.034
HCM Lane V/C Ratio	0.078	0.316	0.112	0.049	0.614	0.698	0.37	0.373	0.063
HCM Control Delay, s/veh	12.5	15.1	11.4	11.6	22.2	26.2	16.2	15.4	10.5
HCM Lane LOS	B	C	B	B	C	D	C	C	B
HCM 95th-tile Q	0.2	1.3	0.4	0.2	4	5.4	1.7	1.7	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Future Volume (veh/h)	80	1030	50	10	920	80	60	40	30	90	20	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	83	1073	52	10	958	83	62	42	31	94	21	73
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	108	1469	641	18	1289	563	76	33	645	87	11	637
Arrive On Green	0.06	0.42	0.42	0.01	0.37	0.37	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1757	3505	1530	1757	3505	1531	0	81	1567	0	27	1547
Grp Volume(v), veh/h	83	1073	52	10	958	83	104	0	31	115	0	73
Grp Sat Flow(s),veh/h/ln	1757	1752	1530	1757	1752	1531	81	0	1567	27	0	1547
Q Serve(g_s), s	3.5	19.3	1.5	0.4	17.9	2.7	0.0	0.0	0.9	0.0	0.0	2.2
Cycle Q Clear(g_c), s	3.5	19.3	1.5	0.4	17.9	2.7	31.0	0.0	0.9	31.0	0.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	0.60		1.00	0.82		1.00
Lane Grp Cap(c), veh/h	108	1469	641	18	1289	563	109	0	645	98	0	637
V/C Ratio(X)	0.77	0.73	0.08	0.57	0.74	0.15	0.95	0.00	0.05	1.18	0.00	0.11
Avail Cap(c_a), veh/h	396	3303	1442	140	2791	1219	109	0	645	98	0	637
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	34.8	18.3	13.2	37.1	20.7	15.9	28.0	0.0	13.3	34.2	0.0	13.7
Incr Delay (d2), s/veh	10.8	0.7	0.1	25.6	0.9	0.1	73.4	0.0	0.1	146.0	0.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	9.4	0.7	0.3	8.8	1.2	4.4	0.0	0.4	6.0	0.0	1.0
LnGrp Delay(d), s/veh	45.7	19.0	13.2	62.8	21.6	16.0	101.4	0.0	13.5	180.2	0.0	14.1
LnGrp LOS	D	B	B	E	C	B	F		B	F		B
Approach Vol, veh/h		1208			1051			135			188	
Approach Delay, s/veh		20.6			21.5			81.2			115.7	
Approach LOS		C			C			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	4.8	35.6		35.0	8.6	31.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	6.0	71.0		31.0	17.0	60.0
Max Q Clear Time (g_c+I1), s		33.0	2.4	21.3		33.0	5.5	19.9
Green Ext Time (p_c), s		0.0	0.0	9.2		0.0	0.1	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.1
HCM 2010 LOS	C



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	SBL2	SBL	SBR	SBR2	SEL2
Lane Configurations												
Traffic Volume (vph)	280	170	1400	300	10	520	10	10	10	10	10	10
Future Volume (vph)	280	170	1400	300	10	520	10	10	10	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Grade (%)			0%			0%			15%			
Total Lost time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Lane Util. Factor		1.00	0.91		1.00	0.91			1.00	1.00		
Frpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Flpb, ped/bikes		1.00	1.00		1.00	1.00			1.00	1.00		
Frt		1.00	0.97		1.00	1.00			1.00	0.85		
Flt Protected		0.95	1.00		0.95	1.00			0.95	1.00		
Satd. Flow (prot)		1805	5036		1805	5172			1670	1494		
Flt Permitted		0.95	1.00		0.22	1.00			0.95	1.00		
Satd. Flow (perm)		1805	5036		413	5172			1670	1494		
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	301	183	1505	323	11	559	11	11	11	11	11	11
RTOR Reduction (vph)	0	0	24	0	0	0	0	0	0	0	0	0
Lane Group Flow (vph)	0	484	1804	0	11	570	0	0	22	22	0	0
Confl. Peds. (#/hr)				1	1				5			
Confl. Bikes (#/hr)				2								
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	Prot	NA		pm+pt	NA		Prot	Prot	Perm		Perm
Protected Phases	7	7	4		3	8		9	9			
Permitted Phases					8					10		6
Actuated Green, G (s)		27.3	45.0		19.1	18.4			1.4	3.1		
Effective Green, g (s)		27.3	45.0		19.1	18.4			1.4	3.1		
Actuated g/C Ratio		0.25	0.42		0.18	0.17			0.01	0.03		
Clearance Time (s)		4.0	4.0		4.0	4.0			4.0	4.0		
Vehicle Extension (s)		3.0	3.0		3.0	3.0			3.0	3.0		
Lane Grp Cap (vph)		457	2104		82	883			21	43		
v/s Ratio Prot		c0.27	c0.36		0.00	0.11			c0.01			
v/s Ratio Perm					0.02					c0.01		
v/c Ratio		1.06	0.86		0.13	0.65			1.05	0.51		
Uniform Delay, d1		40.2	28.4		36.9	41.6			53.2	51.6		
Progression Factor		1.00	1.00		1.00	1.00			1.00	1.00		
Incremental Delay, d2		58.6	3.7		0.7	1.6			212.0	9.9		
Delay (s)		98.8	32.1		37.6	43.2			265.2	61.5		
Level of Service		F	C		D	D			F	E		
Approach Delay (s/veh)			46.1			43.1			163.3			
Approach LOS			D			D			F			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	44.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	107.7	Sum of lost time (s)	20.0
Intersection Capacity Utilization	84.6%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	SEL	SET	SER	NWL	NWT	NWR	NWR2
Lane Configurations							
Traffic Volume (vph)	60	280	70	230	280	20	20
Future Volume (vph)	60	280	70	230	280	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900
Grade (%)		0%			0%		
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	
Satd. Flow (prot)	1805	1900	1615	1805	1900	1615	
Flt Permitted	0.42	1.00	1.00	0.42	1.00	1.00	
Satd. Flow (perm)	800	1900	1615	800	1900	1615	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	65	301	75	247	301	22	22
RTOR Reduction (vph)	0	0	49	0	0	29	0
Lane Group Flow (vph)	76	301	26	247	301	15	0
Confl. Peds. (#/hr)							
Confl. Bikes (#/hr)							
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA	Perm	Perm	NA	Perm	
Protected Phases		6			2		
Permitted Phases	6		6	2		2	
Actuated Green, G (s)	37.5	37.5	37.5	37.5	37.5	37.5	
Effective Green, g (s)	37.5	37.5	37.5	37.5	37.5	37.5	
Actuated g/C Ratio	0.35	0.35	0.35	0.35	0.35	0.35	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	278	661	562	278	661	562	
v/s Ratio Prot		0.16			0.16		
v/s Ratio Perm	0.09		0.02	c0.31		0.01	
v/c Ratio	0.27	0.46	0.05	0.89	0.46	0.03	
Uniform Delay, d1	25.3	27.2	23.3	33.1	27.2	23.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.5	0.5	0.0	31.6	2.3	0.1	
Delay (s)	25.8	27.7	23.3	64.8	29.4	23.2	
Level of Service	C	C	C	E	C	C	
Approach Delay (s/veh)		26.6			43.7		
Approach LOS		C			D		

Intersection Summary

HCM Unsignalized Intersection Capacity Analysis
147: Dodds Avenue (East) & Stage Road

04/21/2025

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	1130	10	10	780	50	10	10	320	10	10	40
Future Volume (Veh/h)	10	1130	10	10	780	50	10	10	320	10	10	40
Sign Control		Free			Free			Stop			Yield	
Grade		0%			0%			0%			0%	
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Hourly flow rate (vph)	10	1177	10	10	812	52	10	10	333	10	10	42
Pedestrians		2									2	
Lane Width (ft)		12.0									12.0	
Walking Speed (ft/s)		4.0									4.0	
Percent Blockage		0									0	
Right turn flare (veh)												
Median type		None			None							
Median storage veh)												
Upstream signal (ft)					499							
pX, platoon unblocked												
vC, conflicting volume	866			1187			1677	2088	594	1807	2067	436
vC1, stage 1 conf vol												
vC2, stage 2 conf vol												
vCu, unblocked vol	866			1187			1677	2088	594	1807	2067	436
tC, single (s)	4.1			4.1			7.5	6.5	6.9	7.5	6.5	6.9
tC, 2 stage (s)												
tF (s)	2.2			2.2			3.5	4.0	3.3	3.5	4.0	3.3
p0 queue free %	99			98			79	80	26	8	81	93
cM capacity (veh/h)	778			590			48	51	451	11	53	569

Direction, Lane #	SE 1	SE 2	NW 1	NW 2	NE 1	NE 2	SW 1
Volume Total	599	599	416	458	131	222	62
Volume Left	10	0	10	0	10	0	10
Volume Right	0	10	0	52	111	222	42
cSH	778	1700	590	1700	202	451	52
Volume to Capacity	0.01	0.35	0.02	0.27	0.65	0.49	1.18
Queue Length 95th (ft)	1	0	1	0	96	67	137
Control Delay (s/veh)	0.3	0.0	0.5	0.0	50.8	20.5	311.3
Lane LOS	A		A		F	C	F
Approach Delay (s/veh)	0.2		0.2		31.7		311.3
Approach LOS					D		F

Intersection Summary				
Average Delay	12.4			
Intersection Capacity Utilization	Err%	ICU Level of Service		H
Analysis Period (min)	15			

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	410	2510	50	10	2130	300	560	10	740	260	10	10
Future Volume (vph)	410	2510	50	10	2130	300	560	10	740	260	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00	1.00	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98	1.00	0.98	0.98	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00	0.99	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00		1.00	1.00	0.85	1.00	0.85	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5116		1786	5136	1566	1767	1498	1490	1787	1881	1553
Flt Permitted	0.95	1.00		0.95	1.00	1.00	0.75	1.00	1.00	0.30	1.00	1.00
Satd. Flow (perm)	3467	5116		1786	5136	1566	1396	1498	1490	556	1881	1553
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	1.00	0.93	1.00
Adj. Flow (vph)	441	2699	54	11	2290	323	602	11	796	260	11	10
RTOR Reduction (vph)	0	1	0	0	0	124	0	95	95	0	0	6
Lane Group Flow (vph)	441	2752	0	11	2290	199	602	306	311	260	11	4
Confl. Peds. (#/hr)			7	7			5		3	3		5
Confl. Bikes (#/hr)			2			1			1			9
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Perm	NA	Perm	Perm	NA	Perm
Protected Phases	5	2		1	6			4			8	
Permitted Phases						6	4		4	8		8
Actuated Green, G (s)	12.0	64.4		0.8	53.2	53.2	46.0	46.0	46.0	46.0	46.0	46.0
Effective Green, g (s)	12.0	64.4		0.8	53.2	53.2	46.0	46.0	46.0	46.0	46.0	46.0
Actuated g/C Ratio	0.10	0.52		0.01	0.43	0.43	0.37	0.37	0.37	0.37	0.37	0.37
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	337	2674		11	2217	676	521	559	556	207	702	579
v/s Ratio Prot	c0.13	c0.54		0.01	0.45			0.20			0.01	
v/s Ratio Perm						0.13	0.43		0.21	c0.47		0.00
v/c Ratio	1.31	1.03		1.00	1.03	0.29	1.16	0.55	0.56	1.26	0.02	0.01
Uniform Delay, d1	55.6	29.4		61.2	35.0	22.8	38.6	30.4	30.6	38.6	24.3	24.2
Progression Factor	1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	158.7	25.3		271.4	28.2	1.1	89.9	1.1	1.3	148.3	0.0	0.0
Delay (s)	214.3	54.7		332.6	63.2	23.9	128.5	31.5	31.9	186.9	24.3	24.3
Level of Service	F	D		F	E	C	F	C	C	F	C	C
Approach Delay (s/veh)		76.8			59.5			73.1			174.8	
Approach LOS		E			E			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	73.7	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.17		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	102.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	730	200	380	40	50	10	280	1070	10	10	830	170
Future Volume (veh/h)	730	200	380	40	50	10	280	1070	10	10	830	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	760	208	396	42	52	10	292	1115	0	10	865	0
Adj No. of Lanes	2	1	1	1	1	0	2	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	887	539	457	54	94	18	373	1852	828	18	1504	673
Arrive On Green	0.25	0.28	0.28	0.03	0.06	0.06	0.11	0.51	0.00	0.01	0.42	0.00
Sat Flow, veh/h	3510	1900	1612	1810	1547	297	3510	3610	1615	1810	3610	1615
Grp Volume(v), veh/h	760	208	396	42	0	62	292	1115	0	10	865	0
Grp Sat Flow(s),veh/h/ln	1755	1900	1612	1810	0	1844	1755	1805	1615	1810	1805	1615
Q Serve(g_s), s	20.1	8.6	22.8	2.2	0.0	3.2	7.9	21.2	0.0	0.5	17.9	0.0
Cycle Q Clear(g_c), s	20.1	8.6	22.8	2.2	0.0	3.2	7.9	21.2	0.0	0.5	17.9	0.0
Prop In Lane	1.00		1.00	1.00		0.16	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	887	539	457	54	0	112	373	1852	828	18	1504	673
V/C Ratio(X)	0.86	0.39	0.87	0.78	0.00	0.55	0.78	0.60	0.00	0.57	0.58	0.00
Avail Cap(c_a), veh/h	1224	838	711	130	0	303	540	1852	828	74	1504	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	34.8	28.1	33.2	47.0	0.0	44.5	42.5	16.7	0.0	48.1	21.8	0.0
Incr Delay (d2), s/veh	4.6	0.5	7.0	21.3	0.0	4.2	4.7	1.5	0.0	25.6	1.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	4.6	11.0	1.4	0.0	1.8	4.1	10.9	0.0	0.4	9.2	0.0
LnGrp Delay(d), s/veh	39.4	28.5	40.2	68.3	0.0	48.7	47.1	18.2	0.0	73.7	23.4	0.0
LnGrp LOS	D	C	D	E		D	D	B		E	C	
Approach Vol, veh/h		1364			104			1407			875	
Approach Delay, s/veh		37.9			56.6			24.2			24.0	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.9	54.0	6.9	31.6	14.3	44.6	28.6	9.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	50.0	7.0	43.0	15.0	39.0	34.0	16.0
Max Q Clear Time (g_c+I1), s	2.5	23.2	4.2	24.8	9.9	19.9	22.1	5.2
Green Ext Time (p_c), s	0.0	8.6	0.0	2.6	0.4	5.6	2.5	0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	720	2010	530	180	1460	100	290	570	360	360	670	140
Future Volume (veh/h)	720	2010	530	180	1460	100	290	570	360	360	670	140
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	750	2094	552	188	1521	104	302	594	375	375	698	146
Adj No. of Lanes	2	3	1	1	3	1	2	2	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	800	2354	720	209	1771	704	357	625	638	406	802	165
Arrive On Green	0.23	0.46	0.46	0.12	0.34	0.34	0.10	0.17	0.17	0.12	0.19	0.19
Sat Flow, veh/h	3476	5136	1570	1792	5136	1566	3476	3574	1542	3476	4247	876
Grp Volume(v), veh/h	750	2094	552	188	1521	104	302	594	375	375	561	283
Grp Sat Flow(s),veh/h/ln	1738	1712	1570	1792	1712	1566	1738	1787	1542	1738	1712	1700
Q Serve(g_s), s	25.4	44.7	35.3	12.4	33.1	4.7	10.2	19.7	21.0	12.8	19.1	19.5
Cycle Q Clear(g_c), s	25.4	44.7	35.3	12.4	33.1	4.7	10.2	19.7	21.0	12.8	19.1	19.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	800	2354	720	209	1771	704	357	625	638	406	647	321
V/C Ratio(X)	0.94	0.89	0.77	0.90	0.86	0.15	0.85	0.95	0.59	0.92	0.87	0.88
Avail Cap(c_a), veh/h	811	2354	720	209	1771	704	377	625	638	406	647	321
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.3	29.7	27.2	52.3	36.6	19.6	52.9	49.0	28.0	52.5	47.2	47.4
Incr Delay (d2), s/veh	18.1	5.5	7.7	36.1	5.7	0.4	15.5	24.2	1.4	26.8	12.0	23.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.2	22.3	16.7	8.3	16.6	2.1	5.7	11.8	10.0	7.7	10.1	11.2
LnGrp Delay(d), s/veh	63.4	35.3	34.8	88.4	42.3	20.1	68.4	73.2	29.5	79.3	59.2	71.0
LnGrp LOS	E	D	C	F	D	C	E	E	C	E	E	E
Approach Vol, veh/h		3396			1813			1271			1219	
Approach Delay, s/veh		41.4			45.8			59.1			68.1	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.0	59.0	18.0	25.0	31.6	45.4	16.3	26.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	55.0	14.0	21.0	28.0	41.0	13.0	22.0
Max Q Clear Time (g_c+I1), s	14.4	46.7	14.8	23.0	27.4	35.1	12.2	21.5
Green Ext Time (p_c), s	0.0	7.3	0.0	0.0	0.2	4.4	0.1	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	20	30	20	20	110	20	2650	10	80	2340	140
Future Volume (veh/h)	140	20	30	20	20	110	20	2650	10	80	2340	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	141	20	30	20	20	111	20	2677	10	81	2364	141
Adj No. of Lanes	0	1	1	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	58	0	307	46	32	306	29	3396	13	103	3388	200
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.02	0.64	0.64	0.06	0.68	0.68
Sat Flow, veh/h	0	0	1559	0	164	1557	1792	5282	20	1792	4952	292
Grp Volume(v), veh/h	161	0	30	40	0	111	20	1735	952	81	1626	879
Grp Sat Flow(s),veh/h/ln	0	0	1559	164	0	1557	1792	1712	1878	1792	1712	1820
Q Serve(g_s), s	0.0	0.0	1.8	0.0	0.0	7.2	1.3	42.9	43.0	5.2	33.4	34.5
Cycle Q Clear(g_c), s	23.0	0.0	1.8	23.0	0.0	7.2	1.3	42.9	43.0	5.2	33.4	34.5
Prop In Lane	0.88		1.00	0.50		1.00	1.00		0.01	1.00		0.16
Lane Grp Cap(c), veh/h	58	0	307	78	0	306	29	2201	1207	103	2343	1245
V/C Ratio(X)	2.79	0.00	0.10	0.51	0.00	0.36	0.68	0.79	0.79	0.78	0.69	0.71
Avail Cap(c_a), veh/h	58	0	307	78	0	306	77	2201	1207	169	2343	1245
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.5	0.0	38.5	40.8	0.0	40.6	57.2	15.1	15.1	54.4	11.1	11.3
Incr Delay (d2), s/veh	850.3	0.0	0.1	5.4	0.0	0.7	24.4	2.9	5.3	12.2	1.7	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.5	0.0	0.8	1.4	0.0	3.2	0.8	20.9	23.7	2.9	16.1	18.3
LnGrp Delay(d), s/veh	908.7	0.0	38.6	46.2	0.0	41.3	81.6	18.0	20.4	66.5	12.8	14.7
LnGrp LOS	F		D	D		D	F	B	C	E	B	B
Approach Vol, veh/h		191			151			2707			2586	
Approach Delay, s/veh		772.1			42.6			19.3			15.1	
Approach LOS		F			D			B			B	

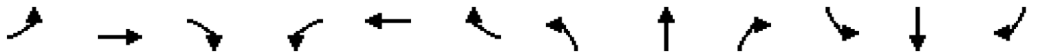
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	79.2		27.0	5.9	84.0		27.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	74.0		23.0	5.0	80.0		23.0
Max Q Clear Time (g_c+I1), s	7.2	45.0		25.0	3.3	36.5		25.0
Green Ext Time (p_c), s	0.0	23.8		0.0	0.0	31.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	580	770	80	110	470	230	140	1810	50	160	1950	320
Future Volume (veh/h)	580	770	80	110	470	230	140	1810	50	160	1950	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	617	819	85	117	500	245	149	1926	53	170	2074	340
Adj No. of Lanes	2	2	1	2	2	1	2	3	0	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	637	987	429	170	506	217	174	2449	67	225	2187	349
Arrive On Green	0.18	0.28	0.28	0.05	0.14	0.14	0.05	0.48	0.48	0.06	0.49	0.49
Sat Flow, veh/h	3476	3574	1552	3476	3574	1529	3476	5135	141	3476	4448	711
Grp Volume(v), veh/h	617	819	85	117	500	245	149	1283	696	170	1584	830
Grp Sat Flow(s),veh/h/ln	1738	1787	1552	1738	1787	1529	1738	1712	1852	1738	1712	1735
Q Serve(g_s), s	21.2	25.8	5.0	4.0	16.8	17.0	5.1	37.6	37.7	5.8	52.5	56.0
Cycle Q Clear(g_c), s	21.2	25.8	5.0	4.0	16.8	17.0	5.1	37.6	37.7	5.8	52.5	56.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.08	1.00		0.41
Lane Grp Cap(c), veh/h	637	987	429	170	506	217	174	1633	883	225	1683	853
V/C Ratio(X)	0.97	0.83	0.20	0.69	0.99	1.13	0.86	0.79	0.79	0.76	0.94	0.97
Avail Cap(c_a), veh/h	637	987	429	174	506	217	174	1633	883	232	1683	853
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	40.8	33.3	56.2	51.4	51.5	56.6	26.3	26.3	55.2	28.8	29.7
Incr Delay (d2), s/veh	27.8	6.0	0.2	10.7	36.6	101.0	32.2	3.9	7.0	13.0	11.8	24.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	13.6	2.2	2.2	10.8	13.2	3.2	18.5	20.9	3.2	27.4	32.7
LnGrp Delay(d), s/veh	76.5	46.8	33.5	66.9	88.0	152.5	88.8	30.1	33.3	68.2	40.6	54.7
LnGrp LOS	E	D	C	E	F	F	F	C	C	E	D	D
Approach Vol, veh/h		1521			862			2128			2584	
Approach Delay, s/veh		58.1			103.5			35.3			47.0	
Approach LOS		E			F			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	61.2	9.9	37.1	10.0	63.0	26.0	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	57.0	6.0	33.0	6.0	59.0	22.0	17.0
Max Q Clear Time (g_c+I1), s	7.8	39.7	6.0	27.8	7.1	58.0	23.2	19.0
Green Ext Time (p_c), s	0.0	12.1	0.0	2.5	0.0	1.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	52.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	970	240	360	920	30	380	110	510	30	50	70
Future Volume (vph)	70	970	240	360	920	30	380	110	510	30	50	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Lane Util. Factor	1.00	0.95	1.00	0.97	0.95		0.95	0.95	1.00		1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98		1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85		0.94	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.97	1.00		0.99	
Satd. Flow (prot)	1805	3610	1587	3502	3590		1715	1756	1588		1762	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.62	0.72	1.00		0.90	
Satd. Flow (perm)	1805	3610	1587	3502	3590		1124	1307	1588		1608	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	74	1021	253	379	968	32	400	116	537	32	53	74
RTOR Reduction (vph)	0	0	158	0	2	0	0	0	189	0	25	0
Lane Group Flow (vph)	74	1021	95	379	998	0	252	264	348	0	134	0
Confl. Peds. (#/hr)			2	2					2	2		
Confl. Bikes (#/hr)			2			2			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA	Perm	Prot	NA		Perm	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4				2		2	6		
Actuated Green, G (s)	7.4	40.4	40.4	16.9	49.9		44.3	44.3	44.3		44.3	
Effective Green, g (s)	7.4	40.4	40.4	16.9	49.9		44.3	44.3	44.3		44.3	
Actuated g/C Ratio	0.07	0.36	0.36	0.15	0.44		0.39	0.39	0.39		0.39	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0		4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0		3.0	
Lane Grp Cap (vph)	117	1283	564	520	1576		438	509	619		627	
v/s Ratio Prot	0.04	c0.28		c0.11	0.28							
v/s Ratio Perm			0.06				c0.22	0.20	0.22		0.08	
v/c Ratio	0.63	0.80	0.17	0.73	0.63		0.58	0.52	0.56		0.21	
Uniform Delay, d1	51.8	32.9	25.1	46.2	24.7		27.3	26.5	27.1		23.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00		1.00	
Incremental Delay, d2	10.6	3.5	0.1	5.1	0.8		5.4	3.7	3.7		0.8	
Delay (s)	62.4	36.4	25.2	51.2	25.6		32.7	30.2	30.8		23.8	
Level of Service	E	D	C	D	C		C	C	C		C	
Approach Delay (s/veh)		35.7			32.6			31.1			23.8	
Approach LOS		D			C			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.69		
Actuated Cycle Length (s)	113.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	77.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	10	30	10	30	10	970	70	20	580	10
Future Volume (veh/h)	10	0	10	30	10	30	10	970	70	20	580	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	0.97		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	11	0	11	33	11	33	11	1066	77	22	637	11
Adj No. of Lanes	0	1	1	0	1	0	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	192	0	129	94	31	56	19	2786	1220	33	2814	1231
Arrive On Green	0.08	0.00	0.08	0.08	0.08	0.08	0.01	0.78	0.78	0.02	0.79	0.79
Sat Flow, veh/h	1436	0	1531	510	371	661	1792	3574	1565	1792	3574	1564
Grp Volume(v), veh/h	11	0	11	77	0	0	11	1066	77	22	637	11
Grp Sat Flow(s),veh/h/ln	1436	0	1531	1542	0	0	1792	1787	1565	1792	1787	1564
Q Serve(g_s), s	0.0	0.0	0.7	3.0	0.0	0.0	0.6	9.5	1.2	1.2	4.7	0.2
Cycle Q Clear(g_c), s	0.7	0.0	0.7	4.8	0.0	0.0	0.6	9.5	1.2	1.2	4.7	0.2
Prop In Lane	1.00		1.00	0.43		0.43	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	0	129	180	0	0	19	2786	1220	33	2814	1231
V/C Ratio(X)	0.06	0.00	0.09	0.43	0.00	0.00	0.58	0.38	0.06	0.67	0.23	0.01
Avail Cap(c_a), veh/h	356	0	316	364	0	0	123	2786	1220	159	2814	1231
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.9	0.0	42.9	44.7	0.0	0.0	50.1	3.5	2.6	49.6	2.8	2.3
Incr Delay (d2), s/veh	0.1	0.0	0.3	1.6	0.0	0.0	25.6	0.4	0.1	21.5	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.3	0.0	0.3	2.2	0.0	0.0	0.4	4.7	0.5	0.8	2.4	0.1
LnGrp Delay(d), s/veh	43.1	0.0	43.2	46.3	0.0	0.0	75.6	3.9	2.7	71.1	3.0	2.3
LnGrp LOS	D		D	D			E	A	A	E	A	A
Approach Vol, veh/h		22			77			1154			670	
Approach Delay, s/veh		43.1			46.3			4.5			5.2	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.9	83.2		12.6	5.1	84.0		12.6
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	78.0		21.0	7.0	80.0		21.0
Max Q Clear Time (g_c+I1), s	3.2	11.5		2.7	2.6	6.7		6.8
Green Ext Time (p_c), s	0.0	9.9		0.0	0.0	4.7		0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.9
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	450	350	110	50	230	40	100	580	40	20	300	310
Future Volume (veh/h)	450	350	110	50	230	40	100	580	40	20	300	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	479	372	117	53	245	43	106	617	43	21	319	330
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	595	917	284	257	358	62	422	1710	744	374	1710	751
Arrive On Green	0.26	0.34	0.34	0.04	0.12	0.12	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	1792	2677	830	1792	3038	525	786	3574	1555	778	3574	1570
Grp Volume(v), veh/h	479	247	242	53	142	146	106	617	43	21	319	330
Grp Sat Flow(s),veh/h/ln	1792	1787	1720	1792	1787	1776	786	1787	1555	778	1787	1570
Q Serve(g_s), s	18.2	8.8	9.0	2.2	6.4	6.6	7.5	9.1	1.2	1.5	4.3	11.6
Cycle Q Clear(g_c), s	18.2	8.8	9.0	2.2	6.4	6.6	11.7	9.1	1.2	10.6	4.3	11.6
Prop In Lane	1.00		0.48	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	595	612	589	257	210	209	422	1710	744	374	1710	751
V/C Ratio(X)	0.81	0.40	0.41	0.21	0.68	0.70	0.25	0.36	0.06	0.06	0.19	0.44
Avail Cap(c_a), veh/h	1158	1304	1255	343	428	425	422	1710	744	374	1710	751
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.1	21.0	21.0	30.9	35.3	35.4	15.8	13.7	11.7	17.1	12.5	14.4
Incr Delay (d2), s/veh	2.6	0.4	0.5	0.4	3.8	4.1	1.4	0.6	0.1	0.3	0.2	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.3	4.4	4.3	1.1	3.4	3.5	1.8	4.6	0.6	0.3	2.1	5.4
LnGrp Delay(d), s/veh	23.7	21.4	21.5	31.3	39.1	39.6	17.3	14.3	11.8	17.3	12.7	16.3
LnGrp LOS	C	C	C	C	D	D	B	B	B	B	B	B
Approach Vol, veh/h		968			341			766			670	
Approach Delay, s/veh		22.6			38.1			14.6			14.6	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		44.0	7.0	32.6		44.0	25.7	13.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		40.0	7.0	61.0		40.0	48.0	20.0
Max Q Clear Time (g_c+I1), s		13.7	4.2	11.0		13.6	20.2	8.6
Green Ext Time (p_c), s		5.1	0.0	3.0		3.3	1.5	1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	750	170	130	470	10	300	100	230	30	50	10
Future Volume (veh/h)	20	750	170	130	470	10	300	100	230	30	50	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	21	798	181	138	500	11	319	106	245	32	53	11
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	362	972	221	246	1383	30	710	780	653	420	867	174
Arrive On Green	0.02	0.33	0.33	0.07	0.38	0.38	0.14	0.41	0.41	0.02	0.29	0.29
Sat Flow, veh/h	1810	2922	663	1810	3609	79	1810	1900	1589	1810	2987	600
Grp Volume(v), veh/h	21	493	486	138	250	261	319	106	245	32	31	33
Grp Sat Flow(s),veh/h/ln	1810	1805	1780	1810	1805	1883	1810	1900	1589	1810	1805	1782
Q Serve(g_s), s	0.7	24.4	24.4	4.6	9.6	9.7	11.4	3.4	10.5	1.2	1.2	1.3
Cycle Q Clear(g_c), s	0.7	24.4	24.4	4.6	9.6	9.7	11.4	3.4	10.5	1.2	1.2	1.3
Prop In Lane	1.00		0.37	1.00		0.04	1.00		1.00	1.00		0.34
Lane Grp Cap(c), veh/h	362	601	592	246	692	722	710	780	653	420	524	517
V/C Ratio(X)	0.06	0.82	0.82	0.56	0.36	0.36	0.45	0.14	0.38	0.08	0.06	0.06
Avail Cap(c_a), veh/h	404	853	841	382	1038	1083	895	780	653	451	524	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.9	29.8	29.8	22.3	21.5	21.5	17.6	17.9	20.0	23.3	25.0	25.0
Incr Delay (d2), s/veh	0.1	4.4	4.5	2.0	0.3	0.3	0.4	0.4	1.6	0.1	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	12.9	12.8	2.4	4.8	5.1	5.7	1.8	4.9	0.6	0.6	0.7
LnGrp Delay(d), s/veh	21.0	34.2	34.3	24.3	21.8	21.8	18.1	18.3	21.6	23.4	25.2	25.2
LnGrp LOS	C	C	C	C	C	C	B	B	C	C	C	C
Approach Vol, veh/h		1000			649			670			96	
Approach Delay, s/veh		34.0			22.3			19.4			24.6	
Approach LOS		C			C			B			C	

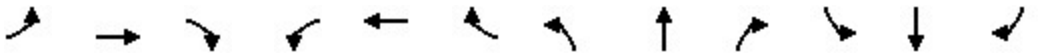
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.3	44.0	10.7	36.4	18.0	32.3	5.7	41.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	40.0	14.0	46.0	24.0	20.0	4.0	56.0
Max Q Clear Time (g_c+I1), s	3.2	12.5	6.6	26.4	13.4	3.3	2.7	11.7
Green Ext Time (p_c), s	0.0	1.4	0.2	6.0	0.7	0.2	0.0	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	400	140	70	470	250	80	370	50	140	270	80
Future Volume (veh/h)	130	400	140	70	470	250	80	370	50	140	270	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	133	408	143	71	480	255	82	378	51	143	276	82
Adj No. of Lanes	1	2	1	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	169	1129	496	92	614	324	107	1090	146	180	1050	305
Arrive On Green	0.09	0.32	0.32	0.05	0.27	0.27	0.06	0.34	0.34	0.10	0.39	0.39
Sat Flow, veh/h	1792	3574	1571	1792	2248	1187	1792	3162	423	1792	2721	791
Grp Volume(v), veh/h	133	408	143	71	381	354	82	212	217	143	179	179
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1647	1792	1787	1798	1792	1787	1725
Q Serve(g_s), s	6.2	7.5	5.9	3.3	16.8	17.0	3.9	7.6	7.7	6.7	5.9	6.1
Cycle Q Clear(g_c), s	6.2	7.5	5.9	3.3	16.8	17.0	3.9	7.6	7.7	6.7	5.9	6.1
Prop In Lane	1.00		1.00	1.00		0.72	1.00		0.24	1.00		0.46
Lane Grp Cap(c), veh/h	169	1129	496	92	488	450	107	616	620	180	690	665
V/C Ratio(X)	0.79	0.36	0.29	0.77	0.78	0.79	0.77	0.34	0.35	0.79	0.26	0.27
Avail Cap(c_a), veh/h	377	1881	826	251	815	751	293	616	620	398	690	665
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	22.6	22.0	40.1	28.7	28.8	39.6	20.8	20.9	37.6	17.9	18.0
Incr Delay (d2), s/veh	7.9	0.2	0.3	12.5	2.8	3.1	10.9	1.5	1.6	7.6	0.9	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.8	2.6	2.0	8.6	8.1	2.2	4.0	4.1	3.7	3.1	3.1
LnGrp Delay(d), s/veh	45.8	22.8	22.3	52.6	31.5	31.8	50.5	22.4	22.4	45.2	18.8	19.0
LnGrp LOS	D	C	C	D	C	C	D	C	C	D	B	B
Approach Vol, veh/h		684			806			511			501	
Approach Delay, s/veh		27.2			33.5			26.9			26.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	33.5	8.4	31.0	9.1	37.0	12.1	27.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	28.0	12.0	45.0	14.0	33.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	8.7	9.7	5.3	9.5	5.9	8.1	8.2	19.0
Green Ext Time (p_c), s	0.2	2.2	0.1	3.2	0.1	2.0	0.2	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Future Volume (vph)	550	360	30	90	440	360	40	340	70	360	290	630
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	0.91	0.91		1.00	0.95	1.00		0.95		0.95	0.95	0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.99		1.00		1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	0.99		1.00	1.00	0.85		0.98		1.00	1.00	0.85
Flt Protected	0.95	0.98		0.95	1.00	1.00		1.00		0.95	0.99	1.00
Satd. Flow (prot)	1626	3330		1787	3574	1584		3457		1698	1775	2745
Flt Permitted	0.95	0.55		0.95	1.00	1.00		0.88		0.95	0.91	1.00
Satd. Flow (perm)	1626	1856		1787	3574	1584		3067		1698	1629	2745
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	573	375	31	94	458	375	42	354	73	375	302	656
RTOR Reduction (vph)	0	3	0	0	0	49	0	13	0	0	0	19
Lane Group Flow (vph)	321	655	0	94	458	326	0	456	0	330	347	637
Confl. Peds. (#/hr)	3		2	2		3	5		7	7		5
Confl. Bikes (#/hr)			2			2			4			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	pm+ov	Perm	NA		Prot	NA	pm+ov
Protected Phases	7	4		3	8	1		2		1	6	7
Permitted Phases						8	2					6
Actuated Green, G (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Effective Green, g (s)	27.7	54.2		7.1	22.5	46.5		24.5		24.0	52.5	80.2
Actuated g/C Ratio	0.24	0.47		0.06	0.20	0.41		0.21		0.21	0.46	0.70
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	392	1232		110	701	697		655		355	776	2015
v/s Ratio Prot	c0.20	0.13		0.05	c0.13	0.10				c0.19	0.09	0.08
v/s Ratio Perm		0.12				0.11		c0.15			0.11	0.16
v/c Ratio	0.82	0.53		0.85	0.65	0.47		0.70		0.93	0.45	0.32
Uniform Delay, d1	41.1	21.3		53.3	42.5	25.0		41.7		44.5	21.2	6.7
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	12.5	0.4		43.8	2.2	0.5		6.0		30.0	0.4	0.1
Delay (s)	53.7	21.8		97.1	44.7	25.5		47.7		74.5	21.6	6.8
Level of Service	D	C		F	D	C		D		E	C	A
Approach Delay (s/veh)		32.2			42.3			47.7			27.4	
Approach LOS		C			D			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	35.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Future Volume (vph)	10	420	420	470	480	10	450	10	410	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95		0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00		1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	0.99	1.00	1.00	1.00	1.00		1.00	1.00	1.00	0.98	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.95	1.00	0.95	1.00	
Satd. Flow (prot)	1765	3574	1575	1785	3558		1698	1705	1562	1756	1740	
Flt Permitted	0.47	1.00	1.00	0.25	1.00		0.95	0.62	1.00	0.95	1.00	
Satd. Flow (perm)	867	3574	1575	460	3558		1698	1101	1562	1756	1740	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	433	433	485	495	10	464	10	423	10	10	10
RTOR Reduction (vph)	0	0	272	0	1	0	0	0	51	0	8	0
Lane Group Flow (vph)	10	433	161	485	504	0	237	237	372	10	12	0
Confl. Peds. (#/hr)	17		8	8		17			13	13		
Confl. Bikes (#/hr)			2			3			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	pm+pt	NA	pm+ov	pm+pt	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4	5	3	8		5	2	3	1	6	
Permitted Phases	4		4	8					2			
Actuated Green, G (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Effective Green, g (s)	21.0	20.3	39.3	51.2	46.5		19.0	46.6	68.8	0.7	23.6	
Actuated g/C Ratio	0.20	0.19	0.37	0.48	0.44		0.18	0.44	0.65	0.01	0.22	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	178	685	644	559	1563		304	593	1074	11	388	
v/s Ratio Prot	0.00	0.12	0.04	c0.22	0.14		c0.14	0.07	0.09	0.01	0.01	
v/s Ratio Perm	0.01		0.06	c0.20				c0.10	0.15			
v/c Ratio	0.06	0.63	0.25	0.87	0.32		0.78	0.40	0.35	0.91	0.03	
Uniform Delay, d1	34.2	39.3	23.0	21.7	19.4		41.4	20.1	8.3	52.5	32.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	0.1	1.9	0.2	13.4	0.1		11.9	0.4	0.2	217.6	0.2	
Delay (s)	34.3	41.2	23.2	35.1	19.5		53.3	20.5	8.5	270.1	32.3	
Level of Service	C	D	C	D	B		D	C	A	F	C	
Approach Delay (s/veh)		32.3			27.1			23.5			111.6	
Approach LOS		C			C			C			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.76		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Future Volume (veh/h)	70	570	100	150	220	110	90	710	280	180	770	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	73	594	104	156	229	115	94	740	292	188	802	52
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	332	692	121	244	616	296	373	1189	469	337	1727	112
Arrive On Green	0.04	0.23	0.23	0.08	0.27	0.27	0.04	0.47	0.47	0.07	0.50	0.50
Sat Flow, veh/h	1810	3055	533	1810	2326	1115	1810	2514	992	1810	3437	223
Grp Volume(v), veh/h	73	350	348	156	175	169	94	531	501	188	421	433
Grp Sat Flow(s),veh/h/ln	1810	1805	1783	1810	1805	1636	1810	1805	1701	1810	1805	1855
Q Serve(g_s), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Cycle Q Clear(g_c), s	3.4	20.4	20.5	6.9	8.7	9.2	2.9	24.0	24.1	5.6	16.6	16.6
Prop In Lane	1.00		0.30	1.00		0.68	1.00		0.58	1.00		0.12
Lane Grp Cap(c), veh/h	332	409	404	244	478	434	373	854	805	337	907	932
V/C Ratio(X)	0.22	0.86	0.86	0.64	0.37	0.39	0.25	0.62	0.62	0.56	0.46	0.46
Avail Cap(c_a), veh/h	336	478	473	310	610	553	412	854	805	454	907	932
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.5	40.6	40.7	30.0	32.7	33.0	14.5	21.5	21.5	16.4	17.7	17.7
Incr Delay (d2), s/veh	0.3	12.8	13.4	2.8	0.5	0.6	0.4	3.4	3.6	1.4	1.7	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.7	11.6	11.5	3.7	4.4	4.2	1.5	12.8	12.1	2.9	8.6	8.8
LnGrp Delay(d), s/veh	30.8	53.4	54.0	32.8	33.2	33.5	14.8	24.9	25.1	17.9	19.4	19.3
LnGrp LOS	C	D	D	C	C	C	B	C	C	B	B	B
Approach Vol, veh/h		771			500			1126			1042	
Approach Delay, s/veh		51.6			33.2			24.2			19.1	
Approach LOS		D			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.9	55.8	13.0	28.8	8.7	59.0	8.8	33.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	47.0	13.0	29.0	7.0	55.0	5.0	37.0
Max Q Clear Time (g_c+I1), s	7.6	26.1	8.9	22.5	4.9	18.6	5.4	11.2
Green Ext Time (p_c), s	0.3	7.0	0.1	2.3	0.0	6.0	0.0	2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Future Volume (veh/h)	400	950	110	560	950	140	200	960	520	90	510	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	412	979	113	577	979	144	206	990	536	93	526	216
Adj No. of Lanes	2	3	0	2	3	1	1	2	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	580	2669	307	581	2939	899	151	1324	582	104	624	255
Arrive On Green	0.57	0.57	0.57	0.57	0.57	0.57	0.08	0.37	0.37	0.25	0.25	0.25
Sat Flow, veh/h	988	4709	542	1018	5187	1587	1810	3610	1587	347	2496	1021
Grp Volume(v), veh/h	412	718	374	577	979	144	206	990	536	93	380	362
Grp Sat Flow(s),veh/h/ln	494	1729	1793	509	1729	1587	1810	1805	1587	347	1805	1711
Q Serve(g_s), s	45.8	13.6	13.7	54.3	12.1	5.2	10.0	28.7	38.8	15.3	24.0	24.2
Cycle Q Clear(g_c), s	57.9	13.6	13.7	68.0	12.1	5.2	10.0	28.7	38.8	30.0	24.0	24.2
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.60
Lane Grp Cap(c), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
V/C Ratio(X)	0.71	0.37	0.37	0.99	0.33	0.16	1.37	0.75	0.92	0.89	0.84	0.85
Avail Cap(c_a), veh/h	580	1960	1016	581	2939	899	151	1324	582	104	451	428
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	14.2	14.2	38.3	13.9	12.4	55.0	33.2	36.3	56.4	42.7	42.8
Incr Delay (d2), s/veh	4.0	0.1	0.2	35.7	0.1	0.1	201.2	3.9	22.2	62.7	17.1	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.6	6.5	6.8	12.4	5.7	2.3	13.4	15.0	20.6	4.9	14.1	13.5
LnGrp Delay(d), s/veh	33.4	14.3	14.5	74.0	14.0	12.5	256.2	37.1	58.6	119.0	59.9	61.1
LnGrp LOS	C	B	B	E	B	B	F	D	E	F	E	E
Approach Vol, veh/h		1504			1700			1732			835	
Approach Delay, s/veh		19.6			34.2			69.8			67.0	
Approach LOS		B			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		8
Phs Duration (G+Y+Rc), s		48.0		72.0	14.0	34.0		72.0
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s		44.0		68.0	10.0	30.0		68.0
Max Q Clear Time (g_c+I1), s		40.8		59.9	12.0	32.0		70.0
Green Ext Time (p_c), s		2.3		6.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.8
HCM 2010 LOS	D

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	260	80	70	1230	1270	210
Future Volume (veh/h)	260	80	70	1230	1270	210
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	260	80	70	1230	1270	210
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	1.00	1.00	1.00	1.00	1.00	1.00
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	300	268	90	2711	2054	337
Arrive On Green	0.17	0.17	0.05	0.76	0.67	0.67
Sat Flow, veh/h	1792	1599	1792	3668	3155	502
Grp Volume(v), veh/h	260	80	70	1230	737	743
Grp Sat Flow(s),veh/h/ln	1792	1599	1792	1787	1787	1776
Q Serve(g_s), s	15.3	4.7	4.2	13.7	24.9	25.6
Cycle Q Clear(g_c), s	15.3	4.7	4.2	13.7	24.9	25.6
Prop In Lane	1.00	1.00	1.00			0.28
Lane Grp Cap(c), veh/h	300	268	90	2711	1199	1192
V/C Ratio(X)	0.87	0.30	0.77	0.45	0.61	0.62
Avail Cap(c_a), veh/h	497	444	166	2711	1199	1192
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.8	39.4	50.7	4.8	9.9	10.1
Incr Delay (d2), s/veh	8.6	0.6	13.1	0.5	2.4	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	4.4	2.4	6.9	12.9	13.2
LnGrp Delay(d), s/veh	52.4	40.1	63.8	5.4	12.3	12.5
LnGrp LOS	D	D	E	A	B	B
Approach Vol, veh/h	340			1300	1480	
Approach Delay, s/veh	49.5			8.5	12.4	
Approach LOS	D			A	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		86.0		22.1	9.5	76.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		82.0		30.0	10.0	68.0		
Max Q Clear Time (g_c+I1), s		15.7		17.3	6.2	27.6		
Green Ext Time (p_c), s		11.9		0.8	0.0	13.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Future Volume (veh/h)	720	580	0	0	830	350	10	180	20	810	0	520
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881	1900	1881	1900	1881	0	1881
Adj Flow Rate, veh/h	758	611	0	0	874	0	11	189	21	853	0	547
Adj No. of Lanes	1	2	0	0	2	1	0	1	0	2	0	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	0	0	1	1	1	1	1	1	0	1
Cap, veh/h	794	2512	0	0	977	437	19	323	36	0	0	0
Arrive On Green	0.38	0.70	0.00	0.00	0.27	0.00	0.21	0.21	0.21	0.00	0.00	0.00
Sat Flow, veh/h	1792	3668	0	0	3668	1599	91	1572	175		0	
Grp Volume(v), veh/h	758	611	0	0	874	0	221	0	0		0.0	
Grp Sat Flow(s),veh/h/ln	1792	1787	0	0	1787	1599	1838	0	0			
Q Serve(g_s), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Cycle Q Clear(g_c), s	30.5	5.4	0.0	0.0	20.6	0.0	9.5	0.0	0.0			
Prop In Lane	1.00		0.00	0.00		1.00	0.05		0.10			
Lane Grp Cap(c), veh/h	794	2512	0	0	977	437	378	0	0			
V/C Ratio(X)	0.95	0.24	0.00	0.00	0.89	0.00	0.58	0.00	0.00			
Avail Cap(c_a), veh/h	844	2655	0	0	1021	457	378	0	0			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	0.00	1.00	0.00	0.00			
Uniform Delay (d), s/veh	19.9	4.7	0.0	0.0	30.6	0.0	31.4	0.0	0.0			
Incr Delay (d2), s/veh	20.1	0.0	0.0	0.0	10.0	0.0	6.5	0.0	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	21.9	2.6	0.0	0.0	11.4	0.0	5.5	0.0	0.0			
LnGrp Delay(d), s/veh	40.0	4.7	0.0	0.0	40.6	0.0	37.9	0.0	0.0			
LnGrp LOS	D	A			D		D					
Approach Vol, veh/h		1369			874			221				
Approach Delay, s/veh		24.2			40.6			37.9				
Approach LOS		C			D			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		22.0		65.5			37.6	27.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		18.0		65.0			36.0	25.0
Max Q Clear Time (g_c+I1), s		11.5		7.4			32.5	22.6
Green Ext Time (p_c), s		0.6		4.6			1.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Future Volume (veh/h)	160	1220	250	170	740	120	300	940	160	170	810	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	163	1245	255	173	755	122	306	959	163	173	827	122
Adj No. of Lanes	1	3	0	1	3	0	2	2	1	2	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	1343	275	201	1424	228	362	1295	565	228	1010	149
Arrive On Green	0.11	0.32	0.32	0.11	0.32	0.32	0.11	0.37	0.37	0.07	0.33	0.33
Sat Flow, veh/h	1774	4213	863	1774	4403	705	3442	3539	1544	3442	3089	456
Grp Volume(v), veh/h	163	1002	498	173	580	297	306	959	163	173	474	475
Grp Sat Flow(s),veh/h/ln	1774	1695	1686	1774	1695	1718	1721	1770	1544	1721	1770	1775
Q Serve(g_s), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Cycle Q Clear(g_c), s	10.6	33.6	33.6	11.3	16.4	16.7	10.3	27.7	8.8	5.8	28.9	28.9
Prop In Lane	1.00		0.51	1.00		0.41	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	192	1080	537	201	1096	555	362	1295	565	228	579	581
V/C Ratio(X)	0.85	0.93	0.93	0.86	0.53	0.54	0.85	0.74	0.29	0.76	0.82	0.82
Avail Cap(c_a), veh/h	287	1096	545	226	1096	555	381	1295	565	234	579	581
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.4	38.7	38.7	51.2	32.5	32.5	51.7	32.4	26.4	53.9	36.3	36.3
Incr Delay (d2), s/veh	14.0	13.1	22.1	25.2	0.5	1.0	15.5	3.8	1.3	13.0	12.2	12.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.0	17.7	18.9	6.9	7.7	8.1	5.7	14.1	3.9	3.2	16.0	16.1
LnGrp Delay(d), s/veh	65.4	51.8	60.8	76.4	32.9	33.6	67.2	36.3	27.7	67.0	48.6	48.5
LnGrp LOS	E	D	E	E	C	C	E	D	C	E	D	D
Approach Vol, veh/h		1663			1050			1428			1122	
Approach Delay, s/veh		55.9			40.3			41.9			51.4	
Approach LOS		E			D			D			D	

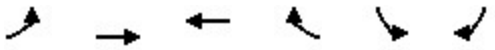
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.8	47.0	17.3	41.5	16.4	42.4	16.7	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	43.0	15.0	38.0	13.0	38.0	19.0	34.0
Max Q Clear Time (g_c+I1), s	7.8	29.7	13.3	35.6	12.3	30.9	12.6	18.7
Green Ext Time (p_c), s	0.0	5.6	0.1	1.9	0.1	3.1	0.2	4.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	48.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Future Volume (veh/h)	210	1120	220	170	740	190	170	860	240	250	890	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	226	1204	237	183	796	204	183	925	258	269	957	161
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	255	1332	577	211	950	241	211	1110	674	298	1282	797
Arrive On Green	0.14	0.26	0.26	0.12	0.24	0.24	0.12	0.31	0.31	0.17	0.36	0.36
Sat Flow, veh/h	1774	5085	1484	1774	4006	1016	1774	3539	1550	1774	3539	1572
Grp Volume(v), veh/h	226	1204	237	183	672	328	183	925	258	269	957	161
Grp Sat Flow(s),veh/h/ln	1774	1695	1484	1774	1695	1631	1774	1770	1550	1774	1770	1572
Q Serve(g_s), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Cycle Q Clear(g_c), s	14.5	26.5	13.6	11.8	21.9	22.2	11.7	28.2	13.1	17.2	27.4	6.5
Prop In Lane	1.00		1.00	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	255	1332	577	211	804	387	211	1110	674	298	1282	797
V/C Ratio(X)	0.89	0.90	0.41	0.87	0.84	0.85	0.87	0.83	0.38	0.90	0.75	0.20
Avail Cap(c_a), veh/h	291	1360	585	230	804	387	245	1110	674	337	1282	797
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	41.4	26.4	50.2	42.1	42.2	50.2	37.0	22.4	47.3	32.3	15.8
Incr Delay (d2), s/veh	24.5	8.7	0.5	26.5	7.7	15.9	23.8	7.4	1.6	24.7	4.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	13.4	5.7	7.3	11.1	11.7	7.1	14.9	5.9	10.5	14.1	3.0
LnGrp Delay(d), s/veh	73.2	50.1	26.9	76.7	49.8	58.1	74.0	44.4	24.1	72.0	36.3	16.3
LnGrp LOS	E	D	C	E	D	E	E	D	C	E	D	B
Approach Vol, veh/h		1667			1183			1366			1387	
Approach Delay, s/veh		49.9			56.3			44.5			40.9	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	23.5	40.4	17.8	34.4	17.8	46.0	20.6	31.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	36.0	15.0	31.0	16.0	42.0	19.0	27.0
Max Q Clear Time (g_c+I1), s	19.2	30.2	13.8	28.5	13.7	29.4	16.5	24.2
Green Ext Time (p_c), s	0.2	3.3	0.1	1.8	0.1	5.5	0.2	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.7
HCM 2010 LOS	D



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (vph)	30	1020	1260	230	680	200
Future Volume (vph)	30	1020	1260	230	680	200
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	0.95	1.00	0.97	0.91
Frpb, ped/bikes	1.00	1.00	1.00	0.97	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	1.00	0.85	1.00	0.85
Flt Protected	0.95	1.00	1.00	1.00	0.95	1.00
Satd. Flow (prot)	1687	3374	3374	1459	3271	1374
Flt Permitted	0.10	1.00	1.00	1.00	0.95	1.00
Satd. Flow (perm)	169	3374	3374	1459	3271	1374
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	31	1041	1286	235	694	204
RTOR Reduction (vph)	0	0	0	90	2	32
Lane Group Flow (vph)	31	1041	1286	145	712	152
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				2		
Heavy Vehicles (%)	7%	7%	7%	7%	7%	7%
Turn Type	Perm	NA	NA	Perm	Prot	Perm
Protected Phases		4	8		6	
Permitted Phases	4			8		6
Actuated Green, G (s)	47.4	47.4	47.4	47.4	42.5	42.5
Effective Green, g (s)	47.4	47.4	47.4	47.4	42.5	42.5
Actuated g/C Ratio	0.48	0.48	0.48	0.48	0.43	0.43
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	81	1633	1633	706	1419	596
v/s Ratio Prot		0.31	c0.38		c0.22	
v/s Ratio Perm	0.18			0.10		0.11
v/c Ratio	0.38	0.64	0.79	0.20	0.50	0.26
Uniform Delay, d1	16.0	18.8	21.1	14.5	20.0	17.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	3.0	0.8	2.6	0.1	1.3	1.0
Delay (s)	19.0	19.7	23.6	14.6	21.3	18.7
Level of Service	B	B	C	B	C	B
Approach Delay (s/veh)		19.6	22.2		20.8	
Approach LOS		B	C		C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	97.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	63.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Future Volume (veh/h)	30	1430	90	70	1050	50	110	50	90	80	70	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	0.99		0.99	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	30	1444	91	71	1061	51	111	51	91	81	71	30
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	2646	167	212	2692	129	514	658	555	507	658	548
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.35	0.35	0.35	0.35	0.35	0.35
Sat Flow, veh/h	504	4880	307	337	4963	238	1281	1863	1571	1234	1863	1551
Grp Volume(v), veh/h	30	1003	532	71	724	388	111	51	91	81	71	30
Grp Sat Flow(s),veh/h/ln	504	1695	1797	337	1695	1811	1281	1863	1571	1234	1863	1551
Q Serve(g_s), s	2.8	14.7	14.7	13.3	9.5	9.5	4.9	1.4	3.0	3.6	2.0	1.0
Cycle Q Clear(g_c), s	12.3	14.7	14.7	28.0	9.5	9.5	6.8	1.4	3.0	5.0	2.0	1.0
Prop In Lane	1.00		0.17	1.00		0.13	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1838	974	212	1838	982	514	658	555	507	658	548
V/C Ratio(X)	0.10	0.55	0.55	0.33	0.39	0.39	0.22	0.08	0.16	0.16	0.11	0.05
Avail Cap(c_a), veh/h	592	3769	1997	404	3769	2014	514	658	555	507	658	548
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.8	11.4	11.4	20.5	10.2	10.2	18.9	16.4	17.0	18.1	16.6	16.3
Incr Delay (d2), s/veh	0.1	0.3	0.5	0.9	0.1	0.3	1.0	0.2	0.6	0.7	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	6.9	7.4	1.3	4.5	4.8	1.9	0.8	1.4	1.3	1.1	0.4
LnGrp Delay(d), s/veh	13.9	11.6	11.9	21.4	10.3	10.4	19.9	16.7	17.6	18.8	17.0	16.5
LnGrp LOS	B	B	B	C	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1565			1183			253			182	
Approach Delay, s/veh		11.8			11.0			18.4			17.7	
Approach LOS		B			B			B			B	

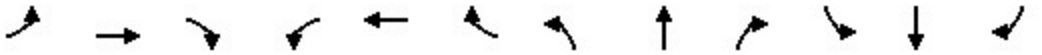
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		31.0		45.5		31.0		45.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		27.0		85.0		27.0		85.0
Max Q Clear Time (g_c+I1), s		8.8		16.7		7.0		30.0
Green Ext Time (p_c), s		0.9		16.3		0.7		11.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	12.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	10	310	10	10	10	310	770	10	60	1000	410
Future Volume (veh/h)	260	10	310	10	10	10	310	770	10	60	1000	410
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	280	11	333	11	11	11	333	828	11	65	1075	441
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	0	384	326	172	157	326	367	2279	992	84	1713	762
Arrive On Green	0.00	0.21	0.21	0.21	0.21	0.21	0.21	0.64	0.64	0.05	0.48	0.48
Sat Flow, veh/h	0	1863	1583	609	764	1581	1774	3539	1540	1774	3539	1575
Grp Volume(v), veh/h	0	11	333	22	0	11	333	828	11	65	1075	441
Grp Sat Flow(s),veh/h/ln	0	1863	1583	1373	0	1581	1774	1770	1540	1774	1770	1575
Q Serve(g_s), s	0.0	0.5	24.0	0.0	0.0	0.6	21.3	12.7	0.3	4.2	26.2	23.4
Cycle Q Clear(g_c), s	0.0	0.5	24.0	1.1	0.0	0.6	21.3	12.7	0.3	4.2	26.2	23.4
Prop In Lane	0.00		1.00	0.50		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	384	326	329	0	326	367	2279	992	84	1713	762
V/C Ratio(X)	0.00	0.03	1.02	0.07	0.00	0.03	0.91	0.36	0.01	0.78	0.63	0.58
Avail Cap(c_a), veh/h	0	384	326	329	0	326	518	2279	992	137	1713	762
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	36.9	46.2	37.2	0.0	37.0	45.1	9.6	7.4	54.9	22.3	21.5
Incr Delay (d2), s/veh	0.0	0.0	55.2	0.1	0.0	0.0	15.4	0.5	0.0	14.3	1.8	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	0.3	15.5	0.6	0.0	0.3	12.0	6.2	0.1	2.4	13.1	10.7
LnGrp Delay(d), s/veh	0.0	37.0	101.5	37.2	0.0	37.0	60.5	10.1	7.5	69.2	24.0	24.7
LnGrp LOS		D	F	D		D	E	B	A	E	C	C
Approach Vol, veh/h		344			33			1172			1581	
Approach Delay, s/veh		99.5			37.2			24.4			26.1	
Approach LOS		F			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	79.0		28.0	28.1	60.4	0.0	28.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	75.0		24.0	34.0	50.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	6.2	14.7		26.0	23.3	28.2	0.0	3.1
Green Ext Time (p_c), s	0.0	6.9		0.0	0.8	9.9	0.0	0.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		33.6
HCM 2010 LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Future Volume (veh/h)	10	0	60	40	10	10	70	390	70	10	430	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	0	61	41	10	10	71	398	71	10	439	10
Adj No. of Lanes	0	1	1	0	1	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	60	0	301	54	8	289	195	1076	1150	42	1372	1152
Arrive On Green	0.19	0.00	0.19	0.19	0.19	0.19	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	0	0	1571	0	40	1507	217	1451	1550	15	1850	1553
Grp Volume(v), veh/h	10	0	61	51	0	10	469	0	71	449	0	10
Grp Sat Flow(s),veh/h/ln	0	0	1571	40	0	1507	1667	0	1550	1865	0	1553
Q Serve(g_s), s	0.0	0.0	3.9	0.0	0.0	0.6	0.0	0.0	1.5	0.0	0.0	0.2
Cycle Q Clear(g_c), s	23.0	0.0	3.9	23.0	0.0	0.6	10.3	0.0	1.5	9.7	0.0	0.2
Prop In Lane	1.00		1.00	0.80		1.00	0.15		1.00	0.02		1.00
Lane Grp Cap(c), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
V/C Ratio(X)	0.17	0.00	0.20	0.83	0.00	0.03	0.37	0.00	0.06	0.32	0.00	0.01
Avail Cap(c_a), veh/h	60	0	301	62	0	289	1271	0	1150	1414	0	1152
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	40.8	56.6	0.0	39.5	5.3	0.0	4.2	5.3	0.0	4.0
Incr Delay (d2), s/veh	1.3	0.0	0.3	57.7	0.0	0.0	0.8	0.0	0.1	0.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	1.7	2.7	0.0	0.3	5.5	0.0	0.7	5.2	0.0	0.1
LnGrp Delay(d), s/veh	61.3	0.0	41.1	114.3	0.0	39.5	6.2	0.0	4.3	5.9	0.0	4.0
LnGrp LOS	E		D	F		D	A		A	A		A
Approach Vol, veh/h		71			61			540			459	
Approach Delay, s/veh		44.0			102.0			5.9			5.8	
Approach LOS		D			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		93.0		27.0		93.0		27.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		89.0		23.0		89.0		23.0
Max Q Clear Time (g_c+I1), s		12.3		25.0		11.7		25.0
Green Ext Time (p_c), s		4.2		0.0		3.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Future Volume (veh/h)	130	100	100	60	50	70	50	1140	80	80	1130	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	137	105	105	63	53	74	53	1200	84	84	1189	53
Adj No. of Lanes	1	1	1	1	1	0	2	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	300	296	81	77	108	103	1953	137	107	2169	956
Arrive On Green	0.09	0.16	0.16	0.05	0.11	0.11	0.03	0.58	0.58	0.06	0.61	0.61
Sat Flow, veh/h	1774	1863	1548	1774	691	964	3442	3356	235	1774	3539	1560
Grp Volume(v), veh/h	137	105	105	63	0	127	53	632	652	84	1189	53
Grp Sat Flow(s),veh/h/ln	1774	1863	1548	1774	0	1655	1721	1770	1821	1774	1770	1560
Q Serve(g_s), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Cycle Q Clear(g_c), s	8.0	5.3	6.2	3.7	0.0	7.8	1.6	24.6	24.7	5.0	20.8	1.4
Prop In Lane	1.00		1.00	1.00		0.58	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	168	300	296	81	0	185	103	1030	1060	107	2169	956
V/C Ratio(X)	0.82	0.35	0.35	0.78	0.00	0.68	0.52	0.61	0.62	0.78	0.55	0.06
Avail Cap(c_a), veh/h	284	421	397	151	0	250	195	1030	1060	201	2169	956
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.1	39.6	37.3	50.1	0.0	45.3	50.7	14.4	14.4	49.1	12.0	8.2
Incr Delay (d2), s/veh	9.3	0.7	0.7	14.5	0.0	4.7	4.0	2.7	2.7	11.6	1.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	2.8	2.7	2.1	0.0	3.8	0.8	12.7	13.1	2.8	10.4	0.6
LnGrp Delay(d), s/veh	56.4	40.3	38.0	64.6	0.0	50.0	54.7	17.2	17.1	60.7	13.0	8.3
LnGrp LOS	E	D	D	E		D	D	B	B	E	B	A
Approach Vol, veh/h		347			190			1337			1326	
Approach Delay, s/veh		46.0			54.8			18.6			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	65.7	8.9	21.1	7.2	69.0	14.0	15.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	59.0	9.0	24.0	6.0	65.0	17.0	16.0
Max Q Clear Time (g_c+I1), s	7.0	26.7	5.7	8.2	3.6	22.8	10.0	9.8
Green Ext Time (p_c), s	0.1	10.2	0.0	0.7	0.0	11.0	0.2	0.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.6
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	16.1
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Future Vol, veh/h	30	40	90	50	30	10	70	270	50	10	340	40
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	33	43	98	54	33	11	76	293	54	11	370	43
Number of Lanes	0	1	1	0	1	1	0	1	1	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	2	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	2	2	2
HCM Control Delay, s/veh	10.9	11.7	17.5	17.9
HCM LOS	B	B	C	C

Lane	NBLn1	NBLn2	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	21%	0%	43%	0%	63%	0%	3%	0%
Vol Thru, %	79%	0%	57%	0%	38%	0%	97%	0%
Vol Right, %	0%	100%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	340	50	70	90	80	10	350	40
LT Vol	70	0	30	0	50	0	10	0
Through Vol	270	0	40	0	30	0	340	0
RT Vol	0	50	0	90	0	10	0	40
Lane Flow Rate	370	54	76	98	87	11	380	43
Geometry Grp	7	7	7	7	7	7	7	7
Degree of Util (X)	0.63	0.08	0.154	0.172	0.182	0.02	0.639	0.064
Departure Headway (Hd)	6.133	5.319	7.279	6.344	7.54	6.503	6.047	5.323
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	588	670	490	562	473	546	593	670
Service Time	3.892	3.078	5.061	4.126	5.329	4.291	3.807	3.083
HCM Lane V/C Ratio	0.629	0.081	0.155	0.174	0.184	0.02	0.641	0.064
HCM Control Delay, s/veh	18.8	8.5	11.4	10.5	12	9.4	19	8.5
HCM Lane LOS	C	A	B	B	B	A	C	A
HCM 95th-tile Q	4.4	0.3	0.5	0.6	0.7	0.1	4.5	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Future Volume (veh/h)	200	890	170	50	690	210	160	860	60	270	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	211	937	179	53	726	221	168	905	63	284	663	221
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	188	1340	577	138	1340	586	349	1891	132	292	1996	878
Arrive On Green	0.38	0.38	0.38	0.38	0.38	0.38	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	596	3574	1540	508	3574	1563	632	3386	236	584	3574	1573
Grp Volume(v), veh/h	211	937	179	53	726	221	168	478	490	284	663	221
Grp Sat Flow(s),veh/h/ln	596	1787	1540	508	1787	1563	632	1787	1835	584	1787	1573
Q Serve(g_s), s	25.9	26.6	9.9	11.8	19.1	12.4	23.6	19.3	19.3	47.7	12.1	8.7
Cycle Q Clear(g_c), s	45.0	26.6	9.9	38.5	19.1	12.4	35.6	19.3	19.3	67.0	12.1	8.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.13	1.00		1.00
Lane Grp Cap(c), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
V/C Ratio(X)	1.12	0.70	0.31	0.39	0.54	0.38	0.48	0.48	0.48	0.97	0.33	0.25
Avail Cap(c_a), veh/h	188	1340	577	138	1340	586	349	998	1024	292	1996	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.2	31.8	26.5	48.1	29.4	27.3	24.0	16.0	16.0	40.5	14.4	13.6
Incr Delay (d2), s/veh	101.3	1.6	0.3	1.8	0.4	0.4	4.7	1.6	1.6	46.2	0.4	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.5	13.4	4.2	1.7	9.5	5.4	4.6	9.9	10.1	13.1	6.0	3.9
LnGrp Delay(d), s/veh	152.5	33.4	26.8	49.8	29.9	27.7	28.7	17.6	17.6	86.7	14.8	14.3
LnGrp LOS	F	C	C	D	C	C	C	B	B	F	B	B
Approach Vol, veh/h		1327			1000			1136			1168	
Approach Delay, s/veh		51.4			30.4			19.2			32.2	
Approach LOS		D			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		71.0		49.0		71.0		49.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		67.0		45.0		67.0		45.0
Max Q Clear Time (g_c+I1), s		37.6		47.0		69.0		40.5
Green Ext Time (p_c), s		8.7		0.0		0.0		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	900	130	140	820	240	110	930	220	130	1160	330
Future Volume (veh/h)	230	900	130	140	820	240	110	930	220	130	1160	330
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	240	938	135	146	854	250	115	969	229	135	1208	344
Adj No. of Lanes	1	3	0	1	3	0	2	2	0	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	266	1245	179	172	874	254	167	1108	261	161	1534	674
Arrive On Green	0.15	0.28	0.28	0.10	0.23	0.23	0.05	0.40	0.40	0.09	0.44	0.44
Sat Flow, veh/h	1757	4437	636	1757	3850	1120	3408	2803	661	1757	3505	1539
Grp Volume(v), veh/h	240	709	364	146	744	360	115	605	593	135	1208	344
Grp Sat Flow(s),veh/h/ln	1757	1679	1715	1757	1679	1612	1704	1752	1711	1757	1752	1539
Q Serve(g_s), s	16.0	22.9	23.0	9.7	26.2	26.4	3.9	37.9	38.1	9.0	35.2	19.2
Cycle Q Clear(g_c), s	16.0	22.9	23.0	9.7	26.2	26.4	3.9	37.9	38.1	9.0	35.2	19.2
Prop In Lane	1.00		0.37	1.00		0.69	1.00		0.39	1.00		1.00
Lane Grp Cap(c), veh/h	266	942	481	172	762	366	167	693	677	161	1534	674
V/C Ratio(X)	0.90	0.75	0.76	0.85	0.98	0.98	0.69	0.87	0.88	0.84	0.79	0.51
Avail Cap(c_a), veh/h	281	942	481	192	762	366	172	693	677	163	1534	674
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.6	39.0	39.1	52.7	45.6	45.7	55.6	33.2	33.3	53.2	28.7	24.2
Incr Delay (d2), s/veh	28.8	3.5	6.8	26.1	26.6	42.4	10.7	14.3	14.9	30.5	4.2	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.9	11.1	11.8	6.0	14.9	16.0	2.1	21.1	20.8	5.7	17.8	8.6
LnGrp Delay(d), s/veh	78.4	42.5	45.8	78.9	72.2	88.1	66.4	47.5	48.2	83.7	32.8	27.0
LnGrp LOS	E	D	D	E	E	F	E	D	D	F	C	C
Approach Vol, veh/h		1313			1250			1313			1687	
Approach Delay, s/veh		50.0			77.6			49.5			35.7	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.9	51.0	15.7	37.4	9.8	56.0	22.0	31.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	47.0	13.0	33.0	6.0	52.0	19.0	27.0
Max Q Clear Time (g_c+I1), s	11.0	40.1	11.7	25.0	5.9	37.2	18.0	28.4
Green Ext Time (p_c), s	0.0	3.9	0.0	3.9	0.0	8.7	0.1	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Future Volume (veh/h)	100	360	70	280	250	120	30	1610	210	140	1670	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	110	396	77	308	275	132	33	1769	231	154	1835	77
Adj No. of Lanes	1	2	1	2	2	0	1	3	0	1	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	137	495	246	375	397	184	42	2325	302	184	2961	124
Arrive On Green	0.08	0.14	0.14	0.11	0.17	0.17	0.02	0.51	0.51	0.10	0.59	0.59
Sat Flow, veh/h	1792	3574	1506	3476	2337	1084	1792	4589	595	1792	5051	212
Grp Volume(v), veh/h	110	396	77	308	208	199	33	1317	683	154	1243	669
Grp Sat Flow(s),veh/h/ln	1792	1787	1506	1738	1787	1634	1792	1712	1761	1792	1712	1839
Q Serve(g_s), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Cycle Q Clear(g_c), s	6.7	11.9	5.0	9.6	12.1	12.8	2.0	34.2	34.7	9.4	26.2	26.2
Prop In Lane	1.00		1.00	1.00		0.66	1.00		0.34	1.00		0.12
Lane Grp Cap(c), veh/h	137	495	246	375	303	277	42	1734	892	184	2007	1078
V/C Ratio(X)	0.80	0.80	0.31	0.82	0.69	0.72	0.79	0.76	0.77	0.84	0.62	0.62
Avail Cap(c_a), veh/h	210	580	282	470	322	295	97	1734	892	259	2007	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.4	46.3	41.1	48.4	43.2	43.5	53.9	21.9	22.1	48.8	14.9	14.9
Incr Delay (d2), s/veh	11.9	6.8	0.7	9.1	5.5	7.6	27.6	3.2	6.2	15.1	1.4	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	6.4	2.1	5.1	6.5	6.3	1.3	16.9	18.2	5.4	12.7	14.0
LnGrp Delay(d), s/veh	62.3	53.1	41.8	57.5	48.8	51.1	81.4	25.1	28.3	63.9	16.4	17.6
LnGrp LOS	E	D	D	E	D	D	F	C	C	E	B	B
Approach Vol, veh/h		583			715			2033			2066	
Approach Delay, s/veh		53.3			53.2			27.1			20.3	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.4	60.2	16.0	19.3	6.6	69.0	12.5	22.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	55.0	15.0	18.0	6.0	65.0	13.0	20.0
Max Q Clear Time (g_c+I1), s	11.4	36.7	11.6	13.9	4.0	28.2	8.7	14.8
Green Ext Time (p_c), s	0.1	13.2	0.3	1.0	0.0	19.5	0.1	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	5.4

Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	20	30	10	80	120	30
Future Vol, veh/h	20	30	10	80	120	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	100	0	100
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	33	11	87	130	33

Major/Minor	Major1		Major2		Minor2	
Conflicting Flow All	98	0	-	0	88	11
Stage 1	-	-	-	-	11	-
Stage 2	-	-	-	-	77	-
Critical Hdwy	4.12	-	-	-	6.42	6.22
Critical Hdwy Stg 1	-	-	-	-	5.42	-
Critical Hdwy Stg 2	-	-	-	-	5.42	-
Follow-up Hdwy	2.218	-	-	-	3.518	3.318
Pot Cap-1 Maneuver	1495	-	-	-	913	1070
Stage 1	-	-	-	-	1012	-
Stage 2	-	-	-	-	946	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	1495	-	-	-	899	1070
Mov Cap-2 Maneuver	-	-	-	-	899	-
Stage 1	-	-	-	-	997	-
Stage 2	-	-	-	-	946	-

Approach	EB	WB	SB
HCM Control Delay, s/v	3	0	9.5
HCM LOS			A

Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	SBLn2
Capacity (veh/h)	1495	-	-	-	899	1070
HCM Lane V/C Ratio	0.015	-	-	-	0.145	0.03
HCM Control Delay (s/veh)	7.4	0	-	-	9.7	8.5
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	-	0.5	0.1

Intersection	
Int Delay, s/veh	3.7

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Vol, veh/h	40	0	90	30	10	10	30	520	20	70	400	10
Future Vol, veh/h	40	0	90	30	10	10	30	520	20	70	400	10
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	0	-	0	-	-	-	0	-	-	0	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	43	0	98	33	11	11	33	565	22	76	435	11

Major/Minor	Minor1			Minor2			Major1			Major2		
Conflicting Flow All	1017	1240	294	942	1246	223	446	0	0	587	0	0
Stage 1	642	642	-	593	593	-	-	-	-	-	-	-
Stage 2	375	598	-	349	653	-	-	-	-	-	-	-
Critical Hdwy	7.54	6.54	6.94	7.54	6.54	6.94	4.14	-	-	4.14	-	-
Critical Hdwy Stg 1	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.54	5.54	-	6.54	5.54	-	-	-	-	-	-	-
Follow-up Hdwy	3.52	4.02	3.32	3.52	4.02	3.32	2.22	-	-	2.22	-	-
Pot Cap-1 Maneuver	192	174	702	218	172	780	1111	-	-	984	-	-
Stage 1	429	467	-	459	492	-	-	-	-	-	-	-
Stage 2	618	489	-	640	462	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	165	156	702	173	154	780	1111	-	-	984	-	-
Mov Cap-2 Maneuver	165	156	-	173	154	-	-	-	-	-	-	-
Stage 1	416	453	-	445	454	-	-	-	-	-	-	-
Stage 2	549	451	-	534	448	-	-	-	-	-	-	-

Approach	NB	SB	SE	NW
HCM Control Delay, s/v	17	29.8	0.4	1.3
HCM LOS	C	D		

Minor Lane/Major Mvmt	NBLn1	NBLn2	NBLn3	NWL	NWT	NWR	SEL	SET	SER	SBLn1
Capacity (veh/h)	165	351	702	984	-	-	1111	-	-	199
HCM Lane V/C Ratio	0.176	0.134	0.093	0.077	-	-	0.029	-	-	0.273
HCM Control Delay (s/veh)	31.4	16.8	10.7	9	-	-	8.3	-	-	29.8
HCM Lane LOS	D	C	B	A	-	-	A	-	-	D
HCM 95th %tile Q(veh)	0.6	0.5	0.3	0.3	-	-	0.1	-	-	1.1

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	850	10	10	210	70	10	10	10	60	10	60
Future Volume (veh/h)	80	850	10	10	210	70	10	10	10	60	10	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	87	924	11	11	228	76	11	11	11	65	11	65
Adj No. of Lanes	0	2	0	0	2	0	0	1	1	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	151	1263	15	73	1005	322	429	404	756	385	84	334
Arrive On Green	0.40	0.40	0.40	0.40	0.40	0.40	0.48	0.48	0.48	0.48	0.48	0.48
Sat Flow, veh/h	219	3133	37	40	2494	798	729	845	1583	641	176	700
Grp Volume(v), veh/h	517	0	505	167	0	148	22	0	11	141	0	0
Grp Sat Flow(s),veh/h/ln	1701	0	1689	1778	0	1554	1574	0	1583	1517	0	0
Q Serve(g_s), s	11.3	0.0	17.1	0.0	0.0	4.2	0.0	0.0	0.2	0.9	0.0	0.0
Cycle Q Clear(g_c), s	17.1	0.0	17.1	17.1	0.0	4.2	0.4	0.0	0.2	3.2	0.0	0.0
Prop In Lane	0.17		0.02	0.07		0.51	0.50		1.00	0.46		0.46
Lane Grp Cap(c), veh/h	748	0	681	774	0	627	832	0	756	803	0	0
V/C Ratio(X)	0.69	0.00	0.74	0.22	0.00	0.24	0.03	0.00	0.01	0.18	0.00	0.00
Avail Cap(c_a), veh/h	2058	0	2016	2066	0	1855	832	0	756	803	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.8	0.0	17.0	13.1	0.0	13.2	9.3	0.0	9.2	10.0	0.0	0.0
Incr Delay (d2), s/veh	1.2	0.0	1.6	0.1	0.0	0.2	0.1	0.0	0.0	0.5	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.3	0.0	8.2	2.0	0.0	1.8	0.2	0.0	0.1	1.6	0.0	0.0
LnGrp Delay(d), s/veh	18.0	0.0	18.7	13.3	0.0	13.4	9.3	0.0	9.2	10.4	0.0	0.0
LnGrp LOS	B		B	B		B	A		A	B		
Approach Vol, veh/h		1022			315			33			141	
Approach Delay, s/veh		18.3			13.3			9.3			10.4	
Approach LOS		B			B			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		36.0		31.0		36.0		31.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		32.0		80.0		32.0		80.0
Max Q Clear Time (g_c+I1), s		2.4		19.1		5.2		19.1
Green Ext Time (p_c), s		0.1		7.9		0.8		2.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	560	10	10	300	10	10	10	10	20	10	10
Future Volume (veh/h)	10	560	10	10	300	10	10	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	609	11	11	326	11	11	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	77	940	17	83	911	30	355	353	308	513	256	222
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.57	0.57	0.57	0.57	0.57	0.57
Sat Flow, veh/h	21	3447	62	37	3342	111	458	615	536	714	446	387
Grp Volume(v), veh/h	331	0	300	182	0	166	33	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1846	0	1684	1814	0	1675	1609	0	0	1547	0	0
Q Serve(g_s), s	0.0	0.0	8.2	0.0	0.0	4.2	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.2	0.0	8.2	4.1	0.0	4.2	0.4	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.03		0.04	0.06		0.07	0.33		0.33	0.50		0.25
Lane Grp Cap(c), veh/h	575	0	459	568	0	457	1016	0	0	992	0	0
V/C Ratio(X)	0.58	0.00	0.65	0.32	0.00	0.36	0.03	0.00	0.00	0.04	0.00	0.00
Avail Cap(c_a), veh/h	2928	0	2643	2804	0	2630	1016	0	0	992	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.8	0.0	16.8	15.3	0.0	15.3	4.8	0.0	0.0	4.9	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.6	0.3	0.0	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.3	0.0	4.0	2.2	0.0	2.0	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	17.7	0.0	18.4	15.6	0.0	15.8	4.9	0.0	0.0	4.9	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		631			348			33			44	
Approach Delay, s/veh		18.0			15.7			4.9			4.9	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		34.0		18.2		34.0		18.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		30.0		82.0		30.0		82.0
Max Q Clear Time (g_c+I1), s		2.4		10.2		2.6		6.2
Green Ext Time (p_c), s		0.1		4.0		0.2		2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.3
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	580	10	10	330	20	10	10	10	20	10	10
Future Volume (veh/h)	10	580	10	10	330	20	10	10	10	20	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	630	11	11	359	22	11	11	11	22	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	78	973	17	83	917	55	350	347	302	506	252	218
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	20	3450	60	32	3251	196	456	617	537	712	449	387
Grp Volume(v), veh/h	342	0	310	206	0	186	33	0	0	44	0	0
Grp Sat Flow(s),veh/h/ln	1845	0	1685	1819	0	1660	1610	0	0	1548	0	0
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	4.7	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	8.3	0.0	8.4	4.6	0.0	4.7	0.4	0.0	0.0	0.6	0.0	0.0
Prop In Lane	0.03		0.04	0.05		0.12	0.33		0.33	0.50		0.25
Lane Grp Cap(c), veh/h	592	0	475	586	0	468	999	0	0	976	0	0
V/C Ratio(X)	0.58	0.00	0.65	0.35	0.00	0.40	0.03	0.00	0.00	0.05	0.00	0.00
Avail Cap(c_a), veh/h	3000	0	2713	2892	0	2675	999	0	0	976	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	16.3	0.0	16.3	14.9	0.0	15.0	5.0	0.0	0.0	5.1	0.0	0.0
Incr Delay (d2), s/veh	0.9	0.0	1.5	0.4	0.0	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.4	0.0	4.1	2.4	0.0	2.2	0.2	0.0	0.0	0.3	0.0	0.0
LnGrp Delay(d), s/veh	17.2	0.0	17.8	15.3	0.0	15.5	5.1	0.0	0.0	5.1	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		652			392			33			44	
Approach Delay, s/veh		17.5			15.4			5.1			5.1	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		33.0		18.5		33.0		18.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		29.0		83.0		29.0		83.0
Max Q Clear Time (g_c+I1), s		2.4		10.4		2.6		6.7
Green Ext Time (p_c), s		0.1		4.2		0.2		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.9
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	600	10	10	340	10	10	10	10	30	10	10
Future Volume (veh/h)	10	600	10	10	340	10	10	10	10	30	10	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1900	1863	1900	1900	1863	1900
Adj Flow Rate, veh/h	11	652	11	11	370	11	11	11	11	33	11	11
Adj No. of Lanes	0	2	0	0	2	0	0	1	0	0	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	969	16	76	944	28	353	351	310	601	200	175
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.58	0.58	0.58	0.58	0.58	0.58
Sat Flow, veh/h	20	3453	58	32	3364	99	465	607	536	863	346	302
Grp Volume(v), veh/h	353	0	321	205	0	187	33	0	0	55	0	0
Grp Sat Flow(s),veh/h/ln	1846	0	1685	1817	0	1678	1607	0	0	1511	0	0
Q Serve(g_s), s	0.0	0.0	9.6	0.0	0.0	5.1	0.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	9.6	0.0	9.6	5.1	0.0	5.1	0.5	0.0	0.0	0.8	0.0	0.0
Prop In Lane	0.03		0.03	0.05		0.06	0.33		0.33	0.60		0.20
Lane Grp Cap(c), veh/h	583	0	473	576	0	471	1015	0	0	976	0	0
V/C Ratio(X)	0.61	0.00	0.68	0.36	0.00	0.40	0.03	0.00	0.00	0.06	0.00	0.00
Avail Cap(c_a), veh/h	2588	0	2335	2490	0	2325	1015	0	0	976	0	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	0.00	0.00	1.00	0.00	0.00
Uniform Delay (d), s/veh	18.2	0.0	18.2	16.6	0.0	16.6	5.1	0.0	0.0	5.2	0.0	0.0
Incr Delay (d2), s/veh	1.0	0.0	1.7	0.4	0.0	0.5	0.1	0.0	0.0	0.1	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	0.0	4.7	2.6	0.0	2.5	0.2	0.0	0.0	0.4	0.0	0.0
LnGrp Delay(d), s/veh	19.2	0.0	19.9	16.9	0.0	17.1	5.2	0.0	0.0	5.3	0.0	0.0
LnGrp LOS	B		B	B		B	A			A		
Approach Vol, veh/h		674			392			33			55	
Approach Delay, s/veh		19.6			17.0			5.2			5.3	
Approach LOS		B			B			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		37.0		20.0		37.0		20.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		33.0		79.0		33.0		79.0
Max Q Clear Time (g_c+I1), s		2.5		11.6		2.8		7.1
Green Ext Time (p_c), s		0.1		4.3		0.3		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.6
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	450	10	10	380	510	0	0	0	10	20	50
Future Volume (vph)	100	450	10	10	380	510	0	0	0	10	20	50
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95		1.00	0.95					0.95	0.91	0.95
Frt		1.00		1.00	0.91					1.00	0.94	0.85
Flt Protected		0.99		0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3498		1770	3235					1681	1585	1504
Flt Permitted		0.60		0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		2107		1770	3235					1681	1585	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	109	489	11	11	413	554	0	0	0	11	22	54
RTOR Reduction (vph)	0	2	0	0	336	0	0	0	0	0	9	19
Lane Group Flow (vph)	0	607	0	11	631	0	0	0	0	10	31	18
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Perm	NA		Prot	NA					Prot	NA	Prot
Protected Phases		4		3	8			2		1	6	6
Permitted Phases	4						2					
Actuated Green, G (s)		22.2		1.1	27.3					1.1	34.2	34.2
Effective Green, g (s)		22.2		1.1	27.3					1.1	34.2	34.2
Actuated g/C Ratio		0.32		0.02	0.39					0.02	0.49	0.49
Clearance Time (s)		4.0		4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		673		28	1270					26	779	740
v/s Ratio Prot				0.01	c0.19					c0.01	c0.00	0.01
v/s Ratio Perm		c0.29									0.02	
v/c Ratio		0.90		0.39	0.50					0.38	0.04	0.02
Uniform Delay, d1		22.6		33.9	15.9					33.9	9.1	9.1
Progression Factor		1.00		1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		15.3		8.9	0.3					9.2	0.0	0.1
Delay (s)		37.9		42.7	16.2					43.1	9.2	9.1
Level of Service		D		D	B					D	A	A
Approach Delay (s/veh)		37.9			16.5			0.0			13.1	
Approach LOS		D			B			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	69.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	120	350	10	10	670	1270	10	10	10	190	10	40
Future Volume (vph)	120	350	10	10	670	1270	10	10	10	190	10	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.96		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.98		0.95	0.96	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583		1750		1681	1616	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00		0.90		0.81	0.79	1.00
Satd. Flow (perm)	1770	3539	1583	1770	3539	1583		1604		1441	1333	1504
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	130	380	11	11	728	1380	11	11	11	207	11	43
RTOR Reduction (vph)	0	0	3	0	0	232	0	10	0	0	1	34
Lane Group Flow (vph)	130	380	8	11	728	1148	0	23	0	112	109	5
Heavy Vehicles (%)	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%	2%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	9.0	94.4	94.4	0.8	86.2	86.2		16.0		16.0	16.0	16.0
Effective Green, g (s)	9.0	94.4	94.4	0.8	86.2	86.2		16.0		16.0	16.0	16.0
Actuated g/C Ratio	0.07	0.77	0.77	0.01	0.70	0.70		0.13		0.13	0.13	0.13
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	129	2711	1212	11	2476	1107		208		187	173	195
v/s Ratio Prot	c0.07	0.11		0.01	0.21							
v/s Ratio Perm			0.01			c0.72		0.01		0.08	c0.08	0.00
v/c Ratio	1.01	0.14	0.01	1.00	0.29	1.04		0.11		0.60	0.63	0.03
Uniform Delay, d1	57.1	3.8	3.4	61.2	7.0	18.5		47.3		50.6	50.8	46.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	81.3	0.0	0.0	271.4	0.1	37.0		1.1		13.4	16.2	0.2
Delay (s)	138.4	3.8	3.4	332.6	7.1	55.5		48.4		64.0	67.0	47.0
Level of Service	F	A	A	F	A	E		D		E	E	D
Approach Delay (s/veh)		37.4			40.3			48.4			62.7	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	123.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	98.6%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	30	30	230	80	20	90	800	150	10	1300	10
Future Volume (veh/h)	10	30	30	230	80	20	90	800	150	10	1300	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	11	33	33	250	87	22	98	870	163	11	1413	11
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	45	109	427	63	0	427	231	2300	1029	363	2340	18
Arrive On Green	0.27	0.27	0.27	0.27	0.27	0.27	0.65	0.65	0.65	0.65	0.65	0.65
Sat Flow, veh/h	0	405	1583	0	0	1583	375	3539	1583	544	3599	28
Grp Volume(v), veh/h	44	0	33	337	0	22	98	870	163	11	694	730
Grp Sat Flow(s),veh/h/ln	405	0	1583	0	0	1583	375	1770	1583	544	1770	1858
Q Serve(g_s), s	0.0	0.0	1.6	0.0	0.0	1.0	20.4	11.4	4.0	1.0	22.6	22.6
Cycle Q Clear(g_c), s	27.0	0.0	1.6	27.0	0.0	1.0	43.0	11.4	4.0	12.4	22.6	22.6
Prop In Lane	0.25		1.00	0.74		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	154	0	427	63	0	427	231	2300	1029	363	1150	1208
V/C Ratio(X)	0.28	0.00	0.08	5.37	0.00	0.05	0.42	0.38	0.16	0.03	0.60	0.60
Avail Cap(c_a), veh/h	154	0	427	63	0	427	231	2300	1029	363	1150	1208
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.5	0.0	27.2	50.0	0.0	27.0	22.5	8.1	6.8	11.0	10.1	10.1
Incr Delay (d2), s/veh	1.0	0.0	0.1	2003.1	0.0	0.0	5.6	0.5	0.3	0.2	2.4	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.7	36.6	0.0	0.5	2.5	5.7	1.8	0.2	11.6	12.1
LnGrp Delay(d), s/veh	30.5	0.0	27.3	2053.1	0.0	27.1	28.1	8.6	7.2	11.1	12.4	12.3
LnGrp LOS	C		C	F		C	C	A	A	B	B	B
Approach Vol, veh/h		77			359			1131			1435	
Approach Delay, s/veh		29.1			1928.9			10.1			12.4	
Approach LOS		C			F			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		69.0		31.0		69.0		31.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		65.0		16.0		65.0		27.0
Max Q Clear Time (g_c+I1), s		45.0		29.0		24.6		29.0
Green Ext Time (p_c), s		8.1		0.0		14.4		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		241.1
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	1.8

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	870	50	90	60	30	10
Future Vol, veh/h	870	50	90	60	30	10
Conflicting Peds, #/hr	0	1	1	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	96	96	96	96	96	96
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	906	52	94	63	31	10

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	959	0	1184	933
Stage 1	-	-	-	-	933	-
Stage 2	-	-	-	-	251	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	725	-	211	325
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	795	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	724	-	182	325
Mov Cap-2 Maneuver	-	-	-	-	182	-
Stage 1	-	-	-	-	386	-
Stage 2	-	-	-	-	688	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	6.4	25.7
HCM LOS			D

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	182	325	-	-	724	-
HCM Lane V/C Ratio	0.172	0.032	-	-	0.129	-
HCM Control Delay (s/veh)	28.8	16.4	-	-	10.7	0
HCM Lane LOS	D	C	-	-	B	A
HCM 95th %tile Q(veh)	0.6	0.1	-	-	0.4	-

Intersection	
Int Delay, s/veh	10

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	60	70	900	20	30	880
Future Vol, veh/h	60	70	900	20	30	880
Conflicting Peds, #/hr	0	0	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	86	86	86	86	86	86
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	70	81	1047	23	35	1023

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1642	536	0	0	1071	0
Stage 1	1060	-	-	-	-	-
Stage 2	582	-	-	-	-	-
Critical Hdwy	6.82	6.92	-	-	4.12	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	-	-	2.21	-
Pot Cap-1 Maneuver	92	492	-	-	652	-
Stage 1	296	-	-	-	-	-
Stage 2	525	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	80	492	-	-	651	-
Mov Cap-2 Maneuver	80	-	-	-	-	-
Stage 1	296	-	-	-	-	-
Stage 2	459	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	145.1	0	0.9
HCM LOS	F		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	SBL	SBT
Capacity (veh/h)	-	-	146	651	-
HCM Lane V/C Ratio	-	-	1.035	0.054	-
HCM Control Delay (s/veh)	-	-	145.1	10.8	0.6
HCM Lane LOS	-	-	F	B	A
HCM 95th %tile Q(veh)	-	-	7.9	0.2	-

Movement	SBL	SBR	SEL	SET	NWT	NWR
Lane Configurations						
Traffic Volume (veh/h)	50	40	10	810	970	20
Future Volume (veh/h)	50	40	10	810	970	20
Number	1	16	7	4	8	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	55	44	11	890	1066	22
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	388	346	371	2562	2565	53
Arrive On Green	0.22	0.22	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1792	1599	521	3668	3673	74
Grp Volume(v), veh/h	55	44	11	890	532	556
Grp Sat Flow(s),veh/h/ln	1792	1599	521	1787	1787	1866
Q Serve(g_s), s	3.0	2.7	1.0	11.3	14.4	14.4
Cycle Q Clear(g_c), s	3.0	2.7	15.5	11.3	14.4	14.4
Prop In Lane	1.00	1.00	1.00			0.04
Lane Grp Cap(c), veh/h	388	346	371	2562	1281	1337
V/C Ratio(X)	0.14	0.13	0.03	0.35	0.42	0.42
Avail Cap(c_a), veh/h	388	346	371	2562	1281	1337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.0	37.9	10.0	6.4	6.9	6.9
Incr Delay (d2), s/veh	0.8	0.8	0.0	0.1	1.0	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	1.2	0.2	5.5	7.3	7.6
LnGrp Delay(d), s/veh	38.7	38.6	10.0	6.5	7.9	7.8
LnGrp LOS	D	D	B	A	A	A
Approach Vol, veh/h	99			901	1088	
Approach Delay, s/veh	38.7			6.5	7.8	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				90.0		30.0		90.0
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				86.0		26.0		86.0
Max Q Clear Time (g_c+I1), s				17.5		5.0		16.4
Green Ext Time (p_c), s				7.1		0.2		8.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	8.7
HCM 2010 LOS	A

ANAHEIM - 2040 PLUS PROJECT AM

HCM 2010 Signalized Intersection Summary
1: Manchester Ave & Katella Ave

03/25/2024

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	790	470	300	1260	0	20	0	540	60	200	10
Future Volume (veh/h)	0	790	470	300	1260	0	20	0	540	60	200	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1827	1827	1827	1827	0	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	0	898	534	341	1432	0	15	0	622	68	227	11
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	0	4	4	4	4	0	4	4	4	4	4	4
Cap, veh/h	0	2124	652	427	3736	0	24	0	756	119	919	411
Arrive On Green	0.00	0.43	0.43	0.13	0.59	0.00	0.01	0.00	0.24	0.04	0.26	0.26
Sat Flow, veh/h	0	5152	1532	3375	6540	0	1740	0	3106	3375	3471	1553
Grp Volume(v), veh/h	0	898	534	341	1432	0	15	0	622	68	227	11
Grp Sat Flow(s),veh/h/ln	0	1663	1532	1688	1571	0	1740	0	1553	1688	1736	1553
Q Serve(g_s), s	0.0	11.9	29.0	9.3	11.3	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Cycle Q Clear(g_c), s	0.0	11.9	29.0	9.3	11.3	0.0	0.8	0.0	17.9	1.9	4.9	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2124	652	427	3736	0	24	0	756	119	919	411
V/C Ratio(X)	0.00	0.42	0.82	0.80	0.38	0.00	0.63	0.00	0.82	0.57	0.25	0.03
Avail Cap(c_a), veh/h	0	3060	940	643	5319	0	110	0	756	179	919	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	19.0	23.9	40.1	10.1	0.0	46.4	0.0	33.8	44.9	27.3	25.7
Incr Delay (d2), s/veh	0.0	0.1	3.8	4.2	0.1	0.0	23.8	0.0	9.9	4.3	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	12.9	4.6	4.9	0.0	0.5	0.0	8.7	0.9	2.4	0.2
LnGrp Delay(d), s/veh	0.0	19.1	27.7	44.4	10.1	0.0	70.1	0.0	43.7	49.2	28.0	25.9
LnGrp LOS		B	C	D	B		E		D	D	C	C
Approach Vol, veh/h		1432			1773			637			306	
Approach Delay, s/veh		22.3			16.7			44.3			32.6	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	7.3	27.0	15.9	44.2	5.3	29.0		60.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	23.0	18.0	58.0	6.0	22.0		80.0
Max Q Clear Time (g_c+I1), s	3.9	19.9	11.3	31.0	2.8	6.9		13.3
Green Ext Time (p_c), s	0.0	0.9	0.7	9.2	0.0	1.1		14.8

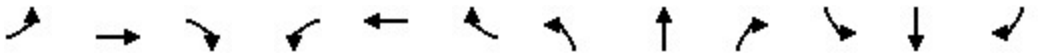
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.1
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	1450	0	0	1120	90	0	0	0	320	360	350
Future Volume (vph)	70	1450	0	0	1120	90	0	0	0	320	360	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	0.99				1.00	0.99	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.94	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3367	6285			5912	1240				1406	5472	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3367	6285			5912	1240				1406	5472	
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	80	1667	0	0	1287	103	0	0	0	368	414	402
RTOR Reduction (vph)	0	0	0	0	1	62	0	0	0	0	6	0
Lane Group Flow (vph)	80	1667	0	0	1296	31	0	0	0	243	935	0
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	6.5	45.3			34.8	34.8				51.4	51.4	
Effective Green, g (s)	6.5	45.3			34.8	34.8				51.4	51.4	
Actuated g/C Ratio	0.06	0.43			0.33	0.33				0.49	0.49	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	209	2719			1965	412				690	2686	
v/s Ratio Prot	0.02	c0.27			c0.22					c0.17	0.17	
v/s Ratio Perm						0.02						
v/c Ratio	0.38	0.61			0.66	0.08				0.35	0.35	
Uniform Delay, d1	47.2	22.9			29.9	23.9				16.4	16.4	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	1.2	0.4			0.8	0.1				0.3	0.1	
Delay (s)	48.3	23.3			30.7	24.0				16.7	16.4	
Level of Service	D	C			C	C				B	B	
Approach Delay (s/veh)		24.5			30.3			0.0			16.5	
Approach LOS		C			C			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	104.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	42.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	440	1230	50	40	800	60	60	70	20	80	10	360
Future Volume (vph)	440	1230	50	40	800	60	60	70	20	80	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.97		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1736	4988	1504	1736	4988	1516	1736	1758		1730	1827	1530
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00		0.67	1.00	1.00
Satd. Flow (perm)	1736	4988	1504	1736	4988	1516	1370	1758		1223	1827	1530
Peak-hour factor, PHF	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85	0.85
Adj. Flow (vph)	518	1447	59	47	941	71	71	82	24	94	12	424
RTOR Reduction (vph)	0	0	26	0	0	52	0	8	0	0	0	307
Lane Group Flow (vph)	518	1447	33	47	941	19	71	98	0	94	12	117
Confl. Peds. (#/hr)	5		3	3		5			2	2		
Confl. Bikes (#/hr)			3			3			3			3
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	35.6	58.8	58.8	4.4	27.6	27.6	28.5	28.5		28.5	28.5	28.5
Effective Green, g (s)	35.6	58.8	58.8	4.4	27.6	27.6	28.5	28.5		28.5	28.5	28.5
Actuated g/C Ratio	0.34	0.57	0.57	0.04	0.27	0.27	0.27	0.27		0.27	0.27	0.27
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	595	2828	852	73	1327	403	376	483		336	502	420
v/s Ratio Prot	c0.30	0.29		0.03	c0.19			0.06			0.01	
v/s Ratio Perm			0.02			0.01	0.05			c0.08		0.08
v/c Ratio	0.87	0.51	0.04	0.64	0.71	0.05	0.19	0.20		0.28	0.02	0.28
Uniform Delay, d1	31.9	13.7	9.9	48.9	34.4	28.3	28.8	28.9		29.5	27.4	29.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	13.1	0.2	0.0	17.8	1.8	0.0	1.1	0.9		2.1	0.1	1.6
Delay (s)	45.0	13.9	10.0	66.7	36.2	28.3	29.9	29.8		31.6	27.5	31.2
Level of Service	D	B	A	E	D	C	C	C		C	C	C
Approach Delay (s/veh)		21.7			37.0			29.8			31.2	
Approach LOS		C			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	12.0
Intersection Capacity Utilization	63.2%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Future Volume (vph)	40	190	40	20	120	20	170	0	90	40	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.98		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1770	4932		3433	4956		1770		2787	1770		2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1770	4932		3433	4956		1770		2787	1770		2787
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	43	204	43	22	129	22	183	0	97	43	0	11
RTOR Reduction (vph)	0	34	0	0	20	0	0	0	29	0	0	3
Lane Group Flow (vph)	43	213	0	22	131	0	183	0	68	43	0	8
Confl. Peds. (#/hr)	4		4	4		4						
Confl. Bikes (#/hr)			3			3						
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Effective Green, g (s)	4.9	11.2		2.5	8.8		60.7		60.7	60.7		60.7
Actuated g/C Ratio	0.06	0.13		0.03	0.10		0.70		0.70	0.70		0.70
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	100	639		99	504		1243		1957	1243		1957
v/s Ratio Prot	c0.02	c0.04		0.01	0.03							
v/s Ratio Perm							c0.10		0.02	0.02		0.00
v/c Ratio	0.43	0.33		0.22	0.26		0.15		0.03	0.03		0.00
Uniform Delay, d1	39.4	34.2		41.0	35.8		4.3		3.9	3.9		3.8
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	3.0	0.3		1.1	0.3		0.2		0.0	0.1		0.0
Delay (s)	42.4	34.5		42.1	36.1		4.5		4.0	4.0		3.8
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		35.7			36.8			4.3			3.9	
Approach LOS		D			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	22.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.19		
Actuated Cycle Length (s)	86.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	28.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Future Volume (veh/h)	270	1040	450	380	920	130	120	540	130	310	1170	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	278	1072	464	392	948	134	124	557	134	320	1206	247
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	309	1034	447	399	1574	222	143	1171	349	383	1260	258
Arrive On Green	0.17	0.30	0.30	0.22	0.35	0.35	0.04	0.23	0.23	0.11	0.30	0.30
Sat Flow, veh/h	1774	3448	1492	1774	4489	632	3442	5085	1513	3442	4199	860
Grp Volume(v), veh/h	278	1054	482	392	715	367	124	557	134	320	974	479
Grp Sat Flow(s),veh/h/ln	1774	1695	1549	1774	1695	1732	1721	1695	1513	1721	1695	1669
Q Serve(g_s), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Cycle Q Clear(g_c), s	18.4	36.0	36.0	26.4	20.8	21.0	4.3	11.4	9.0	10.9	33.8	33.8
Prop In Lane	1.00		0.96	1.00		0.37	1.00		1.00	1.00		0.52
Lane Grp Cap(c), veh/h	309	1017	465	399	1189	607	143	1171	349	383	1017	501
V/C Ratio(X)	0.90	1.04	1.04	0.98	0.60	0.60	0.86	0.48	0.38	0.84	0.96	0.96
Avail Cap(c_a), veh/h	429	1017	465	399	1189	607	143	1171	349	488	1017	501
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	42.0	42.0	46.3	32.1	32.1	57.2	39.9	39.0	52.2	41.2	41.2
Incr Delay (d2), s/veh	16.9	38.1	51.6	40.2	0.9	1.7	38.7	1.4	3.2	9.7	19.6	30.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.5	22.2	22.0	17.4	9.9	10.3	2.8	5.5	4.0	5.7	18.6	19.9
LnGrp Delay(d), s/veh	65.4	80.1	93.6	86.4	32.9	33.8	95.8	41.3	42.2	62.0	60.9	72.1
LnGrp LOS	E	F	F	F	C	C	F	D	D	E	E	E
Approach Vol, veh/h		1814			1474			815			1773	
Approach Delay, s/veh		81.4			47.4			49.7			64.1	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.4	31.6	31.0	40.0	9.0	40.0	24.9	46.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	24.0	27.0	36.0	5.0	36.0	29.0	34.0
Max Q Clear Time (g_c+I1), s	12.9	13.4	28.4	38.0	6.3	35.8	20.4	23.0
Green Ext Time (p_c), s	0.4	3.0	0.0	0.0	0.0	0.1	0.5	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.3
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Future Volume (veh/h)	90	20	30	30	80	110	50	580	70	250	1380	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	0.99		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	94	21	31	31	83	115	52	604	73	260	1438	312
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	176	136	201	299	143	198	222	3704	1127	587	3034	656
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1178	672	992	1339	705	977	274	5085	1547	759	4166	901
Grp Volume(v), veh/h	94	0	52	31	0	198	52	604	73	260	1169	581
Grp Sat Flow(s),veh/h/ln	1178	0	1664	1339	0	1682	274	1695	1547	759	1695	1677
Q Serve(g_s), s	9.1	0.0	3.0	2.3	0.0	12.4	11.4	4.3	1.6	18.8	16.7	16.8
Cycle Q Clear(g_c), s	21.6	0.0	3.0	5.3	0.0	12.4	28.2	4.3	1.6	23.0	16.7	16.8
Prop In Lane	1.00		0.60	1.00		0.58	1.00		1.00	1.00		0.54
Lane Grp Cap(c), veh/h	176	0	338	299	0	342	222	3704	1127	587	2469	1221
V/C Ratio(X)	0.53	0.00	0.15	0.10	0.00	0.58	0.23	0.16	0.06	0.44	0.47	0.48
Avail Cap(c_a), veh/h	209	0	385	337	0	389	222	3704	1127	587	2469	1221
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.7	0.0	38.2	40.4	0.0	42.0	12.4	4.9	4.5	8.4	6.6	6.6
Incr Delay (d2), s/veh	2.5	0.0	0.2	0.2	0.0	1.7	2.5	0.1	0.1	2.4	0.7	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.4	0.9	0.0	5.9	1.0	2.0	0.7	4.3	8.0	8.2
LnGrp Delay(d), s/veh	54.2	0.0	38.5	40.6	0.0	43.7	14.9	5.0	4.6	10.9	7.2	7.9
LnGrp LOS	D		D	D		D	B	A	A	B	A	A
Approach Vol, veh/h		146			229			729			2010	
Approach Delay, s/veh		48.6			43.2			5.7			7.9	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		89.0		27.7		89.0		27.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		85.0		27.0		85.0		27.0
Max Q Clear Time (g_c+I1), s		30.2		23.6		25.0		14.4
Green Ext Time (p_c), s		6.6		0.2		25.0		0.9

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		11.9
HCM 2010 LOS		B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Future Volume (veh/h)	160	270	80	50	320	150	70	630	30	310	1160	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	290	86	54	344	161	75	677	32	333	1247	215
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	276	933	271	336	811	372	97	1621	76	373	2097	362
Arrive On Green	0.35	0.35	0.35	0.35	0.35	0.35	0.05	0.33	0.33	0.21	0.48	0.48
Sat Flow, veh/h	890	2696	783	1002	2345	1076	1774	4973	234	1774	4354	751
Grp Volume(v), veh/h	172	188	188	54	258	247	75	461	248	333	971	491
Grp Sat Flow(s),veh/h/ln	890	1770	1710	1002	1770	1651	1774	1695	1816	1774	1695	1714
Q Serve(g_s), s	18.7	7.9	8.2	4.3	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Cycle Q Clear(g_c), s	30.5	7.9	8.2	12.5	11.4	11.7	4.2	10.8	10.9	18.6	21.2	21.2
Prop In Lane	1.00		0.46	1.00		0.65	1.00		0.13	1.00		0.44
Lane Grp Cap(c), veh/h	276	612	591	336	612	571	97	1105	592	373	1633	826
V/C Ratio(X)	0.62	0.31	0.32	0.16	0.42	0.43	0.78	0.42	0.42	0.89	0.59	0.59
Avail Cap(c_a), veh/h	388	835	807	463	835	779	192	1105	592	593	1633	826
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.3	24.4	24.4	29.0	25.5	25.6	47.5	26.7	26.8	39.1	19.2	19.2
Incr Delay (d2), s/veh	2.3	0.3	0.3	0.2	0.5	0.5	12.4	1.2	2.2	10.4	1.6	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	3.9	3.9	1.2	5.6	5.4	2.4	5.2	5.8	10.1	10.2	10.7
LnGrp Delay(d), s/veh	39.6	24.6	24.8	29.2	25.9	26.1	59.9	27.9	29.0	49.4	20.8	22.3
LnGrp LOS	D	C	C	C	C	C	E	C	C	D	C	C
Approach Vol, veh/h		548			559			784			1795	
Approach Delay, s/veh		29.4			26.3			31.3			26.5	
Approach LOS		C			C			C			C	

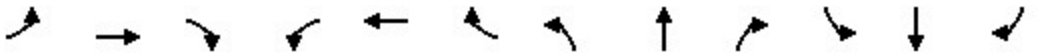
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	25.4	37.2		39.2	9.5	53.0		39.2
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	34.0	26.0		48.0	11.0	49.0		48.0
Max Q Clear Time (g_c+I1), s	20.6	12.9		32.5	6.2	23.2		14.5
Green Ext Time (p_c), s	0.8	3.5		2.7	0.0	11.2		3.4

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		27.9
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Future Volume (veh/h)	10	10	0	560	10	90	50	650	430	110	1160	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	11	0	622	11	100	56	722	478	122	1289	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	45	32	0	570	9	872	72	922	421	148	1637	14
Arrive On Green	0.55	0.55	0.00	0.55	0.55	0.55	0.04	0.27	0.27	0.08	0.31	0.31
Sat Flow, veh/h	0	58	0	932	16	1595	1792	3424	1562	1792	5252	45
Grp Volume(v), veh/h	22	0	0	633	0	100	56	722	478	122	840	460
Grp Sat Flow(s),veh/h/ln	58	0	0	949	0	1595	1792	1712	1562	1792	1712	1873
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Cycle Q Clear(g_c), s	65.0	0.0	0.0	65.0	0.0	3.6	3.7	23.2	32.0	8.0	26.6	26.6
Prop In Lane	0.50		0.00	0.98		1.00	1.00		1.00	1.00		0.02
Lane Grp Cap(c), veh/h	77	0	0	579	0	872	72	922	421	148	1067	584
V/C Ratio(X)	0.29	0.00	0.00	1.09	0.00	0.11	0.78	0.78	1.14	0.82	0.79	0.79
Avail Cap(c_a), veh/h	77	0	0	579	0	872	90	922	421	166	1067	584
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.0	0.0	0.0	30.3	0.0	13.0	56.5	40.2	43.4	53.7	37.3	37.3
Incr Delay (d2), s/veh	2.0	0.0	0.0	65.3	0.0	0.1	27.3	6.6	86.6	25.3	5.9	10.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	29.3	0.0	1.6	2.4	11.8	23.8	5.0	13.5	15.5
LnGrp Delay(d), s/veh	31.0	0.0	0.0	95.5	0.0	13.1	83.8	46.8	130.0	79.0	43.2	47.6
LnGrp LOS	C			F		B	F	D	F	E	D	D
Approach Vol, veh/h		22			733			1256			1422	
Approach Delay, s/veh		31.0			84.3			80.1			47.7	
Approach LOS		C			F			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	36.0		69.0	8.8	41.0		69.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	32.0		65.0	6.0	37.0		65.0
Max Q Clear Time (g_c+I1), s	10.0	34.0		67.0	5.7	28.6		67.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	4.9		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		67.3
HCM 2010 LOS		E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	320	520	200	690	600	40	160	650	500	140	1310	270
Future Volume (vph)	320	520	200	690	600	40	160	650	500	140	1310	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97	1.00	1.00	0.97	1.00	1.00	0.98
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.98	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5898	1235	3433	5085	1541	3433	5085	1537	3433	5085	1548
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5898	1235	3433	5085	1541	3433	5085	1537	3433	5085	1548
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	337	547	211	726	632	42	168	684	526	147	1379	284
RTOR Reduction (vph)	0	20	116	0	0	32	0	0	317	0	0	173
Lane Group Flow (vph)	337	603	19	726	632	10	168	684	209	147	1379	111
Confl. Peds. (#/hr)	7		12	12		7	4		8	8		4
Confl. Bikes (#/hr)									1			3
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	15.6	15.4	15.4	28.6	28.4	28.4	9.4	45.2	45.2	8.7	44.5	44.5
Effective Green, g (s)	15.6	15.4	15.4	28.6	28.4	28.4	9.4	45.2	45.2	8.7	44.5	44.5
Actuated g/C Ratio	0.14	0.14	0.14	0.25	0.25	0.25	0.08	0.40	0.40	0.08	0.39	0.39
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	470	797	166	862	1267	384	283	2017	609	262	1986	604
v/s Ratio Prot	0.10	c0.10		c0.21	0.12		c0.05	0.13		0.04	c0.27	
v/s Ratio Perm			0.02			0.01			0.14			0.07
v/c Ratio	0.72	0.76	0.12	0.84	0.50	0.03	0.59	0.34	0.34	0.56	0.69	0.18
Uniform Delay, d1	47.0	47.4	43.3	40.5	36.6	32.3	50.4	23.9	24.0	50.8	29.0	22.8
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	4.1	0.3	7.5	0.3	0.0	3.3	0.5	1.5	2.7	2.0	0.7
Delay (s)	52.2	51.6	43.6	48.0	37.0	32.3	53.7	24.4	25.5	53.5	31.0	23.4
Level of Service	D	D	D	D	D	C	D	C	C	D	C	C
Approach Delay (s/veh)		50.8			42.6			28.4			31.7	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	113.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	73.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	390	20	300	0	0	0	130	1070	10	10	1670	510
Future Volume (veh/h)	390	20	300	0	0	0	130	1070	10	10	1670	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	429	22	330	0	0	0	143	1176	11	11	1835	560
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	556	491	431	66	981	0	189	3131	29	36	2173	635
Arrive On Green	0.28	0.28	0.28	0.00	0.00	0.00	0.05	0.60	0.60	0.01	0.56	0.56
Sat Flow, veh/h	1768	1770	1554	1025	3632	0	3442	5196	49	3442	3894	1138
Grp Volume(v), veh/h	429	22	330	0	0	0	143	767	420	11	1587	808
Grp Sat Flow(s),veh/h/ln	1768	1770	1554	1025	1770	0	1721	1695	1854	1721	1695	1642
Q Serve(g_s), s	25.3	1.0	21.3	0.0	0.0	0.0	4.5	12.7	12.7	0.3	42.5	46.8
Cycle Q Clear(g_c), s	25.3	1.0	21.3	0.0	0.0	0.0	4.5	12.7	12.7	0.3	42.5	46.8
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.03	1.00		0.69
Lane Grp Cap(c), veh/h	556	491	431	66	981	0	189	2043	1117	36	1892	916
V/C Ratio(X)	0.77	0.04	0.77	0.00	0.00	0.00	0.76	0.38	0.38	0.31	0.84	0.88
Avail Cap(c_a), veh/h	729	664	583	166	1328	0	189	2043	1117	126	1892	916
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.7	28.9	36.2	0.0	0.0	0.0	50.9	11.2	11.2	53.7	20.1	21.0
Incr Delay (d2), s/veh	3.7	0.0	4.2	0.0	0.0	0.0	16.0	0.5	1.0	4.8	4.7	12.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.9	0.5	9.7	0.0	0.0	0.0	2.5	6.0	6.7	0.2	21.1	24.1
LnGrp Delay(d), s/veh	41.4	28.9	40.4	0.0	0.0	0.0	67.0	11.7	12.1	58.5	24.7	33.0
LnGrp LOS	D	C	D				E	B	B	E	C	C
Approach Vol, veh/h		781			0			1330			2406	
Approach Delay, s/veh		40.7			0.0			17.8			27.6	
Approach LOS		D						B			C	

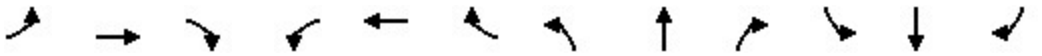
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	69.9		34.3	10.0	65.0		34.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	63.0		41.0	6.0	61.0		41.0
Max Q Clear Time (g_c+I1), s	2.3	14.7		27.3	6.5	48.8		0.0
Green Ext Time (p_c), s	0.0	9.6		3.0	0.0	10.5		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		27.0
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	1470	80	180	620	50	360	860	630	260	1550	280
Future Volume (veh/h)	210	1470	80	180	620	50	360	860	630	260	1550	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	1598	87	196	674	54	391	935	685	283	1685	304
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	288	1659	90	203	1495	119	406	1828	589	342	1984	358
Arrive On Green	0.08	0.33	0.33	0.06	0.31	0.31	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	3476	4980	271	3476	4843	385	3476	4853	1565	3476	5536	999
Grp Volume(v), veh/h	228	1098	587	196	475	253	391	935	685	283	1477	512
Grp Sat Flow(s),veh/h/ln	1738	1712	1827	1738	1712	1804	1738	1618	1565	1738	1618	1681
Q Serve(g_s), s	7.7	37.8	37.8	6.8	13.4	13.5	13.4	17.8	45.2	9.6	33.7	33.7
Cycle Q Clear(g_c), s	7.7	37.8	37.8	6.8	13.4	13.5	13.4	17.8	45.2	9.6	33.7	33.7
Prop In Lane	1.00		0.15	1.00		0.21	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	288	1141	609	203	1057	557	406	1828	589	342	1740	603
V/C Ratio(X)	0.79	0.96	0.96	0.97	0.45	0.45	0.96	0.51	1.16	0.83	0.85	0.85
Avail Cap(c_a), veh/h	377	1141	609	203	1057	557	406	1828	589	406	1740	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	39.3	39.3	56.4	33.3	33.3	52.7	28.9	37.4	53.1	35.5	35.5
Incr Delay (d2), s/veh	8.3	18.3	27.5	53.4	0.3	0.6	35.3	1.0	90.6	11.5	5.4	14.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	20.8	23.7	4.7	6.4	6.8	8.5	8.1	34.3	5.1	15.9	18.0
LnGrp Delay(d), s/veh	62.3	57.6	66.8	109.8	33.6	33.9	88.0	29.9	128.0	64.6	40.9	49.5
LnGrp LOS	E	E	E	F	C	C	F	C	F	E	D	D
Approach Vol, veh/h		1913			924			2011			2272	
Approach Delay, s/veh		61.0			49.8			74.6			45.8	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.8	49.2	11.0	44.0	18.0	47.0	13.9	41.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	43.0	7.0	40.0	14.0	43.0	13.0	34.0
Max Q Clear Time (g_c+I1), s	11.6	47.2	8.8	39.8	15.4	35.7	9.7	15.5
Green Ext Time (p_c), s	0.2	0.0	0.0	0.1	0.0	6.0	0.2	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	58.5
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1040	240	70	1150	70	240	0	170	100	0	30
Future Volume (vph)	10	1040	240	70	1150	70	240	0	170	100	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.98	1.00		0.98
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3396	6151		3400	6285		1752	1453	1453	1752		1531
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3396	6151		3400	6285		1752	1453	1453	1752		1531
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1130	261	76	1250	76	261	0	185	109	0	33
RTOR Reduction (vph)	0	35	0	0	7	0	0	61	60	0	0	24
Lane Group Flow (vph)	11	1356	0	76	1319	0	261	32	32	109	0	9
Confl. Peds. (#/hr)	2		1	1		2	6		6	6		6
Confl. Bikes (#/hr)						3			1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	0.7	34.9		5.8	40.0		20.7	36.8	36.8	11.9		28.0
Effective Green, g (s)	0.7	34.9		5.8	40.0		20.7	36.8	36.8	11.9		28.0
Actuated g/C Ratio	0.01	0.33		0.06	0.38		0.20	0.35	0.35	0.11		0.27
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	22	2036		187	2385		344	507	507	197		406
v/s Ratio Prot	0.00	c0.22		c0.02	0.21		c0.15	c0.02		0.06		
v/s Ratio Perm									0.02			0.01
v/c Ratio	0.50	0.67		0.41	0.55		0.76	0.06	0.06	0.55		0.02
Uniform Delay, d1	52.2	30.2		48.1	25.7		40.0	22.8	22.8	44.2		28.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	16.8	0.8		1.4	0.3		9.2	0.2	0.2	3.3		0.1
Delay (s)	68.9	31.1		49.6	26.0		49.2	23.1	23.1	47.6		28.7
Level of Service	E	C		D	C		D	C	C	D		C
Approach Delay (s/veh)		31.4			27.2			38.4			43.2	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	105.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	54.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Future Volume (veh/h)	90	1270	40	550	1410	180	40	90	150	850	550	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.98		0.95	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	91	1283	40	556	1424	182	40	91	152	859	556	222
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	115	1224	38	488	1239	544	203	251	214	717	1120	446
Arrive On Green	0.03	0.24	0.24	0.14	0.35	0.35	0.03	0.14	0.14	0.34	0.46	0.46
Sat Flow, veh/h	3442	5063	158	3442	3539	1555	1774	1770	1510	1774	2452	976
Grp Volume(v), veh/h	91	859	464	556	1424	182	40	91	152	859	401	377
Grp Sat Flow(s),veh/h/ln	1721	1695	1831	1721	1770	1555	1774	1770	1510	1774	1770	1658
Q Serve(g_s), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Cycle Q Clear(g_c), s	3.2	29.0	29.0	17.0	42.0	10.3	2.3	5.6	11.5	41.0	19.1	19.2
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.59
Lane Grp Cap(c), veh/h	115	819	443	488	1239	544	203	251	214	717	809	758
V/C Ratio(X)	0.79	1.05	1.05	1.14	1.15	0.33	0.20	0.36	0.71	1.20	0.50	0.50
Avail Cap(c_a), veh/h	115	819	443	488	1239	544	230	251	214	717	809	758
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	45.5	45.5	51.5	39.0	28.7	42.5	46.6	49.2	26.8	22.9	22.9
Incr Delay (d2), s/veh	30.6	44.9	56.1	85.4	77.1	0.4	0.5	4.0	18.2	102.2	2.2	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	18.6	21.5	13.8	33.7	4.5	1.1	3.0	5.9	44.1	9.7	9.3
LnGrp Delay(d), s/veh	88.2	90.4	101.6	136.9	116.1	29.1	43.0	50.6	67.3	129.0	25.0	25.2
LnGrp LOS	F	F	F	F	F	C	D	D	E	F	C	C
Approach Vol, veh/h		1414			2162			283			1637	
Approach Delay, s/veh		93.9			114.1			58.5			79.6	
Approach LOS		F			F			E			E	

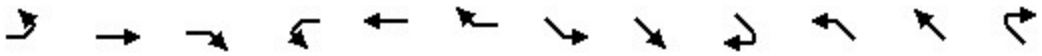
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	45.0	21.0	21.0	33.0	7.2	58.8	8.0	46.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	41.0	17.0	17.0	29.0	5.0	53.0	4.0	42.0
Max Q Clear Time (g_c+I1), s	43.0	13.5	19.0	31.0	4.3	21.2	5.2	44.0
Green Ext Time (p_c), s	0.0	0.4	0.0	0.0	0.0	5.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	95.8
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Future Volume (veh/h)	70	460	40	10	300	40	20	90	50	570	430	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1900	1881	1900
Adj Flow Rate, veh/h	77	505	44	11	330	44	22	99	55	626	473	264
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	171	669	58	112	638	84	426	1658	864	945	754	421
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	1014	3324	289	863	3168	419	725	2274	1185	1211	1034	578
Grp Volume(v), veh/h	77	271	278	11	185	189	22	76	78	631	0	732
Grp Sat Flow(s),veh/h/ln	1014	1787	1826	863	1787	1800	725	1787	1672	1221	0	1601
Q Serve(g_s), s	8.4	16.4	16.5	1.4	10.6	10.8	1.8	1.4	1.5	33.7	0.0	26.2
Cycle Q Clear(g_c), s	19.3	16.4	16.5	17.9	10.6	10.8	28.0	1.4	1.5	35.2	0.0	26.2
Prop In Lane	1.00		0.16	1.00		0.23	1.00		0.71	0.99		0.36
Lane Grp Cap(c), veh/h	171	360	367	112	360	362	426	1303	1219	953	0	1168
V/C Ratio(X)	0.45	0.75	0.76	0.10	0.51	0.52	0.05	0.06	0.06	0.66	0.00	0.63
Avail Cap(c_a), veh/h	214	434	444	148	434	437	426	1303	1219	953	0	1168
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	49.7	43.3	43.3	51.8	41.0	41.1	14.8	4.4	4.4	9.4	0.0	7.8
Incr Delay (d2), s/veh	1.8	5.9	6.0	0.4	1.1	1.2	0.2	0.1	0.1	3.6	0.0	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.5	8.7	9.0	0.3	5.3	5.5	0.4	0.7	0.7	12.4	0.0	12.2
LnGrp Delay(d), s/veh	51.5	49.2	49.4	52.2	42.1	42.2	15.0	4.5	4.5	13.1	0.0	10.3
LnGrp LOS	D	D	D	D	D	D	B	A	A	B		B
Approach Vol, veh/h		626			385			176			1363	
Approach Delay, s/veh		49.6			42.5			5.8			11.6	
Approach LOS		D			D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		88.0		27.2		88.0		27.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		84.0		28.0		84.0		28.0
Max Q Clear Time (g_c+I1), s		30.0		21.3		37.2		19.9
Green Ext Time (p_c), s		1.1		1.9		13.6		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.2
HCM 2010 LOS	C



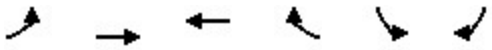
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	280	940	90	150	940	550	570	100	350	10	20	20
Future Volume (vph)	280	940	90	150	940	550	570	100	350	10	20	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.99	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.91	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1568	3400	5036	1568	3400	1589	1469	1752	1845	1568
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1568	3400	5036	1568	3400	1589	1469	1752	1845	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	295	989	95	158	989	579	600	105	368	11	21	21
RTOR Reduction (vph)	0	0	62	0	0	405	0	41	173	0	0	17
Lane Group Flow (vph)	295	989	33	158	989	174	600	204	55	11	21	4
Confl. Peds. (#/hr)									1	1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	13.9	37.0	37.0	9.3	32.4	32.4	26.0	26.0	26.0	19.3	19.3	19.3
Effective Green, g (s)	13.9	37.0	37.0	9.3	32.4	32.4	26.0	26.0	26.0	19.3	19.3	19.3
Actuated g/C Ratio	0.13	0.34	0.34	0.09	0.30	0.30	0.24	0.24	0.24	0.18	0.18	0.18
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	439	1731	539	293	1516	472	821	383	354	314	330	281
v/s Ratio Prot	c0.09	0.20		0.05	c0.20		c0.18	0.13		0.01	c0.01	
v/s Ratio Perm			0.02			0.11			0.04			0.00
v/c Ratio	0.67	0.57	0.06	0.54	0.65	0.37	0.73	0.53	0.16	0.04	0.06	0.01
Uniform Delay, d1	44.7	28.8	23.7	47.1	32.7	29.6	37.6	35.5	32.2	36.5	36.6	36.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	4.0	0.5	0.0	1.9	1.0	0.5	3.4	1.4	0.2	0.2	0.4	0.1
Delay (s)	48.7	29.3	23.7	49.0	33.7	30.1	40.9	36.9	32.4	36.7	37.0	36.4
Level of Service	D	C	C	D	C	C	D	D	C	D	D	D
Approach Delay (s/veh)		33.1			33.9			38.2			36.7	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	107.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

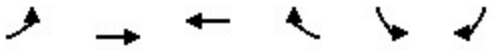
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Future Volume (vph)	0	1760	70	180	920	0	20	0	110	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frt		0.99		1.00	1.00		1.00	0.85				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3554		1787	3574		1626	2916				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3554		1787	3574		1626	2916				
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1913	76	196	1000	0	22	0	120	0	0	0
RTOR Reduction (vph)	0	2	0	0	0	0	0	102	0	0	0	0
Lane Group Flow (vph)	0	1987	0	196	1000	0	20	20	0	0	0	0
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		60.0		12.0	76.0		16.0	16.0				
Effective Green, g (s)		60.0		12.0	76.0		16.0	16.0				
Actuated g/C Ratio		0.60		0.12	0.76		0.16	0.16				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		2132		214	2716		260	466				
v/s Ratio Prot		c0.56		c0.11	0.28		c0.01	0.01				
v/s Ratio Perm												
v/c Ratio		0.93		0.92	0.37		0.08	0.04				
Uniform Delay, d1		18.1		43.5	4.0		35.7	35.5				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		8.1		38.7	0.1		0.6	0.2				
Delay (s)		26.3		82.2	4.1		36.3	35.7				
Level of Service		C		F	A		D	D				
Approach Delay (s/veh)		26.3			16.9			35.8			0.0	
Approach LOS		C			B			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	100.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	74.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



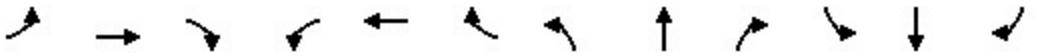
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1490	1030	0	980	750
Future Volume (vph)	0	1490	1030	0	980	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5036	5036		1744	1490
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5036	5036		1744	1490
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	0	1536	1062	0	1010	773
RTOR Reduction (vph)	0	0	0	0	2	3
Lane Group Flow (vph)	0	1536	1062	0	1085	693
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		37.0	37.0		75.0	75.0
Effective Green, g (s)		37.0	37.0		75.0	75.0
Actuated g/C Ratio		0.31	0.31		0.63	0.63
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1552	1552		1090	931
v/s Ratio Prot		c0.31	0.21		c0.62	
v/s Ratio Perm						0.46
v/c Ratio		0.99	0.68		1.00	0.74
Uniform Delay, d1		41.3	36.4		22.3	15.8
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		20.2	1.3		26.1	5.4
Delay (s)		61.5	37.6		48.5	21.1
Level of Service		E	D		D	C
Approach Delay (s/veh)		61.5	37.6		37.8	
Approach LOS		E	D		D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	46.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.0%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	1210	1000	0	250	350
Future Volume (vph)	0	1210	1000	0	250	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.94	0.85
Flt Protected		1.00	1.00		0.97	1.00
Satd. Flow (prot)		5036	5036		3271	1427
Flt Permitted		1.00	1.00		0.97	1.00
Satd. Flow (perm)		5036	5036		3271	1427
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	0	1274	1053	0	263	368
RTOR Reduction (vph)	0	0	0	0	38	38
Lane Group Flow (vph)	0	1274	1053	0	391	164
Confl. Peds. (#/hr)	4			4		
Confl. Bikes (#/hr)				7		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		30.8	30.8		46.2	46.2
Effective Green, g (s)		30.8	30.8		46.2	46.2
Actuated g/C Ratio		0.36	0.36		0.54	0.54
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1824	1824		1777	775
v/s Ratio Prot		c0.25	0.21		c0.12	
v/s Ratio Perm						0.11
v/c Ratio		0.70	0.58		0.22	0.21
Uniform Delay, d1		23.1	21.9		10.1	10.0
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		1.2	0.4		0.3	0.6
Delay (s)		24.3	22.3		10.3	10.6
Level of Service		C	C		B	B
Approach Delay (s/veh)		24.3	22.3		10.4	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	85.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	40.8%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Future Volume (vph)	0	1770	360	360	490	0	0	0	0	290	60	350
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.92	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (prot)		3413	1436	1787	3574					1698	1558	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.99	1.00
Satd. Flow (perm)		3413	1436	1787	3574					1698	1558	1519
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	0	2011	409	409	557	0	0	0	0	330	68	398
RTOR Reduction (vph)	0	1	148	0	0	0	0	0	0	0	35	215
Lane Group Flow (vph)	0	2051	220	409	557	0	0	0	0	274	232	40
Confl. Peds. (#/hr)	5					5						
Confl. Bikes (#/hr)			3			9						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Effective Green, g (s)		64.0	64.0	25.0	93.0					19.0	19.0	19.0
Actuated g/C Ratio		0.53	0.53	0.21	0.78					0.16	0.16	0.16
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1820	765	372	2769					268	246	240
v/s Ratio Prot		c0.60		c0.23	0.16							
v/s Ratio Perm			0.15							c0.16	0.15	0.03
v/c Ratio		1.13	0.29	1.10	0.20					1.02	0.95	0.17
Uniform Delay, d1		28.0	15.4	47.5	3.6					50.5	50.0	43.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		64.9	0.2	76.2	0.0					60.9	44.8	1.5
Delay (s)		92.9	15.6	123.7	3.6					111.4	94.8	45.2
Level of Service		F	B	F	A					F	F	D
Approach Delay (s/veh)		81.1			54.5			0.0			84.6	
Approach LOS		F			D			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	75.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Future Volume (veh/h)	20	1460	160	80	630	0	20	10	10	160	50	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	22	1587	174	87	685	0	22	11	11	174	54	185
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	34	2180	239	113	1821	0	153	76	200	224	70	254
Arrive On Green	0.02	0.47	0.47	0.06	0.51	0.00	0.13	0.13	0.13	0.16	0.16	0.16
Sat Flow, veh/h	1792	4683	512	1792	3668	0	1214	607	1584	1383	429	1564
Grp Volume(v), veh/h	22	1160	601	87	685	0	33	0	11	228	0	185
Grp Sat Flow(s),veh/h/ln	1792	1712	1771	1792	1787	0	1821	0	1584	1812	0	1564
Q Serve(g_s), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Cycle Q Clear(g_c), s	1.1	23.9	24.0	4.2	10.2	0.0	1.4	0.0	0.5	10.5	0.0	9.8
Prop In Lane	1.00		0.29	1.00		0.00	0.67		1.00	0.76		1.00
Lane Grp Cap(c), veh/h	34	1594	825	113	1821	0	229	0	200	294	0	254
V/C Ratio(X)	0.65	0.73	0.73	0.77	0.38	0.00	0.14	0.00	0.06	0.78	0.00	0.73
Avail Cap(c_a), veh/h	103	2117	1095	246	2497	0	229	0	200	560	0	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	42.5	18.9	18.9	40.3	13.0	0.0	34.0	0.0	33.6	35.0	0.0	34.7
Incr Delay (d2), s/veh	18.9	0.9	1.7	10.6	0.1	0.0	1.3	0.0	0.5	4.4	0.0	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	11.5	12.1	2.4	5.0	0.0	0.8	0.0	0.3	5.6	0.0	4.5
LnGrp Delay(d), s/veh	61.4	19.7	20.6	50.9	13.1	0.0	35.3	0.0	34.1	39.4	0.0	38.7
LnGrp LOS	E	B	C	D	B		D		C	D		D
Approach Vol, veh/h		1783			772			44			413	
Approach Delay, s/veh		20.5			17.4			35.0			39.1	
Approach LOS		C			B			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		15.0	9.5	44.7		18.2	5.7	48.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		11.0	12.0	54.0		27.0	5.0	61.0
Max Q Clear Time (g_c+I1), s		3.4	6.2	26.0		12.5	3.1	12.2
Green Ext Time (p_c), s		0.1	0.1	14.7		1.5	0.0	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.5
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1380	0	0	660	520	690
Future Volume (veh/h)	1380	0	0	660	520	690
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	0	0	1845	1845	1845
Adj Flow Rate, veh/h	1516	0	0	725	571	758
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	0	0	3	3	3
Cap, veh/h	1713	0	0	1713	1040	929
Arrive On Green	0.34	0.00	0.00	0.34	0.59	0.59
Sat Flow, veh/h	5368	0	0	5368	1757	1568
Grp Volume(v), veh/h	1516	0	0	725	571	758
Grp Sat Flow(s),veh/h/ln	1679	0	0	1679	1757	1568
Q Serve(g_s), s	33.6	0.0	0.0	13.1	23.2	45.1
Cycle Q Clear(g_c), s	33.6	0.0	0.0	13.1	23.2	45.1
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1713	0	0	1713	1040	929
V/C Ratio(X)	0.89	0.00	0.00	0.42	0.55	0.82
Avail Cap(c_a), veh/h	1789	0	0	1789	1040	929
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.8	0.0	0.0	30.1	14.6	19.0
Incr Delay (d2), s/veh	5.6	0.0	0.0	0.2	2.1	7.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.5	0.0	0.0	6.1	11.7	21.4
LnGrp Delay(d), s/veh	42.4	0.0	0.0	30.2	16.6	26.9
LnGrp LOS	D			C	B	C
Approach Vol, veh/h	1516			725	1329	
Approach Delay, s/veh	42.4			30.2	22.5	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		44.2				44.2
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		47.1		35.6				15.1
Green Ext Time (p_c), s		5.3		4.6				5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	750	0	0	1160	790	1300
Future Volume (vph)	750	0	0	1160	790	1300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.93	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7471			6346	3249	1427
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7471			6346	3249	1427
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	806	0	0	1247	849	1398
RTOR Reduction (vph)	0	0	0	0	4	4
Lane Group Flow (vph)	806	0	0	1247	1530	709
Confl. Peds. (#/hr)		1	1			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	29.1			29.1	82.0	82.0
Effective Green, g (s)	29.1			29.1	82.0	82.0
Actuated g/C Ratio	0.24			0.24	0.69	0.69
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1825			1550	2236	982
v/s Ratio Prot	0.11			c0.20	0.47	
v/s Ratio Perm						c0.50
v/c Ratio	0.44			0.80	0.68	0.72
Uniform Delay, d1	38.1			42.3	10.9	11.5
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.2			3.1	1.7	4.6
Delay (s)	38.3			45.5	12.6	16.1
Level of Service	D			D	B	B
Approach Delay (s/veh)	38.3			45.5	13.7	
Approach LOS	D			D	B	

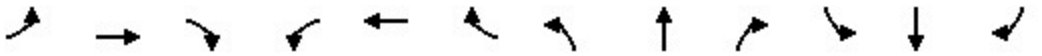
Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	119.1	Sum of lost time (s)	8.0
Intersection Capacity Utilization	69.2%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



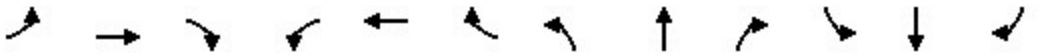
Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1870	0	0	930	70	470
Future Volume (vph)	1870	0	0	930	70	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.88	0.85
Flt Protected	1.00			1.00	0.99	1.00
Satd. Flow (prot)	3574			3574	3191	1455
Flt Permitted	1.00			1.00	0.99	1.00
Satd. Flow (perm)	3574			3574	3191	1455
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	2101	0	0	1045	79	528
RTOR Reduction (vph)	0	0	0	0	11	11
Lane Group Flow (vph)	2101	0	0	1045	332	253
Confl. Peds. (#/hr)		1	1			
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	75.3			75.3	31.2	31.2
Effective Green, g (s)	75.3			75.3	31.2	31.2
Actuated g/C Ratio	0.66			0.66	0.27	0.27
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2350			2350	869	396
v/s Ratio Prot	c0.59			0.29	0.10	
v/s Ratio Perm						c0.17
v/c Ratio	0.89			0.44	0.38	0.64
Uniform Delay, d1	16.3			9.5	33.8	36.7
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	4.8			0.1	1.3	7.7
Delay (s)	21.1			9.6	35.1	44.4
Level of Service	C			A	D	D
Approach Delay (s/veh)	21.1			9.6	39.1	
Approach LOS	C			A	D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.82		
Actuated Cycle Length (s)	114.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	77.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Future Volume (vph)	10	1270	0	0	880	210	70	0	150	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			
Frpb, ped/bikes	1.00	1.00			1.00		1.00		0.99			
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			
Frt	1.00	1.00			0.97		1.00		0.85			
Flt Protected	0.95	1.00			1.00		0.95		1.00			
Satd. Flow (prot)	1787	3574			4966		1787		1579			
Flt Permitted	0.18	1.00			1.00		0.95		1.00			
Satd. Flow (perm)	346	3574			4966		1787		1579			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1380	0	0	957	228	76	0	163	0	0	0
RTOR Reduction (vph)	0	0	0	0	47	0	0	0	72	0	0	0
Lane Group Flow (vph)	11	1380	0	0	1138	0	76	0	91	0	0	0
Confl. Peds. (#/hr)	1		7	7		1						
Confl. Bikes (#/hr)			7			1			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			1
Actuated Green, G (s)	35.2	35.2			35.2		25.3		25.3			
Effective Green, g (s)	35.2	35.2			35.2		25.3		25.3			
Actuated g/C Ratio	0.51	0.51			0.51		0.37		0.37			
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			
Lane Grp Cap (vph)	177	1836			2551		660		583			
v/s Ratio Prot		c0.39			0.23		0.04					
v/s Ratio Perm	0.03								c0.06			
v/c Ratio	0.06	0.75			0.45		0.12		0.16			
Uniform Delay, d1	8.4	13.2			10.5		14.2		14.5			
Progression Factor	1.00	1.00			1.00		1.00		1.00			
Incremental Delay, d2	0.1	1.8			0.1		0.4		0.6			
Delay (s)	8.5	15.0			10.6		14.6		15.0			
Level of Service	A	B			B		B		B			
Approach Delay (s/veh)		14.9			10.6			14.9			0.0	
Approach LOS		B			B			B			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	13.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	68.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



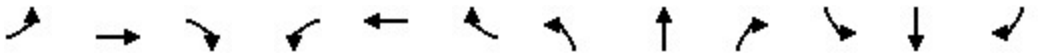
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	620	800	620	120	630	310	620	90	60	400	110	190
Future Volume (vph)	620	800	620	120	630	310	620	90	60	400	110	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.95	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3400	5036	1546	3400	5036	1542	3400	1845	1514	1752	1673	1490
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3400	5036	1546	3400	5036	1542	3400	1845	1514	1752	1673	1490
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	674	870	674	130	685	337	674	98	65	435	120	207
RTOR Reduction (vph)	0	0	470	0	0	289	0	0	49	0	13	24
Lane Group Flow (vph)	674	870	204	130	685	48	674	98	16	435	159	131
Confl. Peds. (#/hr)	2		1	1		2			9	9		
Confl. Bikes (#/hr)									3			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	24.8	35.8	35.8	6.0	17.0	17.0	29.0	29.0	29.0	31.6	31.6	56.4
Effective Green, g (s)	24.8	35.8	35.8	6.0	17.0	17.0	29.0	29.0	29.0	31.6	31.6	56.4
Actuated g/C Ratio	0.21	0.30	0.30	0.05	0.14	0.14	0.24	0.24	0.24	0.27	0.27	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	712	1522	467	172	723	221	832	451	370	467	446	760
v/s Ratio Prot	c0.20	0.17		0.04	c0.14		c0.20	0.05		c0.25	0.09	0.04
v/s Ratio Perm			0.13			0.03			0.01			0.05
v/c Ratio	0.95	0.57	0.44	0.76	0.95	0.22	0.81	0.22	0.04	0.93	0.36	0.17
Uniform Delay, d1	46.1	34.8	33.2	55.5	50.3	44.8	42.1	35.6	34.1	42.3	35.2	17.7
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	21.4	0.5	0.7	17.1	21.3	0.5	8.4	1.1	0.2	25.5	0.5	0.1
Delay (s)	67.6	35.4	33.8	72.6	71.6	45.3	50.5	36.8	34.3	67.8	35.6	17.8
Level of Service	E	D	C	E	E	D	D	D	C	E	D	B
Approach Delay (s/veh)		44.7			64.0			47.6			50.4	
Approach LOS		D			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.5	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	118.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	200	0	0	20	0	0
Future Volume (vph)	200	0	0	20	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.98		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3400			1536		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3400			1536		
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	213	0	0	21	0	0
RTOR Reduction (vph)	0	0	0	19	0	0
Lane Group Flow (vph)	213	0	0	2	0	0
Confl. Peds. (#/hr)	4			1	1	
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	2.6			0.9		
Effective Green, g (s)	2.6			0.9		
Actuated g/C Ratio	0.23			0.08		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	768			120		
v/s Ratio Prot	c0.06					
v/s Ratio Perm				c0.00		
v/c Ratio	0.28			0.01		
Uniform Delay, d1	3.7			4.9		
Progression Factor	1.00			1.00		
Incremental Delay, d2	0.2			0.0		
Delay (s)	3.9			4.9		
Level of Service	A			A		
Approach Delay (s/veh)	3.9		4.9			0.0
Approach LOS	A		A			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	4.0	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	-1.47		
Actuated Cycle Length (s)	11.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	16.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Future Volume (vph)	100	1210	460	450	720	20	200	40	170	20	90	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.97	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (prot)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	
Satd. Flow (perm)	1736	3471	1524	1736	3471	1505	1649	1679	1528	1736	1690	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	103	1247	474	464	742	21	206	41	175	21	93	93
RTOR Reduction (vph)	0	0	193	0	0	10	0	0	150	0	31	0
Lane Group Flow (vph)	103	1247	281	464	742	11	122	125	25	21	155	0
Confl. Peds. (#/hr)	3		3	3		3			2	2		
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Effective Green, g (s)	11.2	41.0	41.0	30.0	59.8	59.8	17.0	17.0	17.0	14.2	14.2	
Actuated g/C Ratio	0.09	0.35	0.35	0.25	0.51	0.51	0.14	0.14	0.14	0.12	0.12	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	164	1203	528	440	1756	761	237	241	219	208	203	
v/s Ratio Prot	0.06	c0.36		c0.27	0.21		0.07	c0.07		0.01	c0.09	
v/s Ratio Perm			0.18			0.01			0.02			
v/c Ratio	0.63	1.04	0.53	1.05	0.42	0.01	0.51	0.52	0.11	0.10	0.76	
Uniform Delay, d1	51.5	38.6	30.9	44.1	18.3	14.5	46.8	46.8	44.1	46.3	50.4	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.3	35.9	1.0	58.0	0.2	0.0	7.8	7.8	1.1	0.2	15.7	
Delay (s)	58.8	74.5	31.9	102.1	18.5	14.5	54.6	54.6	45.1	46.5	66.0	
Level of Service	E	E	C	F	B	B	D	D	D	D	E	
Approach Delay (s/veh)		62.6			50.1			50.7			64.1	
Approach LOS		E			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	57.1	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.92		
Actuated Cycle Length (s)	118.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	95.3%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Future Volume (veh/h)	130	630	210	260	720	90	130	220	150	70	770	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
Arrive On Green	0.10	0.18	0.18	0.18	0.27	0.27	0.06	0.42	0.42	0.05	0.42	0.42
Sat Flow, veh/h	1774	5085	1532	1774	5085	1542	3442	3539	1537	1774	3539	1535
Grp Volume(v), veh/h	138	670	223	277	766	96	138	234	160	74	819	170
Grp Sat Flow(s),veh/h/ln	1774	1695	1532	1774	1695	1542	1721	1770	1537	1774	1770	1535
Q Serve(g_s), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Cycle Q Clear(g_c), s	7.7	12.4	13.9	15.3	13.0	4.5	3.9	4.1	6.7	4.1	17.6	7.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	170	939	283	316	1359	497	203	1500	651	95	1481	643
V/C Ratio(X)	0.81	0.71	0.79	0.88	0.56	0.19	0.68	0.16	0.25	0.78	0.55	0.26
Avail Cap(c_a), veh/h	301	1115	336	548	1824	638	309	1500	651	177	1481	643
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	38.4	39.0	40.1	31.7	24.7	46.3	17.8	18.6	46.9	22.1	19.1
Incr Delay (d2), s/veh	8.9	1.8	10.1	7.9	0.4	0.2	4.0	0.2	0.9	12.6	1.5	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	6.0	6.7	8.2	6.1	1.9	2.0	2.0	3.0	2.4	8.8	3.3
LnGrp Delay(d), s/veh	53.4	40.2	49.1	48.0	32.1	24.9	50.3	18.1	19.5	59.5	23.6	20.1
LnGrp LOS	D	D	D	D	C	C	D	B	B	E	C	C
Approach Vol, veh/h		1031			1139			532			1063	
Approach Delay, s/veh		43.9			35.4			26.8			25.5	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.4	46.5	21.9	22.5	9.9	46.0	13.6	30.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	31.0	22.0	9.0	42.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	6.1	8.7	17.3	15.9	5.9	19.6	9.7	15.0
Green Ext Time (p_c), s	0.0	2.0	0.7	2.6	0.1	6.2	0.2	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Future Volume (veh/h)	20	100	160	20	30	20	140	410	20	50	1060	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	0.99		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
Arrive On Green	0.14	0.14	0.14	0.14	0.14	0.14	0.80	0.80	0.80	0.80	0.80	0.80
Sat Flow, veh/h	1325	1863	1530	1077	1863	1559	449	3539	1580	912	3539	1562
Grp Volume(v), veh/h	22	111	178	22	33	22	156	456	22	56	1178	56
Grp Sat Flow(s),veh/h/ln	1325	1863	1530	1077	1863	1559	449	1770	1580	912	1770	1562
Q Serve(g_s), s	1.7	6.4	13.3	2.2	1.8	1.4	19.0	3.5	0.3	1.8	11.9	0.9
Cycle Q Clear(g_c), s	3.6	6.4	13.3	8.6	1.8	1.4	30.8	3.5	0.3	5.3	11.9	0.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	220	252	207	148	252	211	374	2818	1258	760	2818	1244
V/C Ratio(X)	0.10	0.44	0.86	0.15	0.13	0.10	0.42	0.16	0.02	0.07	0.42	0.05
Avail Cap(c_a), veh/h	257	303	249	178	303	254	374	2818	1258	760	2818	1244
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	46.4	49.4	50.4	44.5	44.3	8.3	2.8	2.5	3.4	3.6	2.5
Incr Delay (d2), s/veh	0.2	1.2	22.0	0.5	0.2	0.2	3.4	0.1	0.0	0.2	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	3.4	6.9	0.7	1.0	0.6	2.7	1.8	0.2	0.5	5.9	0.4
LnGrp Delay(d), s/veh	46.2	47.7	71.4	50.9	44.7	44.5	11.7	2.9	2.5	3.6	4.1	2.6
LnGrp LOS	D	D	E	D	D	D	B	A	A	A	A	A
Approach Vol, veh/h		311			77			634			1290	
Approach Delay, s/veh		61.1			46.4			5.1			4.0	
Approach LOS		E			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		19.8		97.0		19.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		19.0		93.0		19.0
Max Q Clear Time (g_c+I1), s		32.8		15.3		13.9		10.6
Green Ext Time (p_c), s		6.4		0.4		12.2		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	13.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Future Volume (veh/h)	70	110	20	250	330	110	40	440	180	70	940	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	72	113	21	258	340	113	41	454	186	72	969	237
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	93	243	107	301	659	289	52	1307	531	93	1973	882
Arrive On Green	0.05	0.07	0.07	0.17	0.19	0.19	0.03	0.53	0.53	0.05	0.56	0.56
Sat Flow, veh/h	1774	3539	1556	1774	3539	1551	1774	2447	994	1774	3539	1582
Grp Volume(v), veh/h	72	113	21	258	340	113	41	327	313	72	969	237
Grp Sat Flow(s),veh/h/ln	1774	1770	1556	1774	1770	1551	1774	1770	1671	1774	1770	1582
Q Serve(g_s), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Cycle Q Clear(g_c), s	3.7	2.8	1.2	12.9	7.9	5.9	2.1	9.7	9.8	3.7	15.3	7.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		1.00
Lane Grp Cap(c), veh/h	93	243	107	301	659	289	52	945	893	93	1973	882
V/C Ratio(X)	0.77	0.46	0.20	0.86	0.52	0.39	0.79	0.35	0.35	0.77	0.49	0.27
Avail Cap(c_a), veh/h	194	619	272	582	1393	610	136	945	893	194	1973	882
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.8	41.0	40.2	36.9	33.5	32.7	44.1	12.2	12.2	42.8	12.3	10.5
Incr Delay (d2), s/veh	12.8	1.4	0.9	7.0	0.6	0.9	23.2	1.0	1.1	12.8	0.9	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	1.4	0.5	6.9	3.9	2.6	1.4	5.0	4.8	2.1	7.6	3.2
LnGrp Delay(d), s/veh	55.6	42.3	41.1	43.9	34.1	33.5	67.4	13.2	13.3	55.6	13.2	11.3
LnGrp LOS	E	D	D	D	C	C	E	B	B	E	B	B
Approach Vol, veh/h		206			711			681			1278	
Approach Delay, s/veh		46.8			37.6			16.5			15.2	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.8	52.9	19.5	10.3	6.7	55.0	8.8	21.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	48.0	30.0	16.0	7.0	51.0	10.0	36.0
Max Q Clear Time (g_c+I1), s	5.7	11.8	14.9	4.8	4.1	17.3	5.7	9.9
Green Ext Time (p_c), s	0.0	4.1	0.6	0.4	0.0	8.8	0.0	2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Future Volume (veh/h)	310	430	730	140	280	20	250	450	80	20	940	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	356	494	839	161	322	23	287	517	92	23	1080	218
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	413	434	641	275	266	19	317	1648	717	32	1081	481
Arrive On Green	0.23	0.23	0.23	0.15	0.15	0.15	0.18	0.46	0.46	0.02	0.30	0.30
Sat Flow, veh/h	1792	1881	1553	1792	1730	124	1792	3574	1556	1792	3574	1589
Grp Volume(v), veh/h	356	494	839	161	0	345	287	517	92	23	1080	218
Grp Sat Flow(s),veh/h/ln	1792	1881	1553	1792	0	1854	1792	1787	1556	1792	1787	1589
Q Serve(g_s), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Cycle Q Clear(g_c), s	22.3	27.0	27.0	9.8	0.0	18.0	18.4	10.7	4.0	1.5	35.4	13.0
Prop In Lane	1.00		1.00	1.00		0.07	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	413	434	641	275	0	285	317	1648	717	32	1081	481
V/C Ratio(X)	0.86	1.14	1.31	0.58	0.00	1.21	0.91	0.31	0.13	0.71	1.00	0.45
Avail Cap(c_a), veh/h	413	434	641	275	0	285	367	1648	717	76	1081	481
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.3	45.1	34.9	46.1	0.0	49.6	47.3	19.9	18.1	57.2	40.8	33.0
Incr Delay (d2), s/veh	16.8	87.0	150.5	3.2	0.0	122.9	23.4	0.5	0.4	25.1	27.2	3.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.0	24.5	47.5	5.1	0.0	18.9	11.1	5.4	1.8	1.0	21.5	6.1
LnGrp Delay(d), s/veh	60.0	132.0	185.3	49.2	0.0	172.4	70.6	20.4	18.4	82.3	68.0	36.1
LnGrp LOS	E	F	F	D		F	E	C	B	F	E	D
Approach Vol, veh/h		1689			506			896			1321	
Approach Delay, s/veh		143.3			133.2			36.3			63.0	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	58.0		31.0	24.7	39.4		22.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	54.0		27.0	24.0	35.0		18.0
Max Q Clear Time (g_c+I1), s	3.5	12.7		29.0	20.4	37.4		20.0
Green Ext Time (p_c), s	0.0	4.1		0.0	0.3	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		96.4
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Future Volume (veh/h)	180	1160	210	120	860	60	190	530	190	240	1060	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	184	1184	214	122	878	61	194	541	194	245	1082	194
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	218	1477	267	152	1555	463	263	1111	474	317	1677	497
Arrive On Green	0.12	0.35	0.35	0.09	0.31	0.31	0.08	0.32	0.32	0.09	0.33	0.33
Sat Flow, veh/h	1757	4260	770	1757	5036	1499	3408	3505	1495	3408	5036	1494
Grp Volume(v), veh/h	184	933	465	122	878	61	194	541	194	245	1082	194
Grp Sat Flow(s),veh/h/ln	1757	1679	1672	1757	1679	1499	1704	1752	1495	1704	1679	1494
Q Serve(g_s), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Cycle Q Clear(g_c), s	10.5	25.7	25.7	7.0	14.9	3.0	5.7	12.7	10.4	7.2	18.6	10.2
Prop In Lane	1.00		0.46	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	218	1164	580	152	1555	463	263	1111	474	317	1677	497
V/C Ratio(X)	0.84	0.80	0.80	0.80	0.56	0.13	0.74	0.49	0.41	0.77	0.65	0.39
Avail Cap(c_a), veh/h	361	1381	688	275	1825	543	401	1111	474	467	1677	497
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.7	30.2	30.2	45.8	29.5	25.4	46.1	28.2	27.4	45.2	28.9	26.1
Incr Delay (d2), s/veh	9.0	3.0	5.8	9.5	0.3	0.1	4.0	1.5	2.6	4.7	1.9	2.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	12.4	12.8	3.8	7.0	1.2	2.8	6.4	4.6	3.6	8.9	4.5
LnGrp Delay(d), s/veh	52.8	33.1	36.0	55.3	29.9	25.5	50.1	29.7	30.0	49.9	30.9	28.4
LnGrp LOS	D	C	D	E	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1582			1061			929			1521	
Approach Delay, s/veh		36.3			32.5			34.0			33.6	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.5	36.4	12.8	39.4	11.9	38.0	16.7	35.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	32.0	16.0	42.0	12.0	34.0	21.0	37.0
Max Q Clear Time (g_c+I1), s	9.2	14.7	9.0	27.7	7.7	20.6	12.5	16.9
Green Ext Time (p_c), s	0.3	3.8	0.1	7.7	0.2	6.7	0.3	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.3
HCM 2010 LOS	C



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	170	1150	1130	190	550	480
Future Volume (veh/h)	170	1150	1130	190	550	480
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.97	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1900	1845	1845
Adj Flow Rate, veh/h	177	1198	1177	198	573	500
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	211	2518	1477	248	1442	663
Arrive On Green	0.12	0.50	0.34	0.34	0.42	0.42
Sat Flow, veh/h	1757	5202	4489	727	3408	1568
Grp Volume(v), veh/h	177	1198	914	461	573	500
Grp Sat Flow(s),veh/h/ln	1757	1679	1679	1693	1704	1568
Q Serve(g_s), s	10.3	16.2	25.6	25.6	12.1	28.1
Cycle Q Clear(g_c), s	10.3	16.2	25.6	25.6	12.1	28.1
Prop In Lane	1.00			0.43	1.00	1.00
Lane Grp Cap(c), veh/h	211	2518	1147	579	1442	663
V/C Ratio(X)	0.84	0.48	0.80	0.80	0.40	0.75
Avail Cap(c_a), veh/h	355	3292	1388	700	1442	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.8	17.1	31.0	31.0	20.8	25.4
Incr Delay (d2), s/veh	8.7	0.1	2.8	5.4	0.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	7.5	12.2	12.8	5.9	24.2
LnGrp Delay(d), s/veh	53.5	17.2	33.7	36.3	21.6	33.2
LnGrp LOS	D	B	C	D	C	C
Approach Vol, veh/h		1375	1375		1073	
Approach Delay, s/veh		21.9	34.6		27.0	
Approach LOS		C	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				56.0		48.0	16.5	39.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				68.0		44.0	21.0	43.0
Max Q Clear Time (g_c+I1), s				18.2		30.1	12.3	27.6
Green Ext Time (p_c), s				10.7		3.6	0.3	7.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	1340	220	360	1100	120	50	130	140	10	30	10
Future Volume (veh/h)	110	1340	220	360	1100	120	50	130	140	10	30	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	117	1426	234	383	1170	128	53	138	149	11	32	11
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	150	2131	653	498	2223	243	447	530	442	333	377	129
Arrive On Green	0.09	0.42	0.42	0.15	0.48	0.48	0.29	0.29	0.29	0.29	0.29	0.29
Sat Flow, veh/h	1757	5036	1544	3408	4595	502	1339	1845	1540	1074	1311	451
Grp Volume(v), veh/h	117	1426	234	383	855	443	53	138	149	11	0	43
Grp Sat Flow(s),veh/h/ln	1757	1679	1544	1704	1679	1740	1339	1845	1540	1074	0	1762
Q Serve(g_s), s	5.5	19.0	8.6	9.0	14.7	14.8	2.5	4.8	6.4	0.7	0.0	1.5
Cycle Q Clear(g_c), s	5.5	19.0	8.6	9.0	14.7	14.8	4.0	4.8	6.4	5.5	0.0	1.5
Prop In Lane	1.00		1.00	1.00		0.29	1.00		1.00	1.00		0.26
Lane Grp Cap(c), veh/h	150	2131	653	498	1624	842	447	530	442	333	0	506
V/C Ratio(X)	0.78	0.67	0.36	0.77	0.53	0.53	0.12	0.26	0.34	0.03	0.00	0.08
Avail Cap(c_a), veh/h	441	3434	1053	1101	2531	1312	447	530	442	333	0	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	37.4	19.4	16.4	34.3	14.9	15.0	23.2	23.0	23.5	25.1	0.0	21.8
Incr Delay (d2), s/veh	8.3	0.4	0.3	2.5	0.3	0.5	0.5	1.2	2.1	0.2	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	8.8	3.7	4.4	6.8	7.1	1.0	2.6	3.0	0.2	0.0	0.8
LnGrp Delay(d), s/veh	45.8	19.8	16.7	36.9	15.2	15.5	23.8	24.1	25.6	25.3	0.0	22.1
LnGrp LOS	D	B	B	D	B	B	C	C	C	C		C
Approach Vol, veh/h		1777			1681			340			54	
Approach Delay, s/veh		21.1			20.2			24.7			22.7	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	16.2	39.4		28.0	11.2	44.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	27.0	57.0		24.0	21.0	63.0
Max Q Clear Time (g_c+I1), s		8.4	11.0	21.0		7.5	7.5	16.8
Green Ext Time (p_c), s		1.1	1.2	14.3		0.2	0.2	11.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Future Volume (veh/h)	70	560	60	90	400	30	30	200	70	100	370	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	77	615	66	99	440	33	33	220	77	110	407	88
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	305	1178	523	233	1178	518	46	1562	698	143	1756	775
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.03	0.44	0.44	0.08	0.50	0.50
Sat Flow, veh/h	916	3539	1571	756	3539	1555	1774	3539	1581	1774	3539	1561
Grp Volume(v), veh/h	77	615	66	99	440	33	33	220	77	110	407	88
Grp Sat Flow(s),veh/h/ln	916	1770	1571	756	1770	1555	1774	1770	1581	1774	1770	1561
Q Serve(g_s), s	5.8	11.6	2.4	10.1	7.8	1.2	1.5	3.1	2.4	5.0	5.4	2.5
Cycle Q Clear(g_c), s	13.6	11.6	2.4	21.7	7.8	1.2	1.5	3.1	2.4	5.0	5.4	2.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	305	1178	523	233	1178	518	46	1562	698	143	1756	775
V/C Ratio(X)	0.25	0.52	0.13	0.43	0.37	0.06	0.72	0.14	0.11	0.77	0.23	0.11
Avail Cap(c_a), veh/h	621	2399	1065	493	2399	1054	236	1562	698	537	1756	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.2	22.3	19.2	31.0	21.0	18.8	40.0	13.7	13.6	37.2	11.8	11.1
Incr Delay (d2), s/veh	0.4	0.4	0.1	1.2	0.2	0.1	19.3	0.2	0.3	8.4	0.3	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	5.7	1.1	2.2	3.8	0.5	1.0	1.5	1.1	2.8	2.7	1.1
LnGrp Delay(d), s/veh	26.6	22.6	19.3	32.2	21.2	18.8	59.3	13.9	13.9	45.6	12.2	11.4
LnGrp LOS	C	C	B	C	C	B	E	B	B	D	B	B
Approach Vol, veh/h		758			572			330			605	
Approach Delay, s/veh		22.7			23.0			18.5			18.1	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	10.7	40.5		31.5	6.1	45.0		31.5
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	25.0	27.0		56.0	11.0	41.0		56.0
Max Q Clear Time (g_c+I1), s	7.0	5.1		15.6	3.5	7.4		23.7
Green Ext Time (p_c), s	0.2	1.4		5.1	0.0	2.8		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Future Volume (veh/h)	0	1580	130	430	400	0	130	0	730	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	0.99		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1863	1900	1863	1900
Adj Flow Rate, veh/h	0	1699	140	462	430	0	140	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	72	2183	178	145	2336	0	456	0	412	0	2	0
Arrive On Green	0.00	0.66	0.66	0.66	0.66	0.00	0.26	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	954	3308	269	251	3632	0	1756	0	1583	0	1863	0
Grp Volume(v), veh/h	0	899	940	462	430	0	140	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	954	1770	1807	251	1770	0	1756	0	1583	0	1863	0
Q Serve(g_s), s	0.0	35.1	36.9	29.1	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	35.1	36.9	66.0	4.7	0.0	6.4	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.15	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1168	1193	145	2336	0	456	0	412	0	2	0
V/C Ratio(X)	0.00	0.77	0.79	3.18	0.18	0.00	0.31	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1168	1193	145	2336	0	456	0	412	0	298	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	11.7	12.0	42.7	6.6	0.0	29.8	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	3.2	3.6	1000.3	0.0	0.0	1.7	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	18.0	19.2	44.3	2.3	0.0	3.3	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	14.9	15.7	1043.0	6.6	0.0	31.5	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		B	B	F	A		C					
Approach Vol, veh/h		1839			892			140			0	
Approach Delay, s/veh		15.3			543.4			31.5			0.0	
Approach LOS		B			F			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		30.0		70.0		0.0		70.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		26.0		66.0		16.0		66.0
Max Q Clear Time (g_c+I1), s		8.4		38.9		0.0		68.0
Green Ext Time (p_c), s		0.6		16.4		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	180.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Future Volume (veh/h)	200	1330	170	410	550	150	60	380	230	70	620	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	206	1371	175	423	567	155	62	392	237	72	639	31
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1415	181	448	1522	671	80	469	387	89	884	43
Arrive On Green	0.13	0.31	0.31	0.25	0.43	0.43	0.04	0.25	0.25	0.05	0.26	0.26
Sat Flow, veh/h	1774	4553	581	1774	3539	1561	1774	1863	1537	1774	3431	166
Grp Volume(v), veh/h	206	1021	525	423	567	155	62	392	237	72	329	341
Grp Sat Flow(s),veh/h/ln	1774	1695	1743	1774	1770	1561	1774	1863	1537	1774	1770	1827
Q Serve(g_s), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Cycle Q Clear(g_c), s	13.6	35.4	35.4	27.9	12.9	7.5	4.1	23.7	16.2	4.8	20.2	20.3
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.09
Lane Grp Cap(c), veh/h	236	1054	542	448	1522	671	80	469	387	89	456	471
V/C Ratio(X)	0.87	0.97	0.97	0.94	0.37	0.23	0.78	0.84	0.61	0.81	0.72	0.72
Avail Cap(c_a), veh/h	343	1054	542	462	1522	671	104	469	387	89	456	471
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.6	40.5	40.5	43.7	23.0	21.5	56.3	42.2	39.4	55.9	40.3	40.3
Incr Delay (d2), s/veh	15.3	20.5	30.8	28.0	0.2	0.2	23.5	16.0	7.0	39.8	9.6	9.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	19.6	21.7	17.1	6.3	3.3	2.5	14.3	7.7	3.3	11.1	11.4
LnGrp Delay(d), s/veh	65.9	61.0	71.3	71.7	23.2	21.6	79.8	58.2	46.4	95.7	49.9	49.7
LnGrp LOS	E	E	E	E	C	C	E	E	D	F	D	D
Approach Vol, veh/h		1752			1145			691			742	
Approach Delay, s/veh		64.7			40.9			56.1			54.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	34.0	34.1	41.0	9.3	34.7	19.9	55.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	30.0	31.0	37.0	7.0	29.0	23.0	45.0
Max Q Clear Time (g_c+I1), s	6.8	25.7	29.9	37.4	6.1	22.3	15.6	14.9
Green Ext Time (p_c), s	0.0	1.3	0.2	0.0	0.0	2.1	0.3	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.2
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Future Volume (veh/h)	0	1440	470	70	580	0	1040	1320	360	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1516	495	74	611	0	1095	1389	379			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2069	630	122	2432	0	1582	1829	497			
Arrive On Green	0.00	0.40	0.40	0.04	0.47	0.00	0.46	0.46	0.46			
Sat Flow, veh/h	0	5305	1563	3476	5305	0	3476	4020	1093			
Grp Volume(v), veh/h	0	1516	495	74	611	0	1095	1182	586			
Grp Sat Flow(s),veh/h/ln	0	1712	1563	1738	1712	0	1738	1712	1688			
Q Serve(g_s), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Cycle Q Clear(g_c), s	0.0	28.0	31.0	2.4	8.0	0.0	28.1	32.2	32.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		0.65			
Lane Grp Cap(c), veh/h	0	2069	630	122	2432	0	1582	1558	768			
V/C Ratio(X)	0.00	0.73	0.79	0.61	0.25	0.00	0.69	0.76	0.76			
Avail Cap(c_a), veh/h	0	2383	726	155	2796	0	1582	1558	768			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	28.4	29.2	53.3	17.6	0.0	24.3	25.4	25.5			
Incr Delay (d2), s/veh	0.0	1.0	5.0	4.8	0.1	0.0	2.5	3.5	7.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	13.4	14.2	1.2	3.7	0.0	13.9	15.9	16.6			
LnGrp Delay(d), s/veh	0.0	29.4	34.3	58.1	17.7	0.0	26.8	28.9	32.5			
LnGrp LOS		C	C	E	B		C	C	C			
Approach Vol, veh/h		2011			685			2863				
Approach Delay, s/veh		30.6			22.1			28.9				
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			7.9	49.1		55.0		57.1
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			5.0	52.0		51.0		61.0
Max Q Clear Time (g_c+I1), s			4.4	33.0		34.4		10.0
Green Ext Time (p_c), s			0.0	12.1		13.6		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1670	290	340	710	80	100	750	380	240	1540	420
Future Volume (veh/h)	230	1670	290	340	710	80	100	750	380	240	1540	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.85	1.00		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	247	1796	312	366	763	86	108	806	409	258	1656	452
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
Arrive On Green	0.09	0.36	0.36	0.11	0.37	0.37	0.03	0.31	0.31	0.09	0.37	0.37
Sat Flow, veh/h	3442	5085	1475	3442	5085	1501	3442	5085	2381	3442	5085	1388
Grp Volume(v), veh/h	247	1796	312	366	763	86	108	806	409	258	1656	452
Grp Sat Flow(s),veh/h/ln	1721	1695	1475	1721	1695	1501	1721	1695	1190	1721	1695	1388
Q Serve(g_s), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	15.7	14.6	8.8	36.7	31.4
Cycle Q Clear(g_c), s	8.4	42.0	19.6	12.7	13.2	4.6	3.8	15.7	14.6	8.8	36.7	31.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	317	1822	581	373	1905	562	115	1562	1033	320	1865	655
V/C Ratio(X)	0.78	0.99	0.54	0.98	0.40	0.15	0.94	0.52	0.40	0.81	0.89	0.69
Avail Cap(c_a), veh/h	631	1822	581	373	1905	562	115	1562	1033	430	1865	655
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	38.2	28.2	53.4	27.6	24.9	57.9	34.2	24.8	53.4	35.7	26.1
Incr Delay (d2), s/veh	4.2	17.7	1.0	41.6	0.1	0.1	65.6	1.2	1.1	8.0	6.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	22.6	8.1	8.2	6.2	1.9	2.8	7.5	4.9	4.5	18.3	13.0
LnGrp Delay(d), s/veh	57.5	55.9	29.1	94.9	27.7	25.0	123.5	35.5	25.9	61.4	42.4	32.0
LnGrp LOS	E	E	C	F	C	C	F	D	C	E	D	C
Approach Vol, veh/h		2355			1215			1323			2366	
Approach Delay, s/veh		52.5			47.8			39.7			42.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.1	40.9	17.0	47.0	8.0	48.0	15.0	49.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	33.0	13.0	43.0	4.0	44.0	22.0	34.0
Max Q Clear Time (g_c+I1), s	10.8	17.7	14.7	44.0	5.8	38.7	10.4	15.2
Green Ext Time (p_c), s	0.3	6.7	0.0	0.0	0.0	4.5	0.6	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Future Volume (veh/h)	310	2120	0	0	620	220	0	0	0	80	80	40
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	333	2280	0	0	667	237				86	86	43
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93				0.93	0.93	0.93
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	479	4047	0	0	3022	926				159	205	97
Arrive On Green	0.14	0.79	0.00	0.00	0.59	0.59				0.09	0.09	0.09
Sat Flow, veh/h	3476	5305	0	0	5305	1573				1792	2308	1089
Grp Volume(v), veh/h	333	2280	0	0	667	237				86	62	67
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1573				1792	1712	1685
Q Serve(g_s), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Cycle Q Clear(g_c), s	5.9	11.0	0.0	0.0	4.0	4.7				3.0	2.2	2.4
Prop In Lane	1.00		0.00	0.00		1.00				1.00		0.65
Lane Grp Cap(c), veh/h	479	4047	0	0	3022	926				159	152	149
V/C Ratio(X)	0.69	0.56	0.00	0.00	0.22	0.26				0.54	0.41	0.45
Avail Cap(c_a), veh/h	1393	7204	0	0	4829	1479				580	554	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	26.7	2.6	0.0	0.0	6.3	6.5				28.3	28.0	28.0
Incr Delay (d2), s/veh	1.8	0.1	0.0	0.0	0.0	0.1				2.8	1.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	5.1	0.0	0.0	1.9	2.1				1.6	1.1	1.2
LnGrp Delay(d), s/veh	28.5	2.7	0.0	0.0	6.3	6.6				31.1	29.7	30.1
LnGrp LOS	C	A			A	A				C	C	C
Approach Vol, veh/h		2613			904						215	
Approach Delay, s/veh		6.0			6.4						30.4	
Approach LOS		A			A						C	

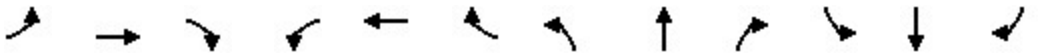
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		9.8		55.1			12.9	42.2
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		21.0		91.0			26.0	61.0
Max Q Clear Time (g_c+I1), s		5.0		13.0			7.9	6.7
Green Ext Time (p_c), s		0.9		38.1			1.0	5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.5
HCM 2010 LOS	A

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Future Volume (veh/h)	30	1850	60	590	950	80	40	10	160	680	390	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.94	1.00		0.95	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	34	2079	67	663	1067	90	45	11	180	764	438	34
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	43	1472	47	459	2038	600	251	264	747	532	997	77
Arrive On Green	0.02	0.29	0.29	0.13	0.40	0.40	0.14	0.14	0.14	0.30	0.30	0.30
Sat Flow, veh/h	1774	5048	162	3442	5085	1496	1774	1863	2651	1774	3323	257
Grp Volume(v), veh/h	34	1394	752	663	1067	90	45	11	180	764	232	240
Grp Sat Flow(s),veh/h/ln	1774	1695	1820	1721	1695	1496	1774	1863	1325	1774	1770	1810
Q Serve(g_s), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Cycle Q Clear(g_c), s	2.3	35.0	35.0	16.0	19.1	4.6	2.7	0.6	6.3	36.0	12.7	12.8
Prop In Lane	1.00		0.09	1.00		1.00	1.00		1.00	1.00		0.14
Lane Grp Cap(c), veh/h	43	989	531	459	2038	600	251	264	747	532	531	543
V/C Ratio(X)	0.79	1.41	1.42	1.44	0.52	0.15	0.18	0.04	0.24	1.44	0.44	0.44
Avail Cap(c_a), veh/h	89	989	531	459	2038	600	251	264	747	532	531	543
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.2	42.5	42.5	52.0	27.3	22.9	45.4	44.5	33.8	42.0	33.8	33.9
Incr Delay (d2), s/veh	26.5	190.5	198.6	212.2	0.2	0.1	1.6	0.3	0.8	206.6	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	42.5	46.8	21.1	8.9	1.9	1.4	0.3	2.4	48.1	6.3	6.5
LnGrp Delay(d), s/veh	84.8	233.0	241.1	264.2	27.5	23.0	46.9	44.8	34.6	248.6	34.4	34.4
LnGrp LOS	F	F	F	F	C	C	D	D	C	F	C	C
Approach Vol, veh/h		2180			1820			236			1236	
Approach Delay, s/veh		233.4			113.5			37.4			166.8	
Approach LOS		F			F			D			F	

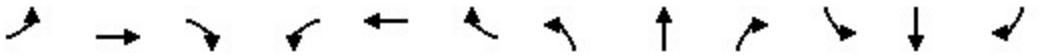
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		21.0	20.0	39.0		40.0	6.9	52.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		17.0	16.0	35.0		36.0	6.0	45.0
Max Q Clear Time (g_c+I1), s		8.3	18.0	37.0		38.0	4.3	21.1
Green Ext Time (p_c), s		0.5	0.0	0.0		0.0	0.0	8.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	170.0
HCM 2010 LOS	F



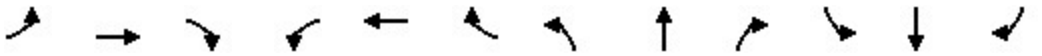
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	40	450	480	0	0	0	0	840	40	0	2260	0
Future Volume (vph)	40	450	480	0	0	0	0	840	40	0	2260	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1786	2814					7542			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1786	2814					7542			6471	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	43	489	522	0	0	0	0	913	43	0	2457	0
RTOR Reduction (vph)	0	0	6	0	0	0	0	6	0	0	0	0
Lane Group Flow (vph)	39	493	516	0	0	0	0	950	0	0	2457	0
Confl. Peds. (#/hr)							6		16	16		6
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	36.3	36.3	36.3					61.5			61.5	
Effective Green, g (s)	36.3	36.3	36.3					61.5			61.5	
Actuated g/C Ratio	0.34	0.34	0.34					0.58			0.58	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	582	612	965					4384			3761	
v/s Ratio Prot	0.02	c0.28						0.13			c0.38	
v/s Ratio Perm			0.18									
v/c Ratio	0.07	0.81	0.53					0.22			0.65	
Uniform Delay, d1	23.4	31.5	28.0					10.6			15.0	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.0	7.6	0.6					0.1			0.9	
Delay (s)	23.4	39.2	28.5					10.7			15.8	
Level of Service	C	D	C					B			B	
Approach Delay (s/veh)		33.3			0.0			10.7			15.8	
Approach LOS		C			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.9	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.71		
Actuated Cycle Length (s)	105.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.5%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Future Volume (vph)	0	1500	680	140	600	0	560	0	60	350	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.98	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5900	1229	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5900	1229	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1613	731	151	645	0	602	0	65	376	0	11
RTOR Reduction (vph)	0	29	226	0	0	0	0	0	43	0	0	7
Lane Group Flow (vph)	0	1891	198	151	645	0	602	0	22	376	0	4
Confl. Peds. (#/hr)			18	18								
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Effective Green, g (s)		53.8	53.8	10.1	67.9		39.1		39.1	39.1		39.1
Actuated g/C Ratio		0.47	0.47	0.09	0.59		0.34		0.34	0.34		0.34
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		2760	574	304	3032		1178		543	1178		543
v/s Ratio Prot		c0.32		c0.04	0.13							
v/s Ratio Perm			0.16				c0.17		0.01	0.11		0.00
v/c Ratio		0.69	0.35	0.50	0.21		0.51		0.04	0.32		0.01
Uniform Delay, d1		24.0	19.4	50.0	11.0		30.3		25.4	28.1		25.1
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.7	0.4	1.3	0.0		1.6		0.1	0.7		0.0
Delay (s)		24.7	19.8	51.3	11.1		31.9		25.5	28.8		25.1
Level of Service		C	B	D	B		C		C	C		C
Approach Delay (s/veh)		23.8			18.7			31.3			28.7	
Approach LOS		C			B			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	24.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.60		
Actuated Cycle Length (s)	115.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	55.7%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	120	840	40	750	0	60	2330	30
Future Volume (vph)	0	0	0	210	120	840	40	750	0	60	2330	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.97
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3346	2814	3467	6471		1787	6471	1552
Flt Permitted				0.95	0.98	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3346	2814	3467	6471		1787	6471	1552
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	228	130	913	43	815	0	65	2533	33
RTOR Reduction (vph)	0	0	0	0	0	238	0	0	0	0	0	14
Lane Group Flow (vph)	0	0	0	116	242	675	43	815	0	65	2533	19
Confl. Peds. (#/hr)							8		15	15		8
Confl. Bikes (#/hr)									3			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				32.2	32.2	32.2	2.2	58.0		7.1	62.9	62.9
Effective Green, g (s)				32.2	32.2	32.2	2.2	58.0		7.1	62.9	62.9
Actuated g/C Ratio				0.29	0.29	0.29	0.02	0.53		0.06	0.58	0.58
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				479	985	829	69	3433		116	3723	893
v/s Ratio Prot				0.07	0.07		0.01	0.13		c0.04	c0.39	
v/s Ratio Perm						c0.24						0.01
v/c Ratio				0.24	0.25	0.81	0.62	0.24		0.56	0.68	0.02
Uniform Delay, d1				29.3	29.3	35.8	53.1	13.8		49.6	16.2	10.0
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.3	0.1	6.2	16.2	0.2		6.1	1.0	0.0
Delay (s)				29.5	29.4	41.9	69.4	13.9		55.6	17.2	10.0
Level of Service				C	C	D	E	B		E	B	B
Approach Delay (s/veh)		0.0			38.4			16.7			18.1	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	109.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	160	1830	750	210	60	200
Future Volume (veh/h)	160	1830	750	210	60	200
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.99	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	176	2011	824	231	66	220
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	217	3363	1807	493	704	628
Arrive On Green	0.12	0.52	0.36	0.36	0.39	0.39
Sat Flow, veh/h	1792	6735	5352	1387	1792	1599
Grp Volume(v), veh/h	176	2011	785	270	66	220
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1622	1792	1599
Q Serve(g_s), s	8.8	19.8	11.4	11.8	2.1	8.9
Cycle Q Clear(g_c), s	8.8	19.8	11.4	11.8	2.1	8.9
Prop In Lane	1.00			0.86	1.00	1.00
Lane Grp Cap(c), veh/h	217	3363	1723	576	704	628
V/C Ratio(X)	0.81	0.60	0.46	0.47	0.09	0.35
Avail Cap(c_a), veh/h	626	5369	2119	709	704	628
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.2	15.3	22.7	22.9	17.5	19.6
Incr Delay (d2), s/veh	7.2	0.2	0.2	0.6	0.3	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	8.8	5.1	5.3	1.1	9.2
LnGrp Delay(d), s/veh	46.4	15.5	22.9	23.5	17.8	21.1
LnGrp LOS	D	B	C	C	B	C
Approach Vol, veh/h		2187	1055		286	
Approach Delay, s/veh		18.0	23.1		20.3	
Approach LOS		B	C		C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				51.6		40.0	15.1	36.5
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				76.0		36.0	32.0	40.0
Max Q Clear Time (g_c+I1), s				21.8		10.9	10.8	13.8
Green Ext Time (p_c), s				25.8		0.9	0.4	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.7
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	SBR	NWL2	NWR
Lane Configurations											
Traffic Volume (vph)	160	10	10	350	30	30	400	30	160	10	10
Future Volume (vph)	160	10	10	350	30	30	400	30	160	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	0.99		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.93		1.00	0.87		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1641	1468	1641	2584	3003		1641	2867		1641	1468
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1641	1468	1641	2584	3003		1641	2867		1641	1468
Peak-hour factor, PHF	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
Adj. Flow (vph)	213	13	13	467	40	40	533	40	213	13	13
RTOR Reduction (vph)	0	11	0	0	0	0	0	83	0	0	0
Lane Group Flow (vph)	213	2	13	467	80	0	533	170	0	13	13
Confl. Peds. (#/hr)			2			5					
Confl. Bikes (#/hr)						1					
Heavy Vehicles (%)	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%	10%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA		Prot	Prot
Protected Phases	4	4	8	1	2		1	6		7	7
Permitted Phases				8							
Actuated Green, G (s)	16.2	16.2	1.3	37.7	16.2		36.4	56.6		2.7	2.7
Effective Green, g (s)	16.2	16.2	1.3	37.7	16.2		36.4	56.6		2.7	2.7
Actuated g/C Ratio	0.17	0.17	0.01	0.41	0.17		0.39	0.61		0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	286	256	22	1161	524		643	1748		47	42
v/s Ratio Prot	c0.13	0.00	0.01	c0.16	c0.03		c0.32	0.06		0.01	c0.01
v/s Ratio Perm				0.02							
v/c Ratio	0.74	0.01	0.59	0.40	0.15		0.83	0.10		0.28	0.31
Uniform Delay, d1	36.3	31.7	45.5	19.6	32.5		25.4	7.5		44.1	44.1
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	10.1	0.0	36.0	0.2	0.6		8.7	0.1		3.2	4.2
Delay (s)	46.4	31.7	81.5	19.8	33.1		34.1	7.6		47.3	48.3
Level of Service	D	C	F	B	C		C	A		D	D
Approach Delay (s/veh)					33.1			25.6			
Approach LOS					C			C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	92.8	Sum of lost time (s)	20.0
Intersection Capacity Utilization	51.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	20	0	10	0	0	0	0	60	0	30	10	10
Future Volume (veh/h)	20	0	10	0	0	0	0	60	0	30	10	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1681	0	1681				0	1681	0	1681	1681	1900
Adj Flow Rate, veh/h	29	0	15				0	88	0	44	15	15
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.68	0.68	0.68				0.68	0.68	0.68	0.68	0.68	0.68
Percent Heavy Veh, %	13	0	13				0	13	0	13	13	13
Cap, veh/h	48	0	43				0	2559	0	54	1431	1233
Arrive On Green	0.03	0.00	0.03				0.00	0.80	0.00	0.03	0.88	0.88
Sat Flow, veh/h	1601	0	1429				0	3363	0	1601	1626	1402
Grp Volume(v), veh/h	29	0	15				0	88	0	44	15	15
Grp Sat Flow(s),veh/h/ln	1601	0	1429				0	1597	0	1601	1597	1430
Q Serve(g_s), s	1.6	0.0	0.9				0.0	0.5	0.0	2.4	0.1	0.1
Cycle Q Clear(g_c), s	1.6	0.0	0.9				0.0	0.5	0.0	2.4	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.98
Lane Grp Cap(c), veh/h	48	0	43				0	2559	0	54	1406	1259
V/C Ratio(X)	0.61	0.00	0.35				0.00	0.03	0.00	0.82	0.01	0.01
Avail Cap(c_a), veh/h	614	0	548				0	2559	0	650	1406	1259
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	42.2				0.0	1.8	0.0	42.6	0.6	0.6
Incr Delay (d2), s/veh	11.8	0.0	4.9				0.0	0.0	0.0	24.6	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	0.0	0.4				0.0	0.2	0.0	1.4	0.0	0.0
LnGrp Delay(d), s/veh	54.3	0.0	47.0				0.0	1.8	0.0	67.2	0.7	0.7
LnGrp LOS	D		D					A		E	A	A
Approach Vol, veh/h		44						88			74	
Approach Delay, s/veh		51.8						1.8			40.2	
Approach LOS		D						A			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	7.0	75.0		6.6		82.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	36.0	38.0		34.0		78.0		
Max Q Clear Time (g_c+I1), s	4.4	2.5		3.6		2.1		
Green Ext Time (p_c), s	0.1	0.5		0.1		0.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.3
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	1.4

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	10	70	0	10	30
Future Vol, veh/h	0	10	70	0	10	30
Conflicting Peds, #/hr	0	1	0	1	1	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	71	71	71	71	71	71
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	0	14	99	0	14	42

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	149	52	0	0	100	0
Stage 1	100	-	-	-	-	-
Stage 2	49	-	-	-	-	-
Critical Hdwy	6.8	6.9	-	-	4.1	-
Critical Hdwy Stg 1	5.8	-	-	-	-	-
Critical Hdwy Stg 2	5.8	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	834	1011	-	-	1505	-
Stage 1	919	-	-	-	-	-
Stage 2	973	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	825	1009	-	-	1504	-
Mov Cap-2 Maneuver	825	-	-	-	-	-
Stage 1	918	-	-	-	-	-
Stage 2	963	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.6	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	1009	1504	-
HCM Lane V/C Ratio	-	-	0.014	0.009	-
HCM Control Delay (s/veh)	-	-	8.6	7.4	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	1410	40	0	910	0	10
Future Vol, veh/h	1410	40	0	910	0	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	3	3	3	3	3	3
Mvmt Flow	1533	43	0	989	0	11

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	767
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.16
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.93
Pot Cap-1 Maneuver	-	-	0	-	0	294
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	294
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	17.7
HCM LOS			C

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	294	-	-	-
HCM Lane V/C Ratio	0.037	-	-	-
HCM Control Delay (s/veh)	17.7	-	-	-
HCM Lane LOS	C	-	-	-
HCM 95th %tile Q(veh)	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	400	250	1020	150	620	660	290	190	1010	420
Future Volume (veh/h)	190	1190	400	250	1020	150	620	660	290	190	1010	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	209	1308	440	275	1121	165	681	725	319	209	1110	462
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	259	1405	429	317	1306	192	734	2136	656	268	1447	436
Arrive On Green	0.08	0.28	0.28	0.09	0.29	0.29	0.21	0.42	0.42	0.08	0.28	0.28
Sat Flow, veh/h	3442	5085	1554	3442	4458	656	3442	5085	1562	3442	5085	1531
Grp Volume(v), veh/h	209	1308	440	275	852	434	681	725	319	209	1110	462
Grp Sat Flow(s),veh/h/ln	1721	1695	1554	1721	1695	1723	1721	1695	1562	1721	1695	1531
Q Serve(g_s), s	7.1	29.9	33.0	9.4	28.4	28.4	23.2	11.5	17.8	7.1	23.9	34.0
Cycle Q Clear(g_c), s	7.1	29.9	33.0	9.4	28.4	28.4	23.2	11.5	17.8	7.1	23.9	34.0
Prop In Lane	1.00		1.00	1.00		0.38	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	259	1405	429	317	993	505	734	2136	656	268	1447	436
V/C Ratio(X)	0.81	0.93	1.02	0.87	0.86	0.86	0.93	0.34	0.49	0.78	0.77	1.06
Avail Cap(c_a), veh/h	259	1405	429	317	993	505	749	2136	656	346	1447	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	42.1	43.2	53.5	39.9	39.9	46.1	23.4	25.3	54.1	39.1	42.7
Incr Delay (d2), s/veh	16.8	11.3	49.9	21.7	7.6	13.9	17.6	0.4	2.6	8.4	3.9	60.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	15.5	20.1	5.4	14.3	15.4	12.8	5.5	8.1	3.7	11.7	21.6
LnGrp Delay(d), s/veh	71.2	53.4	93.2	75.2	47.5	53.8	63.7	23.9	27.8	62.5	43.1	102.8
LnGrp LOS	E	D	F	E	D	D	E	C	C	E	D	F
Approach Vol, veh/h		1957			1561			1725			1781	
Approach Delay, s/veh		64.3			54.1			40.3			60.8	
Approach LOS		E			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.3	54.2	15.0	37.0	29.5	38.0	13.0	39.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	48.0	11.0	33.0	26.0	34.0	9.0	35.0
Max Q Clear Time (g_c+I1), s	9.1	19.8	11.4	35.0	25.2	36.0	9.1	30.4
Green Ext Time (p_c), s	0.2	7.3	0.0	0.0	0.3	0.0	0.0	3.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.3
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	90	1360	690	0	30	1560
Future Volume (vph)	90	1360	690	0	30	1560
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.87	0.85	1.00		1.00	1.00
Flt Protected	0.99	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3087	1427	5036		1752	6346
Flt Permitted	0.99	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3087	1427	5036		1752	6346
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	93	1402	711	0	31	1608
RTOR Reduction (vph)	105	105	0	0	0	0
Lane Group Flow (vph)	689	596	711	0	31	1608
Confl. Peds. (#/hr)				17	17	
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	45.1	45.1	35.7		3.3	43.0
Effective Green, g (s)	45.1	45.1	35.7		3.3	43.0
Actuated g/C Ratio	0.47	0.47	0.37		0.03	0.45
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	1448	669	1870		60	2839
v/s Ratio Prot	0.22		0.14		0.02	c0.25
v/s Ratio Perm		c0.42				
v/c Ratio	0.48	0.89	0.38		0.52	0.57
Uniform Delay, d1	17.4	23.3	22.1		45.6	19.7
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.2	14.1	0.6		7.3	0.8
Delay (s)	17.7	37.4	22.7		52.9	20.5
Level of Service	B	D	C		D	C
Approach Delay (s/veh)	26.9		22.7			21.1
Approach LOS	C		C			C

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	96.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	210	480	40	640	1460	0
Future Volume (veh/h)	210	480	40	640	1460	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	221	505	42	674	1537	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	682	314	54	4653	3371	0
Arrive On Green	0.20	0.20	0.03	0.73	0.67	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	221	505	42	674	1537	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	6.7	24.0	2.8	3.8	17.4	0.0
Cycle Q Clear(g_c), s	6.7	24.0	2.8	3.8	17.4	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	682	314	54	4653	3371	0
V/C Ratio(X)	0.32	1.61	0.78	0.14	0.46	0.00
Avail Cap(c_a), veh/h	682	314	176	4653	3371	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.1	48.0	57.8	4.8	9.4	0.0
Incr Delay (d2), s/veh	0.3	289.1	21.2	0.1	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	43.9	1.7	1.7	8.1	0.0
LnGrp Delay(d), s/veh	41.3	337.1	78.9	4.8	9.9	0.0
LnGrp LOS	D	F	E	A	A	
Approach Vol, veh/h	726			716	1537	
Approach Delay, s/veh	247.0			9.2	9.9	
Approach LOS	F			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		92.0		28.0	7.7	84.3		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		88.0		24.0	12.0	72.0		
Max Q Clear Time (g_c+I1), s		5.8		26.0	4.8	19.4		
Green Ext Time (p_c), s		5.3		0.0	0.0	16.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	930	90	300	580	110	80	440	270	100	500	120
Future Volume (veh/h)	100	930	90	300	580	110	80	440	270	100	500	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.85	1.00		0.88	1.00		0.86	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792	1792
Adj Flow Rate, veh/h	108	1000	97	323	624	118	86	473	290	108	538	129
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	6	6	6	6	6	6	6	6	6	6	6	6
Cap, veh/h	166	1318	348	404	1670	456	138	1955	523	166	1996	536
Arrive On Green	0.05	0.27	0.27	0.12	0.34	0.34	0.04	0.40	0.40	0.05	0.41	0.41
Sat Flow, veh/h	3312	4893	1291	3312	4893	1337	3312	4893	1308	3312	4893	1314
Grp Volume(v), veh/h	108	1000	97	323	624	118	86	473	290	108	538	129
Grp Sat Flow(s),veh/h/ln	1656	1631	1291	1656	1631	1337	1656	1631	1308	1656	1631	1314
Q Serve(g_s), s	3.2	18.9	6.0	9.5	9.7	6.4	2.6	6.5	17.2	3.2	7.4	6.5
Cycle Q Clear(g_c), s	3.2	18.9	6.0	9.5	9.7	6.4	2.6	6.5	17.2	3.2	7.4	6.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	1318	348	404	1670	456	138	1955	523	166	1996	536
V/C Ratio(X)	0.65	0.76	0.28	0.80	0.37	0.26	0.62	0.24	0.55	0.65	0.27	0.24
Avail Cap(c_a), veh/h	264	1752	462	659	2336	638	231	1955	523	264	1996	536
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.9	33.7	29.0	42.9	25.0	23.9	47.4	20.1	23.3	46.9	19.8	19.5
Incr Delay (d2), s/veh	4.3	1.4	0.4	3.7	0.1	0.3	4.5	0.3	4.2	4.3	0.3	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.7	2.2	4.6	4.4	2.4	1.3	2.9	6.8	1.6	3.3	2.5
LnGrp Delay(d), s/veh	51.2	35.1	29.4	46.6	25.1	24.2	51.9	20.4	27.5	51.2	20.1	20.6
LnGrp LOS	D	D	C	D	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1205			1065			849			775	
Approach Delay, s/veh		36.1			31.6			26.0			24.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	44.2	16.3	31.1	8.2	45.0	9.0	38.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	40.0	20.0	36.0	7.0	41.0	8.0	48.0
Max Q Clear Time (g_c+I1), s	5.2	19.2	11.5	20.9	4.6	9.4	5.2	11.7
Green Ext Time (p_c), s	0.1	4.2	0.7	6.2	0.0	4.5	0.1	5.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Future Volume (veh/h)	20	10	30	350	20	100	80	940	540	210	1280	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1827	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	21	11	32	372	21	106	85	1000	574	223	1362	53
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	462	134	388	478	593	501	108	2024	615	259	2420	94
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.06	0.41	0.41	0.15	0.49	0.49
Sat Flow, veh/h	1228	411	1196	1325	1827	1543	1740	4988	1517	1740	4916	191
Grp Volume(v), veh/h	21	0	43	372	21	106	85	1000	574	223	921	494
Grp Sat Flow(s),veh/h/ln	1228	0	1607	1325	1827	1543	1740	1663	1517	1740	1663	1783
Q Serve(g_s), s	1.2	0.0	1.8	27.0	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Cycle Q Clear(g_c), s	2.0	0.0	1.8	28.8	0.8	5.0	4.8	14.8	36.0	12.5	19.4	19.4
Prop In Lane	1.00		0.74	1.00		1.00	1.00		1.00	1.00		0.11
Lane Grp Cap(c), veh/h	462	0	522	478	593	501	108	2024	615	259	1637	878
V/C Ratio(X)	0.05	0.00	0.08	0.78	0.04	0.21	0.78	0.49	0.93	0.86	0.56	0.56
Avail Cap(c_a), veh/h	642	0	759	673	863	729	210	2024	615	402	1637	878
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	23.6	0.0	23.3	33.3	23.0	24.4	46.0	22.0	28.3	41.4	17.7	17.7
Incr Delay (d2), s/veh	0.0	0.0	0.1	3.8	0.0	0.2	11.6	0.9	23.0	11.0	1.4	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.8	10.3	0.4	2.1	2.7	6.9	18.9	6.8	9.1	10.1
LnGrp Delay(d), s/veh	23.7	0.0	23.4	37.1	23.0	24.6	57.6	22.8	51.3	52.4	19.2	20.4
LnGrp LOS	C		C	D	C	C	E	C	D	D	B	C
Approach Vol, veh/h		64			499			1659			1638	
Approach Delay, s/veh		23.5			33.8			34.5			24.0	
Approach LOS		C			C			C			C	

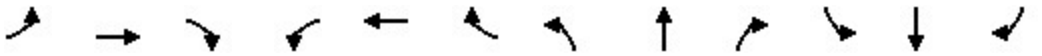
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	18.8	44.4		36.3	10.2	53.0		36.3
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	23.0	38.0		47.0	12.0	49.0		47.0
Max Q Clear Time (g_c+I1), s	14.5	38.0		4.0	6.8	21.4		30.8
Green Ext Time (p_c), s	0.4	0.0		0.3	0.1	11.4		1.5

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh	29.8	
HCM 2010 LOS	C	

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	90	0	0	420	1060	60
Future Volume (veh/h)	90	0	0	420	1060	60
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	93	0	0	433	1093	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2155	0	0	2155	1465	464
Arrive On Green	0.60	0.00	0.00	0.60	0.29	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	93	0	0	433	1093	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	0.8	0.0	0.0	4.1	14.6	0.0
Cycle Q Clear(g_c), s	0.8	0.0	0.0	4.1	14.6	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2155	0	0	2155	1465	464
V/C Ratio(X)	0.04	0.00	0.00	0.20	0.75	0.00
Avail Cap(c_a), veh/h	2155	0	0	2155	4534	1435
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	6.0	0.0	0.0	6.7	24.0	0.0
Incr Delay (d2), s/veh	0.0	0.0	0.0	0.2	0.8	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0	2.0	6.9	0.0
LnGrp Delay(d), s/veh	6.1	0.0	0.0	6.9	24.8	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	93			433	1093	
Approach Delay, s/veh	6.1			6.9	24.8	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		49.0				49.0		25.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		45.0				45.0		67.0
Max Q Clear Time (g_c+I1), s		2.8				6.1		16.6
Green Ext Time (p_c), s		0.5				2.8		5.0

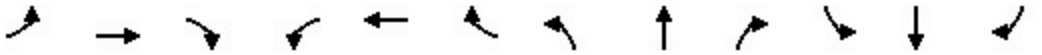
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	1070	120	340	700	110	130	320	240	580	480	120
Future Volume (vph)	290	1070	120	340	700	110	130	320	240	580	480	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.86	1.00	0.99		1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.98		1.00	0.98	0.85	1.00	0.98	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	0.98	
Satd. Flow (prot)	3433	5085	1366	3433	4942		1610	3107	1418	1522	4584	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.72	
Satd. Flow (perm)	3433	5085	1366	3433	4942		1610	2911	1418	1522	3377	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	299	1103	124	351	722	113	134	330	247	598	495	124
RTOR Reduction (vph)	0	0	94	0	17	0	0	12	50	0	16	0
Lane Group Flow (vph)	299	1103	30	351	818	0	121	398	130	305	896	0
Confl. Peds. (#/hr)	21		58	58		21	26		5	5		26
Confl. Bikes (#/hr)			1			3						
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pm+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	3	1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	14.4	28.6	28.6	13.9	28.1		13.2	44.5	45.2	27.0	62.3	
Effective Green, g (s)	14.4	28.6	28.6	13.9	28.1		13.2	44.5	45.2	27.0	62.3	
Actuated g/C Ratio	0.12	0.24	0.24	0.12	0.24		0.11	0.38	0.39	0.23	0.53	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	423	1245	334	408	1188		181	1131	597	351	2080	
v/s Ratio Prot	0.09	c0.22		c0.10	0.17		0.08	0.04	0.03	c0.20	0.10	
v/s Ratio Perm			0.02					0.09	0.07		c0.13	
v/c Ratio	0.71	0.89	0.09	0.86	0.69		0.67	0.35	0.22	0.87	0.43	
Uniform Delay, d1	49.2	42.5	34.1	50.5	40.4		49.7	25.8	24.0	43.2	16.5	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.3	7.9	0.1	16.7	1.7		9.0	0.2	0.2	19.8	0.1	
Delay (s)	54.5	50.4	34.2	67.2	42.0		58.7	26.0	24.1	63.0	16.7	
Level of Service	D	D	C	E	D		E	C	C	E	B	
Approach Delay (s/veh)		49.9			49.5			31.1			28.3	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	116.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.1%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Future Volume (veh/h)	170	830	320	310	730	120	180	630	110	190	860	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
Arrive On Green	0.12	0.27	0.27	0.20	0.35	0.35	0.07	0.27	0.27	0.13	0.32	0.32
Sat Flow, veh/h	1792	3574	1571	1792	3574	1550	3476	3574	1555	1792	3574	1553
Grp Volume(v), veh/h	179	874	337	326	768	126	189	663	116	200	905	168
Grp Sat Flow(s),veh/h/ln	1792	1787	1571	1792	1787	1550	1738	1787	1555	1792	1787	1553
Q Serve(g_s), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Cycle Q Clear(g_c), s	11.3	27.2	20.7	20.5	20.4	5.3	6.1	19.2	5.0	12.6	26.4	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	963	537	356	1254	748	247	947	730	229	1150	500
V/C Ratio(X)	0.85	0.91	0.63	0.92	0.61	0.17	0.76	0.70	0.16	0.87	0.79	0.34
Avail Cap(c_a), veh/h	312	995	551	405	1254	748	272	947	730	265	1150	500
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.8	40.6	31.8	45.1	30.9	17.0	52.5	38.1	17.9	49.2	35.4	29.6
Incr Delay (d2), s/veh	13.7	11.7	2.2	23.6	0.9	0.1	11.2	4.3	0.5	23.6	5.5	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.4	14.9	9.3	12.5	10.2	2.3	3.3	10.0	2.2	7.7	13.9	4.3
LnGrp Delay(d), s/veh	63.5	52.3	34.0	68.7	31.7	17.1	63.6	42.4	18.3	72.8	40.9	31.5
LnGrp LOS	E	D	C	E	C	B	E	D	B	E	D	C
Approach Vol, veh/h		1390			1220			968			1273	
Approach Delay, s/veh		49.3			40.1			43.7			44.6	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.7	34.5	26.8	35.0	12.2	41.0	17.5	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	29.0	26.0	32.0	9.0	37.0	20.0	38.0
Max Q Clear Time (g_c+I1), s	14.6	21.2	22.5	29.2	8.1	28.4	13.3	22.4
Green Ext Time (p_c), s	0.1	2.9	0.3	1.8	0.1	4.1	0.2	4.9

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		44.6	
HCM 2010 LOS		D	

ANAHEIM - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	870	440	580	2720	0	30	0	310	80	70	10
Future Volume (veh/h)	0	870	440	580	2720	0	30	0	310	80	70	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	0	906	458	604	2833	0	21	0	334	83	73	10
Adj No. of Lanes	0	3	1	2	4	0	1	0	2	2	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	0	2228	691	700	4351	0	31	0	566	135	709	317
Arrive On Green	0.00	0.43	0.43	0.20	0.67	0.00	0.02	0.00	0.18	0.04	0.20	0.20
Sat Flow, veh/h	0	5305	1592	3476	6735	0	1792	0	3198	3476	3574	1599
Grp Volume(v), veh/h	0	906	458	604	2833	0	21	0	334	83	73	10
Grp Sat Flow(s),veh/h/ln	0	1712	1592	1738	1618	0	1792	0	1599	1738	1787	1599
Q Serve(g_s), s	0.0	13.0	24.5	18.0	27.4	0.0	1.3	0.0	10.3	2.5	1.8	0.5
Cycle Q Clear(g_c), s	0.0	13.0	24.5	18.0	27.4	0.0	1.3	0.0	10.3	2.5	1.8	0.5
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	2228	691	700	4351	0	31	0	566	135	709	317
V/C Ratio(X)	0.00	0.41	0.66	0.86	0.65	0.00	0.68	0.00	0.59	0.62	0.10	0.03
Avail Cap(c_a), veh/h	0	2393	742	939	5005	0	100	0	566	194	709	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	20.9	24.2	41.4	10.2	0.0	52.4	0.0	40.6	50.8	35.2	34.7
Incr Delay (d2), s/veh	0.0	0.1	2.0	6.5	0.2	0.0	22.6	0.0	4.5	4.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.1	11.2	9.3	12.1	0.0	0.8	0.0	4.9	1.3	0.9	0.3
LnGrp Delay(d), s/veh	0.0	21.0	26.2	47.9	10.5	0.0	75.0	0.0	45.0	55.3	35.5	34.9
LnGrp LOS		C	C	D	B		E		D	E	D	C
Approach Vol, veh/h		1364			3437			355			166	
Approach Delay, s/veh		22.7			17.1			46.8			45.3	
Approach LOS		C			B			D			D	

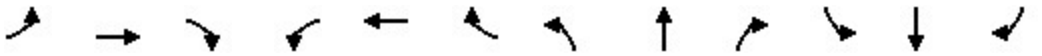
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	8.2	23.0	25.6	50.6	5.9	25.3		76.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	19.0	29.0	50.0	6.0	19.0		83.0
Max Q Clear Time (g_c+I1), s	4.5	12.3	20.0	26.5	3.3	3.8		29.4
Green Ext Time (p_c), s	0.0	0.7	1.6	8.3	0.0	0.3		42.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	60	1280	0	0	2410	160	0	0	0	830	1170	180
Future Volume (vph)	60	1280	0	0	2410	160	0	0	0	830	1170	180
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Lane Util. Factor	0.97	0.86			0.81	0.81				0.81	0.81	
Frpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Flpb, ped/bikes	1.00	1.00			1.00	1.00				1.00	1.00	
Frt	1.00	1.00			1.00	0.85				1.00	0.98	
Flt Protected	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (prot)	3467	6471			6089	1295				1448	5925	
Flt Permitted	0.95	1.00			1.00	1.00				0.95	0.99	
Satd. Flow (perm)	3467	6471			6089	1295				1448	5925	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	66	1407	0	0	2648	176	0	0	0	912	1286	198
RTOR Reduction (vph)	0	0	0	0	1	24	0	0	0	0	15	0
Lane Group Flow (vph)	66	1407	0	0	2665	134	0	0	0	474	1907	0
Confl. Peds. (#/hr)			2	2			1					1
Confl. Bikes (#/hr)			1									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA	Perm				Prot	NA	
Protected Phases	7	4			8					5	2	
Permitted Phases						8						
Actuated Green, G (s)	3.2	62.2			55.0	55.0				49.0	49.0	
Effective Green, g (s)	3.2	62.2			55.0	55.0				49.0	49.0	
Actuated g/C Ratio	0.03	0.52			0.46	0.46				0.41	0.41	
Clearance Time (s)	4.0	4.0			4.0	4.0				4.0	4.0	
Vehicle Extension (s)	3.0	3.0			3.0	3.0				3.0	3.0	
Lane Grp Cap (vph)	93	3376			2809	597				595	2435	
v/s Ratio Prot	c0.02	0.22			c0.44					c0.33	0.32	
v/s Ratio Perm						0.10						
v/c Ratio	0.71	0.42			0.95	0.22				0.80	0.78	
Uniform Delay, d1	57.5	17.4			30.8	19.3				30.7	30.5	
Progression Factor	1.00	1.00			1.00	1.00				1.00	1.00	
Incremental Delay, d2	21.9	0.1			8.0	0.2				7.3	1.7	
Delay (s)	79.4	17.5			38.7	19.5				38.0	32.2	
Level of Service	E	B			D	B				D	C	
Approach Delay (s/veh)		20.3			37.7			0.0			33.4	
Approach LOS		C			D			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.87		
Actuated Cycle Length (s)	119.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	68.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	180	1170	20	40	1900	60	150	180	30	70	10	660
Future Volume (vph)	180	1170	20	40	1900	60	150	180	30	70	10	660
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	1.00	0.91	1.00	1.00	1.00		1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.98	1.00	1.00		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98		1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)	1787	5136	1529	1787	5136	1569	1787	1837		1785	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.75	1.00		0.52	1.00	1.00
Satd. Flow (perm)	1787	5136	1529	1787	5136	1569	1412	1837		971	1881	1599
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	198	1286	22	44	2088	66	165	198	33	77	11	725
RTOR Reduction (vph)	0	0	11	0	0	39	0	5	0	0	0	117
Lane Group Flow (vph)	198	1286	11	44	2088	27	165	226	0	77	11	608
Confl. Peds. (#/hr)	3		6	6		3			1	1		
Confl. Bikes (#/hr)			2									
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Perm	NA		Perm	NA	Perm
Protected Phases	7	4		3	8			2			6	
Permitted Phases			4			8	2			6		6
Actuated Green, G (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Effective Green, g (s)	14.0	58.2	58.2	5.6	49.8	49.8	45.0	45.0		45.0	45.0	45.0
Actuated g/C Ratio	0.12	0.48	0.48	0.05	0.41	0.41	0.37	0.37		0.37	0.37	0.37
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	207	2474	736	82	2117	646	525	684		361	700	595
v/s Ratio Prot	c0.11	0.25		0.02	c0.41			0.12			0.01	
v/s Ratio Perm			0.01			0.02	0.12			0.08		c0.38
v/c Ratio	0.96	0.52	0.01	0.54	0.99	0.04	0.31	0.33		0.21	0.02	1.02
Uniform Delay, d1	53.1	21.6	16.3	56.3	35.2	21.2	26.9	27.1		25.8	23.9	37.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2	49.7	0.2	0.0	6.6	16.3	0.0	1.6	1.3		1.3	0.0	42.7
Delay (s)	102.8	21.8	16.3	62.9	51.4	21.3	28.5	28.4		27.2	24.0	80.6
Level of Service	F	C	B	E	D	C	C	C		C	C	F
Approach Delay (s/veh)		32.4			50.8			28.4			74.7	
Approach LOS		C			D			C			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	47.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.00		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	95.9%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Future Volume (vph)	70	90	70	30	340	70	20	0	80	250	0	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor	1.00	0.91		0.97	0.91		1.00		0.88	1.00		0.88
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		0.99	1.00		1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Frt	1.00	0.93		1.00	0.97		1.00		0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)	1805	4845		3502	5042		1805		2804	1802		2842
Flt Permitted	0.95	1.00		0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)	1805	4845		3502	5042		1805		2804	1802		2842
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	80	102	80	34	386	80	23	0	91	284	0	23
RTOR Reduction (vph)	0	64	0	0	30	0	0	0	34	0	0	9
Lane Group Flow (vph)	80	118	0	34	436	0	23	0	57	284	0	14
Confl. Peds. (#/hr)	1					1			1	1		
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA		Perm		Perm	Perm		Perm
Protected Phases	7	4		3	8							
Permitted Phases							6		6	2		2
Actuated Green, G (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Effective Green, g (s)	7.9	17.9		3.9	13.9		56.6		56.6	56.6		56.6
Actuated g/C Ratio	0.09	0.20		0.04	0.15		0.63		0.63	0.63		0.63
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)	157	959		151	775		1130		1755	1128		1779
v/s Ratio Prot	c0.04	c0.02		0.01	c0.09							
v/s Ratio Perm							0.01		0.02	c0.16		0.01
v/c Ratio	0.51	0.12		0.23	0.56		0.02		0.03	0.25		0.01
Uniform Delay, d1	39.4	29.8		41.8	35.4		6.4		6.4	7.5		6.4
Progression Factor	1.00	1.00		1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2	2.6	0.1		0.8	0.9		0.0		0.0	0.5		0.0
Delay (s)	42.0	29.9		42.6	36.4		6.4		6.5	8.0		6.4
Level of Service	D	C		D	D		A		A	A		A
Approach Delay (s/veh)		33.6			36.8			6.5			7.9	
Approach LOS		C			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	90.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	45.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Future Volume (veh/h)	270	1150	260	190	1070	220	450	1260	210	280	730	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	281	1198	271	198	1115	229	469	1312	219	292	760	240
Adj No. of Lanes	1	3	0	1	3	0	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	311	1398	316	227	1227	252	531	1523	462	352	942	294
Arrive On Green	0.17	0.34	0.34	0.13	0.29	0.29	0.15	0.30	0.30	0.10	0.25	0.25
Sat Flow, veh/h	1792	4161	941	1792	4242	871	3476	5136	1557	3476	3843	1199
Grp Volume(v), veh/h	281	986	483	198	900	444	469	1312	219	292	676	324
Grp Sat Flow(s),veh/h/ln	1792	1712	1679	1792	1712	1689	1738	1712	1557	1738	1712	1618
Q Serve(g_s), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Cycle Q Clear(g_c), s	17.6	30.8	30.8	12.4	29.1	29.1	15.2	27.7	13.2	9.5	21.3	21.7
Prop In Lane	1.00		0.56	1.00		0.52	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	311	1150	564	227	990	488	531	1523	462	352	839	396
V/C Ratio(X)	0.90	0.86	0.86	0.87	0.91	0.91	0.88	0.86	0.47	0.83	0.81	0.82
Avail Cap(c_a), veh/h	359	1194	586	266	1015	501	576	1523	462	394	839	396
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	35.5	35.5	49.2	39.3	39.3	47.6	38.1	33.0	50.6	40.7	40.9
Incr Delay (d2), s/veh	23.3	6.2	11.8	23.1	11.6	20.3	14.3	6.7	3.5	12.7	8.1	16.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	15.5	16.1	7.6	15.3	16.3	8.4	14.1	6.1	5.2	11.0	11.6
LnGrp Delay(d), s/veh	69.8	41.7	47.3	72.2	50.9	59.6	61.9	44.8	36.5	63.2	48.9	57.7
LnGrp LOS	E	D	D	E	D	E	E	D	D	E	D	E
Approach Vol, veh/h		1750			1542			2000			1292	
Approach Delay, s/veh		47.8			56.1			47.9			54.3	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.6	38.0	18.5	42.5	21.5	32.1	23.9	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	34.0	17.0	40.0	19.0	28.0	23.0	34.0
Max Q Clear Time (g_c+I1), s	11.5	29.7	14.4	32.8	17.2	23.7	19.6	31.1
Green Ext Time (p_c), s	0.2	3.1	0.1	4.9	0.4	2.4	0.3	2.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Future Volume (veh/h)	130	30	30	80	50	270	40	1330	40	120	1000	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	149	34	34	92	57	310	46	1529	46	138	1149	207
Adj No. of Lanes	1	1	0	1	1	0	1	3	1	1	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	156	259	259	424	75	410	263	3253	989	216	2761	497
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	1021	864	864	1340	251	1366	404	5136	1562	327	4360	785
Grp Volume(v), veh/h	149	0	68	92	0	367	46	1529	46	138	902	454
Grp Sat Flow(s),veh/h/ln	1021	0	1728	1340	0	1617	404	1712	1562	327	1712	1721
Q Serve(g_s), s	11.3	0.0	3.4	6.4	0.0	24.7	7.7	18.7	1.3	45.6	15.7	15.8
Cycle Q Clear(g_c), s	36.0	0.0	3.4	9.9	0.0	24.7	23.4	18.7	1.3	64.3	15.7	15.8
Prop In Lane	1.00		0.50	1.00		0.84	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
V/C Ratio(X)	0.95	0.00	0.13	0.22	0.00	0.76	0.17	0.47	0.05	0.64	0.42	0.42
Avail Cap(c_a), veh/h	156	0	518	424	0	485	263	3253	989	216	2168	1090
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	0.0	30.6	34.2	0.0	38.0	16.8	11.5	8.3	28.3	11.0	11.0
Incr Delay (d2), s/veh	57.8	0.0	0.1	0.3	0.0	6.7	1.4	0.5	0.1	13.5	0.6	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	1.7	2.4	0.0	11.9	1.0	8.9	0.6	4.9	7.6	7.8
LnGrp Delay(d), s/veh	114.1	0.0	30.7	34.5	0.0	44.8	18.2	12.0	8.4	41.8	11.5	12.1
LnGrp LOS	F		C	C		D	B	B	A	D	B	B
Approach Vol, veh/h		217			459			1621			1494	
Approach Delay, s/veh		88.0			42.7			12.1			14.5	
Approach LOS		F			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		25.4		38.0		66.3		26.7
Green Ext Time (p_c), s		17.6		0.0		6.9		1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Future Volume (veh/h)	620	810	140	80	450	340	100	1040	40	70	970	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	667	871	151	86	484	366	108	1118	43	75	1043	118
Adj No. of Lanes	1	2	0	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	422	2031	352	356	1287	971	75	1014	39	60	895	101
Arrive On Green	0.67	0.67	0.67	0.67	0.67	0.67	0.04	0.20	0.20	0.03	0.19	0.19
Sat Flow, veh/h	652	3046	528	555	1930	1456	1792	5070	195	1792	4668	527
Grp Volume(v), veh/h	667	511	511	86	448	402	108	755	406	75	764	397
Grp Sat Flow(s),veh/h/ln	652	1787	1787	555	1787	1599	1792	1712	1841	1792	1712	1772
Q Serve(g_s), s	66.6	16.0	16.0	10.3	13.4	13.4	5.0	24.0	24.0	4.0	23.0	23.0
Cycle Q Clear(g_c), s	80.0	16.0	16.0	26.3	13.4	13.4	5.0	24.0	24.0	4.0	23.0	23.0
Prop In Lane	1.00		0.30	1.00		0.91	1.00		0.11	1.00		0.30
Lane Grp Cap(c), veh/h	422	1191	1191	356	1191	1066	75	685	368	60	656	340
V/C Ratio(X)	1.58	0.43	0.43	0.24	0.38	0.38	1.45	1.10	1.10	1.26	1.16	1.17
Avail Cap(c_a), veh/h	422	1191	1191	356	1191	1066	75	685	368	60	656	340
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.4	9.3	9.3	15.5	8.9	8.9	57.5	48.0	48.0	58.0	48.5	48.5
Incr Delay (d2), s/veh	272.6	0.2	0.2	0.3	0.2	0.2	261.1	65.8	77.7	200.2	90.2	102.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	45.9	7.9	7.9	1.6	6.7	6.0	7.9	17.6	20.1	5.3	19.1	20.9
LnGrp Delay(d), s/veh	304.0	9.6	9.6	15.8	9.1	9.1	318.6	113.8	125.7	258.2	138.7	151.1
LnGrp LOS	F	A	A	B	A	A	F	F	F	F	F	F
Approach Vol, veh/h		1689			936			1269			1236	
Approach Delay, s/veh		125.9			9.7			135.1			149.9	
Approach LOS		F			A			F			F	

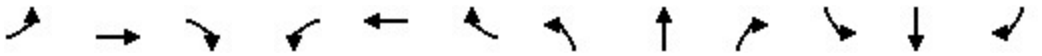
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.0	28.0		84.0	9.0	27.0		84.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	24.0		80.0	5.0	23.0		80.0
Max Q Clear Time (g_c+I1), s	6.0	26.0		82.0	7.0	25.0		28.3
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	0.0		7.7

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		112.7
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Future Volume (veh/h)	10	20	10	680	10	160	20	1110	340	70	1120	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	11	21	11	716	11	168	21	1168	358	74	1179	11
Adj No. of Lanes	0	1	0	0	1	1	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	38	65	22	324	4	877	30	1195	366	75	1748	16
Arrive On Green	0.55	0.55	0.55	0.55	0.55	0.55	0.02	0.31	0.31	0.04	0.33	0.33
Sat Flow, veh/h	0	118	41	481	7	1594	1792	3877	1188	1792	5246	49
Grp Volume(v), veh/h	43	0	0	727	0	168	21	1031	495	74	769	421
Grp Sat Flow(s),veh/h/ln	159	0	0	489	0	1594	1792	1712	1641	1792	1712	1871
Q Serve(g_s), s	0.0	0.0	0.0	0.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Cycle Q Clear(g_c), s	66.0	0.0	0.0	66.0	0.0	6.4	1.4	35.8	35.8	5.0	23.2	23.2
Prop In Lane	0.26		0.26	0.98		1.00	1.00		0.72	1.00		0.03
Lane Grp Cap(c), veh/h	125	0	0	328	0	877	30	1056	506	75	1141	624
V/C Ratio(X)	0.34	0.00	0.00	2.21	0.00	0.19	0.70	0.98	0.98	0.99	0.67	0.67
Avail Cap(c_a), veh/h	125	0	0	328	0	877	60	1056	506	75	1141	624
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.5	0.0	0.0	33.0	0.0	13.6	58.7	41.1	41.1	57.5	34.4	34.4
Incr Delay (d2), s/veh	1.6	0.0	0.0	555.9	0.0	0.1	25.3	22.7	34.8	101.1	3.2	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	61.6	0.0	2.8	0.9	20.2	21.1	4.5	11.5	13.0
LnGrp Delay(d), s/veh	29.2	0.0	0.0	588.9	0.0	13.7	84.0	63.8	75.9	158.5	37.6	40.2
LnGrp LOS	C			F		B	F	E	E	F	D	D
Approach Vol, veh/h		43			895			1547			1264	
Approach Delay, s/veh		29.2			480.9			67.9			45.5	
Approach LOS		C			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.0	41.0		70.0	6.0	44.0		70.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	37.0		66.0	4.0	38.0		66.0
Max Q Clear Time (g_c+I1), s	7.0	37.8		68.0	3.4	25.2		68.0
Green Ext Time (p_c), s	0.0	0.0		0.0	0.0	6.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		158.5
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	290	520	100	640	990	70	290	680	470	160	1020	520
Future Volume (vph)	290	520	100	640	990	70	290	680	470	160	1020	520
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.81	0.81	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.91	1.00
Frpb, ped/bikes	1.00	1.00	0.93	1.00	1.00	0.97	1.00	1.00	0.93	1.00	1.00	0.97
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	6069	1206	3467	5136	1558	3467	5136	1494	3467	5136	1556
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	6069	1206	3467	5136	1558	3467	5136	1494	3467	5136	1556
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	305	547	105	674	1042	74	305	716	495	168	1074	547
RTOR Reduction (vph)	0	2	81	0	0	56	0	0	291	0	0	199
Lane Group Flow (vph)	305	556	13	674	1042	18	305	716	204	168	1074	348
Confl. Peds. (#/hr)	6		26	26		6	7		25	25		7
Confl. Bikes (#/hr)			1			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases			4			8			2			6
Actuated Green, G (s)	13.9	16.3	16.3	26.6	29.0	29.0	13.9	48.1	48.1	9.5	43.7	43.7
Effective Green, g (s)	13.9	16.3	16.3	26.6	29.0	29.0	13.9	48.1	48.1	9.5	43.7	43.7
Actuated g/C Ratio	0.12	0.14	0.14	0.23	0.25	0.25	0.12	0.41	0.41	0.08	0.38	0.38
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	413	849	168	791	1278	387	413	2120	616	282	1926	583
v/s Ratio Prot	0.09	0.09		c0.19	c0.20		c0.09	0.14		0.05	0.21	
v/s Ratio Perm			0.01			0.01			0.14			c0.22
v/c Ratio	0.74	0.66	0.08	0.85	0.82	0.05	0.74	0.34	0.33	0.60	0.56	0.60
Uniform Delay, d1	49.5	47.4	43.6	43.1	41.2	33.3	49.5	23.3	23.3	51.6	28.8	29.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	6.8	1.8	0.2	8.8	4.1	0.1	6.8	0.4	1.4	3.4	1.2	4.5
Delay (s)	56.3	49.3	43.8	51.9	45.4	33.3	56.3	23.8	24.7	55.0	29.9	33.8
Level of Service	E	D	D	D	D	C	E	C	C	E	C	C
Approach Delay (s/veh)		51.0			47.3			30.6			33.5	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.74		
Actuated Cycle Length (s)	116.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	340	0	240	10	10	10	420	1220	10	10	1410	970
Future Volume (veh/h)	340	0	240	10	10	10	420	1220	10	10	1410	970
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	347	0	245	10	10	10	429	1245	10	10	1439	990
Adj No. of Lanes	1	2	0	1	2	0	2	3	0	2	3	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	425	476	424	212	485	416	435	3281	26	33	1742	798
Arrive On Green	0.27	0.00	0.27	0.27	0.27	0.27	0.13	0.62	0.62	0.01	0.51	0.51
Sat Flow, veh/h	1396	1787	1594	1141	1822	1564	3476	5255	42	3476	3424	1568
Grp Volume(v), veh/h	347	0	245	10	10	10	429	811	444	10	1439	990
Grp Sat Flow(s),veh/h/ln	1396	1787	1594	1141	1787	1599	1738	1712	1873	1738	1712	1568
Q Serve(g_s), s	29.3	0.0	16.0	0.9	0.5	0.6	14.8	14.0	14.0	0.3	42.7	61.0
Cycle Q Clear(g_c), s	29.9	0.0	16.0	16.9	0.5	0.6	14.8	14.0	14.0	0.3	42.7	61.0
Prop In Lane	1.00		1.00	1.00		0.98	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	425	476	424	212	476	425	435	2138	1170	33	1742	798
V/C Ratio(X)	0.82	0.00	0.58	0.05	0.02	0.02	0.99	0.38	0.38	0.30	0.83	1.24
Avail Cap(c_a), veh/h	426	477	425	212	477	427	435	2138	1170	116	1742	798
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.5	0.0	38.2	45.5	32.5	32.5	52.4	11.1	11.1	59.0	25.0	29.5
Incr Delay (d2), s/veh	11.7	0.0	1.9	0.1	0.0	0.0	39.5	0.5	0.9	5.1	4.6	119.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	0.0	7.2	0.3	0.2	0.3	9.5	6.7	7.5	0.2	21.3	52.8
LnGrp Delay(d), s/veh	55.3	0.0	40.1	45.6	32.5	32.5	91.9	11.6	12.0	64.1	29.6	148.5
LnGrp LOS	E		D	D	C	C	F	B	B	E	C	F
Approach Vol, veh/h		592			30			1684			2439	
Approach Delay, s/veh		49.0			36.9			32.2			78.0	
Approach LOS		D			D			C			E	

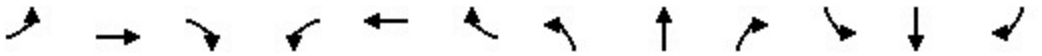
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.1	78.9		35.9	19.0	65.0		35.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	72.0		32.0	15.0	61.0		32.0
Max Q Clear Time (g_c+I1), s	2.3	16.0		31.9	16.8	63.0		18.9
Green Ext Time (p_c), s	0.0	10.6		0.0	0.0	0.0		0.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		57.9
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	730	430	870	1560	170	280	1010	210	140	1350	210
Future Volume (veh/h)	230	730	430	870	1560	170	280	1010	210	140	1350	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	256	811	478	967	1733	189	311	1122	233	156	1500	233
Adj No. of Lanes	2	3	0	2	3	0	2	4	0	2	4	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	310	799	367	956	1967	214	319	1603	330	213	1516	235
Arrive On Green	0.09	0.23	0.23	0.28	0.42	0.42	0.09	0.30	0.30	0.06	0.27	0.27
Sat Flow, veh/h	3476	3424	1571	3476	4694	510	3476	5398	1110	3476	5684	882
Grp Volume(v), veh/h	256	811	478	967	1262	660	311	1008	347	156	1281	452
Grp Sat Flow(s),veh/h/ln	1738	1712	1571	1738	1712	1780	1738	1618	1654	1738	1618	1713
Q Serve(g_s), s	8.7	28.0	28.0	33.0	40.7	41.1	10.7	22.1	22.4	5.3	31.5	31.6
Cycle Q Clear(g_c), s	8.7	28.0	28.0	33.0	40.7	41.1	10.7	22.1	22.4	5.3	31.5	31.6
Prop In Lane	1.00		1.00	1.00		0.29	1.00		0.67	1.00		0.52
Lane Grp Cap(c), veh/h	310	799	367	956	1435	746	319	1441	491	213	1294	457
V/C Ratio(X)	0.82	1.02	1.30	1.01	0.88	0.88	0.98	0.70	0.71	0.73	0.99	0.99
Avail Cap(c_a), veh/h	319	799	367	956	1435	746	319	1441	491	290	1294	457
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.7	46.0	46.0	43.5	32.1	32.2	54.4	37.4	37.5	55.3	43.8	43.8
Incr Delay (d2), s/veh	15.7	35.7	155.4	32.0	6.6	12.2	43.8	2.8	8.3	6.1	22.6	39.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	17.2	27.9	20.0	20.4	22.7	7.1	10.3	11.4	2.7	16.8	20.0
LnGrp Delay(d), s/veh	69.5	81.7	201.4	75.5	38.7	44.4	98.2	40.3	45.9	61.4	66.5	83.7
LnGrp LOS	E	F	F	F	D	D	F	D	D	E	E	F
Approach Vol, veh/h		1545			2889			1666			1889	
Approach Delay, s/veh		116.7			52.3			52.2			70.2	
Approach LOS		F			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.4	39.6	37.0	32.0	15.0	36.0	14.7	54.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	33.0	33.0	28.0	11.0	32.0	11.0	50.0
Max Q Clear Time (g_c+I1), s	7.3	24.4	35.0	30.0	12.7	33.6	10.7	43.1
Green Ext Time (p_c), s	0.1	5.2	0.0	0.0	0.0	0.0	0.0	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	69.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	880	250	170	1670	130	250	0	100	80	0	30
Future Volume (vph)	20	880	250	170	1670	130	250	0	100	80	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Lane Util. Factor	0.97	0.86		0.97	0.86		1.00	0.95	0.95	1.00		1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.97	0.97	1.00		0.97
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.85	0.85	1.00		0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (prot)	3467	6237		3467	6386		1787	1467	1467	1787		1547
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95		1.00
Satd. Flow (perm)	3467	6237		3467	6386		1787	1467	1467	1787		1547
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	22	978	278	189	1856	144	278	0	111	89	0	33
RTOR Reduction (vph)	0	44	0	0	10	0	0	36	36	0	0	26
Lane Group Flow (vph)	22	1212	0	189	1990	0	278	20	19	89	0	7
Confl. Peds. (#/hr)	10		1	1		10	8		11	11		8
Confl. Bikes (#/hr)						2						4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot		Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	2.2	37.7		10.2	45.7		22.5	38.9	38.9	8.7		25.1
Effective Green, g (s)	2.2	37.7		10.2	45.7		22.5	38.9	38.9	8.7		25.1
Actuated g/C Ratio	0.02	0.34		0.09	0.41		0.20	0.35	0.35	0.08		0.23
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0		4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0		3.0
Lane Grp Cap (vph)	68	2108		317	2617		360	511	511	139		348
v/s Ratio Prot	0.01	0.19		c0.05	c0.31		c0.16	c0.01		0.05		
v/s Ratio Perm									0.01			0.00
v/c Ratio	0.32	0.58		0.60	0.76		0.77	0.04	0.04	0.64		0.02
Uniform Delay, d1	53.9	30.3		48.7	28.2		42.1	24.0	23.9	49.9		33.6
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00		1.00
Incremental Delay, d2	2.8	0.4		3.0	1.3		9.9	0.1	0.1	9.7		0.1
Delay (s)	56.7	30.7		51.7	29.6		51.9	24.1	24.1	59.5		33.7
Level of Service	E	C		D	C		D	C	C	E		C
Approach Delay (s/veh)		31.1			31.5			44.0			52.6	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	33.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	111.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	63.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Future Volume (veh/h)	220	1310	30	430	1350	1060	100	460	420	350	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	232	1379	32	453	1421	1116	105	484	442	368	295	189
Adj No. of Lanes	2	3	0	2	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	174	1865	43	511	1638	721	324	402	350	299	647	402
Arrive On Green	0.05	0.36	0.36	0.15	0.46	0.46	0.05	0.22	0.22	0.13	0.31	0.31
Sat Flow, veh/h	3476	5162	120	3476	3574	1574	1792	1787	1556	1792	2099	1304
Grp Volume(v), veh/h	232	915	496	453	1421	1116	105	484	442	368	250	234
Grp Sat Flow(s),veh/h/ln	1738	1712	1858	1738	1787	1574	1792	1787	1556	1792	1787	1616
Q Serve(g_s), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Cycle Q Clear(g_c), s	6.0	27.9	27.9	15.3	42.9	55.0	5.4	27.0	27.0	16.0	13.5	14.1
Prop In Lane	1.00		0.06	1.00		1.00	1.00		1.00	1.00		0.81
Lane Grp Cap(c), veh/h	174	1237	671	511	1638	721	324	402	350	299	551	498
V/C Ratio(X)	1.33	0.74	0.74	0.89	0.87	1.55	0.32	1.20	1.26	1.23	0.45	0.47
Avail Cap(c_a), veh/h	174	1237	671	550	1638	721	324	402	350	299	551	498
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.0	33.4	33.4	50.2	29.2	32.5	33.6	46.5	46.5	35.3	33.4	33.6
Incr Delay (d2), s/veh	184.5	2.4	4.3	15.2	5.2	253.0	0.6	113.1	139.0	129.8	2.7	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	13.6	15.1	8.4	22.3	74.5	2.7	25.9	25.1	20.7	7.1	6.7
LnGrp Delay(d), s/veh	241.5	35.8	37.8	65.4	34.5	285.5	34.2	159.6	185.5	165.1	36.0	36.7
LnGrp LOS	F	D	D	E	C	F	C	F	F	F	D	D
Approach Vol, veh/h		1643			2990			1031			852	
Approach Delay, s/veh		65.4			132.9			157.9			92.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	31.0	21.7	47.3	10.0	41.0	10.0	59.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	27.0	19.0	42.0	6.0	37.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	18.0	29.0	17.3	29.9	7.4	16.1	8.0	57.0
Green Ext Time (p_c), s	0.0	0.0	0.3	6.8	0.0	2.9	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	114.5
HCM 2010 LOS	F

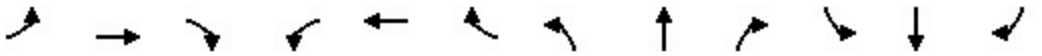
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Future Volume (veh/h)	180	610	30	100	1090	660	30	230	200	380	230	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	217	735	36	120	1313	795	36	277	241	458	277	157
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	0	2	0
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	60	2219	109	440	1422	776	102	555	467	214	310	175
Arrive On Green	0.63	0.63	0.63	0.63	0.63	0.63	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	197	3503	172	709	2246	1225	970	1851	1556	514	1032	585
Grp Volume(v), veh/h	217	379	392	120	1027	1081	36	270	248	458	0	434
Grp Sat Flow(s),veh/h/ln	197	1805	1870	709	1805	1665	970	1805	1602	514	0	1616
Q Serve(g_s), s	0.0	11.7	11.7	11.3	58.1	76.0	4.4	14.8	15.4	20.6	0.0	30.8
Cycle Q Clear(g_c), s	76.0	11.7	11.7	23.0	58.1	76.0	35.3	14.8	15.4	36.0	0.0	30.8
Prop In Lane	1.00		0.09	1.00		0.74	1.00		0.97	1.00		0.36
Lane Grp Cap(c), veh/h	60	1143	1184	440	1143	1055	102	542	481	214	0	485
V/C Ratio(X)	3.62	0.33	0.33	0.27	0.90	1.03	0.35	0.50	0.52	2.14	0.00	0.89
Avail Cap(c_a), veh/h	60	1143	1184	440	1143	1055	102	542	481	214	0	485
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	60.0	10.2	10.2	15.6	18.7	22.0	57.1	34.6	34.8	52.6	0.0	40.2
Incr Delay (d2), s/veh	1217.6	0.2	0.2	0.3	9.7	34.3	9.4	3.3	3.9	528.0	0.0	21.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	22.3	5.8	6.0	2.2	31.6	44.6	1.5	7.8	7.3	38.5	0.0	16.7
LnGrp Delay(d), s/veh	1277.6	10.4	10.4	15.9	28.4	56.3	66.4	37.8	38.7	580.6	0.0	61.9
LnGrp LOS	F	B	B	B	C	F	E	D	D	F		E
Approach Vol, veh/h		988			2228			554			892	
Approach Delay, s/veh		288.7			41.2			40.1			328.2	
Approach LOS		F			D			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		40.0		80.0		40.0		80.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		36.0		76.0		36.0		76.0
Max Q Clear Time (g_c+I1), s		37.3		78.0		38.0		78.0
Green Ext Time (p_c), s		0.0		0.0		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	148.4
HCM 2010 LOS	F

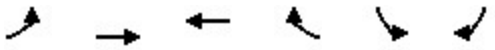
Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	400	940	40	80	1170	710	1560	110	1570	110	170	190
Future Volume (vph)	400	940	40	80	1170	710	1560	110	1570	110	170	190
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	0.95	0.95	1.00	1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.99	0.98	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.87	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3467	5136	1599	3467	5136	1599	3467	1531	1493	1787	1881	1599
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3467	5136	1599	3467	5136	1599	3467	1531	1493	1787	1881	1599
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	1022	43	87	1272	772	1696	120	1707	120	185	207
RTOR Reduction (vph)	0	0	32	0	0	606	0	182	182	0	0	100
Lane Group Flow (vph)	435	1022	11	87	1272	166	1696	740	723	120	185	107
Confl. Peds. (#/hr)									2	2		
Confl. Bikes (#/hr)									1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		6	6		2	2	
Permitted Phases			4			8			6			2
Actuated Green, G (s)	12.0	31.0	31.0	6.0	25.0	25.0	49.0	49.0	49.0	18.0	18.0	18.0
Effective Green, g (s)	12.0	31.0	31.0	6.0	25.0	25.0	49.0	49.0	49.0	18.0	18.0	18.0
Actuated g/C Ratio	0.10	0.26	0.26	0.05	0.21	0.21	0.41	0.41	0.41	0.15	0.15	0.15
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	346	1326	413	173	1070	333	1415	625	609	268	282	239
v/s Ratio Prot	c0.13	0.20		0.03	c0.25		c0.49	0.48		0.07	c0.10	
v/s Ratio Perm			0.01			0.10			0.48			0.07
v/c Ratio	1.26	0.77	0.03	0.50	1.19	0.50	1.20	1.18	1.19	0.45	0.66	0.45
Uniform Delay, d1	54.0	41.2	33.2	55.5	47.5	42.0	35.5	35.5	35.5	46.5	48.1	46.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	137.2	2.8	0.0	2.3	94.5	1.2	96.5	98.2	99.9	5.3	11.3	5.9
Delay (s)	191.2	44.0	33.3	57.8	142.0	43.2	132.0	133.7	135.4	51.8	59.4	52.4
Level of Service	F	D	C	E	F	D	F	F	F	D	E	D
Approach Delay (s/veh)		86.4			102.7			133.3			54.8	
Approach LOS		F			F			F			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	110.4	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	103.7%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



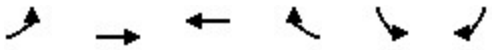
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Future Volume (vph)	0	870	60	170	2100	0	70	0	190	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0		4.0	4.0				
Lane Util. Factor		0.95		1.00	0.95		0.91	0.91				
Frpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Flpb, ped/bikes		1.00		1.00	1.00		1.00	1.00				
Frt		0.99		1.00	1.00		1.00	0.86				
Flt Protected		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (prot)		3567		1805	3610		1643	2953				
Flt Permitted		1.00		0.95	1.00		0.95	1.00				
Satd. Flow (perm)		3567		1805	3610		1643	2953				
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	978	67	191	2360	0	79	0	213	0	0	0
RTOR Reduction (vph)	0	3	0	0	0	0	0	176	0	0	0	0
Lane Group Flow (vph)	0	1042	0	191	2360	0	71	45	0	0	0	0
Confl. Peds. (#/hr)			5	5								
Confl. Bikes (#/hr)			3									
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split		Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)		49.1		14.9	68.0		16.0	16.0				
Effective Green, g (s)		49.1		14.9	68.0		16.0	16.0				
Actuated g/C Ratio		0.53		0.16	0.74		0.17	0.17				
Clearance Time (s)		4.0		4.0	4.0		4.0	4.0				
Vehicle Extension (s)		3.0		3.0	3.0		3.0	3.0				
Lane Grp Cap (vph)		1903		292	2668		285	513				
v/s Ratio Prot		0.29		0.11	c0.65		c0.04	0.02				
v/s Ratio Perm												
v/c Ratio		0.55		0.65	0.88		0.25	0.09				
Uniform Delay, d1		14.1		36.1	9.0		32.8	31.9				
Progression Factor		1.00		1.00	1.00		1.00	1.00				
Incremental Delay, d2		0.3		5.2	3.9		2.1	0.3				
Delay (s)		14.5		41.3	12.9		34.9	32.2				
Level of Service		B		D	B		C	C				
Approach Delay (s/veh)		14.5			15.1			32.9			0.0	
Approach LOS		B			B			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	16.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	92.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		Y	↱
Traffic Volume (vph)	0	1890	1460	0	900	730
Future Volume (vph)	0	1890	1460	0	900	730
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		1.00	0.95
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.99	0.85
Flt Protected		1.00	1.00		0.96	1.00
Satd. Flow (prot)		5136	5136		1778	1519
Flt Permitted		1.00	1.00		0.96	1.00
Satd. Flow (perm)		5136	5136		1778	1519
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	1969	1521	0	938	760
RTOR Reduction (vph)	0	0	0	0	2	2
Lane Group Flow (vph)	0	1969	1521	0	1012	682
Confl. Peds. (#/hr)	1			1		
Confl. Bikes (#/hr)				3		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		45.0	45.0		67.0	67.0
Effective Green, g (s)		45.0	45.0		67.0	67.0
Actuated g/C Ratio		0.38	0.38		0.56	0.56
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1926	1926		992	848
v/s Ratio Prot		c0.38	0.30		c0.57	
v/s Ratio Perm						0.45
v/c Ratio		1.02	0.79		1.02	0.80
Uniform Delay, d1		37.5	33.3		26.5	21.2
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		26.4	2.2		33.8	8.0
Delay (s)		63.9	35.5		60.3	29.3
Level of Service		E	D		E	C
Approach Delay (s/veh)		63.9	35.5		47.8	
Approach LOS		E	D		D	

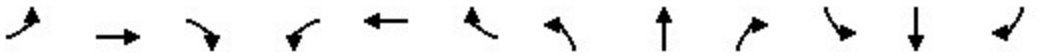
Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.02		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	107.9%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰↰	↱
Traffic Volume (vph)	0	1050	1320	0	190	610
Future Volume (vph)	0	1050	1320	0	190	610
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0		4.0	4.0
Lane Util. Factor		0.91	0.91		0.97	0.91
Frpb, ped/bikes		1.00	1.00		1.00	1.00
Flpb, ped/bikes		1.00	1.00		1.00	1.00
Frt		1.00	1.00		0.91	0.85
Flt Protected		1.00	1.00		0.98	1.00
Satd. Flow (prot)		5136	5136		3250	1455
Flt Permitted		1.00	1.00		0.98	1.00
Satd. Flow (perm)		5136	5136		3250	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	1129	1419	0	204	656
RTOR Reduction (vph)	0	0	0	0	9	9
Lane Group Flow (vph)	0	1129	1419	0	523	319
Confl. Bikes (#/hr)				1		
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type		NA	NA		Prot	Perm
Protected Phases		4	8		6	
Permitted Phases						6
Actuated Green, G (s)		38.4	38.4		55.2	55.2
Effective Green, g (s)		38.4	38.4		55.2	55.2
Actuated g/C Ratio		0.38	0.38		0.54	0.54
Clearance Time (s)		4.0	4.0		4.0	4.0
Vehicle Extension (s)		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)		1941	1941		1765	790
v/s Ratio Prot		0.22	c0.28		0.16	
v/s Ratio Perm						c0.22
v/c Ratio		0.58	0.73		0.30	0.40
Uniform Delay, d1		25.2	27.2		12.6	13.6
Progression Factor		1.00	1.00		1.00	1.00
Incremental Delay, d2		0.4	1.4		0.4	1.5
Delay (s)		25.6	28.6		13.1	15.1
Level of Service		C	C		B	B
Approach Delay (s/veh)		25.6	28.6		13.8	
Approach LOS		C	C		B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	101.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	57.4%	ICU Level of Service	B
Analysis Period (min)	15		

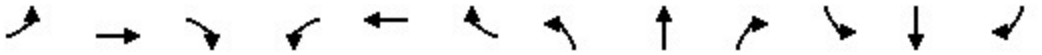
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Future Volume (vph)	0	830	230	970	1390	0	0	0	0	230	70	680
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	1.00	0.95					0.95	0.91	0.95
Frpb, ped/bikes		1.00	0.99	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		1.00	0.85	1.00	1.00					1.00	0.89	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3409	1436	1787	3574					1698	1511	1519
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3409	1436	1787	3574					1698	1511	1519
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	0	912	253	1066	1527	0	0	0	0	253	77	747
RTOR Reduction (vph)	0	2	177	0	0	0	0	0	0	0	52	52
Lane Group Flow (vph)	0	935	51	1066	1527	0	0	0	0	228	379	366
Confl. Bikes (#/hr)			1			14						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA					Perm	NA	Perm
Protected Phases		4		3	8						6	
Permitted Phases			4							6		6
Actuated Green, G (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Effective Green, g (s)		27.0	27.0	56.0	87.0					25.0	25.0	25.0
Actuated g/C Ratio		0.23	0.23	0.47	0.73					0.21	0.21	0.21
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		767	323	833	2591					353	314	316
v/s Ratio Prot		c0.27		c0.60	0.43							
v/s Ratio Perm			0.04							0.13	0.25	0.24
v/c Ratio		1.22	0.16	1.28	0.59					0.65	1.21	1.16
Uniform Delay, d1		46.5	37.4	32.0	7.9					43.5	47.5	47.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		110.5	0.2	135.1	0.3					8.8	119.0	100.4
Delay (s)		157.0	37.6	167.1	8.3					52.3	166.5	147.9
Level of Service		F	D	F	A					D	F	F
Approach Delay (s/veh)		133.6			73.6			0.0			135.1	
Approach LOS		F			E			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	101.7	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.25		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	104.3%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Future Volume (veh/h)	10	1420	40	30	1180	0	160	30	100	130	10	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	0	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	10	1464	41	31	1216	0	165	31	103	134	10	258
Adj No. of Lanes	1	3	0	1	2	0	0	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	0	1	1	1	1	1	1
Cap, veh/h	17	2020	57	41	1455	0	379	71	398	301	22	287
Arrive On Green	0.01	0.39	0.39	0.02	0.41	0.00	0.25	0.25	0.25	0.18	0.18	0.18
Sat Flow, veh/h	1792	5126	144	1792	3668	0	1520	286	1595	1673	125	1594
Grp Volume(v), veh/h	10	978	527	31	1216	0	196	0	103	144	0	258
Grp Sat Flow(s),veh/h/ln	1792	1712	1845	1792	1787	0	1805	0	1595	1798	0	1594
Q Serve(g_s), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Cycle Q Clear(g_c), s	0.6	25.2	25.2	1.8	31.9	0.0	9.5	0.0	5.4	7.4	0.0	16.5
Prop In Lane	1.00		0.08	1.00		0.00	0.84		1.00	0.93		1.00
Lane Grp Cap(c), veh/h	17	1349	727	41	1455	0	450	0	398	324	0	287
V/C Ratio(X)	0.58	0.72	0.72	0.76	0.84	0.00	0.44	0.00	0.26	0.44	0.00	0.90
Avail Cap(c_a), veh/h	69	1709	921	103	1852	0	450	0	398	345	0	306
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	51.4	26.8	26.8	50.6	27.8	0.0	32.9	0.0	31.4	38.1	0.0	41.8
Incr Delay (d2), s/veh	27.0	1.1	2.1	24.7	2.8	0.0	3.0	0.0	1.6	1.0	0.0	26.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	12.2	13.3	1.2	16.3	0.0	5.1	0.0	2.6	3.8	0.0	9.4
LnGrp Delay(d), s/veh	78.4	27.9	28.9	75.3	30.6	0.0	36.0	0.0	32.9	39.0	0.0	68.3
LnGrp LOS	E	C	C	E	C		D		C	D		E
Approach Vol, veh/h		1515			1247			299			402	
Approach Delay, s/veh		28.6			31.7			34.9			57.8	
Approach LOS		C			C			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		30.0	6.4	45.1		22.8	5.0	46.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		26.0	6.0	52.0		20.0	4.0	54.0
Max Q Clear Time (g_c+I1), s		11.5	3.8	27.2		18.5	2.6	33.9
Green Ext Time (p_c), s		1.2	0.0	11.2		0.3	0.0	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.6
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1140	0	0	1530	860	360
Future Volume (veh/h)	1140	0	0	1530	860	360
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	0	1863	1863	1863
Adj Flow Rate, veh/h	1239	0	0	1663	935	391
Adj No. of Lanes	3	0	0	3	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	0	2	2	2
Cap, veh/h	1770	0	0	1770	1038	926
Arrive On Green	0.35	0.00	0.00	0.35	0.59	0.59
Sat Flow, veh/h	5421	0	0	5421	1774	1583
Grp Volume(v), veh/h	1239	0	0	1663	935	391
Grp Sat Flow(s),veh/h/ln	1695	0	0	1695	1774	1583
Q Serve(g_s), s	25.1	0.0	0.0	37.9	55.3	16.3
Cycle Q Clear(g_c), s	25.1	0.0	0.0	37.9	55.3	16.3
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	1770	0	0	1770	1038	926
V/C Ratio(X)	0.70	0.00	0.00	0.94	0.90	0.42
Avail Cap(c_a), veh/h	1785	0	0	1785	1038	926
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	0.0	0.0	37.8	21.8	13.7
Incr Delay (d2), s/veh	1.2	0.0	0.0	10.2	12.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.9	0.0	0.0	19.4	30.3	7.4
LnGrp Delay(d), s/veh	34.8	0.0	0.0	48.0	34.1	15.1
LnGrp LOS	C			D	C	B
Approach Vol, veh/h	1239			1663	1326	
Approach Delay, s/veh	34.8			48.0	28.5	
Approach LOS	C			D	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4				8
Phs Duration (G+Y+Rc), s		74.0		45.7				45.7
Change Period (Y+Rc), s		4.0		4.0				4.0
Max Green Setting (Gmax), s		70.0		42.0				42.0
Max Q Clear Time (g_c+I1), s		57.3		27.1				39.9
Green Ext Time (p_c), s		4.4		7.2				1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.0
HCM 2010 LOS	D



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	670	0	0	1670	1000	1100
Future Volume (vph)	670	0	0	1670	1000	1100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.81			0.86	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.95	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	7544			6408	3332	1441
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	7544			6408	3332	1441
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	713	0	0	1777	1064	1170
RTOR Reduction (vph)	0	0	0	0	25	25
Lane Group Flow (vph)	713	0	0	1777	1507	677
Confl. Bikes (#/hr)		1				
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	39.6			39.6	72.0	72.0
Effective Green, g (s)	39.6			39.6	72.0	72.0
Actuated g/C Ratio	0.33			0.33	0.60	0.60
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2497			2121	2005	867
v/s Ratio Prot	0.09			c0.28	0.45	
v/s Ratio Perm						c0.47
v/c Ratio	0.29			0.84	0.75	0.78
Uniform Delay, d1	29.5			37.0	17.3	17.9
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			3.1	2.7	6.9
Delay (s)	29.6			40.1	20.0	24.8
Level of Service	C			D	B	C
Approach Delay (s/veh)	29.6			40.1	21.5	
Approach LOS	C			D	C	

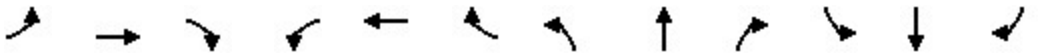
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.80		
Actuated Cycle Length (s)	119.6	Sum of lost time (s)	8.0
Intersection Capacity Utilization	70.9%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	940	0	0	2000	230	470
Future Volume (vph)	940	0	0	2000	230	470
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.95			0.95	0.97	0.91
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.92	0.85
Flt Protected	1.00			1.00	0.98	1.00
Satd. Flow (prot)	3574			3574	3291	1455
Flt Permitted	1.00			1.00	0.98	1.00
Satd. Flow (perm)	3574			3574	3291	1455
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	1011	0	0	2151	247	505
RTOR Reduction (vph)	0	0	0	0	135	135
Lane Group Flow (vph)	1011	0	0	2151	365	117
Confl. Bikes (#/hr)		1				
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	76.2			76.2	25.3	25.3
Effective Green, g (s)	76.2			76.2	25.3	25.3
Actuated g/C Ratio	0.70			0.70	0.23	0.23
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2487			2487	760	336
v/s Ratio Prot	0.28			c0.60	c0.11	
v/s Ratio Perm						0.08
v/c Ratio	0.41			0.86	0.48	0.35
Uniform Delay, d1	7.1			12.7	36.4	35.2
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			3.4	2.2	2.9
Delay (s)	7.2			16.1	38.6	38.1
Level of Service	A			B	D	D
Approach Delay (s/veh)	7.2			16.1	38.4	
Approach LOS	A			B	D	

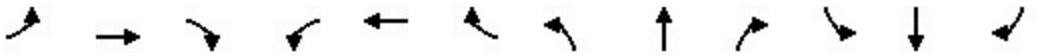
Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	109.5	Sum of lost time (s)	8.0
Intersection Capacity Utilization	73.5%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Future Volume (vph)	10	1130	0	0	1580	320	40	0	110	0	0	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Lane Util. Factor	1.00	0.95			0.91		1.00		1.00			1.00
Frpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Flpb, ped/bikes	1.00	1.00			1.00		1.00		1.00			1.00
Frt	1.00	1.00			0.97		1.00		0.85			0.87
Flt Protected	0.95	1.00			1.00		0.95		1.00			1.00
Satd. Flow (prot)	1787	3574			4983		1787		1599			1627
Flt Permitted	0.09	1.00			1.00		0.95		1.00			1.00
Satd. Flow (perm)	175	3574			4983		1787		1599			1627
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	10	1165	0	0	1629	330	41	0	113	0	0	10
RTOR Reduction (vph)	0	0	0	0	28	0	0	0	85	0	0	10
Lane Group Flow (vph)	10	1165	0	0	1931	0	41	0	28	0	0	0
Confl. Peds. (#/hr)	3		17	17		3						
Confl. Bikes (#/hr)			22			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA			NA		Prot		Perm			Perm
Protected Phases		4			8		2					
Permitted Phases	4								2			6
Actuated Green, G (s)	43.0	43.0			43.0		18.7		18.7			0.8
Effective Green, g (s)	43.0	43.0			43.0		18.7		18.7			0.8
Actuated g/C Ratio	0.58	0.58			0.58		0.25		0.25			0.01
Clearance Time (s)	4.0	4.0			4.0		4.0		4.0			4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0		3.0			3.0
Lane Grp Cap (vph)	101	2062			2876		448		401			17
v/s Ratio Prot		0.33			c0.39		c0.02					
v/s Ratio Perm	0.06								0.02			c0.00
v/c Ratio	0.10	0.56			0.67		0.09		0.07			0.01
Uniform Delay, d1	7.1	9.9			10.9		21.4		21.3			36.5
Progression Factor	1.00	1.00			1.00		1.00		1.00			1.00
Incremental Delay, d2	0.4	0.4			0.6		0.4		0.3			0.1
Delay (s)	7.5	10.2			11.5		21.8		21.6			36.6
Level of Service	A	B			B		C		C			D
Approach Delay (s/veh)		10.2			11.5			21.7			36.6	
Approach LOS		B			B			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.49		
Actuated Cycle Length (s)	74.5	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.4%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	350	720	540	80	830	580	710	580	170	1070	560	1590
Future Volume (vph)	350	720	540	80	830	580	710	580	170	1070	560	1590
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00	1.00	0.95	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.99	1.00	1.00	0.97	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.93	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5085	1527	3433	5085	1562	3433	1863	1539	1770	1637	1504
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5085	1527	3433	5085	1562	3433	1863	1539	1770	1637	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	365	750	562	83	865	604	740	604	177	1115	583	1656
RTOR Reduction (vph)	0	0	404	0	0	518	0	0	89	0	30	24
Lane Group Flow (vph)	365	750	159	83	865	86	740	604	89	1115	1133	1052
Confl. Peds. (#/hr)			9	9					7	7		
Confl. Bikes (#/hr)			3			1			1			
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	pm+ov
Protected Phases	7	4		3	8		2	2		6	6	7
Permitted Phases			4			8			2			6
Actuated Green, G (s)	9.0	22.0	22.0	4.0	17.0	17.0	30.0	30.0	30.0	48.0	48.0	57.0
Effective Green, g (s)	9.0	22.0	22.0	4.0	17.0	17.0	30.0	30.0	30.0	48.0	48.0	57.0
Actuated g/C Ratio	0.08	0.18	0.18	0.03	0.14	0.14	0.25	0.25	0.25	0.40	0.40	0.48
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	257	932	279	114	720	221	858	465	384	708	654	764
v/s Ratio Prot	c0.11	0.15		0.02	c0.17		0.22	c0.32		0.63	c0.69	c0.10
v/s Ratio Perm			0.10			0.05			0.06			0.60
v/c Ratio	1.42	0.80	0.57	0.73	1.20	0.39	0.86	1.30	0.23	1.57	1.73	1.38
Uniform Delay, d1	55.5	46.9	44.7	57.5	51.5	46.8	43.0	45.0	35.8	36.0	36.0	31.5
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	210.4	5.1	2.7	20.6	103.7	1.1	11.1	149.6	1.4	265.5	336.0	178.1
Delay (s)	265.9	52.1	47.3	78.0	155.2	47.9	54.2	194.6	37.2	301.5	372.0	209.6
Level of Service	F	D	D	E	F	D	D	F	D	F	F	F
Approach Delay (s/veh)		97.0			109.3			108.0			296.4	
Approach LOS		F			F			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	183.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.52		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	129.2%	ICU Level of Service	H
Analysis Period (min)	15		

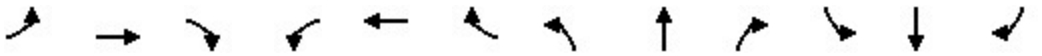
c Critical Lane Group



Movement	NWL	NWR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Volume (vph)	310	0	0	1330	0	0
Future Volume (vph)	310	0	0	1330	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0		
Lane Util. Factor	0.97			1.00		
Frpb, ped/bikes	1.00			0.97		
Flpb, ped/bikes	1.00			1.00		
Frt	1.00			0.85		
Flt Protected	0.95			1.00		
Satd. Flow (prot)	3433			1529		
Flt Permitted	0.95			1.00		
Satd. Flow (perm)	3433			1529		
Peak-hour factor, PHF	0.88	0.88	0.88	0.88	0.88	0.88
Adj. Flow (vph)	352	0	0	1511	0	0
RTOR Reduction (vph)	0	0	0	227	0	0
Lane Group Flow (vph)	352	0	0	1284	0	0
Confl. Peds. (#/hr)	5			4	4	
Confl. Bikes (#/hr)				2		
Turn Type	Prot			Perm	Prot	
Protected Phases	8		2		1	6
Permitted Phases				2		
Actuated Green, G (s)	15.1			88.0		
Effective Green, g (s)	15.1			88.0		
Actuated g/C Ratio	0.14			0.79		
Clearance Time (s)	4.0			4.0		
Vehicle Extension (s)	3.0			3.0		
Lane Grp Cap (vph)	466			1211		
v/s Ratio Prot	c0.10					
v/s Ratio Perm				c0.84		
v/c Ratio	0.76			1.06		
Uniform Delay, d1	46.2			11.5		
Progression Factor	1.00			1.00		
Incremental Delay, d2	6.8			43.5		
Delay (s)	53.1			55.0		
Level of Service	D			E		
Approach Delay (s/veh)	53.1		55.0			0.0
Approach LOS	D		E			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	54.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.06		
Actuated Cycle Length (s)	111.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	86.1%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Future Volume (vph)	70	1070	300	230	1220	10	360	30	240	20	40	150
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.95	0.95	1.00	1.00	1.00	
Frpb, ped/bikes	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	0.99	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.88	
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Flt Permitted	0.95	1.00	1.00	0.95	1.00	1.00	0.95	0.96	1.00	0.95	1.00	
Satd. Flow (perm)	1770	3539	1555	1770	3539	1546	1681	1698	1561	1770	1624	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	77	1176	330	253	1341	11	396	33	264	22	44	165
RTOR Reduction (vph)	0	0	141	0	0	6	0	0	211	0	117	0
Lane Group Flow (vph)	77	1176	189	253	1341	5	214	215	53	22	92	0
Confl. Peds. (#/hr)	1		2	2		1			1	1		
Confl. Bikes (#/hr)			3									1
Turn Type	Prot	NA	Perm	Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Effective Green, g (s)	6.8	43.3	43.3	19.1	55.6	55.6	22.2	22.2	22.2	10.9	10.9	
Actuated g/C Ratio	0.06	0.39	0.39	0.17	0.50	0.50	0.20	0.20	0.20	0.10	0.10	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	107	1374	603	303	1764	770	334	338	310	173	158	
v/s Ratio Prot	0.04	c0.33		c0.14	0.38		c0.13	0.13		0.01	c0.06	
v/s Ratio Perm			0.12			0.00			0.03			
v/c Ratio	0.72	0.86	0.31	0.83	0.76	0.01	0.64	0.64	0.17	0.13	0.58	
Uniform Delay, d1	51.4	31.2	23.8	44.7	22.6	14.1	41.0	40.9	37.0	46.0	48.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	20.6	5.5	0.3	17.7	2.0	0.0	9.1	8.8	1.2	0.3	5.3	
Delay (s)	72.0	36.7	24.1	62.4	24.5	14.1	50.1	49.8	38.2	46.3	53.4	
Level of Service	E	D	C	E	C	B	D	D	D	D	D	
Approach Delay (s/veh)		35.8			30.4			45.5			52.8	
Approach LOS		D			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	36.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	111.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	80.3%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Future Volume (veh/h)	80	890	90	230	820	120	290	350	290	80	330	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Adj No. of Lanes	1	3	1	1	3	1	2	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
Arrive On Green	0.07	0.27	0.27	0.17	0.37	0.37	0.12	0.32	0.32	0.07	0.26	0.26
Sat Flow, veh/h	1774	5085	1538	1774	5085	1567	3442	3539	1544	1774	3539	1532
Grp Volume(v), veh/h	90	1000	101	258	921	135	326	393	326	90	371	157
Grp Sat Flow(s),veh/h/ln	1774	1695	1538	1774	1695	1567	1721	1770	1544	1774	1770	1532
Q Serve(g_s), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Cycle Q Clear(g_c), s	4.5	16.2	4.7	12.8	12.6	4.8	8.3	7.7	16.5	4.5	7.8	7.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	116	1364	412	301	1896	687	418	1133	494	116	934	404
V/C Ratio(X)	0.78	0.73	0.24	0.86	0.49	0.20	0.78	0.35	0.66	0.78	0.40	0.39
Avail Cap(c_a), veh/h	235	1852	560	587	2862	985	684	1133	494	235	934	404
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.7	30.2	26.0	36.5	21.8	15.7	38.6	23.6	26.6	41.7	27.4	27.4
Incr Delay (d2), s/veh	10.6	1.0	0.3	6.9	0.2	0.1	3.2	0.8	6.8	10.6	1.3	2.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.6	7.7	2.0	6.8	5.9	2.1	4.1	3.9	8.0	2.6	4.0	3.5
LnGrp Delay(d), s/veh	52.3	31.2	26.3	43.4	22.0	15.8	41.8	24.4	33.3	52.3	28.7	30.2
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1191			1314			1045			618	
Approach Delay, s/veh		32.4			25.5			32.6			32.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	33.0	19.4	28.3	15.0	27.9	9.9	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	29.0	30.0	33.0	18.0	23.0	12.0	51.0
Max Q Clear Time (g_c+I1), s	6.5	18.5	14.8	18.2	10.3	9.8	6.5	14.6
Green Ext Time (p_c), s	0.1	2.7	0.6	6.1	0.7	2.3	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Future Volume (veh/h)	50	60	380	20	100	40	170	830	10	30	650	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
Arrive On Green	0.29	0.29	0.29	0.29	0.29	0.29	0.64	0.64	0.64	0.64	0.64	0.64
Sat Flow, veh/h	1227	1863	1560	907	1863	1558	697	3539	1580	603	3539	1560
Grp Volume(v), veh/h	55	66	418	22	110	44	187	912	11	33	714	55
Grp Sat Flow(s),veh/h/ln	1227	1863	1560	907	1863	1558	697	1770	1580	603	1770	1560
Q Serve(g_s), s	4.0	2.9	29.3	2.1	5.0	2.3	18.7	14.1	0.3	3.2	10.3	1.5
Cycle Q Clear(g_c), s	9.0	2.9	29.3	5.0	5.0	2.3	29.0	14.1	0.3	17.3	10.3	1.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	365	541	453	304	541	452	445	2260	1009	373	2260	997
V/C Ratio(X)	0.15	0.12	0.92	0.07	0.20	0.10	0.42	0.40	0.01	0.09	0.32	0.06
Avail Cap(c_a), veh/h	444	661	553	362	661	553	445	2260	1009	373	2260	997
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.6	29.4	38.8	31.3	30.2	29.2	15.8	9.9	7.4	14.1	9.2	7.6
Incr Delay (d2), s/veh	0.2	0.1	18.9	0.1	0.2	0.1	2.9	0.5	0.0	0.5	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	1.5	14.9	0.5	2.6	1.0	3.9	7.0	0.1	0.6	5.1	0.7
LnGrp Delay(d), s/veh	33.8	29.5	57.7	31.4	30.3	29.3	18.7	10.5	7.4	14.6	9.6	7.7
LnGrp LOS	C	C	E	C	C	C	B	B	A	B	A	A
Approach Vol, veh/h		539			176			1110			802	
Approach Delay, s/veh		51.8			30.2			11.8			9.7	
Approach LOS		D			C			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		76.0		36.7		76.0		36.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		72.0		40.0		72.0		40.0
Max Q Clear Time (g_c+I1), s		31.0		31.3		19.3		7.0
Green Ext Time (p_c), s		9.7		1.5		6.0		0.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Future Volume (veh/h)	100	220	40	210	180	130	30	750	260	140	900	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	109	239	43	228	196	141	33	815	283	152	978	109
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	137	340	149	263	592	260	42	1254	435	183	2011	886
Arrive On Green	0.08	0.10	0.10	0.15	0.17	0.17	0.02	0.49	0.49	0.10	0.57	0.57
Sat Flow, veh/h	1757	3505	1533	1757	3505	1542	1757	2542	882	1757	3505	1545
Grp Volume(v), veh/h	109	239	43	228	196	141	33	561	537	152	978	109
Grp Sat Flow(s),veh/h/ln	1757	1752	1533	1757	1752	1542	1757	1752	1672	1757	1752	1545
Q Serve(g_s), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Cycle Q Clear(g_c), s	6.3	6.8	2.7	13.0	5.1	8.6	1.9	24.6	24.6	8.7	17.0	3.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	137	340	149	263	592	260	42	864	824	183	2011	886
V/C Ratio(X)	0.80	0.70	0.29	0.87	0.33	0.54	0.79	0.65	0.65	0.83	0.49	0.12
Avail Cap(c_a), veh/h	256	545	238	393	818	360	103	864	824	273	2011	886
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	45.0	43.1	42.7	37.6	39.1	49.9	19.4	19.5	45.1	13.0	10.0
Incr Delay (d2), s/veh	10.0	2.6	1.1	12.6	0.3	1.8	27.3	3.8	4.0	12.4	0.8	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	3.4	1.2	7.3	2.5	3.8	1.2	12.8	12.2	4.9	8.4	1.5
LnGrp Delay(d), s/veh	56.6	47.6	44.2	55.3	37.9	40.8	77.3	23.2	23.4	57.5	13.8	10.3
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	B	B
Approach Vol, veh/h		391			565			1131			1239	
Approach Delay, s/veh		49.7			45.7			24.9			18.9	
Approach LOS		D			D			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	54.7	19.4	14.0	6.4	63.0	12.0	21.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	49.0	23.0	16.0	6.0	59.0	15.0	24.0
Max Q Clear Time (g_c+I1), s	10.7	26.6	15.0	8.8	3.9	19.0	8.3	10.6
Green Ext Time (p_c), s	0.2	7.4	0.4	0.8	0.0	8.5	0.1	1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Future Volume (veh/h)	210	310	550	80	450	20	430	820	80	30	890	300
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	216	320	567	82	464	21	443	845	82	31	918	309
Adj No. of Lanes	1	1	1	1	1	0	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	284	298	604	418	416	19	403	1620	706	39	894	391
Arrive On Green	0.16	0.16	0.16	0.23	0.23	0.23	0.22	0.45	0.45	0.02	0.25	0.25
Sat Flow, veh/h	1792	1881	1541	1792	1784	81	1792	3574	1559	1792	3574	1565
Grp Volume(v), veh/h	216	320	567	82	0	485	443	845	82	31	918	309
Grp Sat Flow(s),veh/h/ln	1792	1881	1541	1792	0	1864	1792	1787	1559	1792	1787	1565
Q Serve(g_s), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Cycle Q Clear(g_c), s	13.8	19.0	19.0	4.4	0.0	28.0	27.0	20.3	3.6	2.1	30.0	22.1
Prop In Lane	1.00		1.00	1.00		0.04	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	298	604	418	0	435	403	1620	706	39	894	391
V/C Ratio(X)	0.76	1.07	0.94	0.20	0.00	1.11	1.10	0.52	0.12	0.79	1.03	0.79
Avail Cap(c_a), veh/h	284	298	604	418	0	435	403	1620	706	90	894	391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.3	50.5	35.9	37.0	0.0	46.0	46.5	23.5	18.9	58.4	45.0	42.1
Incr Delay (d2), s/veh	11.5	73.3	22.7	0.2	0.0	78.2	74.3	1.2	0.3	28.9	37.3	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.7	15.9	21.9	2.2	0.0	23.8	21.6	10.2	1.6	1.3	19.4	11.1
LnGrp Delay(d), s/veh	59.8	123.8	58.6	37.2	0.0	124.2	120.8	24.7	19.3	87.3	82.3	57.0
LnGrp LOS	E	F	E	D		F	F	C	B	F	F	E
Approach Vol, veh/h		1103			567			1370			1258	
Approach Delay, s/veh		77.7			111.6			55.4			76.2	
Approach LOS		E			F			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	6.6	58.4		23.0	31.0	34.0		32.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	51.0		19.0	27.0	30.0		28.0
Max Q Clear Time (g_c+I1), s	4.1	22.3		21.0	29.0	32.0		30.0
Green Ext Time (p_c), s	0.0	6.8		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	74.6
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Future Volume (veh/h)	240	1020	140	210	1650	210	340	1100	120	100	870	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.94	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	264	1121	154	231	1813	231	374	1209	132	110	956	242
Adj No. of Lanes	1	3	0	1	3	1	2	2	1	2	3	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	266	1553	213	259	1737	513	430	1209	510	115	1272	365
Arrive On Green	0.15	0.35	0.35	0.15	0.34	0.34	0.12	0.34	0.34	0.03	0.25	0.25
Sat Flow, veh/h	1774	4490	616	1774	5085	1501	3442	3539	1493	3442	5085	1460
Grp Volume(v), veh/h	264	846	429	231	1813	231	374	1209	132	110	956	242
Grp Sat Flow(s),veh/h/ln	1774	1695	1717	1774	1695	1501	1721	1770	1493	1721	1695	1460
Q Serve(g_s), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Cycle Q Clear(g_c), s	17.8	26.1	26.2	15.3	41.0	14.4	12.8	41.0	7.7	3.8	20.8	17.9
Prop In Lane	1.00		0.36	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1172	594	259	1737	513	430	1209	510	115	1272	365
V/C Ratio(X)	0.99	0.72	0.72	0.89	1.04	0.45	0.87	1.00	0.26	0.96	0.75	0.66
Avail Cap(c_a), veh/h	266	1172	594	296	1737	513	459	1209	510	115	1272	365
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	34.2	34.2	50.3	39.5	30.7	51.6	39.5	28.5	57.9	41.5	40.4
Incr Delay (d2), s/veh	52.9	2.2	4.3	25.0	33.9	0.6	15.7	25.8	1.2	70.9	4.1	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.6	12.6	13.1	9.3	24.6	6.1	7.0	24.3	3.3	2.9	10.2	8.1
LnGrp Delay(d), s/veh	103.8	36.4	38.5	75.4	73.4	31.4	67.3	65.3	29.8	128.8	45.7	49.6
LnGrp LOS	F	D	D	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1539			2275			1715			1308	
Approach Delay, s/veh		48.6			69.3			63.0			53.4	
Approach LOS		D			E			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	45.0	21.5	45.5	19.0	34.0	22.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	41.0	20.0	39.0	16.0	29.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	5.8	43.0	17.3	28.2	14.8	22.8	19.8	43.0
Green Ext Time (p_c), s	0.0	0.0	0.2	5.9	0.2	3.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.0
HCM 2010 LOS	E



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	1290	1280	410	400	270
Future Volume (veh/h)	390	1290	1280	410	400	270
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	411	1358	1347	432	421	284
Adj No. of Lanes	1	3	3	0	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	451	3659	1618	516	733	337
Arrive On Green	0.25	0.71	0.42	0.42	0.21	0.21
Sat Flow, veh/h	1792	5305	4001	1222	3476	1599
Grp Volume(v), veh/h	411	1358	1203	576	421	284
Grp Sat Flow(s),veh/h/ln	1792	1712	1712	1630	1738	1599
Q Serve(g_s), s	23.2	10.8	32.6	33.0	11.3	17.8
Cycle Q Clear(g_c), s	23.2	10.8	32.6	33.0	11.3	17.8
Prop In Lane	1.00			0.75	1.00	1.00
Lane Grp Cap(c), veh/h	451	3659	1446	688	733	337
V/C Ratio(X)	0.91	0.37	0.83	0.84	0.57	0.84
Avail Cap(c_a), veh/h	653	4431	1575	750	733	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.9	5.9	26.8	26.9	37.0	39.5
Incr Delay (d2), s/veh	12.9	0.1	3.7	7.8	3.3	21.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.2	5.1	16.1	16.2	5.8	16.7
LnGrp Delay(d), s/veh	50.8	5.9	30.5	34.7	40.2	61.3
LnGrp LOS	D	A	C	C	D	E
Approach Vol, veh/h		1769	1779		705	
Approach Delay, s/veh		16.4	31.9		48.7	
Approach LOS		B	C		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				78.3		26.0	30.3	48.0
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	38.0	48.0
Max Q Clear Time (g_c+I1), s				12.8		19.8	25.2	35.0
Green Ext Time (p_c), s				13.5		0.7	1.0	9.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Future Volume (veh/h)	210	430	120	90	400	90	240	890	70	120	650	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	0.99		0.95	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	228	467	130	98	435	98	261	967	76	130	707	217
Adj No. of Lanes	1	2	1	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	306	741	318	243	517	219	418	2103	165	321	1355	416
Arrive On Green	0.12	0.21	0.21	0.06	0.14	0.14	0.09	0.63	0.63	0.51	0.51	0.51
Sat Flow, veh/h	1792	3574	1533	1792	3574	1515	1792	3352	263	543	2677	822
Grp Volume(v), veh/h	228	467	130	98	435	98	261	516	527	130	472	452
Grp Sat Flow(s),veh/h/ln	1792	1787	1533	1792	1787	1515	1792	1787	1828	543	1787	1711
Q Serve(g_s), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	18.9	20.3	20.3
Cycle Q Clear(g_c), s	12.0	13.7	8.4	5.3	13.6	6.8	7.6	17.3	17.3	22.3	20.3	20.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.14	1.00		0.48
Lane Grp Cap(c), veh/h	306	741	318	243	517	219	418	1121	1147	321	904	866
V/C Ratio(X)	0.74	0.63	0.41	0.40	0.84	0.45	0.62	0.46	0.46	0.40	0.52	0.52
Avail Cap(c_a), veh/h	351	903	387	244	592	251	481	1121	1147	321	904	866
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	34.9	41.5	39.4	38.5	47.8	44.9	14.0	11.2	11.2	20.7	19.0	19.0
Incr Delay (d2), s/veh	7.2	1.0	0.8	1.1	9.5	1.4	2.0	1.4	1.3	3.7	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	6.8	3.6	2.7	7.4	2.9	3.9	8.9	9.1	3.2	10.5	10.1
LnGrp Delay(d), s/veh	42.2	42.5	40.2	39.6	57.3	46.3	16.0	12.5	12.5	24.4	21.2	21.3
LnGrp LOS	D	D	D	D	E	D	B	B	B	C	C	C
Approach Vol, veh/h		825			631			1304			1054	
Approach Delay, s/veh		42.0			52.8			13.2			21.6	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s		76.0	11.0	27.8	13.9	62.1	18.1	20.6
Change Period (Y+Rc), s		4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s		72.0	7.0	29.0	14.0	54.0	17.0	19.0
Max Q Clear Time (g_c+I1), s		19.3	7.3	15.7	9.6	24.3	14.0	15.6
Green Ext Time (p_c), s		8.4	0.0	2.9	0.3	8.7	0.2	1.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Future Volume (veh/h)	70	1550	240	270	1370	40	190	50	260	70	180	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	77	1703	264	297	1505	44	209	55	286	77	198	110
Adj No. of Lanes	1	3	1	2	3	0	1	1	1	1	1	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	99	1985	608	359	2227	65	364	765	648	468	459	255
Arrive On Green	0.06	0.39	0.39	0.10	0.43	0.43	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	1792	5136	1573	3476	5124	150	1077	1881	1593	1043	1130	628
Grp Volume(v), veh/h	77	1703	264	297	1006	543	209	55	286	77	0	308
Grp Sat Flow(s),veh/h/ln	1792	1712	1573	1738	1712	1850	1077	1881	1593	1043	0	1757
Q Serve(g_s), s	4.9	35.2	14.3	9.7	27.2	27.2	20.0	2.1	15.0	5.6	0.0	14.6
Cycle Q Clear(g_c), s	4.9	35.2	14.3	9.7	27.2	27.2	34.6	2.1	15.0	7.7	0.0	14.6
Prop In Lane	1.00		1.00	1.00		0.08	1.00		1.00	1.00		0.36
Lane Grp Cap(c), veh/h	99	1985	608	359	1488	804	364	765	648	468	0	714
V/C Ratio(X)	0.78	0.86	0.43	0.83	0.68	0.68	0.57	0.07	0.44	0.16	0.00	0.43
Avail Cap(c_a), veh/h	170	2088	640	421	1488	804	364	765	648	468	0	714
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	53.9	32.6	26.1	50.8	26.2	26.2	37.1	21.0	24.8	23.3	0.0	24.7
Incr Delay (d2), s/veh	12.5	3.7	0.5	11.4	1.2	2.3	6.4	0.2	2.2	0.8	0.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	17.2	6.3	5.2	13.1	14.4	6.6	1.1	7.0	1.7	0.0	7.5
LnGrp Delay(d), s/veh	66.4	36.2	26.6	62.2	27.4	28.4	43.6	21.2	27.0	24.1	0.0	26.6
LnGrp LOS	E	D	C	E	C	C	D	C	C	C		C
Approach Vol, veh/h		2044			1846			550			385	
Approach Delay, s/veh		36.1			33.3			32.7			26.1	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		51.0	15.9	48.7		51.0	10.4	54.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		47.0	14.0	47.0		47.0	11.0	50.0
Max Q Clear Time (g_c+I1), s		36.6	11.7	37.2		16.6	6.9	29.2
Green Ext Time (p_c), s		1.6	0.2	7.5		2.4	0.0	10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	33.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Future Volume (veh/h)	180	1320	100	80	560	50	40	280	10	120	560	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	202	1483	112	90	629	56	45	315	11	135	629	101
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	463	2162	946	171	2162	954	57	662	292	164	874	386
Arrive On Green	0.61	0.61	0.61	0.61	0.61	0.61	0.03	0.19	0.19	0.09	0.25	0.25
Sat Flow, veh/h	753	3539	1548	318	3539	1562	1774	3539	1560	1774	3539	1561
Grp Volume(v), veh/h	202	1483	112	90	629	56	45	315	11	135	629	101
Grp Sat Flow(s),veh/h/ln	753	1770	1548	318	1770	1562	1774	1770	1560	1774	1770	1561
Q Serve(g_s), s	19.0	30.7	3.3	28.9	9.2	1.6	2.8	8.7	0.6	8.2	17.8	5.7
Cycle Q Clear(g_c), s	28.1	30.7	3.3	59.6	9.2	1.6	2.8	8.7	0.6	8.2	17.8	5.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	2162	946	171	2162	954	57	662	292	164	874	386
V/C Ratio(X)	0.44	0.69	0.12	0.53	0.29	0.06	0.78	0.48	0.04	0.83	0.72	0.26
Avail Cap(c_a), veh/h	526	2460	1076	198	2460	1086	81	662	292	211	874	386
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	16.7	14.2	8.9	34.2	10.1	8.6	52.5	39.6	36.4	48.8	37.7	33.1
Incr Delay (d2), s/veh	0.6	0.7	0.1	2.5	0.1	0.0	26.7	2.4	0.2	18.3	5.1	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	15.0	1.4	2.6	4.5	0.7	1.8	4.5	0.3	4.8	9.3	2.6
LnGrp Delay(d), s/veh	17.4	14.9	9.0	36.7	10.1	8.6	79.3	42.1	36.6	67.1	42.8	34.8
LnGrp LOS	B	B	A	D	B	A	E	D	D	E	D	C
Approach Vol, veh/h		1797			775			371			865	
Approach Delay, s/veh		14.8			13.1			46.4			45.6	
Approach LOS		B			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	14.1	24.5		70.8	7.5	31.0		70.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	13.0	19.0		76.0	5.0	27.0		76.0
Max Q Clear Time (g_c+I1), s	10.2	10.7		32.7	4.8	19.8		61.6
Green Ext Time (p_c), s	0.1	1.1		19.1	0.0	2.4		5.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		24.6
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Future Volume (veh/h)	0	760	180	540	890	0	290	0	750	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	0.98		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1900	1881	1881	1900	1881	1900
Adj Flow Rate, veh/h	0	854	202	607	1000	0	326	0	0	0	0	0
Adj No. of Lanes	1	2	0	1	2	0	0	1	1	0	1	0
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	72	1911	452	356	2395	0	441	0	400	0	2	0
Arrive On Green	0.00	0.67	0.67	0.67	0.67	0.00	0.25	0.00	0.00	0.00	0.00	0.00
Sat Flow, veh/h	567	2852	674	537	3668	0	1764	0	1599	0	1881	0
Grp Volume(v), veh/h	0	535	521	607	1000	0	326	0	0	0	0	0
Grp Sat Flow(s),veh/h/ln	567	1787	1739	537	1787	0	1764	0	1599	0	1881	0
Q Serve(g_s), s	0.0	14.1	14.1	52.9	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	14.1	14.1	67.0	12.8	0.0	17.0	0.0	0.0	0.0	0.0	0.0
Prop In Lane	1.00		0.39	1.00		0.00	1.00		1.00	0.00		0.00
Lane Grp Cap(c), veh/h	72	1197	1165	356	2395	0	441	0	400	0	2	0
V/C Ratio(X)	0.00	0.45	0.45	1.70	0.42	0.00	0.74	0.00	0.00	0.00	0.00	0.00
Avail Cap(c_a), veh/h	72	1197	1165	356	2395	0	441	0	400	0	301	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	7.8	7.8	28.9	7.6	0.0	34.5	0.0	0.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.3	0.3	328.6	0.1	0.0	10.6	0.0	0.0	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	6.9	6.7	42.3	6.3	0.0	9.5	0.0	0.0	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	8.0	8.0	357.5	7.7	0.0	45.1	0.0	0.0	0.0	0.0	0.0
LnGrp LOS		A	A	F	A		D					
Approach Vol, veh/h		1056			1607			326			0	
Approach Delay, s/veh		8.0			139.8			45.1			0.0	
Approach LOS		A			F			D				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		29.0		71.0		0.0		71.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		25.0		67.0		16.0		67.0
Max Q Clear Time (g_c+I1), s		19.0		16.1		0.0		69.0
Green Ext Time (p_c), s		0.9		8.3		0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	82.9
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Future Volume (veh/h)	200	960	120	290	1330	250	200	580	400	140	550	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	206	990	124	299	1371	258	206	598	412	144	567	186
Adj No. of Lanes	1	3	0	1	2	1	1	1	1	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	194	1306	163	328	1281	541	234	611	507	134	708	231
Arrive On Green	0.11	0.28	0.28	0.18	0.36	0.36	0.13	0.32	0.32	0.08	0.27	0.27
Sat Flow, veh/h	1792	4602	575	1792	3574	1510	1792	1881	1559	1792	2627	859
Grp Volume(v), veh/h	206	736	378	299	1371	258	206	598	412	144	385	368
Grp Sat Flow(s),veh/h/ln	1792	1712	1754	1792	1787	1510	1792	1881	1559	1792	1787	1698
Q Serve(g_s), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Cycle Q Clear(g_c), s	13.0	23.5	23.6	19.6	43.0	15.9	13.6	37.7	29.1	9.0	24.1	24.2
Prop In Lane	1.00		0.33	1.00		1.00	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	194	972	498	328	1281	541	234	611	507	134	481	458
V/C Ratio(X)	1.06	0.76	0.76	0.91	1.07	0.48	0.88	0.98	0.81	1.07	0.80	0.80
Avail Cap(c_a), veh/h	194	972	498	373	1281	541	269	611	507	134	481	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	39.2	39.2	48.1	38.5	29.8	51.2	40.1	37.2	55.5	40.8	40.9
Incr Delay (d2), s/veh	81.8	3.5	6.7	24.4	46.3	0.7	24.7	31.4	13.3	98.1	13.1	13.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	11.6	12.4	11.9	29.4	6.7	8.3	24.9	14.4	8.1	13.6	13.1
LnGrp Delay(d), s/veh	135.3	42.7	46.0	72.5	84.8	30.4	75.9	71.5	50.5	153.6	53.9	54.8
LnGrp LOS	F	D	D	E	F	C	E	E	D	F	D	D
Approach Vol, veh/h		1320			1928			1216			897	
Approach Delay, s/veh		58.1			75.6			65.1			70.3	
Approach LOS		E			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	43.0	25.9	38.1	19.7	36.3	17.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	39.0	25.0	31.0	18.0	30.0	13.0	43.0
Max Q Clear Time (g_c+I1), s	11.0	39.7	21.6	25.6	15.6	26.2	15.0	45.0
Green Ext Time (p_c), s	0.0	0.0	0.3	3.1	0.1	1.5	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	68.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Future Volume (veh/h)	0	1240	300	220	1260	0	400	140	210	0	0	0
Number	7	4	14	3	8	18	1	6	16			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	0	1881	1881	1881	1881	0	1881	1881	1900			
Adj Flow Rate, veh/h	0	1425	345	253	1448	0	460	161	241			
Adj No. of Lanes	0	3	1	2	3	0	2	3	0			
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87			
Percent Heavy Veh, %	0	1	1	1	1	0	1	1	1			
Cap, veh/h	0	2099	642	344	2832	0	1255	1236	577			
Arrive On Green	0.00	0.41	0.41	0.10	0.55	0.00	0.36	0.36	0.36			
Sat Flow, veh/h	0	5305	1572	3476	5305	0	3476	3424	1599			
Grp Volume(v), veh/h	0	1425	345	253	1448	0	460	161	241			
Grp Sat Flow(s),veh/h/ln	0	1712	1572	1738	1712	0	1738	1712	1599			
Q Serve(g_s), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Cycle Q Clear(g_c), s	0.0	20.8	15.2	6.5	16.1	0.0	8.9	2.9	10.4			
Prop In Lane	0.00		1.00	1.00		0.00	1.00		1.00			
Lane Grp Cap(c), veh/h	0	2099	642	344	2832	0	1255	1236	577			
V/C Ratio(X)	0.00	0.68	0.54	0.74	0.51	0.00	0.37	0.13	0.42			
Avail Cap(c_a), veh/h	0	3147	963	723	4439	0	1255	1236	577			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	0.0	22.1	20.5	40.0	12.8	0.0	21.5	19.6	22.0			
Incr Delay (d2), s/veh	0.0	0.4	0.7	3.1	0.1	0.0	0.8	0.2	2.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.0	9.8	6.7	3.2	7.5	0.0	4.4	1.4	4.9			
LnGrp Delay(d), s/veh	0.0	22.5	21.2	43.1	13.0	0.0	22.3	19.8	24.2			
LnGrp LOS		C	C	D	B		C	B	C			
Approach Vol, veh/h		1770			1701			862				
Approach Delay, s/veh		22.2			17.4			22.4				
Approach LOS		C			B			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			13.0	41.3		37.0		54.4
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			19.0	56.0		33.0		79.0
Max Q Clear Time (g_c+I1), s			8.5	22.8		12.4		18.1
Green Ext Time (p_c), s			0.6	14.6		4.1		14.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	420	1450	100	310	1120	130	170	1260	830	190	1540	450
Future Volume (veh/h)	420	1450	100	310	1120	130	170	1260	830	190	1540	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.93	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	457	1576	109	337	1217	141	185	1370	902	207	1674	489
Adj No. of Lanes	2	3	1	2	3	1	2	3	2	2	3	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	515	1626	574	377	1422	419	203	1883	1264	261	1969	807
Arrive On Green	0.15	0.32	0.32	0.11	0.28	0.28	0.06	0.37	0.37	0.08	0.38	0.38
Sat Flow, veh/h	3476	5136	1518	3476	5136	1513	3476	5136	2616	3476	5136	1488
Grp Volume(v), veh/h	457	1576	109	337	1217	141	185	1370	902	207	1674	489
Grp Sat Flow(s),veh/h/ln	1738	1712	1518	1738	1712	1513	1738	1712	1308	1738	1712	1488
Q Serve(g_s), s	15.5	36.3	5.8	11.5	26.9	8.9	6.4	27.6	33.1	7.0	35.8	27.5
Cycle Q Clear(g_c), s	15.5	36.3	5.8	11.5	26.9	8.9	6.4	27.6	33.1	7.0	35.8	27.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	515	1626	574	377	1422	419	203	1883	1264	261	1969	807
V/C Ratio(X)	0.89	0.97	0.19	0.89	0.86	0.34	0.91	0.73	0.71	0.79	0.85	0.61
Avail Cap(c_a), veh/h	550	1626	574	377	1422	419	203	1883	1264	261	1969	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	40.4	25.3	52.8	41.1	34.6	56.2	32.8	25.2	54.6	33.9	19.6
Incr Delay (d2), s/veh	15.5	15.6	0.2	22.9	5.4	0.5	39.7	2.5	3.5	15.5	4.8	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.5	19.4	2.4	6.7	13.4	3.8	4.2	13.5	12.5	3.9	17.8	12.1
LnGrp Delay(d), s/veh	65.7	56.0	25.4	75.7	46.5	35.1	95.9	35.3	28.7	70.0	38.7	23.0
LnGrp LOS	E	E	C	E	D	D	F	D	C	E	D	C
Approach Vol, veh/h		2142			1695			2457			2370	
Approach Delay, s/veh		56.5			51.4			37.5			38.2	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	48.0	17.0	42.0	11.0	50.0	21.8	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	44.0	13.0	38.0	7.0	46.0	19.0	32.0
Max Q Clear Time (g_c+I1), s	9.0	35.1	13.5	38.3	8.4	37.8	17.5	28.9
Green Ext Time (p_c), s	0.0	7.2	0.0	0.0	0.0	6.7	0.3	2.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Future Volume (veh/h)	440	1160	0	0	1380	710	0	0	0	190	780	20
Number	7	4	14	3	8	18				5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99				1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	0	0	1881	1881				1900	1881	1900
Adj Flow Rate, veh/h	506	1333	0	0	1586	816				218	897	23
Adj No. of Lanes	2	3	0	0	3	1				0	3	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87				0.87	0.87	0.87
Percent Heavy Veh, %	1	1	0	0	1	1				1	1	1
Cap, veh/h	521	3552	0	0	2611	802				235	1043	27
Arrive On Green	0.15	0.69	0.00	0.00	0.51	0.51				0.24	0.24	0.24
Sat Flow, veh/h	3476	5305	0	0	5305	1578				973	4318	113
Grp Volume(v), veh/h	506	1333	0	0	1586	816				411	349	379
Grp Sat Flow(s),veh/h/ln	1738	1712	0	0	1712	1578				1833	1712	1859
Q Serve(g_s), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Cycle Q Clear(g_c), s	17.4	13.0	0.0	0.0	26.4	61.0				26.3	23.3	23.3
Prop In Lane	1.00		0.00	0.00		1.00				0.53		0.06
Lane Grp Cap(c), veh/h	521	3552	0	0	2611	802				443	414	449
V/C Ratio(X)	0.97	0.38	0.00	0.00	0.61	1.02				0.93	0.84	0.84
Avail Cap(c_a), veh/h	521	3552	0	0	2611	802				443	414	449
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00				1.00	1.00	1.00
Uniform Delay (d), s/veh	50.7	7.7	0.0	0.0	21.0	29.5				44.5	43.3	43.3
Incr Delay (d2), s/veh	31.9	0.1	0.0	0.0	0.4	36.3				27.9	18.5	17.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	6.1	0.0	0.0	12.4	34.4				16.7	13.2	14.2
LnGrp Delay(d), s/veh	82.6	7.8	0.0	0.0	21.4	65.8				72.4	61.8	60.6
LnGrp LOS	F	A			C	F				E	E	E
Approach Vol, veh/h		1839			2402						1138	
Approach Delay, s/veh		28.4			36.5						65.2	
Approach LOS		C			D						E	

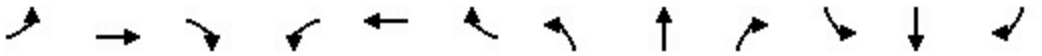
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		33.0		87.0			22.0	65.0
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		29.0		83.0			18.0	61.0
Max Q Clear Time (g_c+I1), s		28.3		15.0			19.4	63.0
Green Ext Time (p_c), s		0.5		13.0			0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Future Volume (veh/h)	90	1290	70	160	1550	70	150	40	490	170	90	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	93	1330	72	165	1598	72	155	41	505	175	93	93
Adj No. of Lanes	1	3	0	2	3	1	1	1	2	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	119	2056	111	240	2135	639	388	408	777	244	243	206
Arrive On Green	0.07	0.41	0.41	0.07	0.42	0.42	0.22	0.22	0.22	0.14	0.14	0.14
Sat Flow, veh/h	1792	4976	269	3476	5136	1538	1792	1881	2690	1792	1787	1518
Grp Volume(v), veh/h	93	915	487	165	1598	72	155	41	505	175	93	93
Grp Sat Flow(s),veh/h/ln	1792	1712	1821	1738	1712	1538	1792	1881	1345	1792	1787	1518
Q Serve(g_s), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Cycle Q Clear(g_c), s	5.0	20.7	20.8	4.5	25.6	2.8	7.2	1.7	16.0	9.1	4.6	5.5
Prop In Lane	1.00		0.15	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	119	1415	752	240	2135	639	388	408	777	244	243	206
V/C Ratio(X)	0.78	0.65	0.65	0.69	0.75	0.11	0.40	0.10	0.65	0.72	0.38	0.45
Avail Cap(c_a), veh/h	222	1696	902	502	2649	793	388	408	777	388	387	329
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	44.5	22.8	22.8	44.1	24.0	17.4	32.6	30.4	30.4	40.1	38.2	38.5
Incr Delay (d2), s/veh	10.4	0.6	1.2	3.5	0.9	0.1	3.0	0.5	4.2	3.9	1.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.8	9.9	10.7	2.3	12.2	1.2	3.9	0.9	6.4	4.7	2.3	2.4
LnGrp Delay(d), s/veh	55.0	23.4	24.0	47.6	25.0	17.4	35.6	30.9	34.6	44.0	39.1	40.1
LnGrp LOS	D	C	C	D	C	B	D	C	C	D	D	D
Approach Vol, veh/h		1495			1835			701			361	
Approach Delay, s/veh		25.6			26.7			34.6			41.8	
Approach LOS		C			C			C			D	

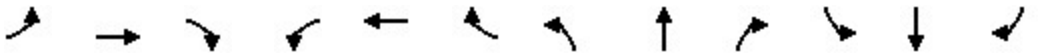
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		25.0	10.7	44.0		17.2	10.5	44.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		21.0	14.0	48.0		21.0	12.0	50.0
Max Q Clear Time (g_c+I1), s		18.0	6.5	22.8		11.1	7.0	27.6
Green Ext Time (p_c), s		0.9	0.3	10.8		1.1	0.1	12.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.8
HCM 2010 LOS	C



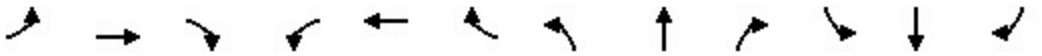
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	290	240	0	0	0	0	1680	70	0	2470	0
Future Volume (vph)	60	290	240	0	0	0	0	1680	70	0	2470	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0			4.0	
Lane Util. Factor	0.95	0.95	0.88					0.81			0.86	
Frpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00			1.00	
Frt	1.00	1.00	0.85					0.99			1.00	
Flt Protected	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (prot)	1698	1785	2814					7560			6471	
Flt Permitted	0.95	1.00	1.00					1.00			1.00	
Satd. Flow (perm)	1698	1785	2814					7560			6471	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	67	322	267	0	0	0	0	1867	78	0	2744	0
RTOR Reduction (vph)	0	0	7	0	0	0	0	5	0	0	0	0
Lane Group Flow (vph)	60	329	260	0	0	0	0	1940	0	0	2744	0
Confl. Peds. (#/hr)							5		6	6		5
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm					NA			NA	
Protected Phases	4	4						2			6	
Permitted Phases			4									
Actuated Green, G (s)	25.7	25.7	25.7					73.3			73.3	
Effective Green, g (s)	25.7	25.7	25.7					73.3			73.3	
Actuated g/C Ratio	0.24	0.24	0.24					0.69			0.69	
Clearance Time (s)	4.0	4.0	4.0					4.0			4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0			3.0	
Lane Grp Cap (vph)	407	428	675					5178			4432	
v/s Ratio Prot	0.04	c0.18						0.26			c0.42	
v/s Ratio Perm			0.09									
v/c Ratio	0.15	0.77	0.39					0.37			0.62	
Uniform Delay, d1	32.0	37.9	34.0					7.1			9.2	
Progression Factor	1.00	1.00	1.00					1.00			1.00	
Incremental Delay, d2	0.2	8.1	0.4					0.2			0.7	
Delay (s)	32.2	46.0	34.4					7.3			9.9	
Level of Service	C	D	C					A			A	
Approach Delay (s/veh)		40.0			0.0			7.3			9.9	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	107.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Future Volume (vph)	0	1400	1050	210	1270	0	440	0	60	350	0	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Lane Util. Factor		0.81	0.81	0.97	0.91		0.97		1.00	0.97		1.00
Frpb, ped/bikes		0.99	0.95	1.00	1.00		1.00		1.00	1.00		1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Frt		0.96	0.85	1.00	1.00		1.00		0.85	1.00		0.85
Flt Protected		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (prot)		5772	1236	3467	5136		3467		1599	3467		1599
Flt Permitted		1.00	1.00	0.95	1.00		0.95		1.00	0.95		1.00
Satd. Flow (perm)		5772	1236	3467	5136		3467		1599	3467		1599
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	0	1429	1071	214	1296	0	449	0	61	357	0	31
RTOR Reduction (vph)	0	58	256	0	0	0	0	0	45	0	0	23
Lane Group Flow (vph)	0	1907	279	214	1296	0	449	0	16	357	0	8
Confl. Peds. (#/hr)	2		16	16		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type		NA	Perm	Prot	NA		Perm		Perm	Perm		Perm
Protected Phases		4		3	8							
Permitted Phases			4				2		2	6		6
Actuated Green, G (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Effective Green, g (s)		58.8	58.8	11.9	74.7		30.2		30.2	30.2		30.2
Actuated g/C Ratio		0.52	0.52	0.11	0.66		0.27		0.27	0.27		0.27
Clearance Time (s)		4.0	4.0	4.0	4.0		4.0		4.0	4.0		4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0		3.0		3.0	3.0		3.0
Lane Grp Cap (vph)		3006	643	365	3398		927		427	927		427
v/s Ratio Prot		c0.33		c0.06	0.25							
v/s Ratio Perm			0.23				c0.13		0.01	0.10		0.01
v/c Ratio		0.63	0.43	0.59	0.38		0.48		0.04	0.39		0.02
Uniform Delay, d1		19.4	16.7	48.2	8.6		34.8		30.6	33.8		30.4
Progression Factor		1.00	1.00	1.00	1.00		1.00		1.00	1.00		1.00
Incremental Delay, d2		0.4	0.5	2.4	0.1		1.8		0.2	1.2		0.1
Delay (s)		19.8	17.2	50.6	8.7		36.6		30.8	35.0		30.5
Level of Service		B	B	D	A		D		C	C		C
Approach Delay (s/veh)		19.2			14.6			35.9			34.6	
Approach LOS		B			B			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	20.8	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.58		
Actuated Cycle Length (s)	112.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	57.6%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	100	1030	670	230	1390	0	40	2690	30
Future Volume (vph)	0	0	0	100	1030	670	230	1390	0	40	2690	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor				0.91	0.91	0.88	0.97	0.86		1.00	0.86	1.00
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt				1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (prot)				1626	3422	2814	3467	6471		1787	6471	1567
Flt Permitted				0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00
Satd. Flow (perm)				1626	3422	2814	3467	6471		1787	6471	1567
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	112	1157	753	258	1562	0	45	3022	34
RTOR Reduction (vph)	0	0	0	0	0	167	0	0	0	0	0	18
Lane Group Flow (vph)	0	0	0	101	1168	586	258	1562	0	45	3022	16
Confl. Peds. (#/hr)							3		5	5		3
Confl. Bikes (#/hr)									4			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type				Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases				3	8		5	2		1	6	
Permitted Phases						8						6
Actuated Green, G (s)				42.0	42.0	42.0	9.0	60.6		6.2	57.8	57.8
Effective Green, g (s)				42.0	42.0	42.0	9.0	60.6		6.2	57.8	57.8
Actuated g/C Ratio				0.35	0.35	0.35	0.07	0.50		0.05	0.48	0.48
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)				565	1189	978	258	3246		91	3096	749
v/s Ratio Prot				0.06	c0.34		c0.07	c0.24		0.03	c0.47	
v/s Ratio Perm						0.21						0.01
v/c Ratio				0.18	0.98	0.60	1.00	0.48		0.49	0.98	0.02
Uniform Delay, d1				27.4	39.0	32.5	55.9	19.8		55.8	30.8	16.6
Progression Factor				1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2				0.2	21.8	1.0	56.0	0.5		4.2	11.5	0.1
Delay (s)				27.6	60.8	33.5	111.9	20.3		60.0	42.3	16.7
Level of Service				C	E	C	F	C		E	D	B
Approach Delay (s/veh)		0.0			49.0			33.3			42.3	
Approach LOS		A			D			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.97		
Actuated Cycle Length (s)	120.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	80.9%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	WBT	WBR	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	210	1620	1780	360	60	180
Future Volume (veh/h)	210	1620	1780	360	60	180
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			0.98	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	221	1705	1874	379	63	189
Adj No. of Lanes	1	4	4	0	1	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	261	4447	2708	546	411	367
Arrive On Green	0.15	0.69	0.50	0.50	0.23	0.23
Sat Flow, veh/h	1792	6735	5683	1093	1792	1599
Grp Volume(v), veh/h	221	1705	1678	575	63	189
Grp Sat Flow(s),veh/h/ln	1792	1618	1618	1659	1792	1599
Q Serve(g_s), s	11.5	10.7	25.4	25.5	2.7	9.9
Cycle Q Clear(g_c), s	11.5	10.7	25.4	25.5	2.7	9.9
Prop In Lane	1.00			0.66	1.00	1.00
Lane Grp Cap(c), veh/h	261	4447	2425	829	411	367
V/C Ratio(X)	0.85	0.38	0.69	0.69	0.15	0.52
Avail Cap(c_a), veh/h	523	6073	2935	1003	411	367
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	39.9	6.4	18.3	18.4	29.5	32.3
Incr Delay (d2), s/veh	7.4	0.1	0.5	1.6	0.8	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	4.8	11.3	11.9	1.4	9.4
LnGrp Delay(d), s/veh	47.3	6.4	18.9	20.0	30.3	37.4
LnGrp LOS	D	A	B	B	C	D
Approach Vol, veh/h		1926	2253		252	
Approach Delay, s/veh		11.1	19.2		35.6	
Approach LOS		B	B		D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6	7	8
Phs Duration (G+Y+Rc), s				69.9		26.0	18.0	51.9
Change Period (Y+Rc), s				4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s				90.0		22.0	28.0	58.0
Max Q Clear Time (g_c+I1), s				12.7		11.9	13.5	27.5
Green Ext Time (p_c), s				20.7		0.6	0.5	20.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.6
HCM 2010 LOS	B



Movement	EBL	EBR2	WBL	WBR	NBT	NBR	SBL2	SBT	SBR	NWL2	NWR
Lane Configurations											
Traffic Volume (vph)	180	10	20	440	80	10	350	40	150	10	10
Future Volume (vph)	180	10	20	440	80	10	350	40	150	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.88	0.95		1.00	0.95		1.00	1.00
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Frt	1.00	0.85	1.00	0.85	0.98		1.00	0.88		1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (prot)	1671	1495	1671	2632	3280		1671	2946		1671	1495
Flt Permitted	0.95	1.00	0.95	1.00	1.00		0.95	1.00		0.95	1.00
Satd. Flow (perm)	1671	1495	1671	2632	3280		1671	2946		1671	1495
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	196	11	22	478	87	11	380	43	163	11	11
RTOR Reduction (vph)	0	9	0	0	0	0	0	64	0	0	0
Lane Group Flow (vph)	196	2	22	478	98	0	380	142	0	11	11
Confl. Peds. (#/hr)			12			2					
Confl. Bikes (#/hr)						1					
Heavy Vehicles (%)	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%	8%
Turn Type	Prot	Prot	Prot	pm+ov	NA		Prot	NA		Prot	Prot
Protected Phases	4	4	8	1	2		1	6		7	7
Permitted Phases				8							
Actuated Green, G (s)	14.8	14.8	2.7	27.2	26.9		24.5	55.4		2.4	2.4
Effective Green, g (s)	14.8	14.8	2.7	27.2	26.9		24.5	55.4		2.4	2.4
Actuated g/C Ratio	0.16	0.16	0.03	0.30	0.29		0.27	0.61		0.03	0.03
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	270	242	49	899	966		448	1787		43	39
v/s Ratio Prot	c0.12	0.00	0.01	c0.14	c0.03		c0.23	0.05		0.01	c0.01
v/s Ratio Perm				0.04							
v/c Ratio	0.73	0.01	0.45	0.53	0.10		0.85	0.08		0.26	0.28
Uniform Delay, d1	36.3	32.1	43.6	26.7	23.4		31.6	7.4		43.6	43.6
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00		1.00	1.00
Incremental Delay, d2	9.3	0.0	6.4	0.6	0.2		13.9	0.1		3.1	3.9
Delay (s)	45.6	32.1	50.0	27.3	23.6		45.5	7.5		46.7	47.5
Level of Service	D	C	D	C	C		D	A		D	D
Approach Delay (s/veh)					23.6			32.2			
Approach LOS					C			C			

Intersection Summary			
HCM 2000 Control Delay (s/veh)	32.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.52		
Actuated Cycle Length (s)	91.3	Sum of lost time (s)	20.0
Intersection Capacity Utilization	55.4%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	SEL	SET	SER	NWL	NWT	NWR	NEL	NET	NER	SWL	SWT	SWR
Lane Configurations												
Traffic Volume (veh/h)	10	0	0	0	0	0	0	90	0	20	20	10
Future Volume (veh/h)	10	0	0	0	0	0	0	90	0	20	20	10
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1712	0	1712				0	1712	0	1712	1712	1900
Adj Flow Rate, veh/h	11	0	0				0	99	0	22	22	11
Adj No. of Lanes	1	0	1				0	2	0	1	2	0
Peak Hour Factor	0.91	0.91	0.91				0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	11	0	11				0	11	0	11	11	11
Cap, veh/h	17	0	15				0	2747	0	30	1955	906
Arrive On Green	0.01	0.00	0.00				0.00	0.84	0.00	0.02	0.91	0.91
Sat Flow, veh/h	1630	0	1455				0	3423	0	1630	2159	1001
Grp Volume(v), veh/h	11	0	0				0	99	0	22	16	17
Grp Sat Flow(s),veh/h/ln	1630	0	1455				0	1626	0	1630	1626	1534
Q Serve(g_s), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.1	0.1
Cycle Q Clear(g_c), s	0.6	0.0	0.0				0.0	0.5	0.0	1.3	0.1	0.1
Prop In Lane	1.00		1.00				0.00		0.00	1.00		0.65
Lane Grp Cap(c), veh/h	17	0	15				0	2747	0	30	1472	1389
V/C Ratio(X)	0.64	0.00	0.00				0.00	0.04	0.00	0.73	0.01	0.01
Avail Cap(c_a), veh/h	446	0	398				0	2747	0	635	1472	1389
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00				0.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.8	0.0	0.0				0.0	1.2	0.0	46.4	0.4	0.4
Incr Delay (d2), s/veh	32.8	0.0	0.0				0.0	0.0	0.0	28.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.4	0.0	0.0				0.0	0.2	0.0	0.8	0.0	0.0
LnGrp Delay(d), s/veh	79.6	0.0	0.0				0.0	1.2	0.0	74.4	0.4	0.4
LnGrp LOS	E							A		E	A	A
Approach Vol, veh/h		11						99			55	
Approach Delay, s/veh		79.6						1.2			30.0	
Approach LOS		E						A			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	5.8	84.2		5.0		90.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	37.0	45.0		26.0		86.0		
Max Q Clear Time (g_c+I1), s	3.3	2.5		2.6		2.1		
Green Ext Time (p_c), s	0.0	0.6		0.0		0.2		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.0
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	1

Movement	WBL	WBR	NET	NER	SWL	SWT
Lane Configurations						
Traffic Vol, veh/h	0	10	110	0	10	30
Future Vol, veh/h	0	10	110	0	10	30
Conflicting Peds, #/hr	1	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	11	124	0	11	34

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	164	62	0	0	124	0
Stage 1	124	-	-	-	-	-
Stage 2	40	-	-	-	-	-
Critical Hdwy	6.84	6.94	-	-	4.14	-
Critical Hdwy Stg 1	5.84	-	-	-	-	-
Critical Hdwy Stg 2	5.84	-	-	-	-	-
Follow-up Hdwy	3.52	3.32	-	-	2.22	-
Pot Cap-1 Maneuver	811	990	-	-	1461	-
Stage 1	888	-	-	-	-	-
Stage 2	977	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	804	990	-	-	1461	-
Mov Cap-2 Maneuver	804	-	-	-	-	-
Stage 1	888	-	-	-	-	-
Stage 2	968	-	-	-	-	-

Approach	WB	NE	SW
HCM Control Delay, s/v	8.7	0	1.9
HCM LOS	A		

Minor Lane/Major Mvmt	NET	NER	WBLn1	SWL	SWT
Capacity (veh/h)	-	-	990	1461	-
HCM Lane V/C Ratio	-	-	0.011	0.008	-
HCM Control Delay (s/veh)	-	-	8.7	7.5	0
HCM Lane LOS	-	-	A	A	A
HCM 95th %tile Q(veh)	-	-	0	0	-

Intersection	
Int Delay, s/veh	0.1

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations	↑↑↑	↱		↑↑↑		↱
Traffic Vol, veh/h	1090	30	0	1410	0	20
Future Vol, veh/h	1090	30	0	1410	0	20
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	0	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	94	94	94	94	94	94
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	1160	32	0	1500	0	21

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	-	-	-	580
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	-	-	-	7.14
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	-	-	-	3.92
Pot Cap-1 Maneuver	-	-	0	-	0	392
Stage 1	-	-	0	-	0	-
Stage 2	-	-	0	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	-	-	-	392
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	0	14.7
HCM LOS			B

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBT
Capacity (veh/h)	392	-	-	-
HCM Lane V/C Ratio	0.054	-	-	-
HCM Control Delay (s/veh)	14.7	-	-	-
HCM Lane LOS	B	-	-	-
HCM 95th %tile Q(veh)	0.2	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	870	440	250	1990	180	670	1110	400	150	830	310
Future Volume (veh/h)	320	870	440	250	1990	180	670	1110	400	150	830	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.97	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	333	906	458	260	2073	188	698	1156	417	156	865	323
Adj No. of Lanes	2	3	1	2	3	0	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	315	2067	613	322	1931	173	660	1554	468	210	890	261
Arrive On Green	0.09	0.41	0.41	0.09	0.41	0.41	0.19	0.31	0.31	0.06	0.17	0.17
Sat Flow, veh/h	3442	5085	1509	3442	4730	424	3442	5085	1532	3442	5085	1490
Grp Volume(v), veh/h	333	906	458	260	1479	782	698	1156	417	156	865	323
Grp Sat Flow(s),veh/h/ln	1721	1695	1509	1721	1695	1764	1721	1695	1532	1721	1695	1490
Q Serve(g_s), s	11.0	15.4	31.0	8.9	49.0	49.0	23.0	24.5	31.2	5.3	20.3	21.0
Cycle Q Clear(g_c), s	11.0	15.4	31.0	8.9	49.0	49.0	23.0	24.5	31.2	5.3	20.3	21.0
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	315	2067	613	322	1384	720	660	1554	468	210	890	261
V/C Ratio(X)	1.06	0.44	0.75	0.81	1.07	1.09	1.06	0.74	0.89	0.74	0.97	1.24
Avail Cap(c_a), veh/h	315	2067	613	430	1384	720	660	1554	468	229	890	261
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.5	25.7	30.3	53.3	35.5	35.5	48.5	37.5	39.8	55.4	49.2	49.5
Incr Delay (d2), s/veh	66.0	0.1	5.0	8.2	44.8	59.2	51.4	3.3	21.7	11.1	24.1	135.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.1	7.2	13.7	4.6	31.5	35.7	15.6	11.9	16.0	2.9	11.5	18.5
LnGrp Delay(d), s/veh	120.5	25.9	35.3	61.5	80.3	94.7	99.9	40.7	61.5	66.5	73.3	185.4
LnGrp LOS	F	C	D	E	F	F	F	D	E	E	E	F
Approach Vol, veh/h		1697			2521			2271			1344	
Approach Delay, s/veh		47.0			82.8			62.7			99.5	
Approach LOS		D			F			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.3	40.7	15.2	52.8	27.0	25.0	15.0	53.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	36.0	15.0	45.0	23.0	21.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	7.3	33.2	10.9	33.0	25.0	23.0	13.0	51.0
Green Ext Time (p_c), s	0.0	2.2	0.3	6.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.1
HCM 2010 LOS	E



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (vph)	40	810	1310	0	60	1440
Future Volume (vph)	40	810	1310	0	60	1440
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	0.97	0.91	0.91		1.00	0.86
Frpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00		1.00	1.00
Frt	0.86	0.85	1.00		1.00	1.00
Flt Protected	1.00	1.00	1.00		0.95	1.00
Satd. Flow (prot)	3107	1441	5085		1770	6408
Flt Permitted	1.00	1.00	1.00		0.95	1.00
Satd. Flow (perm)	3107	1441	5085		1770	6408
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	42	844	1365	0	62	1500
RTOR Reduction (vph)	158	158	0	0	0	0
Lane Group Flow (vph)	306	264	1365	0	63	1500
Confl. Peds. (#/hr)				13	13	
Confl. Bikes (#/hr)				4		
Turn Type	Prot	Perm	NA		Prot	NA
Protected Phases	8		2		1	6
Permitted Phases		8				
Actuated Green, G (s)	22.6	22.6	55.4		7.2	66.6
Effective Green, g (s)	22.6	22.6	55.4		7.2	66.6
Actuated g/C Ratio	0.23	0.23	0.57		0.07	0.69
Clearance Time (s)	4.0	4.0	4.0		4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0		3.0	3.0
Lane Grp Cap (vph)	722	335	2898		131	4390
v/s Ratio Prot	0.10		c0.27		c0.04	0.23
v/s Ratio Perm		c0.18				
v/c Ratio	0.42	0.79	0.47		0.48	0.34
Uniform Delay, d1	31.8	35.0	12.3		43.2	6.3
Progression Factor	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	0.4	11.6	0.6		2.8	0.2
Delay (s)	32.2	46.6	12.8		46.0	6.5
Level of Service	C	D	B		D	A
Approach Delay (s/veh)	39.1		12.8			8.1
Approach LOS	D		B			A

Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.0	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	97.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	65.4%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	270	270	70	1510	700	0
Future Volume (veh/h)	270	270	70	1510	700	0
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	0
Adj Flow Rate, veh/h	290	290	75	1624	753	0
Adj No. of Lanes	2	1	1	4	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	0
Cap, veh/h	726	334	97	4530	3132	0
Arrive On Green	0.21	0.21	0.06	0.71	0.62	0.00
Sat Flow, veh/h	3408	1568	1757	6604	5368	0
Grp Volume(v), veh/h	290	290	75	1624	753	0
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1586	1679	0
Q Serve(g_s), s	8.0	19.5	4.6	10.8	7.3	0.0
Cycle Q Clear(g_c), s	8.0	19.5	4.6	10.8	7.3	0.0
Prop In Lane	1.00	1.00	1.00			0.00
Lane Grp Cap(c), veh/h	726	334	97	4530	3132	0
V/C Ratio(X)	0.40	0.87	0.77	0.36	0.24	0.00
Avail Cap(c_a), veh/h	1061	488	386	4530	3132	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	37.0	41.5	50.9	6.0	9.2	0.0
Incr Delay (d2), s/veh	0.4	11.0	12.1	0.2	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	16.7	2.6	4.7	3.4	0.0
LnGrp Delay(d), s/veh	37.3	52.5	63.0	6.2	9.4	0.0
LnGrp LOS	D	D	E	A	A	
Approach Vol, veh/h	580			1699	753	
Approach Delay, s/veh	44.9			8.7	9.4	
Approach LOS	D			A	A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		82.0		27.3	10.0	72.0		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		78.0		34.0	24.0	50.0		
Max Q Clear Time (g_c+I1), s		12.8		21.5	6.6	9.3		
Green Ext Time (p_c), s		19.5		1.7	0.1	5.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	1050	80	310	1750	140	160	780	370	120	730	190
Future Volume (veh/h)	180	1050	80	310	1750	140	160	780	370	120	730	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.89	1.00		0.84	1.00		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	194	1129	86	333	1882	151	172	839	398	129	785	204
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	248	1824	499	398	2045	566	230	1693	442	172	1608	422
Arrive On Green	0.07	0.36	0.36	0.12	0.41	0.41	0.07	0.34	0.34	0.05	0.32	0.32
Sat Flow, veh/h	3408	5036	1376	3408	5036	1393	3408	5036	1314	3408	5036	1321
Grp Volume(v), veh/h	194	1129	86	333	1882	151	172	839	398	129	785	204
Grp Sat Flow(s),veh/h/ln	1704	1679	1376	1704	1679	1393	1704	1679	1314	1704	1679	1321
Q Serve(g_s), s	6.7	21.9	5.1	11.4	42.2	8.6	5.9	15.8	34.3	4.4	15.0	14.8
Cycle Q Clear(g_c), s	6.7	21.9	5.1	11.4	42.2	8.6	5.9	15.8	34.3	4.4	15.0	14.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	248	1824	499	398	2045	566	230	1693	442	172	1608	422
V/C Ratio(X)	0.78	0.62	0.17	0.84	0.92	0.27	0.75	0.50	0.90	0.75	0.49	0.48
Avail Cap(c_a), veh/h	258	1824	499	516	2074	574	315	1693	442	172	1608	422
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.2	31.2	25.8	51.4	33.5	23.5	54.5	31.5	37.6	55.8	32.7	32.6
Incr Delay (d2), s/veh	13.9	0.6	0.2	9.2	7.2	0.3	6.4	1.0	24.1	16.7	1.1	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	10.2	1.9	5.9	20.9	3.3	3.0	7.5	15.3	2.5	7.1	5.8
LnGrp Delay(d), s/veh	68.1	31.8	26.0	60.7	40.7	23.8	60.9	32.5	61.7	72.5	33.7	36.5
LnGrp LOS	E	C	C	E	D	C	E	C	E	E	C	D
Approach Vol, veh/h		1409			2366			1409			1118	
Approach Delay, s/veh		36.5			42.5			44.2			38.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	44.0	17.9	47.1	12.0	42.0	12.7	52.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	40.0	18.0	40.0	11.0	35.0	9.0	49.0
Max Q Clear Time (g_c+I1), s	6.4	36.3	13.4	23.9	7.9	17.0	8.7	44.2
Green Ext Time (p_c), s	0.0	2.3	0.5	7.2	0.1	5.9	0.0	4.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Future Volume (veh/h)	30	60	110	560	50	240	60	1160	870	360	1100	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	31	62	115	583	52	250	62	1208	906	375	1146	31
Adj No. of Lanes	1	1	0	1	1	1	1	3	1	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	524	262	487	521	838	699	80	1356	409	325	2059	56
Arrive On Green	0.45	0.45	0.45	0.45	0.45	0.45	0.04	0.27	0.27	0.18	0.41	0.41
Sat Flow, veh/h	1069	583	1081	1200	1863	1554	1774	5085	1533	1774	5084	137
Grp Volume(v), veh/h	31	0	177	583	52	250	62	1208	906	375	764	413
Grp Sat Flow(s),veh/h/ln	1069	0	1664	1200	1863	1554	1774	1695	1533	1774	1695	1831
Q Serve(g_s), s	2.0	0.0	7.9	46.1	1.9	12.7	4.2	27.4	32.0	22.0	20.8	20.8
Cycle Q Clear(g_c), s	3.9	0.0	7.9	54.0	1.9	12.7	4.2	27.4	32.0	22.0	20.8	20.8
Prop In Lane	1.00		0.65	1.00		1.00	1.00		1.00	1.00		0.08
Lane Grp Cap(c), veh/h	524	0	749	521	838	699	80	1356	409	325	1373	742
V/C Ratio(X)	0.06	0.00	0.24	1.12	0.06	0.36	0.78	0.89	2.22	1.15	0.56	0.56
Avail Cap(c_a), veh/h	524	0	749	521	838	699	133	1356	409	325	1373	742
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	0.0	20.3	39.6	18.7	21.6	56.7	42.3	44.0	49.0	27.4	27.4
Incr Delay (d2), s/veh	0.0	0.0	0.2	76.0	0.0	0.3	14.9	9.1	555.0	98.1	1.6	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.6	0.0	3.6	28.2	1.0	5.5	2.4	14.0	76.6	19.6	10.0	11.1
LnGrp Delay(d), s/veh	19.8	0.0	20.5	115.6	18.7	21.9	71.6	51.5	599.0	147.1	29.0	30.4
LnGrp LOS	B		C	F	B	C	E	D	F	F	C	C
Approach Vol, veh/h		208			885			2176			1552	
Approach Delay, s/veh		20.4			83.4			280.0			57.9	
Approach LOS		C			F			F			E	

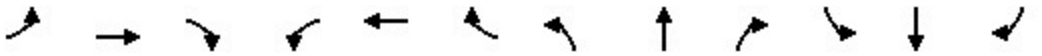
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.0	36.0		58.0	9.4	52.6		58.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	22.0	32.0		54.0	9.0	45.0		54.0
Max Q Clear Time (g_c+I1), s	24.0	34.0		9.9	6.2	22.8		56.0
Green Ext Time (p_c), s	0.0	0.0		1.3	0.0	8.2		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		161.2
HCM 2010 LOS		F

Movement	NBT	NBR	SBL	SBT	SWL	SWR
Lane Configurations						
Traffic Volume (veh/h)	230	0	0	170	770	40
Future Volume (veh/h)	230	0	0	170	770	40
Number	2	12	1	6	3	18
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	0	0	1881	1881	1881
Adj Flow Rate, veh/h	240	0	0	177	802	0
Adj No. of Lanes	2	0	0	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	0	0	1	1	1
Cap, veh/h	2302	0	0	2302	1164	368
Arrive On Green	0.64	0.00	0.00	0.64	0.23	0.00
Sat Flow, veh/h	3762	0	0	3762	5052	1599
Grp Volume(v), veh/h	240	0	0	177	802	0
Grp Sat Flow(s),veh/h/ln	1787	0	0	1787	1684	1599
Q Serve(g_s), s	1.6	0.0	0.0	1.2	9.2	0.0
Cycle Q Clear(g_c), s	1.6	0.0	0.0	1.2	9.2	0.0
Prop In Lane		0.00	0.00		1.00	1.00
Lane Grp Cap(c), veh/h	2302	0	0	2302	1164	368
V/C Ratio(X)	0.10	0.00	0.00	0.08	0.69	0.00
Avail Cap(c_a), veh/h	2302	0	0	2302	5635	1783
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	4.3	0.0	0.0	4.2	22.4	0.0
Incr Delay (d2), s/veh	0.1	0.0	0.0	0.1	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.0	0.0	0.6	4.4	0.0
LnGrp Delay(d), s/veh	4.4	0.0	0.0	4.3	23.2	0.0
LnGrp LOS	A			A	C	
Approach Vol, veh/h	240			177	802	
Approach Delay, s/veh	4.4			4.3	23.2	
Approach LOS	A			A	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2				6		8
Phs Duration (G+Y+Rc), s		45.0				45.0		18.7
Change Period (Y+Rc), s		4.0				4.0		4.0
Max Green Setting (Gmax), s		41.0				41.0		71.0
Max Q Clear Time (g_c+I1), s		3.6				3.2		11.2
Green Ext Time (p_c), s		1.4				1.0		3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	16.7
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	780	120	510	1290	270	200	840	410	290	590	70
Future Volume (vph)	280	780	120	510	1290	270	200	840	410	290	590	70
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91	1.00	0.97	0.91		0.91	0.86	0.91	0.86	0.86	
Frpb, ped/bikes	1.00	1.00	0.94	1.00	0.99		1.00	1.00	1.00	1.00	0.99	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	0.97		1.00	0.99	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	3467	5136	1496	3467	4954		1626	3209	1455	1537	4734	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.94	1.00	0.95	0.80	
Satd. Flow (perm)	3467	5136	1496	3467	4954		1626	3015	1455	1537	3813	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	298	830	128	543	1372	287	213	894	436	309	628	74
RTOR Reduction (vph)	0	0	99	0	27	0	0	3	26	0	9	0
Lane Group Flow (vph)	298	830	29	543	1632	0	192	956	366	247	755	0
Confl. Peds. (#/hr)	18		23	23		18	23					23
Confl. Bikes (#/hr)			2			6						1
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	pt+ov	Prot	NA	
Protected Phases	7	4		3	8		5	2	2 3	1	6	
Permitted Phases			4									
Actuated Green, G (s)	11.0	26.9	26.9	23.1	39.0		18.7	52.7	61.1	20.0	55.3	
Effective Green, g (s)	11.0	26.9	26.9	23.1	39.0		18.7	52.7	61.1	20.0	55.3	
Actuated g/C Ratio	0.09	0.22	0.22	0.19	0.33		0.16	0.44	0.51	0.17	0.46	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0		3.0	3.0	
Lane Grp Cap (vph)	317	1151	335	667	1610		253	1354	740	256	1910	
v/s Ratio Prot	c0.09	0.16		0.16	c0.33		0.12	0.11	0.25	c0.16	0.07	
v/s Ratio Perm			0.02					c0.20			0.12	
v/c Ratio	0.94	0.72	0.09	0.81	1.01		0.76	0.71	0.50	0.96	0.40	
Uniform Delay, d1	54.2	43.1	36.8	46.4	40.5		48.5	27.4	19.3	49.7	21.3	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	35.0	2.3	0.1	7.5	25.9		12.3	1.7	0.5	46.1	0.1	
Delay (s)	89.2	45.3	36.9	53.9	66.4		60.8	29.1	19.9	95.8	21.5	
Level of Service	F	D	D	D	E		E	C	B	F	C	
Approach Delay (s/veh)		54.9			63.3			30.7			39.6	
Approach LOS		D			E			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	49.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.90		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Future Volume (veh/h)	220	670	180	190	1200	180	350	840	220	140	630	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.96	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
Arrive On Green	0.13	0.37	0.37	0.13	0.37	0.37	0.13	0.28	0.28	0.08	0.24	0.24
Sat Flow, veh/h	1792	3574	1543	1792	3574	1539	3476	3574	1536	1792	3574	1497
Grp Volume(v), veh/h	242	736	198	209	1319	198	385	923	242	154	692	231
Grp Sat Flow(s),veh/h/ln	1792	1787	1543	1792	1787	1539	1738	1787	1536	1792	1787	1497
Q Serve(g_s), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Cycle Q Clear(g_c), s	16.0	19.7	9.0	13.7	44.0	9.7	13.1	29.9	13.1	10.0	21.8	16.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1310	765	239	1311	698	434	1013	649	149	864	362
V/C Ratio(X)	1.01	0.56	0.26	0.87	1.01	0.28	0.89	0.91	0.37	1.03	0.80	0.64
Avail Cap(c_a), veh/h	239	1310	765	343	1311	698	434	1013	649	149	864	362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	30.3	17.8	51.0	38.0	20.8	51.7	41.5	24.2	55.0	42.8	40.8
Incr Delay (d2), s/veh	61.6	0.6	0.2	15.7	26.4	0.2	19.3	13.6	1.6	82.2	7.7	8.4
Initial Q Delay(d3),s/veh	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.3	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.0	9.8	3.8	7.8	26.5	4.2	7.4	16.7	5.8	8.3	11.7	7.7
LnGrp Delay(d), s/veh	113.7	30.9	18.0	66.7	64.4	21.1	70.9	55.2	25.9	137.6	50.5	49.2
LnGrp LOS	F	C	B	E	F	C	E	E	C	F	D	D
Approach Vol, veh/h		1176			1726			1550			1077	
Approach Delay, s/veh		45.8			59.7			54.5			62.7	
Approach LOS		D			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	38.0	20.0	48.0	19.0	33.0	20.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	34.0	23.0	37.0	15.0	29.0	16.0	44.0
Max Q Clear Time (g_c+I1), s	12.0	31.9	15.7	21.7	15.1	23.8	18.0	46.0
Green Ext Time (p_c), s	0.0	1.3	0.3	4.9	0.0	2.4	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.9
HCM 2010 LOS	E

FULLERTON - 2040 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	720	170	170	500	80	130	1020	120	240	1340	30
Future Volume (veh/h)	50	720	170	170	500	80	130	1020	120	240	1340	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	52	742	175	175	515	82	134	1052	124	247	1381	31
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	274	809	191	216	1011	160	205	1328	156	291	1601	36
Arrive On Green	0.03	0.28	0.28	0.08	0.33	0.33	0.06	0.41	0.41	0.09	0.45	0.45
Sat Flow, veh/h	1792	2872	677	1792	3092	490	1792	3221	379	1792	3573	80
Grp Volume(v), veh/h	52	462	455	175	297	300	134	583	593	247	690	722
Grp Sat Flow(s),veh/h/ln	1792	1787	1762	1792	1787	1795	1792	1787	1813	1792	1787	1866
Q Serve(g_s), s	2.4	29.6	29.6	8.0	15.9	16.0	5.1	33.7	33.8	9.0	41.1	41.2
Cycle Q Clear(g_c), s	2.4	29.6	29.6	8.0	15.9	16.0	5.1	33.7	33.8	9.0	41.1	41.2
Prop In Lane	1.00		0.38	1.00		0.27	1.00		0.21	1.00		0.04
Lane Grp Cap(c), veh/h	274	503	496	216	584	587	205	737	748	291	801	836
V/C Ratio(X)	0.19	0.92	0.92	0.81	0.51	0.51	0.65	0.79	0.79	0.85	0.86	0.86
Avail Cap(c_a), veh/h	280	529	521	216	604	607	205	737	748	334	801	836
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.3	41.2	41.2	30.7	32.1	32.2	26.2	30.3	30.3	24.6	29.3	29.4
Incr Delay (d2), s/veh	0.3	20.5	20.8	20.0	0.7	0.7	7.3	8.5	8.5	16.4	11.8	11.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	17.5	17.3	5.1	7.9	8.0	2.9	18.3	18.5	5.7	22.8	23.7
LnGrp Delay(d), s/veh	29.6	61.7	61.9	50.7	32.8	32.9	33.5	38.8	38.8	41.0	41.1	40.8
LnGrp LOS	C	E	E	D	C	C	C	D	D	D	D	D
Approach Vol, veh/h		969			772			1310			1659	
Approach Delay, s/veh		60.1			36.9			38.3			41.0	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.2	52.8	13.0	37.3	11.0	57.0	7.6	42.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	46.0	9.0	35.0	7.0	53.0	4.0	40.0
Max Q Clear Time (g_c+I1), s	11.0	35.8	10.0	31.6	7.1	43.2	4.4	18.0
Green Ext Time (p_c), s	0.2	5.3	0.0	1.7	0.0	6.2	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	640	80	200	360	60	60	1020	250	180	1370	160
Future Volume (veh/h)	170	640	80	200	360	60	60	1020	250	180	1370	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	179	674	84	211	379	63	63	1074	263	189	1442	168
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	341	713	89	249	703	116	146	1659	730	284	1627	188
Arrive On Green	0.09	0.23	0.23	0.10	0.23	0.23	0.03	0.47	0.47	0.07	0.51	0.51
Sat Flow, veh/h	1774	3161	393	1774	3032	499	1774	3539	1557	1774	3192	368
Grp Volume(v), veh/h	179	377	381	211	220	222	63	1074	263	189	793	817
Grp Sat Flow(s),veh/h/ln	1774	1770	1785	1774	1770	1762	1774	1770	1557	1774	1770	1791
Q Serve(g_s), s	9.1	25.1	25.2	10.9	13.0	13.3	2.2	27.7	12.9	6.3	47.7	49.2
Cycle Q Clear(g_c), s	9.1	25.1	25.2	10.9	13.0	13.3	2.2	27.7	12.9	6.3	47.7	49.2
Prop In Lane	1.00		0.22	1.00		0.28	1.00		1.00	1.00		0.21
Lane Grp Cap(c), veh/h	341	399	403	249	411	409	146	1659	730	284	902	913
V/C Ratio(X)	0.53	0.94	0.95	0.85	0.54	0.54	0.43	0.65	0.36	0.67	0.88	0.89
Avail Cap(c_a), veh/h	382	399	403	249	411	409	150	1659	730	379	902	913
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.6	45.6	45.6	33.9	40.3	40.4	25.8	24.2	20.3	20.0	26.1	26.4
Incr Delay (d2), s/veh	1.3	31.1	31.4	23.0	1.4	1.5	2.0	2.0	1.4	2.7	12.0	13.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	15.7	15.9	6.9	6.5	6.7	1.1	13.9	5.8	3.3	26.1	27.6
LnGrp Delay(d), s/veh	32.9	76.7	77.0	56.8	41.7	41.9	27.8	26.2	21.7	22.7	38.0	39.6
LnGrp LOS	C	E	E	E	D	D	C	C	C	C	D	D
Approach Vol, veh/h		937			653			1400			1799	
Approach Delay, s/veh		68.5			46.6			25.4			37.1	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.6	60.1	16.0	31.0	7.7	65.0	15.2	31.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	50.0	12.0	27.0	4.0	61.0	14.0	25.0
Max Q Clear Time (g_c+I1), s	8.3	29.7	12.9	27.2	4.2	51.2	11.1	15.3
Green Ext Time (p_c), s	0.3	8.7	0.0	0.0	0.0	7.0	0.1	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Future Volume (veh/h)	60	1060	100	120	620	10	90	90	80	30	160	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		0.97	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	65	1140	108	129	667	11	97	97	86	32	172	75
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	457	1918	181	245	2096	35	359	611	504	106	521	517
Arrive On Green	0.58	0.58	0.58	0.58	0.58	0.58	0.32	0.32	0.32	0.32	0.32	0.32
Sat Flow, veh/h	765	3292	311	448	3598	59	1137	1881	1553	177	1605	1592
Grp Volume(v), veh/h	65	618	630	129	331	347	97	97	86	204	0	75
Grp Sat Flow(s),veh/h/ln	765	1787	1817	448	1787	1870	1137	1881	1553	1781	0	1592
Q Serve(g_s), s	4.1	19.0	19.1	22.3	8.2	8.2	6.1	3.2	3.4	0.0	0.0	2.9
Cycle Q Clear(g_c), s	12.3	19.0	19.1	41.4	8.2	8.2	13.2	3.2	3.4	7.1	0.0	2.9
Prop In Lane	1.00		0.17	1.00		0.03	1.00		1.00	0.16		1.00
Lane Grp Cap(c), veh/h	457	1041	1058	245	1041	1090	359	611	504	627	0	517
V/C Ratio(X)	0.14	0.59	0.60	0.53	0.32	0.32	0.27	0.16	0.17	0.33	0.00	0.15
Avail Cap(c_a), veh/h	756	1741	1769	421	1741	1822	359	611	504	627	0	517
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	12.4	11.5	11.5	24.7	9.2	9.2	27.0	20.7	20.8	22.1	0.0	20.6
Incr Delay (d2), s/veh	0.1	0.5	0.5	1.7	0.2	0.2	1.8	0.6	0.7	1.4	0.0	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.4	9.6	2.9	4.0	4.2	2.1	1.7	1.6	3.9	0.0	1.4
LnGrp Delay(d), s/veh	12.5	12.0	12.0	26.5	9.4	9.4	28.9	21.3	21.5	23.4	0.0	21.2
LnGrp LOS	B	B	B	C	A	A	C	C	C	C		C
Approach Vol, veh/h		1313			807			280			279	
Approach Delay, s/veh		12.1			12.1			24.0			22.8	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		32.0		54.2		32.0		54.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		28.0		84.0		28.0		84.0
Max Q Clear Time (g_c+I1), s		15.2		21.1		9.1		43.4
Green Ext Time (p_c), s		1.0		11.7		1.4		6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	14.5
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	940	180	110	430	20	200	230	140	40	240	50
Future Volume (veh/h)	100	940	180	110	430	20	200	230	140	40	240	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	109	1022	196	120	467	22	217	250	152	43	261	54
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	459	1803	781	208	1803	779	417	791	657	395	791	657
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.42	0.42	0.42	0.42	0.42	0.42
Sat Flow, veh/h	910	3574	1547	461	3574	1544	1068	1881	1562	987	1881	1562
Grp Volume(v), veh/h	109	1022	196	120	467	22	217	250	152	43	261	54
Grp Sat Flow(s),veh/h/ln	910	1787	1547	461	1787	1544	1068	1881	1562	987	1881	1562
Q Serve(g_s), s	8.3	21.2	7.7	26.1	8.0	0.8	18.3	9.5	6.7	3.3	10.0	2.2
Cycle Q Clear(g_c), s	16.3	21.2	7.7	47.3	8.0	0.8	28.3	9.5	6.7	12.8	10.0	2.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	459	1803	781	208	1803	779	417	791	657	395	791	657
V/C Ratio(X)	0.24	0.57	0.25	0.58	0.26	0.03	0.52	0.32	0.23	0.11	0.33	0.08
Avail Cap(c_a), veh/h	570	2239	969	265	2239	967	417	791	657	395	791	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.7	18.4	15.0	34.8	15.1	13.3	30.4	20.7	19.9	25.0	20.8	18.6
Incr Delay (d2), s/veh	0.3	0.3	0.2	2.5	0.1	0.0	4.6	1.0	0.8	0.6	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	10.4	3.3	3.5	3.9	0.3	6.0	5.2	3.0	0.9	5.4	1.0
LnGrp Delay(d), s/veh	20.0	18.7	15.2	37.3	15.2	13.3	34.9	21.7	20.7	25.5	22.0	18.8
LnGrp LOS	C	B	B	D	B	B	C	C	C	C	C	B
Approach Vol, veh/h		1327			609			619			358	
Approach Delay, s/veh		18.3			19.5			26.1			21.9	
Approach LOS		B			B			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		58.0		49.0		58.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		67.0		45.0		67.0
Max Q Clear Time (g_c+I1), s		30.3		23.2		14.8		49.3
Green Ext Time (p_c), s		2.6		11.2		2.1		4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.6
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	0.7

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	20	10	560	40	10	380
Future Vol, veh/h	20	10	560	40	10	380
Conflicting Peds, #/hr	0	0	0	22	22	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	85	85	85	85	85	85
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	24	12	659	47	12	447

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1152	681	0	0	728	0
Stage 1	681	-	-	-	-	-
Stage 2	471	-	-	-	-	-
Critical Hdwy	6.41	6.21	-	-	4.11	-
Critical Hdwy Stg 1	5.41	-	-	-	-	-
Critical Hdwy Stg 2	5.41	-	-	-	-	-
Follow-up Hdwy	3.509	3.309	-	-	2.209	-
Pot Cap-1 Maneuver	220	452	-	-	880	-
Stage 1	504	-	-	-	-	-
Stage 2	630	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	213	444	-	-	864	-
Mov Cap-2 Maneuver	213	-	-	-	-	-
Stage 1	495	-	-	-	-	-
Stage 2	621	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	20.4	0	0.2
HCM LOS	C		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	213	444	864	-
HCM Lane V/C Ratio	-	-	0.11	0.026	0.014	-
HCM Control Delay (s/veh)	-	-	24	13.3	9.2	-
HCM Lane LOS	-	-	C	B	A	-
HCM 95th %tile Q(veh)	-	-	0.4	0.1	0	-

Intersection	
Int Delay, s/veh	3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	20	30	20	10	40	400	20	20	260	10
Future Vol, veh/h	10	10	20	30	20	10	40	400	20	20	260	10
Conflicting Peds, #/hr	3	0	1	1	0	3	22	0	22	22	0	22
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	91	91	91	91	91	91	91	91	91	91	91	91
Heavy Vehicles, %	3	3	3	3	3	3	3	3	3	3	3	3
Mvmt Flow	11	11	22	33	22	11	44	440	22	22	286	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	911	924	309	903	913	465	319	0	0	484	0	0
Stage 1	352	352	-	550	550	-	-	-	-	-	-	-
Stage 2	559	572	-	353	363	-	-	-	-	-	-	-
Critical Hdwy	7.13	6.53	6.23	7.13	6.53	6.23	4.13	-	-	4.13	-	-
Critical Hdwy Stg 1	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.13	5.53	-	6.13	5.53	-	-	-	-	-	-	-
Follow-up Hdwy	3.527	4.027	3.327	3.527	4.027	3.327	2.227	-	-	2.227	-	-
Pot Cap-1 Maneuver	254	268	729	257	272	595	1235	-	-	1074	-	-
Stage 1	663	630	-	518	514	-	-	-	-	-	-	-
Stage 2	512	503	-	662	623	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	218	244	715	226	248	583	1212	-	-	1054	-	-
Mov Cap-2 Maneuver	218	244	-	226	248	-	-	-	-	-	-	-
Stage 1	627	605	-	490	487	-	-	-	-	-	-	-
Stage 2	461	476	-	616	599	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	16.3	22.7	0.7	0.6
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1212	-	-	230	715	234	583	1054	-	-
HCM Lane V/C Ratio	0.036	-	-	0.096	0.031	0.235	0.019	0.021	-	-
HCM Control Delay (s/veh)	8.1	-	-	22.3	10.2	25	11.3	8.5	-	-
HCM Lane LOS	A	-	-	C	B	D	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.3	0.1	0.9	0.1	0.1	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Future Volume (veh/h)	70	260	0	0	110	80	10	220	30	100	80	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.97		1.00	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
Arrive On Green	0.21	0.21	0.00	0.00	0.21	0.21	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Grp Volume(v), veh/h	83	310	0	0	131	95	12	262	36	119	95	333
Grp Sat Flow(s),veh/h/ln	1118	1863	1583	1065	1863	1507	950	1863	1531	1071	1863	1531
Q Serve(g_s), s	5.9	13.6	0.0	0.0	5.1	4.6	0.3	4.2	0.6	3.8	1.4	7.2
Cycle Q Clear(g_c), s	11.0	13.6	0.0	0.0	5.1	4.6	1.7	4.2	0.6	8.0	1.4	7.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	249	387	329	84	387	313	733	1302	1070	780	1302	1070
V/C Ratio(X)	0.33	0.80	0.00	0.00	0.34	0.30	0.02	0.20	0.03	0.15	0.07	0.31
Avail Cap(c_a), veh/h	694	1129	959	508	1129	913	733	1302	1070	780	1302	1070
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.7	32.3	0.0	0.0	29.0	28.7	4.4	4.5	4.0	5.9	4.1	5.0
Incr Delay (d2), s/veh	0.8	3.9	0.0	0.0	0.5	0.5	0.0	0.3	0.1	0.4	0.1	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	7.4	0.0	0.0	2.7	1.9	0.1	2.2	0.3	1.2	0.8	3.2
LnGrp Delay(d), s/veh	34.4	36.2	0.0	0.0	29.5	29.3	4.4	4.9	4.0	6.3	4.2	5.7
LnGrp LOS	C	D			C	C	A	A	A	A	A	A
Approach Vol, veh/h		393			226			310			547	
Approach Delay, s/veh		35.8			29.4			4.8			5.6	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		64.0		21.8		64.0		21.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		60.0		52.0		60.0		52.0
Max Q Clear Time (g_c+I1), s		6.2		15.6		10.0		7.1
Green Ext Time (p_c), s		1.9		2.3		2.4		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.1
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Future Volume (veh/h)	120	1350	30	50	780	70	60	80	130	80	40	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	0.99		0.97	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	129	1452	32	54	839	75	65	86	140	86	43	86
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	364	2146	47	221	1839	164	561	732	604	505	732	603
Arrive On Green	0.07	0.42	0.42	0.04	0.39	0.39	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1774	5114	113	1774	4734	421	1240	1863	1537	1138	1863	1534
Grp Volume(v), veh/h	129	963	521	54	600	314	65	86	140	86	43	86
Grp Sat Flow(s),veh/h/ln	1774	1695	1837	1774	1695	1765	1240	1863	1537	1138	1863	1534
Q Serve(g_s), s	3.3	18.1	18.1	1.4	10.4	10.5	2.7	2.3	4.8	4.1	1.1	2.8
Cycle Q Clear(g_c), s	3.3	18.1	18.1	1.4	10.4	10.5	3.8	2.3	4.8	6.4	1.1	2.8
Prop In Lane	1.00		0.06	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	364	1423	771	221	1317	685	561	732	604	505	732	603
V/C Ratio(X)	0.35	0.68	0.68	0.24	0.46	0.46	0.12	0.12	0.23	0.17	0.06	0.14
Avail Cap(c_a), veh/h	652	2880	1560	383	2536	1320	561	732	604	505	732	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	13.3	18.5	18.5	15.4	17.9	17.9	16.1	15.2	16.0	17.3	14.9	15.4
Incr Delay (d2), s/veh	0.6	0.6	1.0	0.6	0.2	0.5	0.4	0.3	0.9	0.7	0.2	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.6	8.5	9.3	0.7	4.9	5.2	1.0	1.3	2.2	1.4	0.6	1.3
LnGrp Delay(d), s/veh	13.9	19.1	19.6	15.9	18.2	18.4	16.5	15.6	16.9	18.0	15.0	15.9
LnGrp LOS	B	B	B	B	B	B	B	B	B	B	B	B
Approach Vol, veh/h		1613			968			291			215	
Approach Delay, s/veh		18.9			18.1			16.4			16.6	
Approach LOS		B			B			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		35.0	6.8	37.1		35.0	9.2	34.6
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		31.0	10.0	67.0		31.0	18.0	59.0
Max Q Clear Time (g_c+I1), s		6.8	3.4	20.1		8.4	5.3	12.5
Green Ext Time (p_c), s		1.1	0.0	12.9		0.8	0.2	6.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.2
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	83.4

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	60	990	100	180	690	10	30	10	220	10	20	110
Future Vol, veh/h	60	990	100	180	690	10	30	10	220	10	20	110
Conflicting Peds, #/hr	1	0	5	5	0	1	2	0	3	3	0	2
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	62	1021	103	186	711	10	31	10	227	10	21	113

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	722	0	0	1129	0	0	1942	2296	570	1732	2342	364
Stage 1	-	-	-	-	-	-	1202	1202	-	1089	1089	-
Stage 2	-	-	-	-	-	-	740	1094	-	643	1253	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.52	6.52	6.92	7.52	6.52	6.92
Critical Hdwy Stg 1	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.52	5.52	-	6.52	5.52	-
Follow-up Hdwy	2.21	-	-	2.21	-	-	3.51	4.01	3.31	3.51	4.01	3.31
Pot Cap-1 Maneuver	883	-	-	620	-	-	40	39	467	57	36	636
Stage 1	-	-	-	-	-	-	197	258	-	232	292	-
Stage 2	-	-	-	-	-	-	377	290	-	431	244	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	882	-	-	617	-	-	~ 6	25	464	15	23	634
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 6	25	-	15	23	-
Stage 1	-	-	-	-	-	-	182	239	-	216	204	-
Stage 2	-	-	-	-	-	-	194	202	-	196	226	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.5	2.7	$ 513	$ 473
HCM LOS			F	F

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	7	464	882	-	-	617	-	-	82
HCM Lane V/C Ratio	5.891	0.489	0.07	-	-	0.301	-	-	1.76
HCM Control Delay (s/veh)	$ 3224.3	20	9.4	-	-	13.3	-	-	$ 473
HCM Lane LOS	F	C	A	-	-	B	-	-	F
HCM 95th %tile Q(veh)	6.6	2.6	0.2	-	-	1.3	-	-	12.2

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	990	120	30	460	20	40	180	20	30	180	70
Future Volume (veh/h)	110	990	120	30	460	20	40	180	20	30	180	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881
Adj Flow Rate, veh/h	120	1076	130	33	500	22	43	196	22	33	196	76
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	421	1432	634	192	1306	578	48	190	701	46	240	701
Arrive On Green	0.06	0.40	0.40	0.03	0.37	0.37	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1792	3574	1583	1792	3574	1582	0	432	1596	0	547	1596
Grp Volume(v), veh/h	120	1076	130	33	500	22	239	0	22	229	0	76
Grp Sat Flow(s),veh/h/ln	1792	1787	1583	1792	1787	1582	433	0	1596	547	0	1596
Q Serve(g_s), s	3.6	22.9	4.8	1.0	9.2	0.8	0.0	0.0	0.7	0.0	0.0	2.5
Cycle Q Clear(g_c), s	3.6	22.9	4.8	1.0	9.2	0.8	39.0	0.0	0.7	39.0	0.0	2.5
Prop In Lane	1.00		1.00	1.00		1.00	0.18		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	421	1432	634	192	1306	578	238	0	701	287	0	701
V/C Ratio(X)	0.29	0.75	0.20	0.17	0.38	0.04	1.01	0.00	0.03	0.80	0.00	0.11
Avail Cap(c_a), veh/h	474	2535	1123	269	2455	1086	238	0	701	287	0	701
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	15.7	22.8	17.4	19.2	20.8	18.1	28.8	0.0	14.2	26.3	0.0	14.7
Incr Delay (d2), s/veh	0.4	0.8	0.2	0.4	0.2	0.0	59.7	0.0	0.1	20.3	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	11.4	2.1	0.5	4.5	0.4	8.6	0.0	0.3	5.8	0.0	1.2
LnGrp Delay(d), s/veh	16.1	23.6	17.5	19.6	21.0	18.2	88.5	0.0	14.2	46.6	0.0	15.0
LnGrp LOS	B	C	B	B	C	B	F		B	D		B
Approach Vol, veh/h		1326			555			261			305	
Approach Delay, s/veh		22.4			20.8			82.3			38.7	
Approach LOS		C			C			F			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	6.2	39.6		43.0	9.3	36.5
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		39.0	6.0	63.0		39.0	8.0	61.0
Max Q Clear Time (g_c+I1), s		41.0	3.0	24.9		41.0	5.6	11.2
Green Ext Time (p_c), s		0.0	0.0	10.7		0.0	0.1	3.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1450	850	480	1470	110	510	630	310	170	1260	190
Future Volume (veh/h)	200	1450	850	480	1470	110	510	630	310	170	1260	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	208	1510	885	500	1531	115	531	656	323	177	1312	198
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	265	1300	597	402	2151	667	430	1518	470	235	1229	380
Arrive On Green	0.08	0.38	0.38	0.12	0.42	0.42	0.13	0.30	0.30	0.07	0.24	0.24
Sat Flow, veh/h	3442	3390	1556	3442	5085	1578	3442	5085	1575	3442	5085	1574
Grp Volume(v), veh/h	208	1510	885	500	1531	115	531	656	323	177	1312	198
Grp Sat Flow(s),veh/h/ln	1721	1695	1556	1721	1695	1578	1721	1695	1575	1721	1695	1574
Q Serve(g_s), s	7.1	46.0	46.0	14.0	29.8	5.4	15.0	12.5	21.7	6.1	29.0	13.1
Cycle Q Clear(g_c), s	7.1	46.0	46.0	14.0	29.8	5.4	15.0	12.5	21.7	6.1	29.0	13.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	265	1300	597	402	2151	667	430	1518	470	235	1229	380
V/C Ratio(X)	0.79	1.16	1.48	1.25	0.71	0.17	1.23	0.43	0.69	0.75	1.07	0.52
Avail Cap(c_a), veh/h	315	1300	597	402	2151	667	430	1518	470	315	1229	380
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	37.0	37.0	53.0	28.6	21.5	52.5	33.9	37.1	54.9	45.5	39.5
Incr Delay (d2), s/veh	10.4	81.7	226.4	129.7	1.1	0.1	124.2	0.9	7.9	6.9	45.8	5.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.8	36.2	57.2	13.9	14.1	2.4	14.5	6.0	10.5	3.1	18.8	6.2
LnGrp Delay(d), s/veh	64.9	118.7	263.4	182.7	29.7	21.7	176.7	34.8	45.1	61.8	91.3	44.5
LnGrp LOS	E	F	F	F	C	C	F	C	D	E	F	D
Approach Vol, veh/h		2603			2146			1510			1687	
Approach Delay, s/veh		163.6			64.9			86.9			82.7	
Approach LOS		F			E			F			F	

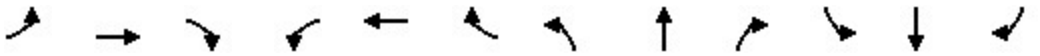
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.2	39.8	18.0	50.0	19.0	33.0	13.2	54.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	33.0	14.0	46.0	15.0	29.0	11.0	49.0
Max Q Clear Time (g_c+I1), s	8.1	23.7	16.0	48.0	17.0	31.0	9.1	31.8
Green Ext Time (p_c), s	0.1	3.6	0.0	0.0	0.0	0.0	0.1	9.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	105.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	1200	250	450	1130	200	310	1310	190	440	1790	290
Future Volume (veh/h)	320	1200	250	450	1130	200	310	1310	190	440	1790	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	333	1250	260	469	1177	208	323	1365	198	458	1865	302
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	314	1131	235	434	1113	338	319	1685	512	511	1706	272
Arrive On Green	0.17	0.27	0.27	0.13	0.22	0.22	0.09	0.33	0.33	0.15	0.38	0.38
Sat Flow, veh/h	1792	4242	882	3476	5136	1559	3476	5136	1560	3476	4450	711
Grp Volume(v), veh/h	333	1009	501	469	1177	208	323	1365	198	458	1429	738
Grp Sat Flow(s),veh/h/ln	1792	1712	1700	1738	1712	1559	1738	1712	1560	1738	1712	1737
Q Serve(g_s), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	29.2	11.7	15.5	46.0	46.0
Cycle Q Clear(g_c), s	21.0	32.0	32.0	15.0	26.0	14.5	11.0	29.2	11.7	15.5	46.0	46.0
Prop In Lane	1.00		0.52	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	314	913	453	434	1113	338	319	1685	512	511	1312	666
V/C Ratio(X)	1.06	1.11	1.11	1.08	1.06	0.62	1.01	0.81	0.39	0.90	1.09	1.11
Avail Cap(c_a), veh/h	314	913	453	434	1113	338	319	1685	512	521	1312	666
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	44.0	44.0	52.5	47.0	42.5	54.5	36.9	31.0	50.3	37.0	37.0
Incr Delay (d2), s/veh	68.2	62.9	74.0	66.2	43.6	3.3	54.0	4.3	2.2	17.9	52.7	68.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.3	23.1	24.3	11.2	16.8	6.6	7.7	14.5	5.4	8.7	31.3	34.7
LnGrp Delay(d), s/veh	117.7	106.9	118.0	118.7	90.6	45.8	108.5	41.2	33.2	68.2	89.7	105.6
LnGrp LOS	F	F	F	F	F	D	F	D	C	E	F	F
Approach Vol, veh/h		1843			1854			1886			2625	
Approach Delay, s/veh		111.8			92.7			51.9			90.4	
Approach LOS		F			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	43.4	19.0	36.0	15.0	50.0	25.0	30.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	18.0	39.0	15.0	32.0	11.0	46.0	21.0	26.0
Max Q Clear Time (g_c+I1), s	17.5	31.2	17.0	34.0	13.0	48.0	23.0	28.0
Green Ext Time (p_c), s	0.1	5.2	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	86.9
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	90	30	750	150	210	40	1070	520	90	1710	90
Future Volume (vph)	50	90	30	750	150	210	40	1070	520	90	1710	90
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.98	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.99	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1787	1881	1599	1698	1729	1564	1787	5136	1571	1787	5089	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1787	1881	1599	1698	1729	1564	1787	5136	1571	1787	5089	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	52	94	31	781	156	219	42	1115	542	94	1781	94
RTOR Reduction (vph)	0	0	28	0	0	149	0	0	329	0	4	0
Lane Group Flow (vph)	52	94	3	469	468	70	42	1115	213	94	1871	0
Confl. Peds. (#/hr)	3					3	2		2	2		2
Confl. Bikes (#/hr)						5			3			4
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	10.8	10.8	10.8	30.3	30.3	30.3	5.3	43.2	43.2	9.4	47.3	
Effective Green, g (s)	10.8	10.8	10.8	30.3	30.3	30.3	5.3	43.2	43.2	9.4	47.3	
Actuated g/C Ratio	0.10	0.10	0.10	0.28	0.28	0.28	0.05	0.39	0.39	0.09	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	175	185	157	469	477	431	86	2022	618	153	2194	
v/s Ratio Prot	0.03	c0.05		c0.28	0.27		0.02	0.22		c0.05	c0.37	
v/s Ratio Perm			0.00			0.04			0.14			
v/c Ratio	0.30	0.51	0.02	1.00	0.98	0.16	0.49	0.55	0.35	0.61	0.85	
Uniform Delay, d1	45.9	46.9	44.7	39.7	39.4	30.1	50.9	25.7	23.3	48.4	28.1	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.0	2.2	0.0	41.6	36.1	0.2	4.3	1.1	1.5	7.1	3.4	
Delay (s)	46.9	49.1	44.7	81.3	75.6	30.3	55.2	26.8	24.9	55.5	31.5	
Level of Service	D	D	D	F	E	C	E	C	C	E	C	
Approach Delay (s/veh)		47.7			69.3			26.9			32.6	
Approach LOS		D			E			C			C	

Intersection Summary					
HCM 2000 Control Delay (s/veh)	39.7	HCM 2000 Level of Service	D		
HCM 2000 Volume to Capacity ratio	0.86				
Actuated Cycle Length (s)	109.7	Sum of lost time (s)	16.0		
Intersection Capacity Utilization	81.2%	ICU Level of Service	D		
Analysis Period (min)	15				
c Critical Lane Group					

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	200	80	70	160	450	130	980	100	840	1630	70
Future Volume (veh/h)	70	200	80	70	160	450	130	980	100	840	1630	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	78	222	89	78	178	500	144	1089	111	933	1811	78
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	138	350	283	143	350	753	171	1372	140	1017	2205	953
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.10	0.42	0.42	0.29	0.62	0.62
Sat Flow, veh/h	762	1881	1523	1070	1881	1532	1792	3267	333	3476	3574	1544
Grp Volume(v), veh/h	78	222	89	78	178	500	144	595	605	933	1811	78
Grp Sat Flow(s),veh/h/ln	762	1881	1523	1070	1881	1532	1792	1787	1813	1738	1787	1544
Q Serve(g_s), s	11.9	12.9	6.0	8.6	10.1	22.0	9.4	34.3	34.4	30.7	46.5	2.4
Cycle Q Clear(g_c), s	22.0	12.9	6.0	21.5	10.1	22.0	9.4	34.3	34.4	30.7	46.5	2.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.18	1.00		1.00
Lane Grp Cap(c), veh/h	138	350	283	143	350	753	171	751	761	1017	2205	953
V/C Ratio(X)	0.57	0.63	0.31	0.54	0.51	0.66	0.84	0.79	0.79	0.92	0.82	0.08
Avail Cap(c_a), veh/h	138	350	283	143	350	753	197	751	761	1116	2205	953
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.3	44.4	41.6	54.4	43.3	23.8	52.6	29.8	29.9	40.5	17.6	9.1
Incr Delay (d2), s/veh	5.3	3.7	0.6	4.2	1.2	2.2	24.1	8.4	8.4	11.2	3.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.7	7.1	2.6	2.7	5.4	12.9	5.8	18.6	18.9	16.4	24.0	1.1
LnGrp Delay(d), s/veh	58.6	48.2	42.3	58.6	44.5	26.1	76.7	38.2	38.2	51.7	21.2	9.3
LnGrp LOS	E	D	D	E	D	C	E	D	D	D	C	A
Approach Vol, veh/h		389			756			1344			2822	
Approach Delay, s/veh		48.9			33.8			42.4			30.9	
Approach LOS		D			C			D			C	

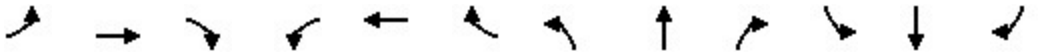
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	38.6	53.7		26.0	15.3	77.0		26.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	38.0	48.0		22.0	13.0	73.0		22.0
Max Q Clear Time (g_c+I1), s	32.7	36.4		24.0	11.4	48.5		24.0
Green Ext Time (p_c), s	1.9	5.9		0.0	0.1	16.2		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.5
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1000	70	270	730	220	40	890	450	330	1480	90
Future Volume (veh/h)	150	1000	70	270	730	220	40	890	450	330	1480	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	158	1053	74	284	768	232	42	937	474	347	1558	95
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	249	899	63	224	996	418	118	874	432	284	1647	100
Arrive On Green	0.08	0.27	0.27	0.09	0.28	0.28	0.03	0.38	0.38	0.13	0.48	0.48
Sat Flow, veh/h	1792	3371	237	1792	3574	1500	1792	2279	1128	1792	3408	206
Grp Volume(v), veh/h	158	558	569	284	768	232	42	730	681	347	811	842
Grp Sat Flow(s),veh/h/ln	1792	1787	1821	1792	1787	1500	1792	1787	1620	1792	1787	1828
Q Serve(g_s), s	7.6	32.0	32.0	11.0	23.7	15.8	1.7	46.0	46.0	15.0	51.6	52.9
Cycle Q Clear(g_c), s	7.6	32.0	32.0	11.0	23.7	15.8	1.7	46.0	46.0	15.0	51.6	52.9
Prop In Lane	1.00		0.13	1.00		1.00	1.00		0.70	1.00		0.11
Lane Grp Cap(c), veh/h	249	477	486	224	996	418	118	685	621	284	864	883
V/C Ratio(X)	0.64	1.17	1.17	1.27	0.77	0.56	0.36	1.07	1.10	1.22	0.94	0.95
Avail Cap(c_a), veh/h	255	477	486	224	996	418	133	685	621	284	864	883
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	44.0	44.0	32.5	39.8	36.9	29.5	37.0	37.0	38.9	29.4	29.7
Incr Delay (d2), s/veh	4.9	97.3	97.4	150.4	3.8	1.6	1.8	53.2	65.3	127.3	19.1	20.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	28.6	29.2	16.8	12.3	6.7	0.9	32.8	31.8	19.4	29.8	31.8
LnGrp Delay(d), s/veh	35.9	141.3	141.4	182.9	43.5	38.5	31.4	90.2	102.3	166.2	48.4	50.5
LnGrp LOS	D	F	F	F	D	D	C	F	F	F	D	D
Approach Vol, veh/h		1285			1284			1453			2000	
Approach Delay, s/veh		128.4			73.4			94.2			69.7	
Approach LOS		F			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	19.0	50.0	15.0	36.0	7.0	62.0	13.6	37.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	15.0	46.0	11.0	32.0	4.0	57.0	10.0	33.0
Max Q Clear Time (g_c+I1), s	17.0	48.0	13.0	34.0	3.7	54.9	9.6	25.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	1.7	0.0	3.5

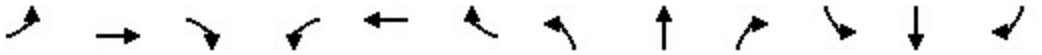
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	88.9
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1100	100	310	440	60	60	910	540	200	1350	50
Future Volume (veh/h)	150	1100	100	310	440	60	60	910	540	200	1350	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	163	1196	109	337	478	65	65	989	587	217	1467	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	427	1102	480	299	1311	573	120	1221	525	239	1375	51
Arrive On Green	0.08	0.31	0.31	0.13	0.37	0.37	0.03	0.34	0.34	0.08	0.39	0.39
Sat Flow, veh/h	1792	3574	1557	1792	3574	1562	1792	3574	1535	1792	3511	129
Grp Volume(v), veh/h	163	1196	109	337	478	65	65	989	587	217	745	776
Grp Sat Flow(s),veh/h/ln	1792	1787	1557	1792	1787	1562	1792	1787	1535	1792	1787	1853
Q Serve(g_s), s	7.4	37.0	6.2	16.0	11.7	3.3	2.8	30.2	41.0	9.2	47.0	47.0
Cycle Q Clear(g_c), s	7.4	37.0	6.2	16.0	11.7	3.3	2.8	30.2	41.0	9.2	47.0	47.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.07
Lane Grp Cap(c), veh/h	427	1102	480	299	1311	573	120	1221	525	239	700	726
V/C Ratio(X)	0.38	1.09	0.23	1.13	0.36	0.11	0.54	0.81	1.12	0.91	1.06	1.07
Avail Cap(c_a), veh/h	427	1102	480	299	1311	573	120	1221	525	239	700	726
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.2	41.5	30.9	37.3	27.8	25.1	31.3	36.0	39.5	28.3	36.5	36.5
Incr Delay (d2), s/veh	0.6	53.3	0.2	91.0	0.2	0.1	4.9	5.9	76.2	34.9	52.4	53.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	26.4	2.7	17.4	5.8	1.4	1.5	15.8	28.4	6.8	33.3	34.8
LnGrp Delay(d), s/veh	25.8	94.8	31.1	128.3	28.0	25.2	36.3	41.8	115.7	63.2	88.9	90.0
LnGrp LOS	C	F	C	F	C	C	D	D	F	E	F	F
Approach Vol, veh/h		1468			880			1641			1738	
Approach Delay, s/veh		82.4			66.2			68.0			86.2	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.0	45.0	20.0	41.0	8.0	51.0	13.0	48.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	41.0	16.0	37.0	4.0	47.0	9.0	44.0
Max Q Clear Time (g_c+I1), s	11.2	43.0	18.0	39.0	4.8	49.0	9.4	13.7
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	76.9
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	290	120	60	370	140	100	1050	160	180	1550	90
Future Volume (veh/h)	130	290	120	60	370	140	100	1050	160	180	1550	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	140	312	129	65	398	151	108	1129	172	194	1667	97
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	39	27	706	34	148	706	120	1348	597	244	1519	659
Arrive On Green	0.44	0.44	0.44	0.44	0.44	0.44	0.03	0.38	0.38	0.08	0.43	0.43
Sat Flow, veh/h	0	60	1599	0	334	1599	1792	3574	1584	1792	3574	1551
Grp Volume(v), veh/h	452	0	129	463	0	151	108	1129	172	194	1667	97
Grp Sat Flow(s),veh/h/ln	60	0	1599	334	0	1599	1792	1787	1584	1792	1787	1551
Q Serve(g_s), s	0.0	0.0	5.9	0.0	0.0	7.0	4.0	34.5	9.1	7.7	51.0	4.6
Cycle Q Clear(g_c), s	53.0	0.0	5.9	53.0	0.0	7.0	4.0	34.5	9.1	7.7	51.0	4.6
Prop In Lane	0.31		1.00	0.14		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	66	0	706	182	0	706	120	1348	597	244	1519	659
V/C Ratio(X)	6.85	0.00	0.18	2.55	0.00	0.21	0.90	0.84	0.29	0.80	1.10	0.15
Avail Cap(c_a), veh/h	66	0	706	182	0	706	120	1348	597	277	1519	659
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	0.0	20.3	41.8	0.0	20.7	33.9	34.0	26.1	26.8	34.5	21.2
Incr Delay (d2), s/veh	2665.2	0.0	0.1	712.0	0.0	0.1	53.2	6.3	1.2	13.3	54.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	51.0	0.0	2.6	40.9	0.0	3.1	4.0	18.1	4.2	4.6	36.6	2.1
LnGrp Delay(d), s/veh	2704.1	0.0	20.5	753.8	0.0	20.8	87.0	40.4	27.3	40.1	89.1	21.6
LnGrp LOS	F		C	F		C	F	D	C	D	F	C
Approach Vol, veh/h		581			614			1409			1958	
Approach Delay, s/veh		2108.2			573.5			42.4			80.9	
Approach LOS		F			F			D			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.8	49.2		57.0	8.0	55.0		57.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	43.0		53.0	4.0	51.0		53.0
Max Q Clear Time (g_c+I1), s	9.7	36.5		55.0	6.0	53.0		55.0
Green Ext Time (p_c), s	0.1	4.1		0.0	0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	393.5
HCM 2010 LOS	F

Intersection	
Int Delay, s/veh	0.6

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	40	0	0	60	0	1260	10	0	1690	10
Future Vol, veh/h	0	0	40	0	0	60	0	1260	10	0	1690	10
Conflicting Peds, #/hr	0	0	0	0	0	0	7	0	5	5	0	7
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	43	0	0	65	0	1355	11	0	1817	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	909	-	-	678	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	280	0	0	397	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	280	-	-	397	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	20.2	15.8	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	280	397	-
HCM Lane V/C Ratio	-	0.154	0.163	-
HCM Control Delay (s/veh)	-	20.2	15.8	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.5	0.6	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1140	300	130	420	130	100	1100	210	230	1690	120
Future Volume (veh/h)	240	1140	300	130	420	130	100	1100	210	230	1690	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	258	1226	323	140	452	140	108	1183	226	247	1817	129
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	320	1417	423	195	858	368	161	1585	689	306	2371	168
Arrive On Green	0.09	0.28	0.28	0.06	0.24	0.24	0.05	0.44	0.44	0.09	0.49	0.49
Sat Flow, veh/h	3476	5136	1534	3476	3574	1531	3476	3574	1553	3476	4886	346
Grp Volume(v), veh/h	258	1226	323	140	452	140	108	1183	226	247	1272	674
Grp Sat Flow(s),veh/h/ln	1738	1712	1534	1738	1787	1531	1738	1787	1553	1738	1712	1808
Q Serve(g_s), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	32.3	11.1	8.2	35.7	36.0
Cycle Q Clear(g_c), s	8.5	26.7	22.7	4.7	12.9	9.0	3.6	32.3	11.1	8.2	35.7	36.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.19
Lane Grp Cap(c), veh/h	320	1417	423	195	858	368	161	1585	689	306	1662	877
V/C Ratio(X)	0.81	0.86	0.76	0.72	0.53	0.38	0.67	0.75	0.33	0.81	0.77	0.77
Avail Cap(c_a), veh/h	414	1487	444	207	858	368	178	1585	689	355	1662	877
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.3	40.4	39.0	54.5	38.8	37.3	55.1	27.2	21.3	52.6	24.7	24.8
Incr Delay (d2), s/veh	8.6	5.4	7.3	10.6	0.6	0.6	8.3	3.2	1.3	11.4	3.4	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	13.3	10.5	2.5	6.5	3.8	1.9	16.7	5.0	4.4	17.6	19.4
LnGrp Delay(d), s/veh	60.9	45.9	46.3	65.1	39.4	38.0	63.5	30.4	22.5	64.0	28.2	31.2
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	C	C
Approach Vol, veh/h		1807			732			1517			2193	
Approach Delay, s/veh		48.1			44.1			31.6			33.1	
Approach LOS		D			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	56.1	10.6	36.4	9.4	61.0	14.8	32.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	51.0	7.0	34.0	6.0	57.0	14.0	27.0
Max Q Clear Time (g_c+I1), s	10.2	34.3	6.7	28.7	5.6	38.0	10.5	14.9
Green Ext Time (p_c), s	0.1	8.3	0.0	3.8	0.0	12.8	0.3	2.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	160	410	130	150	1300	0	0	1560	790
Future Volume (veh/h)	0	0	0	160	410	130	150	1300	0	0	1560	790
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1863	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				168	432	137	158	1368	0	0	1642	832
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				266	532	238	216	3972	0	0	2319	1065
Arrive On Green				0.15	0.15	0.15	0.06	0.78	0.00	0.00	0.68	0.68
Sat Flow, veh/h				1774	3539	1583	3442	5253	0	0	3558	1557
Grp Volume(v), veh/h				168	432	137	158	1368	0	0	1642	832
Grp Sat Flow(s),veh/h/ln				1774	1770	1583	1721	1695	0	0	1695	1557
Q Serve(g_s), s				10.4	13.8	9.4	5.3	9.4	0.0	0.0	34.6	42.3
Cycle Q Clear(g_c), s				10.4	13.8	9.4	5.3	9.4	0.0	0.0	34.6	42.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				266	532	238	216	3972	0	0	2319	1065
V/C Ratio(X)				0.63	0.81	0.58	0.73	0.34	0.00	0.00	0.71	0.78
Avail Cap(c_a), veh/h				320	638	285	295	3972	0	0	2319	1065
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				46.5	47.9	46.1	53.6	3.8	0.0	0.0	11.3	12.5
Incr Delay (d2), s/veh				2.9	6.7	2.2	5.8	0.2	0.0	0.0	1.9	5.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.3	7.2	4.3	2.7	4.4	0.0	0.0	16.6	19.7
LnGrp Delay(d), s/veh				49.4	54.6	48.2	59.4	4.1	0.0	0.0	13.1	18.2
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					737			1526			2474	
Approach Delay, s/veh					52.2			9.8			14.8	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		95.0			11.3	83.7		21.5
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		91.0			10.0	77.0		21.0
Max Q Clear Time (g_c+I1), s		11.4			7.3	44.3		15.8
Green Ext Time (p_c), s		13.8			0.1	24.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	19.0
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	650	280	130	0	0	0	0	850	280	370	1300	0
Future Volume (veh/h)	650	280	130	0	0	0	0	850	280	370	1300	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863				0	1863	1863	1863	1863	0
Adj Flow Rate, veh/h	722	311	144				0	944	311	411	1444	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	899	487	414				0	2427	740	504	3366	0
Arrive On Green	0.26	0.26	0.26				0.00	0.48	0.48	0.15	0.66	0.00
Sat Flow, veh/h	3442	1863	1583				0	5253	1550	3442	5253	0
Grp Volume(v), veh/h	722	311	144				0	944	311	411	1444	0
Grp Sat Flow(s),veh/h/ln	1721	1863	1583				0	1695	1550	1721	1695	0
Q Serve(g_s), s	20.4	15.4	7.7				0.0	12.4	13.7	12.1	14.0	0.0
Cycle Q Clear(g_c), s	20.4	15.4	7.7				0.0	12.4	13.7	12.1	14.0	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	899	487	414				0	2427	740	504	3366	0
V/C Ratio(X)	0.80	0.64	0.35				0.00	0.39	0.42	0.82	0.43	0.00
Avail Cap(c_a), veh/h	1420	768	653				0	2427	740	891	3366	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	36.0	34.1	31.3				0.0	17.5	17.8	43.1	8.3	0.0
Incr Delay (d2), s/veh	1.8	1.4	0.5				0.0	0.5	1.8	3.3	0.4	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.0	8.1	3.4				0.0	5.9	6.1	5.9	6.5	0.0
LnGrp Delay(d), s/veh	37.8	35.5	31.8				0.0	18.0	19.6	46.4	8.7	0.0
LnGrp LOS	D	D	C					B	B	D	A	
Approach Vol, veh/h		1177						1255			1855	
Approach Delay, s/veh		36.5						18.4			17.1	
Approach LOS		D						B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	19.3	53.7		31.2		73.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	27.0	38.0		43.0		69.0		
Max Q Clear Time (g_c+I1), s	14.1	15.7		22.4		16.0		
Green Ext Time (p_c), s	1.2	8.1		4.8		14.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	1750	230	470	1100	130	160	490	250	280	1220	380
Future Volume (veh/h)	240	1750	230	470	1100	130	160	490	250	280	1220	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	270	1966	258	528	1236	146	180	551	281	315	1371	427
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
Arrive On Green	0.10	0.32	0.32	0.13	0.35	0.35	0.08	0.32	0.32	0.11	0.34	0.34
Sat Flow, veh/h	3476	5136	1591	3476	5136	1592	1792	3574	1565	3476	3574	1564
Grp Volume(v), veh/h	270	1966	258	528	1236	146	180	551	281	315	1371	427
Grp Sat Flow(s),veh/h/ln	1738	1712	1591	1738	1712	1592	1792	1787	1565	1738	1787	1564
Q Serve(g_s), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	15.0	14.7	10.7	41.0	25.3
Cycle Q Clear(g_c), s	9.1	38.0	15.9	15.0	24.9	7.9	10.0	15.0	14.7	10.7	41.0	25.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	335	1626	504	434	1773	550	149	1129	694	379	1221	689
V/C Ratio(X)	0.81	1.21	0.51	1.22	0.70	0.27	1.21	0.49	0.40	0.83	1.12	0.62
Avail Cap(c_a), veh/h	492	1626	504	434	1773	550	149	1129	694	492	1221	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.1	41.0	33.4	52.5	33.9	28.3	55.0	33.2	22.9	52.4	39.5	26.1
Incr Delay (d2), s/veh	6.1	100.0	0.9	116.4	1.2	0.3	139.4	1.5	1.8	9.1	66.4	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.7	33.0	7.1	14.2	12.0	3.5	10.7	7.6	6.7	5.6	31.4	11.6
LnGrp Delay(d), s/veh	59.2	141.0	34.3	168.9	35.1	28.6	194.4	34.7	24.6	61.4	105.9	30.2
LnGrp LOS	E	F	C	F	D	C	F	C	C	E	F	C
Approach Vol, veh/h		2494			1910			1012			2113	
Approach Delay, s/veh		121.1			71.6			60.3			84.0	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.1	41.9	19.0	42.0	14.0	45.0	15.6	45.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	17.0	34.0	15.0	38.0	10.0	41.0	17.0	36.0
Max Q Clear Time (g_c+I1), s	12.7	17.0	17.0	40.0	12.0	43.0	11.1	26.9
Green Ext Time (p_c), s	0.4	4.0	0.0	0.0	0.0	0.0	0.4	5.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	90.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	1140	180	360	740	150	110	520	280	70	590	90
Future Volume (veh/h)	280	1140	180	360	740	150	110	520	280	70	590	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.88	1.00		0.86	1.00		0.80	0.99		0.79
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	295	1200	189	379	779	158	116	547	295	74	621	95
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	329	1330	207	434	1358	521	191	949	340	209	743	113
Arrive On Green	0.18	0.44	0.44	0.12	0.38	0.38	0.05	0.27	0.27	0.03	0.25	0.25
Sat Flow, veh/h	1792	3033	473	3476	3574	1372	1792	3574	1282	1792	2991	455
Grp Volume(v), veh/h	295	703	686	379	779	158	116	547	295	74	370	346
Grp Sat Flow(s),veh/h/ln	1792	1787	1719	1738	1787	1372	1792	1787	1282	1792	1787	1659
Q Serve(g_s), s	18.8	42.5	43.6	12.5	20.2	9.4	5.7	15.5	25.7	3.6	22.9	23.2
Cycle Q Clear(g_c), s	18.8	42.5	43.6	12.5	20.2	9.4	5.7	15.5	25.7	3.6	22.9	23.2
Prop In Lane	1.00		0.28	1.00		1.00	1.00		1.00	1.00		0.27
Lane Grp Cap(c), veh/h	329	784	754	434	1358	521	191	949	340	209	444	412
V/C Ratio(X)	0.90	0.90	0.91	0.87	0.57	0.30	0.61	0.58	0.87	0.35	0.83	0.84
Avail Cap(c_a), veh/h	475	826	795	446	1358	521	191	949	340	209	444	412
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.6	30.3	30.7	50.2	28.7	25.4	33.4	37.2	40.9	32.2	41.6	41.7
Incr Delay (d2), s/veh	14.7	12.1	14.2	16.8	0.6	0.3	5.5	2.6	24.5	1.0	16.6	18.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	23.5	23.6	7.0	10.1	3.6	3.0	8.0	11.4	1.8	13.3	12.7
LnGrp Delay(d), s/veh	61.3	42.4	44.9	67.0	29.3	25.7	38.8	39.8	65.5	33.3	58.2	60.0
LnGrp LOS	E	D	D	E	C	C	D	D	E	C	E	E
Approach Vol, veh/h		1684			1316			958			790	
Approach Delay, s/veh		46.7			39.7			47.6			56.7	
Approach LOS		D			D			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	35.0	18.6	55.2	10.0	33.0	25.4	48.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	31.0	15.0	54.0	6.0	29.0	31.0	38.0
Max Q Clear Time (g_c+I1), s	5.6	27.7	14.5	45.6	7.7	25.2	20.8	22.2
Green Ext Time (p_c), s	0.0	1.6	0.1	5.6	0.0	1.6	0.6	5.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1190	430	190	500	80	320	910	190	70	1090	120
Future Volume (veh/h)	130	1190	430	190	500	80	320	910	190	70	1090	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	138	1266	457	202	532	85	340	968	202	74	1160	128
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	166	1162	497	203	1039	452	299	1587	706	245	1134	125
Arrive On Green	0.09	0.32	0.32	0.06	0.29	0.29	0.13	0.44	0.44	0.04	0.35	0.35
Sat Flow, veh/h	1792	3574	1530	3476	3574	1555	1792	3574	1590	1792	3240	357
Grp Volume(v), veh/h	138	1266	457	202	532	85	340	968	202	74	639	649
Grp Sat Flow(s),veh/h/ln	1792	1787	1530	1738	1787	1555	1792	1787	1590	1792	1787	1810
Q Serve(g_s), s	9.1	39.0	34.5	7.0	14.9	4.9	16.0	24.8	9.7	3.2	42.0	42.0
Cycle Q Clear(g_c), s	9.1	39.0	34.5	7.0	14.9	4.9	16.0	24.8	9.7	3.2	42.0	42.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	166	1162	497	203	1039	452	299	1587	706	245	625	633
V/C Ratio(X)	0.83	1.09	0.92	1.00	0.51	0.19	1.14	0.61	0.29	0.30	1.02	1.03
Avail Cap(c_a), veh/h	254	1162	497	203	1039	452	299	1587	706	249	625	633
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.5	40.5	39.0	56.5	35.5	31.9	38.3	25.4	21.2	24.2	39.0	39.0
Incr Delay (d2), s/veh	12.9	54.4	22.3	62.1	0.4	0.2	94.5	1.8	1.0	0.7	41.4	42.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	28.0	17.7	5.1	7.4	2.1	17.7	12.6	4.4	1.6	27.9	28.4
LnGrp Delay(d), s/veh	66.4	94.9	61.3	118.6	35.9	32.1	132.9	27.2	22.3	24.9	80.4	81.3
LnGrp LOS	E	F	E	F	D	C	F	C	C	C	F	F
Approach Vol, veh/h		1861			819			1510			1362	
Approach Delay, s/veh		84.5			55.9			50.3			77.8	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	57.3	11.0	43.0	20.0	46.0	15.1	38.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	53.0	7.0	39.0	16.0	42.0	17.0	29.0
Max Q Clear Time (g_c+I1), s	5.2	26.8	9.0	41.0	18.0	44.0	11.1	16.9
Green Ext Time (p_c), s	0.0	8.0	0.0	0.0	0.0	0.0	0.2	3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	69.4
HCM 2010 LOS	E

Intersection	
Int Delay, s/veh	1341.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	100	0	280	10	0	10	290	1580	140	10	1500	130
Future Vol, veh/h	100	0	280	10	0	10	290	1580	140	10	1500	130
Conflicting Peds, #/hr	0	0	1	1	0	0	11	0	29	29	0	11
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	150	-	50	100	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	95	95	95	95	95	95	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	105	0	295	11	0	11	305	1663	147	11	1579	137

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	3123	4130	870	3115	4051	861	1727	0	0	1839	0	0
Stage 1	1681	1681	-	2302	2302	-	-	-	-	-	-	-
Stage 2	1442	2449	-	813	1749	-	-	-	-	-	-	-
Critical Hdwy	7.52	6.52	6.92	7.52	6.52	6.92	4.12	-	-	4.12	-	-
Critical Hdwy Stg 1	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.52	5.52	-	6.52	5.52	-	-	-	-	-	-	-
Follow-up Hdwy	3.51	4.01	3.31	3.51	4.01	3.31	2.21	-	-	2.21	-	-
Pot Cap-1 Maneuver	~ 5	2	297	~ 5	3	301	366	-	-	331	-	-
Stage 1	~ 99	151	-	40	73	-	-	-	-	-	-	-
Stage 2	140	61	-	341	140	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	~ 1	0	~ 294	-	0	294	363	-	-	323	-	-
Mov Cap-2 Maneuver	~ 1	0	-	-	0	-	-	-	-	-	-	-
Stage 1	~ 16	145	-	~ 6	11	-	-	-	-	-	-	-
Stage 2	~ 22	10	-	-	134	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	$ 1425.5		7.2	0.1
HCM LOS	F	-		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	363	-	-	1	294	-	294	323	-	-
HCM Lane V/C Ratio	0.841	-	-	105.263	1.003	-	0.036	0.033	-	-
HCM Control Delay (s/veh)	50.1	-	-	$ 53913.1	92.1	-	17.7	16.5	-	-
HCM Lane LOS	F	-	-	F	F	-	C	C	-	-
HCM 95th %tile Q(veh)	7.7	-	-	15.6	10.6	-	0.1	0.1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	260	1090	200	90	430	270	110	1190	120	360	1250	100
Future Volume (veh/h)	260	1090	200	90	430	270	110	1190	120	360	1250	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	271	1135	208	94	448	281	115	1240	125	375	1302	104
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	284	1340	245	144	399	248	219	1251	546	360	1645	722
Arrive On Green	0.16	0.31	0.31	0.04	0.19	0.19	0.06	0.35	0.35	0.17	0.46	0.46
Sat Flow, veh/h	1792	4342	795	3476	2080	1294	1792	3574	1561	1792	3574	1568
Grp Volume(v), veh/h	271	895	448	94	384	345	115	1240	125	375	1302	104
Grp Sat Flow(s),veh/h/ln	1792	1712	1714	1738	1787	1587	1792	1787	1561	1792	1787	1568
Q Serve(g_s), s	18.0	29.4	29.4	3.2	23.0	23.0	4.9	41.4	6.8	20.0	37.1	4.6
Cycle Q Clear(g_c), s	18.0	29.4	29.4	3.2	23.0	23.0	4.9	41.4	6.8	20.0	37.1	4.6
Prop In Lane	1.00		0.46	1.00		0.82	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	284	1056	529	144	343	304	219	1251	546	360	1645	722
V/C Ratio(X)	0.96	0.85	0.85	0.65	1.12	1.13	0.52	0.99	0.23	1.04	0.79	0.14
Avail Cap(c_a), veh/h	284	1056	529	145	343	304	238	1251	546	360	1645	722
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.1	38.8	38.8	56.7	48.5	48.5	26.0	38.8	27.6	38.7	27.5	18.7
Incr Delay (d2), s/veh	41.3	6.5	12.2	9.9	85.9	92.6	1.9	23.4	1.0	58.2	4.0	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	14.9	15.7	1.7	19.5	17.9	2.5	24.4	3.1	17.7	19.2	2.1
LnGrp Delay(d), s/veh	91.4	45.4	51.0	66.6	134.4	141.1	27.9	62.3	28.5	96.9	31.5	19.1
LnGrp LOS	F	D	D	E	F	F	C	E	C	F	C	B
Approach Vol, veh/h		1614			823			1480			1781	
Approach Delay, s/veh		54.7			129.4			56.7			44.5	
Approach LOS		D			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	24.0	46.0	9.0	41.0	10.8	59.2	23.0	27.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	42.0	5.0	37.0	8.0	54.0	19.0	23.0
Max Q Clear Time (g_c+I1), s	22.0	43.4	5.2	31.4	6.9	39.1	20.0	25.0
Green Ext Time (p_c), s	0.0	0.0	0.0	3.7	0.0	8.1	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	62.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	250	300	690	60	780	0	0	1430	340
Future Volume (veh/h)	0	0	0	250	300	690	60	780	0	0	1430	340
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h				266	319	734	64	830	0	0	1521	362
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				2	2	2	2	2	0	0	2	2
Cap, veh/h				693	907	712	74	2458	0	0	1672	395
Arrive On Green				0.45	0.45	0.45	0.04	0.48	0.00	0.00	0.41	0.41
Sat Flow, veh/h				1540	2015	1583	1774	5253	0	0	4263	968
Grp Volume(v), veh/h				308	277	734	64	830	0	0	1257	626
Grp Sat Flow(s),veh/h/ln				1786	1770	1583	1774	1695	0	0	1695	1673
Q Serve(g_s), s				13.8	12.2	54.0	4.3	12.1	0.0	0.0	41.8	42.4
Cycle Q Clear(g_c), s				13.8	12.2	54.0	4.3	12.1	0.0	0.0	41.8	42.4
Prop In Lane				0.86		1.00	1.00		0.00	0.00		0.58
Lane Grp Cap(c), veh/h				804	796	712	74	2458	0	0	1384	683
V/C Ratio(X)				0.38	0.35	1.03	0.87	0.34	0.00	0.00	0.91	0.92
Avail Cap(c_a), veh/h				804	796	712	74	2458	0	0	1384	683
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				21.9	21.5	33.0	57.2	19.1	0.0	0.0	33.4	33.6
Incr Delay (d2), s/veh				0.3	0.3	41.7	61.5	0.4	0.0	0.0	10.3	19.1
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				6.8	6.1	31.8	3.4	5.7	0.0	0.0	21.5	23.1
LnGrp Delay(d), s/veh				22.2	21.8	74.7	118.6	19.5	0.0	0.0	43.7	52.6
LnGrp LOS				C	C	F	F	B			D	D
Approach Vol, veh/h					1319			894			1883	
Approach Delay, s/veh					51.3			26.6			46.7	
Approach LOS					D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		62.0			9.0	53.0		58.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		58.0			5.0	49.0		54.0
Max Q Clear Time (g_c+I1), s		14.1			6.3	44.4		56.0
Green Ext Time (p_c), s		6.4			0.0	3.8		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh	43.8	
HCM 2010 LOS	D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	210	560	150	0	0	0	0	790	740	680	1050	0
Future Volume (veh/h)	210	560	150	0	0	0	0	790	740	680	1050	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	233	622	167				0	878	822	756	1167	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.90	0.90	0.90				0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	247	703	419				0	1353	620	811	2365	0
Arrive On Green	0.26	0.26	0.26				0.00	0.40	0.40	0.24	0.67	0.00
Sat Flow, veh/h	934	2652	1583				0	3558	1554	3442	3632	0
Grp Volume(v), veh/h	453	402	167				0	878	822	756	1167	0
Grp Sat Flow(s),veh/h/ln	1816	1770	1583				0	1695	1554	1721	1770	0
Q Serve(g_s), s	29.3	25.9	10.4				0.0	25.1	47.8	25.8	19.5	0.0
Cycle Q Clear(g_c), s	29.3	25.9	10.4				0.0	25.1	47.8	25.8	19.5	0.0
Prop In Lane	0.51		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	481	469	419				0	1353	620	811	2365	0
V/C Ratio(X)	0.94	0.86	0.40				0.00	0.65	1.32	0.93	0.49	0.00
Avail Cap(c_a), veh/h	485	473	423				0	1353	620	834	2365	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	43.1	41.8	36.2				0.0	29.2	36.0	44.8	9.8	0.0
Incr Delay (d2), s/veh	26.8	14.4	0.6				0.0	2.4	157.2	16.8	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	18.2	14.5	4.6				0.0	12.2	47.4	14.2	9.6	0.0
LnGrp Delay(d), s/veh	69.9	56.2	36.8				0.0	31.6	193.2	61.6	10.6	0.0
LnGrp LOS	E	E	D					C	F	E	B	
Approach Vol, veh/h		1022						1700			1923	
Approach Delay, s/veh		59.1						109.7			30.7	
Approach LOS		E						F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	32.2	51.8		35.7		84.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	29.0	47.0		32.0		80.0		
Max Q Clear Time (g_c+I1), s	27.8	49.8		31.3		21.5		
Green Ext Time (p_c), s	0.4	0.0		0.5		10.8		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	65.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1380	70	180	1640	60	60	140	140	150	270	70
Future Volume (veh/h)	50	1380	70	180	1640	60	60	140	140	150	270	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.93	0.92		0.79	0.95		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	60	1643	83	214	1952	71	71	167	167	179	321	83
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	135	1914	96	245	2120	76	199	289	194	270	531	133
Arrive On Green	0.03	0.55	0.55	0.08	0.60	0.60	0.03	0.15	0.15	0.08	0.20	0.20
Sat Flow, veh/h	1792	3455	173	1792	3509	127	1792	1881	1261	1792	2707	676
Grp Volume(v), veh/h	60	845	881	214	986	1037	71	167	167	179	208	196
Grp Sat Flow(s),veh/h/ln	1792	1787	1841	1792	1787	1848	1792	1881	1261	1792	1787	1596
Q Serve(g_s), s	1.7	46.9	48.0	7.0	57.1	59.4	3.9	9.7	15.2	9.0	12.4	13.2
Cycle Q Clear(g_c), s	1.7	46.9	48.0	7.0	57.1	59.4	3.9	9.7	15.2	9.0	12.4	13.2
Prop In Lane	1.00		0.09	1.00		0.07	1.00		1.00	1.00		0.42
Lane Grp Cap(c), veh/h	135	990	1020	245	1080	1117	199	289	194	270	350	313
V/C Ratio(X)	0.45	0.85	0.86	0.87	0.91	0.93	0.36	0.58	0.86	0.66	0.59	0.63
Avail Cap(c_a), veh/h	143	990	1020	331	1112	1150	199	289	194	270	350	313
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.6	22.1	22.4	30.1	20.5	20.9	40.6	46.1	48.4	38.5	42.9	43.2
Incr Delay (d2), s/veh	2.3	7.3	7.8	17.5	11.2	12.8	1.1	8.2	36.7	5.9	7.2	9.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	25.0	26.5	8.0	31.3	33.9	2.0	5.7	7.3	5.2	6.8	6.6
LnGrp Delay(d), s/veh	28.9	29.4	30.2	47.5	31.7	33.7	41.7	54.3	85.2	44.5	50.1	52.3
LnGrp LOS	C	C	C	D	C	C	D	D	F	D	D	D
Approach Vol, veh/h		1786			2237			405			583	
Approach Delay, s/veh		29.8			34.1			64.8			49.1	
Approach LOS		C			C			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.0	22.0	13.3	69.0	8.0	27.0	7.4	74.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	18.0	15.0	62.0	4.0	23.0	4.0	73.0
Max Q Clear Time (g_c+I1), s	11.0	17.2	9.0	50.0	5.9	15.2	3.7	61.4
Green Ext Time (p_c), s	0.0	0.1	0.3	8.5	0.0	1.4	0.0	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	36.8
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Future Volume (veh/h)	150	1360	40	30	630	40	50	110	40	160	120	200
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	0.99		0.96	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	172	1563	46	34	724	46	57	126	46	184	138	230
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	430	1858	55	160	1646	105	257	484	168	422	449	389
Arrive On Green	0.07	0.53	0.53	0.02	0.49	0.49	0.04	0.19	0.19	0.10	0.25	0.25
Sat Flow, veh/h	1774	3508	103	1774	3378	215	1774	2551	885	1774	1770	1534
Grp Volume(v), veh/h	172	786	823	34	379	391	57	85	87	184	138	230
Grp Sat Flow(s),veh/h/ln	1774	1770	1842	1774	1770	1823	1774	1770	1666	1774	1770	1534
Q Serve(g_s), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Cycle Q Clear(g_c), s	4.7	38.6	38.9	1.0	14.3	14.3	2.6	4.2	4.6	8.2	6.5	13.5
Prop In Lane	1.00		0.06	1.00		0.12	1.00		0.53	1.00		1.00
Lane Grp Cap(c), veh/h	430	937	975	160	862	888	257	336	316	422	449	389
V/C Ratio(X)	0.40	0.84	0.84	0.21	0.44	0.44	0.22	0.25	0.27	0.44	0.31	0.59
Avail Cap(c_a), veh/h	503	1175	1222	204	1071	1103	279	336	316	469	449	389
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	12.1	20.4	20.5	19.0	17.1	17.1	31.9	35.3	35.5	27.5	30.9	33.6
Incr Delay (d2), s/veh	0.6	4.5	4.5	0.7	0.4	0.3	0.4	1.8	2.1	0.7	1.8	6.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	19.8	20.9	0.5	7.0	7.3	1.3	2.2	2.3	4.1	3.4	6.4
LnGrp Delay(d), s/veh	12.7	25.0	25.0	19.7	17.5	17.5	32.4	37.1	37.6	28.2	32.7	40.0
LnGrp LOS	B	C	C	B	B	B	C	D	D	C	C	D
Approach Vol, veh/h		1781			804			229			552	
Approach Delay, s/veh		23.8			17.6			36.1			34.2	
Approach LOS		C			B			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.3	23.5	6.5	58.3	7.7	30.0	10.8	53.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	18.0	5.0	68.0	5.0	26.0	11.0	62.0
Max Q Clear Time (g_c+I1), s	10.2	6.6	3.0	40.9	4.6	15.5	6.7	16.3
Green Ext Time (p_c), s	0.1	0.6	0.0	13.4	0.0	1.6	0.2	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	930	270	240	560	50	250	300	250	40	110	60
Future Volume (veh/h)	120	930	270	240	560	50	250	300	250	40	110	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	136	1057	307	273	636	57	284	341	284	45	125	68
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	167	1337	388	349	1661	148	581	673	550	292	909	394
Arrive On Green	0.10	0.35	0.35	0.10	0.35	0.35	0.14	0.37	0.37	0.03	0.26	0.26
Sat Flow, veh/h	1757	3861	1121	3408	4701	418	1757	1826	1493	1757	3505	1519
Grp Volume(v), veh/h	136	919	445	273	453	240	284	327	298	45	125	68
Grp Sat Flow(s),veh/h/ln	1757	1679	1624	1704	1679	1761	1757	1752	1567	1757	1752	1519
Q Serve(g_s), s	7.8	25.4	25.4	8.1	10.4	10.5	11.6	15.0	15.3	1.9	2.8	3.6
Cycle Q Clear(g_c), s	7.8	25.4	25.4	8.1	10.4	10.5	11.6	15.0	15.3	1.9	2.8	3.6
Prop In Lane	1.00		0.69	1.00		0.24	1.00		0.95	1.00		1.00
Lane Grp Cap(c), veh/h	167	1162	562	349	1186	622	581	645	577	292	909	394
V/C Ratio(X)	0.81	0.79	0.79	0.78	0.38	0.39	0.49	0.51	0.52	0.15	0.14	0.17
Avail Cap(c_a), veh/h	323	1432	693	561	1366	717	715	645	577	328	909	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.8	30.4	30.4	45.2	24.9	25.0	21.2	25.3	25.4	27.0	29.4	29.6
Incr Delay (d2), s/veh	9.1	2.5	5.1	3.9	0.2	0.4	0.6	2.8	3.3	0.2	0.3	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	12.1	12.2	4.0	4.9	5.2	5.7	7.7	7.1	1.0	1.4	1.6
LnGrp Delay(d), s/veh	54.9	32.9	35.4	49.0	25.1	25.4	21.8	28.1	28.7	27.2	29.7	30.6
LnGrp LOS	D	C	D	D	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1500			966			909			238	
Approach Delay, s/veh		35.6			32.0			26.3			29.5	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.9	42.0	14.6	39.7	18.1	30.7	13.8	40.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	38.0	17.0	44.0	22.0	21.0	19.0	42.0
Max Q Clear Time (g_c+I1), s	3.9	17.3	10.1	27.4	13.6	5.6	9.8	12.5
Green Ext Time (p_c), s	0.0	3.7	0.5	8.3	0.5	0.7	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1150	80	120	1440	350	50	440	110	280	410	510
Future Volume (veh/h)	520	1150	80	120	1440	350	50	440	110	280	410	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.92	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	553	1223	85	128	1532	372	53	468	117	298	436	543
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	611	1908	837	156	1590	695	68	542	223	322	737	590
Arrive On Green	0.18	0.53	0.53	0.09	0.44	0.44	0.04	0.15	0.15	0.09	0.21	0.21
Sat Flow, veh/h	3476	3574	1568	1792	3574	1562	1792	3574	1470	3476	3574	1498
Grp Volume(v), veh/h	553	1223	85	128	1532	372	53	468	117	298	436	543
Grp Sat Flow(s),veh/h/ln	1738	1787	1568	1792	1787	1562	1792	1787	1470	1738	1787	1498
Q Serve(g_s), s	18.5	28.8	3.2	8.3	49.4	20.6	3.5	15.2	8.7	10.1	13.1	24.5
Cycle Q Clear(g_c), s	18.5	28.8	3.2	8.3	49.4	20.6	3.5	15.2	8.7	10.1	13.1	24.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	611	1908	837	156	1590	695	68	542	223	322	737	590
V/C Ratio(X)	0.90	0.64	0.10	0.82	0.96	0.54	0.78	0.86	0.52	0.92	0.59	0.92
Avail Cap(c_a), veh/h	644	1908	837	242	1596	698	91	542	223	322	737	590
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.9	19.6	13.6	53.3	32.0	24.0	56.6	49.1	46.4	53.4	42.6	35.3
Incr Delay (d2), s/veh	15.9	0.7	0.1	12.2	14.7	0.8	25.4	16.5	8.6	31.4	3.5	21.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	14.3	1.4	4.7	27.5	9.0	2.2	8.7	4.1	6.2	6.8	20.5
LnGrp Delay(d), s/veh	63.8	20.3	13.7	65.5	46.7	24.8	82.0	65.6	55.0	84.9	46.0	57.2
LnGrp LOS	E	C	B	E	D	C	F	E	D	F	D	E
Approach Vol, veh/h		1861			2032			638			1277	
Approach Delay, s/veh		32.9			43.9			65.0			59.8	
Approach LOS		C			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	22.0	14.3	67.4	8.5	28.5	24.9	56.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	18.0	16.0	59.0	6.0	23.0	22.0	53.0
Max Q Clear Time (g_c+I1), s	12.1	17.2	10.3	30.8	5.5	26.5	20.5	51.4
Green Ext Time (p_c), s	0.0	0.3	0.1	10.4	0.0	0.0	0.4	1.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Future Volume (veh/h)	190	280	270	140	200	30	320	720	140	20	1080	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.96		0.91	1.00		0.91	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	207	304	293	152	217	33	348	783	152	22	1174	196
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	189	236	192	119	406	60	282	2015	391	429	1071	889
Arrive On Green	0.03	0.13	0.13	0.03	0.13	0.13	0.13	0.68	0.68	0.02	0.57	0.57
Sat Flow, veh/h	1774	1770	1436	1774	3045	452	1774	2952	573	1774	1863	1547
Grp Volume(v), veh/h	207	304	293	152	124	126	348	469	466	22	1174	196
Grp Sat Flow(s),veh/h/ln	1774	1770	1436	1774	1770	1728	1774	1770	1755	1774	1863	1547
Q Serve(g_s), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Cycle Q Clear(g_c), s	4.0	16.0	16.0	4.0	7.8	8.2	15.0	13.7	13.7	0.6	69.0	7.4
Prop In Lane	1.00		1.00	1.00		0.26	1.00		0.33	1.00		1.00
Lane Grp Cap(c), veh/h	189	236	192	119	236	230	282	1208	1198	429	1071	889
V/C Ratio(X)	1.09	1.29	1.53	1.28	0.53	0.55	1.24	0.39	0.39	0.05	1.10	0.22
Avail Cap(c_a), veh/h	189	236	192	119	236	230	282	1208	1198	457	1071	889
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	52.0	52.0	51.1	48.5	48.6	43.7	8.2	8.2	10.1	25.5	12.4
Incr Delay (d2), s/veh	92.6	157.8	263.1	174.0	2.1	2.7	132.6	0.9	1.0	0.0	57.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.9	18.1	20.3	9.1	4.0	4.1	19.7	7.0	6.9	0.3	52.3	3.3
LnGrp Delay(d), s/veh	145.6	209.8	315.1	225.1	50.6	51.3	176.2	9.2	9.2	10.1	83.1	13.0
LnGrp LOS	F	F	F	F	D	D	F	A	A	B	F	B
Approach Vol, veh/h		804			402			1283			1392	
Approach Delay, s/veh		231.6			116.8			54.5			72.1	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	6.1	85.9	8.0	20.0	19.0	73.0	8.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	80.0	4.0	16.0	15.0	69.0	4.0	16.0
Max Q Clear Time (g_c+I1), s	2.6	15.7	6.0	18.0	17.0	71.0	6.0	10.2
Green Ext Time (p_c), s	0.0	7.3	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	720	320	370	700	50	370	280	240	60	160	20
Future Volume (veh/h)	80	720	320	370	700	50	370	280	240	60	160	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	0.99		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1900
Adj Flow Rate, veh/h	85	766	340	394	745	53	394	298	255	64	170	21
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	327	882	387	430	1943	137	597	1223	534	301	887	106
Arrive On Green	0.05	0.26	0.26	0.20	0.41	0.41	0.20	0.35	0.35	0.04	0.20	0.20
Sat Flow, veh/h	1740	3367	1480	1740	4748	336	1740	3471	1517	1740	4501	536
Grp Volume(v), veh/h	85	756	350	394	520	278	394	298	255	64	124	67
Grp Sat Flow(s),veh/h/ln	1740	1663	1521	1740	1663	1759	1740	1736	1517	1740	1663	1712
Q Serve(g_s), s	3.8	23.5	23.8	18.3	11.8	11.9	18.6	6.6	14.1	3.1	3.4	3.5
Cycle Q Clear(g_c), s	3.8	23.5	23.8	18.3	11.8	11.9	18.6	6.6	14.1	3.1	3.4	3.5
Prop In Lane	1.00		0.97	1.00		0.19	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	327	871	398	430	1360	720	597	1223	534	301	655	337
V/C Ratio(X)	0.26	0.87	0.88	0.92	0.38	0.39	0.66	0.24	0.48	0.21	0.19	0.20
Avail Cap(c_a), veh/h	337	925	423	587	1695	897	660	1223	534	311	655	337
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	26.9	38.0	38.2	27.5	22.3	22.4	24.4	24.8	27.2	32.5	36.1	36.2
Incr Delay (d2), s/veh	0.4	8.6	17.8	15.6	0.2	0.3	2.1	0.5	3.0	0.3	0.6	1.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.9	11.8	12.0	13.2	5.5	5.8	9.2	3.2	6.3	1.5	1.6	1.8
LnGrp Delay(d), s/veh	27.3	46.6	56.0	43.1	22.5	22.7	26.5	25.2	30.2	32.9	36.8	37.5
LnGrp LOS	C	D	E	D	C	C	C	C	C	C	D	D
Approach Vol, veh/h		1191			1192			947			255	
Approach Delay, s/veh		48.0			29.4			27.1			36.0	
Approach LOS		D			C			C			D	

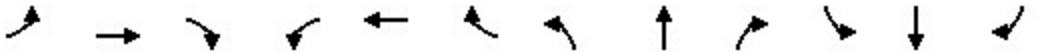
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.4	42.0	25.3	32.3	25.1	25.3	9.4	48.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	38.0	31.0	30.0	25.0	18.0	6.0	55.0
Max Q Clear Time (g_c+I1), s	5.1	16.1	20.3	25.8	20.6	5.5	5.8	13.9
Green Ext Time (p_c), s	0.0	2.6	0.9	2.5	0.5	0.8	0.0	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1290	60	150	1880	410	20	220	170	40	80	80
Future Volume (veh/h)	200	1290	60	150	1880	410	20	220	170	40	80	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.97	0.91		0.84	0.99		0.84
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	213	1372	64	160	2000	436	21	234	181	43	85	85
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	243	2316	108	322	2248	978	217	326	230	106	333	238
Arrive On Green	0.09	0.67	0.67	0.05	0.63	0.63	0.18	0.18	0.18	0.18	0.18	0.18
Sat Flow, veh/h	1792	3476	162	1792	3574	1555	1109	1843	1298	967	1881	1342
Grp Volume(v), veh/h	213	704	732	160	2000	436	21	226	189	43	85	85
Grp Sat Flow(s),veh/h/ln	1792	1787	1850	1792	1787	1555	1109	1787	1354	967	1881	1342
Q Serve(g_s), s	7.8	24.5	24.7	3.6	53.3	16.3	1.9	13.5	15.1	4.9	4.4	6.3
Cycle Q Clear(g_c), s	7.8	24.5	24.7	3.6	53.3	16.3	6.3	13.5	15.1	20.0	4.4	6.3
Prop In Lane	1.00		0.09	1.00		1.00	1.00		0.96	1.00		1.00
Lane Grp Cap(c), veh/h	243	1191	1233	322	2248	978	217	316	240	106	333	238
V/C Ratio(X)	0.88	0.59	0.59	0.50	0.89	0.45	0.10	0.72	0.79	0.41	0.26	0.36
Avail Cap(c_a), veh/h	292	1218	1261	406	2372	1032	217	316	240	106	333	238
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.0	10.4	10.4	9.6	17.7	10.8	42.8	43.8	44.5	54.1	40.1	40.9
Incr Delay (d2), s/veh	21.6	0.7	0.7	1.2	4.5	0.3	0.9	13.0	22.6	11.1	1.8	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	12.2	12.6	1.8	27.5	7.0	0.6	7.8	7.1	1.7	2.5	2.6
LnGrp Delay(d), s/veh	57.6	11.1	11.1	10.8	22.1	11.1	43.7	56.8	67.0	65.2	41.9	45.0
LnGrp LOS	E	B	B	B	C	B	D	E	E	E	D	D
Approach Vol, veh/h		1649			2596			436			213	
Approach Delay, s/veh		17.1			19.6			60.6			47.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		24.0	9.7	79.3		24.0	13.9	75.1
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		20.0	11.0	77.0		20.0	13.0	75.0
Max Q Clear Time (g_c+I1), s		17.1	5.6	26.7		22.0	9.8	55.3
Green Ext Time (p_c), s		0.7	0.2	13.6		0.0	0.2	15.8

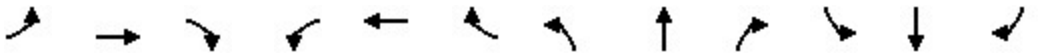
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	630	580	310	2140	0	0	0	0	70	50	140
Future Volume (veh/h)	0	630	580	310	2140	0	0	0	0	70	50	140
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	643	592	316	2184	0				71	51	143
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98				0.98	0.98	0.98
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1721	788	357	2651	0				190	137	286
Arrive On Green	0.00	0.50	0.50	0.20	0.74	0.00				0.18	0.18	0.18
Sat Flow, veh/h	0	3593	1568	1792	3668	0				1064	764	1599
Grp Volume(v), veh/h	0	643	592	316	2184	0				122	0	143
Grp Sat Flow(s),veh/h/ln	0	1712	1568	1792	1787	0				1828	0	1599
Q Serve(g_s), s	0.0	11.6	30.3	17.3	40.8	0.0				5.9	0.0	8.1
Cycle Q Clear(g_c), s	0.0	11.6	30.3	17.3	40.8	0.0				5.9	0.0	8.1
Prop In Lane	0.00		1.00	1.00		0.00				0.58		1.00
Lane Grp Cap(c), veh/h	0	1721	788	357	2651	0				327	0	286
V/C Ratio(X)	0.00	0.37	0.75	0.89	0.82	0.00				0.37	0.00	0.50
Avail Cap(c_a), veh/h	0	1905	873	605	3339	0				327	0	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	15.3	20.0	39.2	8.6	0.0				36.3	0.0	37.3
Incr Delay (d2), s/veh	0.0	0.1	3.3	8.4	1.4	0.0				3.2	0.0	6.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	5.5	13.7	9.3	20.2	0.0				3.3	0.0	4.1
LnGrp Delay(d), s/veh	0.0	15.5	23.3	47.6	10.1	0.0				39.6	0.0	43.4
LnGrp LOS		B	C	D	B					D		D
Approach Vol, veh/h		1235			2500						265	
Approach Delay, s/veh		19.2			14.8						41.6	
Approach LOS		B			B						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			24.0	54.6		22.0		78.6
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			34.0	56.0		18.0		94.0
Max Q Clear Time (g_c+I1), s			19.3	32.3		10.1		42.8
Green Ext Time (p_c), s			0.8	9.2		0.6		31.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.9
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	480	0	0	1130	160	1060	0	500	0	0	0
Future Volume (vph)	110	480	0	0	1130	160	1060	0	500	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (prot)	1787	3574			3482		1698	1615	1519			
Flt Permitted	0.95	1.00			1.00		0.95	0.96	1.00			
Satd. Flow (perm)	1787	3574			3482		1698	1615	1519			
Peak-hour factor, PHF	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Adj. Flow (vph)	111	485	0	0	1141	162	1071	0	505	0	0	0
RTOR Reduction (vph)	0	0	0	0	9	0	0	26	180	0	0	0
Lane Group Flow (vph)	111	485	0	0	1294	0	568	528	274	0	0	0
Confl. Peds. (#/hr)	8		14	14		8						
Confl. Bikes (#/hr)			10			11						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	10.4	61.3			46.9		49.0	49.0	49.0			
Effective Green, g (s)	10.4	61.3			46.9		49.0	49.0	49.0			
Actuated g/C Ratio	0.09	0.52			0.40		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	157	1851			1380		703	668	629			
v/s Ratio Prot	c0.06	0.14			c0.37		c0.33	0.33	0.18			
v/s Ratio Perm												
v/c Ratio	0.71	0.26			0.94		0.81	0.79	0.44			
Uniform Delay, d1	52.5	15.9			34.3		30.5	30.2	24.8			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	13.5	0.1			12.2		9.7	9.2	2.2			
Delay (s)	66.0	16.0			46.4		40.2	39.4	27.0			
Level of Service	E	B			D		D	D	C			
Approach Delay (s/veh)		25.3			46.4			36.1			0.0	
Approach LOS		C			D			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	38.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	118.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	107.8%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	730	160	120	890	90	340	420	170	350	650	210
Future Volume (veh/h)	150	730	160	120	890	90	340	420	170	350	650	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	167	811	178	133	989	100	378	467	189	389	722	233
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	223	997	631	160	1086	469	437	642	257	419	974	314
Arrive On Green	0.06	0.28	0.28	0.09	0.30	0.30	0.13	0.26	0.26	0.23	0.37	0.37
Sat Flow, veh/h	3476	3574	1542	1792	3574	1544	3476	2461	987	1792	2641	852
Grp Volume(v), veh/h	167	811	178	133	989	100	378	338	318	389	489	466
Grp Sat Flow(s),veh/h/ln	1738	1787	1542	1792	1787	1544	1738	1787	1661	1792	1787	1706
Q Serve(g_s), s	5.5	24.7	9.1	8.5	31.1	5.6	12.4	20.1	20.4	24.8	27.7	27.7
Cycle Q Clear(g_c), s	5.5	24.7	9.1	8.5	31.1	5.6	12.4	20.1	20.4	24.8	27.7	27.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.59	1.00		0.50
Lane Grp Cap(c), veh/h	223	997	631	160	1086	469	437	466	433	419	659	629
V/C Ratio(X)	0.75	0.81	0.28	0.83	0.91	0.21	0.86	0.73	0.73	0.93	0.74	0.74
Avail Cap(c_a), veh/h	238	1012	638	184	1134	490	477	466	433	476	659	629
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.6	39.2	23.4	52.2	39.1	30.2	50.0	39.3	39.4	43.7	32.0	32.0
Incr Delay (d2), s/veh	11.5	5.1	0.2	23.7	10.7	0.2	14.3	9.5	10.6	23.1	7.4	7.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	12.9	3.9	5.3	16.9	2.4	6.9	11.2	10.6	14.9	15.1	14.4
LnGrp Delay(d), s/veh	65.1	44.3	23.6	76.0	49.7	30.4	64.3	48.8	50.0	66.8	39.3	39.7
LnGrp LOS	E	D	C	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1156			1222			1034			1344	
Approach Delay, s/veh		44.1			51.0			54.8			47.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	31.3	34.4	14.4	36.5	18.7	47.0	11.5	39.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	31.0	28.0	12.0	33.0	16.0	43.0	8.0	37.0
Max Q Clear Time (g_c+I1), s	26.8	22.4	10.5	26.7	14.4	29.7	7.5	33.1
Green Ext Time (p_c), s	0.5	1.9	0.0	3.0	0.2	4.9	0.0	2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.1
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Future Volume (veh/h)	230	240	80	110	380	80	490	1070	140	120	1310	700
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	247	258	86	118	409	86	527	1151	151	129	1409	753
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	178	357	294	212	326	268	356	1788	234	292	1051	507
Arrive On Green	0.07	0.19	0.19	0.05	0.17	0.17	0.17	0.57	0.57	0.05	0.46	0.46
Sat Flow, veh/h	1774	1863	1535	1774	1863	1529	1774	3136	410	1774	2293	1107
Grp Volume(v), veh/h	247	258	86	118	409	86	527	648	654	129	1053	1109
Grp Sat Flow(s),veh/h/ln	1774	1863	1535	1774	1863	1529	1774	1770	1777	1774	1770	1630
Q Serve(g_s), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Cycle Q Clear(g_c), s	8.0	15.6	5.8	6.0	21.0	5.9	20.0	29.8	30.0	4.6	55.0	55.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.23	1.00		0.68
Lane Grp Cap(c), veh/h	178	357	294	212	326	268	356	1009	1013	292	811	747
V/C Ratio(X)	1.39	0.72	0.29	0.56	1.25	0.32	1.48	0.64	0.65	0.44	1.30	1.48
Avail Cap(c_a), veh/h	178	357	294	212	326	268	356	1009	1013	343	811	747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	43.4	45.5	41.5	40.6	49.5	43.3	41.1	17.5	17.5	17.0	32.5	32.5
Incr Delay (d2), s/veh	204.3	7.0	0.5	3.2	137.3	0.7	231.3	3.1	3.2	1.0	143.4	225.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	8.7	2.5	3.4	23.2	2.5	34.6	15.3	15.6	2.3	59.1	71.4
LnGrp Delay(d), s/veh	247.7	52.5	42.1	43.8	186.8	44.0	272.4	20.6	20.7	18.0	175.9	257.5
LnGrp LOS	F	D	D	D	F	D	F	C	C	B	F	F
Approach Vol, veh/h		591			613			1829			2291	
Approach Delay, s/veh		132.6			139.2			93.2			206.5	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.6	72.4	10.0	27.0	24.0	59.0	12.0	25.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	65.0	6.0	23.0	20.0	55.0	8.0	21.0
Max Q Clear Time (g_c+I1), s	6.6	32.0	8.0	17.6	22.0	57.0	10.0	23.0
Green Ext Time (p_c), s	0.1	11.1	0.0	0.8	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	151.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Future Volume (veh/h)	110	20	20	20	20	30	20	400	20	60	300	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.97	0.98		0.97	0.99		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	131	24	24	24	24	36	24	476	24	71	357	71
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	236	132	132	247	104	156	752	1438	1171	688	1438	1172
Arrive On Green	0.16	0.16	0.16	0.16	0.16	0.16	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	1322	852	852	1335	669	1004	959	1881	1532	899	1881	1533
Grp Volume(v), veh/h	131	0	48	24	0	60	24	476	24	71	357	71
Grp Sat Flow(s),veh/h/ln	1322	0	1704	1335	0	1673	959	1881	1532	899	1881	1533
Q Serve(g_s), s	9.6	0.0	2.4	1.6	0.0	3.1	0.7	7.9	0.4	2.7	5.5	1.1
Cycle Q Clear(g_c), s	12.7	0.0	2.4	4.0	0.0	3.1	6.2	7.9	0.4	10.6	5.5	1.1
Prop In Lane	1.00		0.50	1.00		0.60	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	0	265	247	0	260	752	1438	1171	688	1438	1172
V/C Ratio(X)	0.55	0.00	0.18	0.10	0.00	0.23	0.03	0.33	0.02	0.10	0.25	0.06
Avail Cap(c_a), veh/h	509	0	617	523	0	606	752	1438	1171	688	1438	1172
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.4	0.0	36.5	38.3	0.0	36.8	4.3	3.7	2.8	5.4	3.4	2.9
Incr Delay (d2), s/veh	2.0	0.0	0.3	0.2	0.0	0.4	0.1	0.6	0.0	0.3	0.4	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	0.0	1.2	0.6	0.0	1.5	0.2	4.3	0.2	0.7	2.9	0.5
LnGrp Delay(d), s/veh	44.4	0.0	36.8	38.4	0.0	37.2	4.4	4.3	2.8	5.7	3.8	3.0
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		179			84			524			499	
Approach Delay, s/veh		42.4			37.6			4.3			4.0	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		19.4		80.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		9.9		14.7		12.6		6.0
Green Ext Time (p_c), s		3.7		0.6		3.1		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.6
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	13.4
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	30	20	20	20	180	10	10	20	200	60	10
Future Vol, veh/h	20	30	20	20	20	180	10	10	20	200	60	10
Peak Hour Factor	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73	0.73
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	27	41	27	27	27	247	14	14	27	274	82	14
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	9.7	10.7	9.7	17.2
HCM LOS	A	B	A	C

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	25%	40%	0%	50%	0%	77%	0%
Vol Thru, %	25%	60%	0%	50%	0%	23%	0%
Vol Right, %	50%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	40	50	20	40	180	260	10
LT Vol	10	20	0	20	0	200	0
Through Vol	10	30	0	20	0	60	0
RT Vol	20	0	20	0	180	0	10
Lane Flow Rate	55	68	27	55	247	356	14
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.092	0.124	0.042	0.095	0.362	0.601	0.019
Departure Headway (Hd)	6.016	6.492	5.576	6.253	5.29	6.073	4.981
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	596	552	641	574	681	595	720
Service Time	4.053	4.233	3.317	3.987	3.024	3.797	2.704
HCM Lane V/C Ratio	0.092	0.123	0.042	0.096	0.363	0.598	0.019
HCM Control Delay, s/veh	9.7	10.2	8.6	9.6	11	17.6	7.8
HCM Lane LOS	A	B	A	A	B	C	A
HCM 95th-tile Q	0.3	0.4	0.1	0.3	1.7	4	0.1

Intersection	
Int Delay, s/veh	5.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	20	10	10	10	30	20
Future Vol, veh/h	20	10	10	10	30	20
Conflicting Peds, #/hr	0	2	2	0	3	2
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	66	66	66	66	66	66
Heavy Vehicles, %	6	6	6	6	6	6
Mvmt Flow	30	15	15	15	45	30

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	47	0	88	42
Stage 1	-	-	-	-	40	-
Stage 2	-	-	-	-	48	-
Critical Hdwy	-	-	4.16	-	6.46	6.26
Critical Hdwy Stg 1	-	-	-	-	5.46	-
Critical Hdwy Stg 2	-	-	-	-	5.46	-
Follow-up Hdwy	-	-	2.254	-	3.554	3.354
Pot Cap-1 Maneuver	-	-	1535	-	903	1017
Stage 1	-	-	-	-	972	-
Stage 2	-	-	-	-	964	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1532	-	890	1014
Mov Cap-2 Maneuver	-	-	-	-	890	-
Stage 1	-	-	-	-	970	-
Stage 2	-	-	-	-	952	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	3.7	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	890	1014	-	-	1532	-
HCM Lane V/C Ratio	0.051	0.03	-	-	0.01	-
HCM Control Delay (s/veh)	9.3	8.7	-	-	7.4	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.2	0.1	-	-	0	-

Intersection	
Int Delay, s/veh	3.8

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	20	270	100	20	130	10	30	30	60	10	10	10
Future Vol, veh/h	20	270	100	20	130	10	30	30	60	10	10	10
Conflicting Peds, #/hr	4	0	19	19	0	4	5	0	2	2	0	5
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	89	89	89	89	89	89	89	89	89	89	89	89
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	22	303	112	22	146	11	34	34	67	11	11	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	161	0	0	434	0	0	634	627	380	656	678	161
Stage 1	-	-	-	-	-	-	422	422	-	200	200	-
Stage 2	-	-	-	-	-	-	212	205	-	456	478	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1418	-	-	1126	-	-	392	400	667	379	374	884
Stage 1	-	-	-	-	-	-	609	588	-	802	736	-
Stage 2	-	-	-	-	-	-	790	732	-	584	556	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1413	-	-	1108	-	-	358	376	655	305	351	877
Mov Cap-2 Maneuver	-	-	-	-	-	-	358	376	-	305	351	-
Stage 1	-	-	-	-	-	-	586	566	-	783	718	-
Stage 2	-	-	-	-	-	-	748	714	-	482	535	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	1	15.7	14.5
HCM LOS			C	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	470	1413	-	-	1108	-	-	413
HCM Lane V/C Ratio	0.287	0.016	-	-	0.02	-	-	0.082
HCM Control Delay (s/veh)	15.7	7.6	0	-	8.3	0	-	14.5
HCM Lane LOS	C	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	1.2	0	-	-	0.1	-	-	0.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	150	60	120	130	80	30	1160	40	30	1660	50
Future Volume (veh/h)	110	150	60	120	130	80	30	1160	40	30	1660	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	115	156	62	125	135	83	31	1208	42	31	1729	52
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	185	222	494	150	342	210	122	2141	74	240	2153	64
Arrive On Green	0.32	0.32	0.32	0.32	0.32	0.32	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	438	684	1521	1170	1051	646	268	3519	122	447	3539	106
Grp Volume(v), veh/h	271	0	62	125	0	218	31	613	637	31	869	912
Grp Sat Flow(s),veh/h/ln	1122	0	1521	1170	0	1697	268	1787	1855	447	1787	1858
Q Serve(g_s), s	17.8	0.0	3.4	9.2	0.0	11.9	12.1	24.5	24.6	5.3	44.5	45.3
Cycle Q Clear(g_c), s	29.8	0.0	3.4	39.0	0.0	11.9	57.3	24.5	24.6	29.9	44.5	45.3
Prop In Lane	0.42		1.00	1.00		0.38	1.00		0.07	1.00		0.06
Lane Grp Cap(c), veh/h	407	0	494	150	0	552	122	1087	1128	240	1087	1130
V/C Ratio(X)	0.67	0.00	0.13	0.83	0.00	0.40	0.25	0.56	0.56	0.13	0.80	0.81
Avail Cap(c_a), veh/h	407	0	494	150	0	552	122	1087	1128	240	1087	1130
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.7	0.0	28.5	56.7	0.0	31.4	40.1	14.0	14.0	22.9	17.9	18.1
Incr Delay (d2), s/veh	4.1	0.0	0.1	31.3	0.0	0.5	5.0	2.1	2.0	1.1	6.2	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	0.0	1.5	5.4	0.0	5.6	1.1	12.7	13.2	0.7	23.6	25.0
LnGrp Delay(d), s/veh	44.8	0.0	28.6	87.9	0.0	31.8	45.1	16.1	16.1	24.0	24.1	24.3
LnGrp LOS	D		C	F		C	D	B	B	C	C	C
Approach Vol, veh/h		333			343			1281			1812	
Approach Delay, s/veh		41.8			52.3			16.8			24.2	
Approach LOS		D			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		77.0		43.0		77.0		43.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		73.0		39.0		73.0		39.0
Max Q Clear Time (g_c+I1), s		59.3		31.8		47.3		41.0
Green Ext Time (p_c), s		7.1		1.1		16.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.8
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	17.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	30	30	50	1990	1760	30
Future Vol, veh/h	30	30	50	1990	1760	30
Conflicting Peds, #/hr	1	1	12	0	0	12
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	95	95	95	95	95	95
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	32	32	53	2095	1853	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3020	940	1897	0	-	0
Stage 1	1865	-	-	-	-	-
Stage 2	1155	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	~ 10	267	315	-	-	-
Stage 1	109	-	-	-	-	-
Stage 2	264	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 8	264	312	-	-	-
Mov Cap-2 Maneuver	~ 8	-	-	-	-	-
Stage 1	90	-	-	-	-	-
Stage 2	261	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, $/v	125.9	0.5	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	312	-	8	264	-	-
HCM Lane V/C Ratio	0.169	-	3.947	0.12	-	-
HCM Control Delay (s/veh)	18.9	-	$ 2231.3	20.5	-	-
HCM Lane LOS	C	-	F	C	-	-
HCM 95th %tile Q(veh)	0.6	-	5.2	0.4	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	50	80	80	130	170	30	1650	20	30	1570	190
Future Volume (veh/h)	140	50	80	80	130	170	30	1650	20	30	1570	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.76	1.00		0.94	1.00		0.94
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	149	53	85	85	138	181	32	1755	21	32	1670	202
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	4	411	41	51	365	112	2289	27	137	2025	239
Arrive On Green	0.30	0.30	0.30	0.30	0.30	0.30	0.63	0.63	0.63	0.63	0.63	0.63
Sat Flow, veh/h	0	12	1369	0	170	1217	245	3614	43	269	3197	378
Grp Volume(v), veh/h	202	0	85	223	0	181	32	866	910	32	916	956
Grp Sat Flow(s),veh/h/ln	12	0	1369	170	0	1217	245	1787	1870	269	1787	1788
Q Serve(g_s), s	0.0	0.0	5.6	0.0	0.0	14.7	14.2	41.4	41.7	11.5	46.2	50.6
Cycle Q Clear(g_c), s	36.0	0.0	5.6	36.0	0.0	14.7	64.8	41.4	41.7	53.2	46.2	50.6
Prop In Lane	0.74		1.00	0.38		1.00	1.00		0.02	1.00		0.21
Lane Grp Cap(c), veh/h	56	0	411	92	0	365	112	1132	1185	137	1132	1132
V/C Ratio(X)	3.63	0.00	0.21	2.42	0.00	0.50	0.29	0.77	0.77	0.23	0.81	0.84
Avail Cap(c_a), veh/h	56	0	411	92	0	365	112	1132	1185	137	1132	1132
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.7	0.0	31.3	41.1	0.0	34.5	42.9	15.7	15.7	34.7	16.5	17.3
Incr Delay (d2), s/veh	1225.8	0.0	0.2	668.6	0.0	1.0	6.3	4.9	4.8	4.0	6.3	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	0.0	2.1	20.2	0.0	5.0	1.2	21.8	22.8	1.0	24.6	27.2
LnGrp Delay(d), s/veh	1283.5	0.0	31.6	709.6	0.0	35.6	49.2	20.6	20.5	38.7	22.8	25.1
LnGrp LOS	F		C	F		D	D	C	C	D	C	C
Approach Vol, veh/h		287			404			1808			1904	
Approach Delay, s/veh		912.7			407.6			21.1			24.2	
Approach LOS		F			F			C			C	

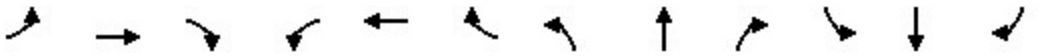
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		80.0		40.0		80.0		40.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		76.0		36.0		76.0		36.0
Max Q Clear Time (g_c+I1), s		66.8		38.0		55.2		38.0
Green Ext Time (p_c), s		7.2		0.0		14.7		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		116.0
HCM 2010 LOS		F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	630	40	120	850	180	60	340	80	160	500	380
Future Volume (veh/h)	280	630	40	120	850	180	60	340	80	160	500	380
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	298	670	43	128	904	0	64	362	85	170	532	404
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	334	1539	98	158	1098	342	82	1295	567	236	737	560
Arrive On Green	0.19	0.32	0.32	0.09	0.22	0.00	0.05	0.37	0.37	0.07	0.39	0.39
Sat Flow, veh/h	1757	4832	308	1757	5036	1568	1757	3505	1534	3408	1880	1427
Grp Volume(v), veh/h	298	464	249	128	904	0	64	362	85	170	496	440
Grp Sat Flow(s),veh/h/ln	1757	1679	1783	1757	1679	1568	1757	1752	1534	1704	1752	1555
Q Serve(g_s), s	17.3	11.4	11.6	7.5	17.9	0.0	3.8	7.6	3.9	5.1	25.1	25.1
Cycle Q Clear(g_c), s	17.3	11.4	11.6	7.5	17.9	0.0	3.8	7.6	3.9	5.1	25.1	25.1
Prop In Lane	1.00		0.17	1.00		1.00	1.00		1.00	1.00		0.92
Lane Grp Cap(c), veh/h	334	1069	568	158	1098	342	82	1295	567	236	687	610
V/C Ratio(X)	0.89	0.43	0.44	0.81	0.82	0.00	0.78	0.28	0.15	0.72	0.72	0.72
Avail Cap(c_a), veh/h	487	1252	665	269	1252	390	134	1295	567	358	687	610
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.3	28.2	28.2	46.7	39.0	0.0	49.3	23.2	22.0	47.7	27.0	27.0
Incr Delay (d2), s/veh	13.6	0.3	0.5	9.5	4.1	0.0	14.6	0.5	0.6	4.1	6.5	7.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.6	5.3	5.7	4.0	8.7	0.0	2.2	3.8	1.7	2.5	13.4	12.0
LnGrp Delay(d), s/veh	54.9	28.5	28.8	56.3	43.1	0.0	63.9	23.7	22.6	51.8	33.4	34.2
LnGrp LOS	D	C	C	E	D		E	C	C	D	C	C
Approach Vol, veh/h		1011			1032			511			1106	
Approach Delay, s/veh		36.3			44.7			28.6			36.6	
Approach LOS		D			D			C			D	

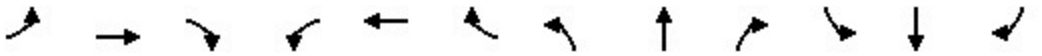
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	42.7	13.4	37.3	8.9	45.0	23.9	26.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	38.0	16.0	39.0	8.0	41.0	29.0	26.0
Max Q Clear Time (g_c+I1), s	7.1	9.6	9.5	13.6	5.8	27.1	19.3	19.9
Green Ext Time (p_c), s	0.2	2.6	0.1	4.4	0.0	5.0	0.6	2.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.7
HCM 2010 LOS	D



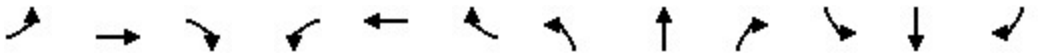
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	330	370	300	2340	0	0	0	0	80	180	750
Future Volume (vph)	0	330	370	300	2340	0	0	0	0	80	180	750
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.99	0.96	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.95	0.85	1.00	1.00					1.00	0.91	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3255	1413	3502	3610					1715	1570	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3255	1413	3502	3610					1715	1570	1534
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	344	385	312	2438	0	0	0	0	83	188	781
RTOR Reduction (vph)	0	39	120	0	0	0	0	0	0	0	1	32
Lane Group Flow (vph)	0	463	107	313	2438	0	0	0	0	75	500	445
Confl. Peds. (#/hr)	182		12	12		182						
Confl. Bikes (#/hr)						77						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		56.8	56.8	15.2	76.0					36.0	36.0	36.0
Effective Green, g (s)		56.8	56.8	15.2	76.0					36.0	36.0	36.0
Actuated g/C Ratio		0.47	0.47	0.13	0.63					0.30	0.30	0.30
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1540	668	443	2286					514	471	460
v/s Ratio Prot		0.14		0.09	c0.68					0.04	c0.32	0.29
v/s Ratio Perm			0.08									
v/c Ratio		0.30	0.16	0.71	1.07					0.15	1.06	0.97
Uniform Delay, d1		19.4	18.0	50.3	22.0					30.7	42.0	41.4
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.1	0.1	5.1	39.5					0.6	58.5	34.4
Delay (s)		19.5	18.1	55.3	61.5					31.3	100.5	75.8
Level of Service		B	B	E	E					C	F	E
Approach Delay (s/veh)		19.1			60.8			0.0			84.4	
Approach LOS		B			E			A			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	59.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	1.10		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	220	710	10	10	990	300	10	10	20	270	10	270
Future Volume (vph)	220	710	10	10	990	300	10	10	20	270	10	270
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		0.99	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.87	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3367	4973		1716	4988	1525		1782	1553	1649	1500	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	237	763	11	11	1065	323	11	11	22	290	11	290
RTOR Reduction (vph)	0	1	0	0	0	144	0	0	18	0	228	0
Lane Group Flow (vph)	237	773	0	11	1065	179	0	22	4	261	102	0
Confl. Peds. (#/hr)	2		11	11		2						
Confl. Bikes (#/hr)			2			3						
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	12.4	46.2		0.7	34.5	34.5		18.5	18.5	22.3	22.3	
Effective Green, g (s)	12.4	46.2		0.7	34.5	34.5		18.5	18.5	22.3	22.3	
Actuated g/C Ratio	0.12	0.45		0.01	0.33	0.33		0.18	0.18	0.22	0.22	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	402	2215		11	1659	507		317	277	354	322	
v/s Ratio Prot	c0.07	0.16		0.01	c0.21			c0.01		c0.16	0.07	
v/s Ratio Perm						0.12			0.00			
v/c Ratio	0.59	0.35		1.00	0.64	0.35		0.07	0.01	0.74	0.32	
Uniform Delay, d1	43.2	18.9		51.5	29.4	26.2		35.4	35.1	38.0	34.3	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.2	0.1		271.4	0.9	0.4		0.4	0.1	7.8	0.6	
Delay (s)	45.5	19.0		322.9	30.2	26.6		35.9	35.2	45.8	34.9	
Level of Service	D	B		F	C	C		D	D	D	C	
Approach Delay (s/veh)		25.2			31.7			35.5			39.7	
Approach LOS		C			C			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	31.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	103.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	230	0	0	1240	90	1440	250	250	0	0	0
Future Volume (vph)	160	230	0	0	1240	90	1440	250	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.98		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.99		1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3500		1643	3142	1470			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3500		1643	3142	1470			
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	242	0	0	1305	95	1516	263	263	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	1	86	0	0	0
Lane Group Flow (vph)	168	242	0	0	1400	0	758	1046	151	0	0	0
Confl. Peds. (#/hr)	124		12	12		124						
Confl. Bikes (#/hr)			3			49						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	6.0	57.0			47.0		55.0	55.0	55.0			
Effective Green, g (s)	6.0	57.0			47.0		55.0	55.0	55.0			
Actuated g/C Ratio	0.05	0.48			0.39		0.46	0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	175	1714			1370		753	1440	673			
v/s Ratio Prot	c0.05	0.07			c0.40		c0.46	0.33				
v/s Ratio Perm									0.10			
v/c Ratio	0.96	0.14			1.02		1.01	1.01dl	0.22			
Uniform Delay, d1	56.9	17.7			36.5		32.5	26.4	19.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	56.1	0.0			30.0		34.4	3.2	0.8			
Delay (s)	113.0	17.8			66.5		66.9	29.6	20.4			
Level of Service	F	B			E		E	C	C			
Approach Delay (s/veh)		56.8			66.5			42.4			0.0	
Approach LOS		E			E			D			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.7	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	1.01		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	115.0%	ICU Level of Service	H
Analysis Period (min)	15		

dl Defacto Left Lane. Recode with 1 though lane as a left lane.
c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	830	0	0	950	190	360	0	710	0	0	0
Future Volume (veh/h)	130	830	0	0	950	190	360	0	710	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.97	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1827	1827	0	0	1827	1900	1827	0	1827			
Adj Flow Rate, veh/h	140	892	0	0	1022	204	387	0	763			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	4	4	0	0	4	4	4	0	4			
Cap, veh/h	193	1772	0	0	1100	219	1950	0	897			
Arrive On Green	0.06	0.36	0.00	0.00	0.26	0.26	0.58	0.00	0.58			
Sat Flow, veh/h	3375	5152	0	0	4318	827	3375	0	1553			
Grp Volume(v), veh/h	140	892	0	0	818	408	387	0	763			
Grp Sat Flow(s),veh/h/ln	1688	1663	0	0	1663	1656	1688	0	1553			
Q Serve(g_s), s	4.9	16.8	0.0	0.0	28.6	28.7	6.5	0.0	48.7			
Cycle Q Clear(g_c), s	4.9	16.8	0.0	0.0	28.6	28.7	6.5	0.0	48.7			
Prop In Lane	1.00		0.00	0.00		0.50	1.00		1.00			
Lane Grp Cap(c), veh/h	193	1772	0	0	881	438	1950	0	897			
V/C Ratio(X)	0.73	0.50	0.00	0.00	0.93	0.93	0.20	0.00	0.85			
Avail Cap(c_a), veh/h	198	1796	0	0	891	444	1950	0	897			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	55.4	30.2	0.0	0.0	42.8	42.8	12.0	0.0	20.9			
Incr Delay (d2), s/veh	12.3	0.2	0.0	0.0	15.6	26.3	0.2	0.0	9.9			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	2.6	7.7	0.0	0.0	15.1	16.4	3.1	0.0	23.2			
LnGrp Delay(d), s/veh	67.7	30.4	0.0	0.0	58.4	69.1	12.3	0.0	30.9			
LnGrp LOS	E	C			E	E	B		C			
Approach Vol, veh/h		1032			1226			1150				
Approach Delay, s/veh		35.5			62.0			24.6				
Approach LOS		D			E			C				

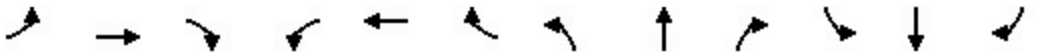
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		73.0		46.4			10.8	35.6
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		69.0		43.0			7.0	32.0
Max Q Clear Time (g_c+I1), s		50.7		18.8			6.9	30.7
Green Ext Time (p_c), s		4.7		6.3			0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1570	420	250	1550	80	420	510	170	220	1030	320
Future Volume (veh/h)	230	1570	420	250	1550	80	420	510	170	220	1030	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	245	1670	447	266	1649	85	447	543	181	234	1096	340
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	258	1695	517	287	1737	537	459	1855	567	293	1121	484
Arrive On Green	0.08	0.33	0.33	0.08	0.34	0.34	0.13	0.36	0.36	0.09	0.32	0.32
Sat Flow, veh/h	3442	5085	1551	3442	5085	1571	3442	5085	1553	3442	3539	1529
Grp Volume(v), veh/h	245	1670	447	266	1649	85	447	543	181	234	1096	340
Grp Sat Flow(s),veh/h/ln	1721	1695	1551	1721	1695	1571	1721	1695	1553	1721	1770	1529
Q Serve(g_s), s	8.5	39.1	32.4	9.2	37.9	4.5	15.5	9.1	10.1	8.0	36.8	23.4
Cycle Q Clear(g_c), s	8.5	39.1	32.4	9.2	37.9	4.5	15.5	9.1	10.1	8.0	36.8	23.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	1695	517	287	1737	537	459	1855	567	293	1121	484
V/C Ratio(X)	0.95	0.99	0.86	0.93	0.95	0.16	0.97	0.29	0.32	0.80	0.98	0.70
Avail Cap(c_a), veh/h	258	1695	517	287	1737	537	459	1855	567	373	1121	484
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.3	39.7	37.5	54.6	38.5	27.5	51.8	27.1	27.4	53.9	40.6	36.0
Incr Delay (d2), s/veh	42.2	18.4	14.2	34.6	11.7	0.1	35.2	0.4	1.5	9.2	22.1	8.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.6	21.1	15.8	5.8	19.6	2.0	9.6	4.3	4.5	4.2	21.4	11.0
LnGrp Delay(d), s/veh	97.4	58.1	51.7	89.2	50.2	27.6	87.0	27.5	28.9	63.0	62.7	44.3
LnGrp LOS	F	E	D	F	D	C	F	C	C	E	E	D
Approach Vol, veh/h		2362			2000			1171			1670	
Approach Delay, s/veh		60.9			54.5			50.4			59.0	
Approach LOS		E			D			D			E	

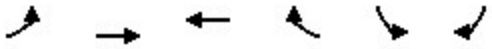
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	47.8	14.0	44.0	20.0	42.0	13.0	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	41.0	10.0	40.0	16.0	38.0	9.0	41.0
Max Q Clear Time (g_c+I1), s	10.0	12.1	11.2	41.1	17.5	38.8	10.5	39.9
Green Ext Time (p_c), s	0.2	4.2	0.0	0.0	0.0	0.0	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	57.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	380	40	900	310	140	50	310	360	450	1420	250
Future Volume (vph)	90	380	40	900	310	140	50	310	360	450	1420	250
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.98	1.00	1.00	0.98	1.00	0.99	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.99		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.99		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4983		3253	1686	1575	1787	3574	1575	3467	4991	
Flt Permitted		0.78		0.95	0.46	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3929		3253	781	1575	1787	3574	1575	3467	4991	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	100	422	44	1000	344	156	56	344	400	500	1578	278
RTOR Reduction (vph)	0	8	0	0	0	83	0	0	38	0	21	0
Lane Group Flow (vph)	0	558	0	890	454	73	56	344	362	500	1835	0
Confl. Peds. (#/hr)	1		47	47		1	5		9	9		5
Confl. Bikes (#/hr)			5			2			1			
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.4		34.6	56.0	56.0	4.0	30.4	65.0	21.6	48.0	
Effective Green, g (s)		17.4		34.6	56.0	56.0	4.0	30.4	65.0	21.6	48.0	
Actuated g/C Ratio		0.14		0.29	0.47	0.47	0.03	0.25	0.54	0.18	0.40	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		569		937	625	735	59	905	905	624	1996	
v/s Ratio Prot				c0.27	0.21		0.03	0.10	0.12	c0.14	c0.37	
v/s Ratio Perm		c0.14			0.13	0.05			0.11			
v/c Ratio		0.98		0.95	0.73	0.10	0.95	0.38	0.40	0.80	0.92	
Uniform Delay, d1		51.1		41.8	25.8	17.9	57.9	37.0	16.1	47.1	34.2	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		32.8		18.2	4.2	0.1	97.7	1.2	0.3	7.3	8.4	
Delay (s)		83.9		60.1	30.0	18.0	155.6	38.2	16.4	54.5	42.5	
Level of Service		F		E	C	B	F	D	B	D	D	
Approach Delay (s/veh)		83.9			46.6			35.5			45.1	
Approach LOS		F			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.95		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	84.5%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↰	↱
Traffic Volume (veh/h)	0	580	1690	0	130	470
Future Volume (veh/h)	0	580	1690	0	130	470
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	598	1742	0	134	485
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2160	2160	0	928	828
Arrive On Green	0.00	0.42	0.42	0.00	0.51	0.51
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	598	1742	0	134	485
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	8.6	33.4	0.0	4.4	23.7
Cycle Q Clear(g_c), s	0.0	8.6	33.4	0.0	4.4	23.7
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2160	2160	0	928	828
V/C Ratio(X)	0.00	0.28	0.81	0.00	0.14	0.59
Avail Cap(c_a), veh/h	0	2476	2476	0	928	828
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	21.8	29.0	0.0	14.5	19.2
Incr Delay (d2), s/veh	0.0	0.1	1.8	0.0	0.3	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	4.1	16.2	0.0	2.3	11.2
LnGrp Delay(d), s/veh	0.0	21.8	30.8	0.0	14.8	22.2
LnGrp LOS		C	C		B	C
Approach Vol, veh/h		598	1742		619	
Approach Delay, s/veh		21.8	30.8		20.6	
Approach LOS		C	C		C	

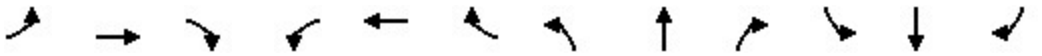
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				51.1		62.0		51.1
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				54.0		58.0		54.0
Max Q Clear Time (g_c+I1), s				10.6		25.7		35.4
Green Ext Time (p_c), s				4.3		2.3		11.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	26.9
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	480	0	0	1830	630	1040
Future Volume (vph)	480	0	0	1830	630	1040
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	0.99	0.97
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.96	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5136			5136	1724	1466
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5136			5136	1724	1466
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	516	0	0	1968	677	1118
RTOR Reduction (vph)	0	0	0	0	11	89
Lane Group Flow (vph)	516	0	0	1968	923	772
Confl. Peds. (#/hr)						10
Confl. Bikes (#/hr)						2
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	47.0			47.0	65.0	65.0
Effective Green, g (s)	47.0			47.0	65.0	65.0
Actuated g/C Ratio	0.39			0.39	0.54	0.54
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	2011			2011	933	794
v/s Ratio Prot	0.10			c0.38	c0.54	
v/s Ratio Perm						0.53
v/c Ratio	0.26			0.98	0.99	0.97
Uniform Delay, d1	24.7			36.0	27.1	26.6
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	0.1			15.1	26.9	25.9
Delay (s)	24.8			51.2	54.0	52.5
Level of Service	C			D	D	D
Approach Delay (s/veh)	24.8			51.2	53.3	
Approach LOS	C			D	D	

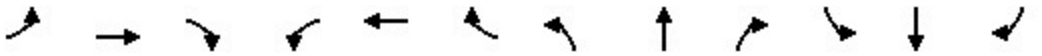
Intersection Summary			
HCM 2000 Control Delay (s/veh)	48.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	105.2%	ICU Level of Service	G
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Future Volume (vph)	510	0	260	0	0	0	0	860	400	240	380	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.98	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.89						1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1645	1544						5036	1539	1752	3505	
Flt Permitted	0.95	0.99						1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1645	1544						5036	1539	1752	3505	
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	526	0	268	0	0	0	0	887	412	247	392	0
RTOR Reduction (vph)	0	82	0	0	0	0	0	0	228	0	0	0
Lane Group Flow (vph)	416	296	0	0	0	0	0	887	184	247	392	0
Confl. Peds. (#/hr)							5		3	3		5
Confl. Bikes (#/hr)									1			7
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Bus Blockages (#/hr)	3	0	0	0	0	0	0	0	0	0	0	0
Turn Type	Perm	NA						NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4								2			
Actuated Green, G (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Effective Green, g (s)	33.8	33.8						42.6	42.6	19.8	66.4	
Actuated g/C Ratio	0.31	0.31						0.39	0.39	0.18	0.61	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	513	482						1982	605	320	2150	
v/s Ratio Prot								c0.18		c0.14	0.11	
v/s Ratio Perm	c0.25	0.19							0.12			
v/c Ratio	0.81	0.61						0.45	0.30	0.77	0.18	
Uniform Delay, d1	34.3	31.7						24.1	22.6	42.1	9.1	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	9.4	2.3						0.7	1.3	11.0	0.2	
Delay (s)	43.7	34.0						24.9	23.9	53.0	9.3	
Level of Service	D	C						C	C	D	A	
Approach Delay (s/veh)		39.1			0.0			24.6			26.2	
Approach LOS		D			A			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	108.2	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		

c Critical Lane Group



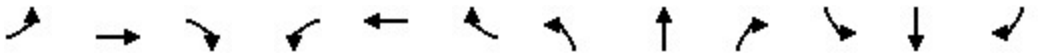
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Future Volume (vph)	0	0	0	210	0	300	560	980	0	0	480	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.97
Flpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1752		1568	1752	3505			5036	1517
Flt Permitted				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (perm)				1752		1568	1752	3505			5036	1517
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	0	0	0	219	0	312	583	1021	0	0	500	292
RTOR Reduction (vph)	0	0	0	0	0	132	0	0	0	0	0	194
Lane Group Flow (vph)	0	0	0	219	0	181	583	1021	0	0	500	98
Confl. Peds. (#/hr)							2					2
Confl. Bikes (#/hr)												5
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type				Perm		Perm	Prot	NA			NA	Perm
Protected Phases							5	2			6	
Permitted Phases				8		8						6
Actuated Green, G (s)				19.2		19.2	42.9	84.2			37.3	37.3
Effective Green, g (s)				19.2		19.2	42.9	84.2			37.3	37.3
Actuated g/C Ratio				0.17		0.17	0.39	0.76			0.33	0.33
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				301		270	674	2649			1686	507
v/s Ratio Prot							c0.33	c0.29			0.10	
v/s Ratio Perm				c0.12		0.12						0.06
v/c Ratio				0.73		0.67	0.86	0.39			0.30	0.19
Uniform Delay, d1				43.6		43.1	31.6	4.7			27.4	26.3
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				8.5		6.2	11.2	0.4			0.4	0.8
Delay (s)				52.1		49.3	42.8	5.1			27.8	27.2
Level of Service				D		D	D	A			C	C
Approach Delay (s/veh)		0.0			50.4			18.8			27.6	
Approach LOS		A			D			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.67		
Actuated Cycle Length (s)	111.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	88.8%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Future Volume (veh/h)	0	0	0	460	0	230	110	1090	0	0	1560	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				489	0	245	117	1160	0	0	1660	351
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				546	0	858	178	2209	0	0	2712	819
Arrive On Green				0.30	0.00	0.30	0.05	0.62	0.00	0.00	0.53	0.53
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1551
Grp Volume(v), veh/h				489	0	245	117	1160	0	0	1660	351
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1551
Q Serve(g_s), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Cycle Q Clear(g_c), s				27.0	0.0	6.9	3.4	19.0	0.0	0.0	23.3	14.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				546	0	858	178	2209	0	0	2712	819
V/C Ratio(X)				0.90	0.00	0.29	0.66	0.53	0.00	0.00	0.61	0.43
Avail Cap(c_a), veh/h				830	0	1304	268	2209	0	0	2712	819
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				34.4	0.0	27.4	48.2	11.2	0.0	0.0	17.0	14.9
Incr Delay (d2), s/veh				8.5	0.0	0.2	4.1	0.9	0.0	0.0	1.0	1.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				14.6	0.0	2.7	1.7	9.6	0.0	0.0	11.2	6.4
LnGrp Delay(d), s/veh				42.9	0.0	27.6	52.3	12.1	0.0	0.0	18.1	16.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					734			1277			2011	
Approach Delay, s/veh					37.8			15.8			17.8	
Approach LOS					D			B			B	

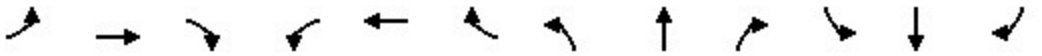
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		68.0			9.3	58.7		35.6
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		64.0			8.0	52.0		48.0
Max Q Clear Time (g_c+I1), s		21.0			5.4	25.3		29.0
Green Ext Time (p_c), s		10.9			0.1	16.1		2.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.8
HCM 2010 LOS	C



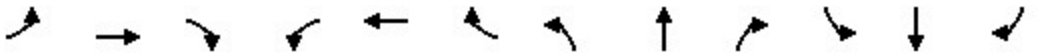
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Future Volume (vph)	160	0	140	0	0	0	0	1030	700	360	1670	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.97	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.93	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1555	1519					5136	1557	3467	3574	
Flt Permitted	0.95	0.97	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1555	1519					5136	1557	3467	3574	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	168	0	147	0	0	0	0	1084	737	379	1758	0
RTOR Reduction (vph)	0	40	48	0	0	0	0	0	187	0	0	0
Lane Group Flow (vph)	109	66	52	0	0	0	0	1084	550	379	1758	0
Confl. Peds. (#/hr)							6		6	6		6
Confl. Bikes (#/hr)									5			3
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm					NA	Perm	Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4						2			
Actuated Green, G (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Effective Green, g (s)	12.5	12.5	12.5					73.5	73.5	17.6	95.1	
Actuated g/C Ratio	0.11	0.11	0.11					0.64	0.64	0.15	0.82	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	183	168	164					3265	989	527	2940	
v/s Ratio Prot								0.21		c0.11	c0.49	
v/s Ratio Perm	c0.06	0.04	0.03						0.35			
v/c Ratio	0.60	0.39	0.32					0.33	0.56	0.72	0.60	
Uniform Delay, d1	49.1	48.0	47.6					9.7	11.9	46.6	3.6	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	5.1	1.5	1.1					0.3	2.3	4.7	0.9	
Delay (s)	54.3	49.5	48.7					10.0	14.1	51.3	4.5	
Level of Service	D	D	D					A	B	D	A	
Approach Delay (s/veh)		50.9			0.0			11.7			12.8	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	115.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.1%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Future Volume (vph)	300	0	280	0	0	0	0	690	430	210	440	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.93	0.85					0.94		1.00	1.00	
Flt Protected	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1649	1502	1475					4661		3367	4988	
Flt Permitted	0.95	0.98	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1649	1502	1475					4661		3367	4988	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	323	0	301	0	0	0	0	742	462	226	473	0
RTOR Reduction (vph)	0	36	161	0	0	0	0	71	0	0	0	0
Lane Group Flow (vph)	216	173	38	0	0	0	0	1133	0	226	473	0
Confl. Peds. (#/hr)							6		4	4		6
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type	Perm	NA	Perm					NA		Prot	NA	
Protected Phases		4						2		1	6	
Permitted Phases	4		4									
Actuated Green, G (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Effective Green, g (s)	20.0	20.0	20.0					60.1		12.2	76.3	
Actuated g/C Ratio	0.19	0.19	0.19					0.58		0.12	0.73	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	316	288	282					2685		393	3648	
v/s Ratio Prot								c0.24		c0.07	0.09	
v/s Ratio Perm	c0.13	0.11	0.03									
v/c Ratio	0.68	0.60	0.14					0.42		0.58	0.13	
Uniform Delay, d1	39.2	38.5	35.0					12.4		43.6	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	6.0	3.3	0.2					0.5		2.0	0.1	
Delay (s)	45.2	41.8	35.2					12.9		45.6	4.2	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.9			0.0			12.9			17.6	
Approach LOS		D			A			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.50		
Actuated Cycle Length (s)	104.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Future Volume (vph)	0	0	0	160	0	300	290	650	0	0	500	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.87	0.85	1.00	1.00			0.94	
Flt Protected				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1649	1431	1475	3367	4988			4653	
Flt Permitted				0.95	1.00	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1649	1431	1475	3367	4988			4653	
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	0	0	0	180	0	337	326	730	0	0	562	337
RTOR Reduction (vph)	0	0	0	0	137	148	0	0	0	0	62	0
Lane Group Flow (vph)	0	0	0	162	43	27	326	730	0	0	837	0
Confl. Peds. (#/hr)							3		4	4		3
Confl. Bikes (#/hr)									6			2
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm	NA	Perm	Prot	NA			NA	
Protected Phases					8		5	2			6	
Permitted Phases				8		8						
Actuated Green, G (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Effective Green, g (s)				16.2	16.2	16.2	15.1	79.2			60.1	
Actuated g/C Ratio				0.16	0.16	0.16	0.15	0.77			0.58	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				258	224	231	491	3820			2704	
v/s Ratio Prot							c0.10	0.15			c0.18	
v/s Ratio Perm				c0.10	0.03	0.02						
v/c Ratio				0.63	0.19	0.12	0.66	0.19			0.31	
Uniform Delay, d1				40.8	37.9	37.5	41.8	3.3			11.1	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				4.7	0.4	0.2	3.4	0.1			0.3	
Delay (s)				45.5	38.3	37.7	45.1	3.4			11.4	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			40.4			16.3			11.4	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	19.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.42		
Actuated Cycle Length (s)	103.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	50.3%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

FULLERTON - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	740	180	160	730	200	220	1360	130	110	930	30
Future Volume (veh/h)	50	740	180	160	730	200	220	1360	130	110	930	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	56	822	200	178	811	222	244	1511	144	122	1033	33
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	159	861	209	207	955	261	314	1502	142	136	1418	45
Arrive On Green	0.03	0.30	0.30	0.08	0.34	0.34	0.10	0.45	0.45	0.04	0.40	0.40
Sat Flow, veh/h	1810	2879	700	1810	2792	764	1810	3333	315	1810	3570	114
Grp Volume(v), veh/h	56	515	507	178	524	509	244	813	842	122	522	544
Grp Sat Flow(s),veh/h/ln	1810	1805	1774	1810	1805	1751	1810	1805	1843	1810	1805	1879
Q Serve(g_s), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.9	54.0	4.9	29.4	29.4
Cycle Q Clear(g_c), s	2.6	33.6	33.6	8.0	32.3	32.3	9.2	53.9	54.0	4.9	29.4	29.4
Prop In Lane	1.00		0.39	1.00		0.44	1.00		0.17	1.00		0.06
Lane Grp Cap(c), veh/h	159	540	531	207	617	599	314	813	830	136	717	746
V/C Ratio(X)	0.35	0.95	0.95	0.86	0.85	0.85	0.78	1.00	1.01	0.90	0.73	0.73
Avail Cap(c_a), veh/h	161	542	533	207	618	599	368	813	830	136	717	746
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.1	41.2	41.2	30.6	36.6	36.6	23.9	32.9	32.9	29.7	30.7	30.7
Incr Delay (d2), s/veh	1.3	27.6	27.9	29.0	10.8	11.1	8.7	31.4	34.8	48.5	6.4	6.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	20.9	20.6	5.6	17.9	17.4	5.3	33.7	35.3	4.2	15.9	16.5
LnGrp Delay(d), s/veh	32.4	68.8	69.1	59.6	47.4	47.7	32.6	64.3	67.7	78.1	37.1	36.8
LnGrp LOS	C	E	E	E	D	D	C	E	F	E	D	D
Approach Vol, veh/h		1078			1211			1899			1188	
Approach Delay, s/veh		67.0			49.3			61.8			41.2	
Approach LOS		E			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	58.0	13.0	39.8	15.4	51.6	7.9	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	54.0	9.0	36.0	15.0	44.0	4.0	41.0
Max Q Clear Time (g_c+I1), s	6.9	56.0	10.0	35.6	11.2	31.4	4.6	34.3
Green Ext Time (p_c), s	0.0	0.0	0.0	0.3	0.2	5.4	0.0	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	180	490	80	330	670	210	100	1330	230	120	960	190
Future Volume (veh/h)	180	490	80	330	670	210	100	1330	230	120	960	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	189	516	84	347	705	221	105	1400	242	126	1011	200
Adj No. of Lanes	1	2	0	1	2	0	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	243	643	104	399	753	236	222	1583	698	184	1336	264
Arrive On Green	0.09	0.21	0.21	0.17	0.28	0.28	0.05	0.44	0.44	0.05	0.45	0.45
Sat Flow, veh/h	1810	3096	502	1810	2687	842	1810	3610	1591	1810	2998	592
Grp Volume(v), veh/h	189	300	300	347	474	452	105	1400	242	126	608	603
Grp Sat Flow(s),veh/h/ln	1810	1805	1793	1810	1805	1724	1810	1805	1591	1810	1805	1785
Q Serve(g_s), s	9.7	18.8	19.0	17.2	30.4	30.5	3.8	42.3	12.0	4.5	33.5	33.7
Cycle Q Clear(g_c), s	9.7	18.8	19.0	17.2	30.4	30.5	3.8	42.3	12.0	4.5	33.5	33.7
Prop In Lane	1.00		0.28	1.00		0.49	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	243	375	373	399	506	483	222	1583	698	184	804	796
V/C Ratio(X)	0.78	0.80	0.81	0.87	0.94	0.94	0.47	0.88	0.35	0.68	0.76	0.76
Avail Cap(c_a), veh/h	243	375	373	451	516	493	228	1583	698	193	804	796
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.0	44.8	44.8	30.1	41.8	41.8	22.5	30.6	22.1	26.9	27.6	27.6
Incr Delay (d2), s/veh	14.8	11.6	12.2	15.2	24.5	25.3	1.6	7.6	1.4	9.1	6.5	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	10.5	10.7	10.3	18.6	17.8	2.0	22.7	5.5	2.7	18.0	18.1
LnGrp Delay(d), s/veh	49.8	56.3	57.1	45.2	66.2	67.1	24.1	38.2	23.5	36.0	34.1	34.3
LnGrp LOS	D	E	E	D	E	E	C	D	C	D	C	C
Approach Vol, veh/h		789			1273			1747			1337	
Approach Delay, s/veh		55.0			60.8			35.3			34.4	
Approach LOS		E			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.4	56.2	23.6	28.7	9.6	57.0	15.0	37.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	52.0	23.0	22.0	6.0	53.0	11.0	34.0
Max Q Clear Time (g_c+I1), s	6.5	44.3	19.2	21.0	5.8	35.7	11.7	32.5
Green Ext Time (p_c), s	0.0	5.6	0.4	0.4	0.0	7.7	0.0	0.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	44.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Future Volume (veh/h)	40	830	140	120	1050	20	190	130	130	20	120	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.97	0.99		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	41	856	144	124	1082	21	196	134	134	21	124	52
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	226	1556	262	254	1825	35	521	786	646	117	660	663
Arrive On Green	0.50	0.50	0.50	0.50	0.50	0.50	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	519	3089	520	572	3622	70	1223	1900	1561	179	1596	1604
Grp Volume(v), veh/h	41	500	500	124	539	564	196	134	134	145	0	52
Grp Sat Flow(s),veh/h/ln	519	1805	1804	572	1805	1887	1223	1900	1561	1776	0	1604
Q Serve(g_s), s	5.9	18.4	18.4	18.4	20.4	20.5	11.7	4.3	5.3	0.0	0.0	1.9
Cycle Q Clear(g_c), s	26.3	18.4	18.4	36.8	20.4	20.5	16.4	4.3	5.3	4.7	0.0	1.9
Prop In Lane	1.00		0.29	1.00		0.04	1.00		1.00	0.14		1.00
Lane Grp Cap(c), veh/h	226	909	909	254	909	951	521	786	646	777	0	663
V/C Ratio(X)	0.18	0.55	0.55	0.49	0.59	0.59	0.38	0.17	0.21	0.19	0.00	0.08
Avail Cap(c_a), veh/h	351	1343	1343	392	1343	1405	521	786	646	777	0	663
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	26.3	16.5	16.5	29.1	17.0	17.0	23.2	17.9	18.2	18.0	0.0	17.2
Incr Delay (d2), s/veh	0.4	0.5	0.5	1.5	0.6	0.6	2.1	0.5	0.7	0.5	0.0	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	9.3	9.3	3.0	10.3	10.8	4.3	2.4	2.4	2.6	0.0	0.9
LnGrp Delay(d), s/veh	26.7	17.0	17.0	30.5	17.6	17.6	25.3	18.4	18.9	18.5	0.0	17.4
LnGrp LOS	C	B	B	C	B	B	C	B	B	B		B
Approach Vol, veh/h		1041			1227			464			197	
Approach Delay, s/veh		17.4			18.9			21.5			18.2	
Approach LOS		B			B			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		44.0		52.7		44.0		52.7
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		40.0		72.0		40.0		72.0
Max Q Clear Time (g_c+I1), s		18.4		28.3		6.7		38.8
Green Ext Time (p_c), s		2.0		8.1		1.1		10.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	18.7
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	630	230	140	650	40	250	290	110	40	330	70
Future Volume (veh/h)	80	630	230	140	650	40	250	290	110	40	330	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	86	677	247	151	699	43	269	312	118	43	355	75
Adj No. of Lanes	1	2	1	1	2	1	1	1	1	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	266	1513	641	238	1513	642	451	972	808	466	972	807
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	729	3610	1530	615	3610	1531	972	1900	1579	972	1900	1577
Grp Volume(v), veh/h	86	677	247	151	699	43	269	312	118	43	355	75
Grp Sat Flow(s),veh/h/ln	729	1805	1530	615	1805	1531	972	1900	1579	972	1900	1577
Q Serve(g_s), s	11.1	15.5	12.9	26.9	16.1	1.9	26.5	11.1	4.6	3.1	12.9	2.8
Cycle Q Clear(g_c), s	27.2	15.5	12.9	42.3	16.1	1.9	39.4	11.1	4.6	14.2	12.9	2.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	266	1513	641	238	1513	642	451	972	808	466	972	807
V/C Ratio(X)	0.32	0.45	0.39	0.64	0.46	0.07	0.60	0.32	0.15	0.09	0.37	0.09
Avail Cap(c_a), veh/h	296	1659	703	262	1659	703	451	972	808	466	972	807
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.9	24.0	23.2	39.1	24.1	20.0	28.8	16.5	14.9	20.6	16.9	14.4
Incr Delay (d2), s/veh	0.7	0.2	0.4	4.3	0.2	0.0	5.7	0.9	0.4	0.4	1.1	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	7.8	5.5	4.9	8.0	0.8	7.8	6.0	2.1	0.9	7.1	1.3
LnGrp Delay(d), s/veh	34.6	24.2	23.6	43.4	24.4	20.1	34.5	17.3	15.3	21.0	18.0	14.7
LnGrp LOS	C	C	C	D	C	C	C	B	B	C	B	B
Approach Vol, veh/h		1010			893			699			473	
Approach Delay, s/veh		24.9			27.4			23.6			17.7	
Approach LOS		C			C			C			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		63.0		52.3		63.0		52.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		59.0		53.0		59.0		53.0
Max Q Clear Time (g_c+I1), s		41.4		29.2		16.2		44.3
Green Ext Time (p_c), s		3.5		6.5		3.0		4.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	2.2

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Vol, veh/h	50	40	570	30	20	630
Future Vol, veh/h	50	40	570	30	20	630
Conflicting Peds, #/hr	0	0	0	3	3	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	25	-	100	100	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	57	45	648	34	23	716

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	1413	651	0	0	685	0
Stage 1	651	-	-	-	-	-
Stage 2	762	-	-	-	-	-
Critical Hdwy	6.4	6.2	-	-	4.1	-
Critical Hdwy Stg 1	5.4	-	-	-	-	-
Critical Hdwy Stg 2	5.4	-	-	-	-	-
Follow-up Hdwy	3.5	3.3	-	-	2.2	-
Pot Cap-1 Maneuver	153	472	-	-	918	-
Stage 1	523	-	-	-	-	-
Stage 2	464	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	149	471	-	-	916	-
Mov Cap-2 Maneuver	149	-	-	-	-	-
Stage 1	522	-	-	-	-	-
Stage 2	452	-	-	-	-	-

Approach	WB	NB	SB
HCM Control Delay, s/v	30.1	0	0.3
HCM LOS	D		

Minor Lane/Major Mvmt	NBT	NBR	WBLn1	WBLn2	SBL	SBT
Capacity (veh/h)	-	-	149	471	916	-
HCM Lane V/C Ratio	-	-	0.381	0.097	0.025	-
HCM Control Delay (s/veh)	-	-	43.3	13.5	9	-
HCM Lane LOS	-	-	E	B	A	-
HCM 95th %tile Q(veh)	-	-	1.6	0.3	0.1	-

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Future Vol, veh/h	10	10	20	20	10	30	20	510	20	10	470	10
Conflicting Peds, #/hr	5	0	0	0	0	5	4	0	18	18	0	4
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	25	-	-	25	100	-	100	100	-	100
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	88	88	88	88	88	88	88	88	88	88	88	88
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	11	23	23	11	34	23	580	23	11	534	11

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	1225	1227	538	1223	1215	603	549	0	0	621	0	0
Stage 1	560	560	-	644	644	-	-	-	-	-	-	-
Stage 2	665	667	-	579	571	-	-	-	-	-	-	-
Critical Hdwy	7.1	6.5	6.2	7.1	6.5	6.2	4.1	-	-	4.1	-	-
Critical Hdwy Stg 1	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Critical Hdwy Stg 2	6.1	5.5	-	6.1	5.5	-	-	-	-	-	-	-
Follow-up Hdwy	3.5	4	3.3	3.5	4	3.3	2.2	-	-	2.2	-	-
Pot Cap-1 Maneuver	157	180	547	158	183	503	1031	-	-	969	-	-
Stage 1	516	514	-	465	471	-	-	-	-	-	-	-
Stage 2	453	460	-	504	508	-	-	-	-	-	-	-
Platoon blocked, %								-	-		-	-
Mov Cap-1 Maneuver	134	171	545	138	174	493	1028	-	-	954	-	-
Mov Cap-2 Maneuver	134	171	-	138	174	-	-	-	-	-	-	-
Stage 1	503	506	-	448	454	-	-	-	-	-	-	-
Stage 2	400	443	-	467	500	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	22.6	24.7	0.3	0.2
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBL	NBT	NBR	EBLn1	EBLn2	WBLn1	WBLn2	SBL	SBT	SBR
Capacity (veh/h)	1028	-	-	150	545	148	493	954	-	-
HCM Lane V/C Ratio	0.022	-	-	0.152	0.042	0.23	0.069	0.012	-	-
HCM Control Delay (s/veh)	8.6	-	-	33.2	11.9	36.5	12.8	8.8	-	-
HCM Lane LOS	A	-	-	D	B	E	B	A	-	-
HCM 95th %tile Q(veh)	0.1	-	-	0.5	0.1	0.8	0.2	0	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Future Volume (veh/h)	130	140	50	40	150	60	50	320	30	80	370	220
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.95	0.98		0.95	1.00		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Adj No. of Lanes	1	1	1	1	1	1	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Grp Volume(v), veh/h	138	149	53	43	160	64	53	340	32	85	394	234
Grp Sat Flow(s),veh/h/ln	1158	1900	1529	1181	1900	1529	808	1900	1554	1021	1900	1556
Q Serve(g_s), s	10.9	6.3	2.7	3.0	6.8	3.2	2.6	6.4	0.6	3.2	7.6	5.2
Cycle Q Clear(g_c), s	17.7	6.3	2.7	9.3	6.8	3.2	10.2	6.4	0.6	9.6	7.6	5.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	251	424	341	261	424	341	571	1317	1077	715	1317	1078
V/C Ratio(X)	0.55	0.35	0.16	0.16	0.38	0.19	0.09	0.26	0.03	0.12	0.30	0.22
Avail Cap(c_a), veh/h	552	918	738	568	918	738	571	1317	1077	715	1317	1078
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.9	31.2	29.8	35.1	31.4	30.0	7.6	5.5	4.6	7.3	5.7	5.3
Incr Delay (d2), s/veh	1.9	0.5	0.2	0.3	0.6	0.3	0.3	0.5	0.1	0.3	0.6	0.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.6	3.4	1.1	1.0	3.6	1.4	0.6	3.5	0.3	1.0	4.2	2.3
LnGrp Delay(d), s/veh	40.8	31.7	30.0	35.4	31.9	30.3	8.0	5.9	4.6	7.6	6.2	5.7
LnGrp LOS	D	C	C	D	C	C	A	A	A	A	A	A
Approach Vol, veh/h		340			267			425			713	
Approach Delay, s/veh		35.1			32.1			6.1			6.2	
Approach LOS		D			C			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		70.0		25.2		70.0		25.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		66.0		46.0		66.0		46.0
Max Q Clear Time (g_c+I1), s		12.2		19.7		11.6		11.3
Green Ext Time (p_c), s		2.8		1.5		4.1		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Future Volume (veh/h)	280	930	100	100	1030	180	130	160	100	120	150	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	0.99		0.93	0.99		0.96	0.99		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	289	959	103	103	1062	186	134	165	103	124	155	237
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	371	1927	206	321	1469	257	418	740	605	453	740	603
Arrive On Green	0.13	0.41	0.41	0.06	0.34	0.34	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1792	4675	500	1792	4341	759	988	1881	1538	1105	1881	1535
Grp Volume(v), veh/h	289	701	361	103	837	411	134	165	103	124	155	237
Grp Sat Flow(s),veh/h/ln	1792	1712	1751	1792	1712	1676	988	1881	1538	1105	1881	1535
Q Serve(g_s), s	8.5	13.1	13.2	3.2	18.5	18.6	9.0	5.0	3.8	7.3	4.7	9.6
Cycle Q Clear(g_c), s	8.5	13.1	13.2	3.2	18.5	18.6	13.7	5.0	3.8	12.3	4.7	9.6
Prop In Lane	1.00		0.29	1.00		0.45	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	371	1411	722	321	1159	567	418	740	605	453	740	603
V/C Ratio(X)	0.78	0.50	0.50	0.32	0.72	0.72	0.32	0.22	0.17	0.27	0.21	0.39
Avail Cap(c_a), veh/h	781	2494	1276	449	1702	833	418	740	605	453	740	603
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	18.0	18.8	18.8	17.2	25.1	25.1	21.9	17.5	17.1	21.6	17.4	18.8
Incr Delay (d2), s/veh	3.6	0.3	0.5	0.6	0.9	1.8	2.0	0.7	0.6	1.5	0.6	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	6.2	6.4	1.6	8.9	8.8	2.7	2.8	1.7	2.4	2.6	4.4
LnGrp Delay(d), s/veh	21.5	19.1	19.4	17.7	25.9	26.8	23.9	18.2	17.7	23.0	18.0	20.8
LnGrp LOS	C	B	B	B	C	C	C	B	B	C	B	C
Approach Vol, veh/h		1351			1351			402			516	
Approach Delay, s/veh		19.7			25.6			19.9			20.5	
Approach LOS		B			C			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		38.0	8.8	39.6		38.0	15.2	33.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		34.0	11.0	63.0		34.0	31.0	43.0
Max Q Clear Time (g_c+I1), s		15.7	5.2	15.2		14.3	10.5	20.6
Green Ext Time (p_c), s		1.8	0.1	8.0		2.2	0.8	8.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.0
HCM 2010 LOS	C

Intersection	
Int Delay, s/veh	233.9

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	70	880	80	180	1100	30	90	20	270	10	10	130
Future Vol, veh/h	70	880	80	180	1100	30	90	20	270	10	10	130
Conflicting Peds, #/hr	0	0	6	6	0	0	0	0	1	1	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	150	-	-	150	-	-	-	-	50	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	72	907	82	186	1134	31	93	21	278	10	10	134

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	1165	0	0	995	0	0	2042	2635	502	2131	2661	583
Stage 1	-	-	-	-	-	-	1098	1098	-	1522	1522	-
Stage 2	-	-	-	-	-	-	944	1537	-	609	1139	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.5	6.5	6.9	7.5	6.5	6.9
Critical Hdwy Stg 1	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.5	5.5	-	6.5	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	607	-	-	703	-	-	~ 34	24	520	29	23	461
Stage 1	-	-	-	-	-	-	230	291	-	126	182	-
Stage 2	-	-	-	-	-	-	286	179	-	454	278	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	607	-	-	699	-	-	~ 8	~ 15	517	-	15	461
Mov Cap-2 Maneuver	-	-	-	-	-	-	~ 8	~ 15	-	-	15	-
Stage 1	-	-	-	-	-	-	202	255	-	111	134	-
Stage 2	-	-	-	-	-	-	137	131	-	170	244	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.8	1.6	$ 1759.1	
HCM LOS			F	-

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	9	517	607	-	-	699	-	-	-
HCM Lane V/C Ratio	12.6	0.538	0.119	-	-	0.265	-	-	-
HCM Control Delay (s/veh)	$ 6028.4	19.8	11.7	-	-	12	-	-	-
HCM Lane LOS	F	C	B	-	-	B	-	-	-
HCM 95th %tile Q(veh)	15.8	3.2	0.4	-	-	1.1	-	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	710	70	30	700	40	120	190	50	40	160	120
Future Volume (veh/h)	100	710	70	30	700	40	120	190	50	40	160	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	102	724	71	31	714	41	122	194	51	41	163	122
Adj No. of Lanes	1	2	1	1	2	1	0	1	1	0	1	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	233	1056	451	197	932	399	52	63	901	45	156	901
Arrive On Green	0.06	0.29	0.29	0.02	0.26	0.26	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	1810	3610	1540	1810	3610	1544	0	112	1611	0	279	1611
Grp Volume(v), veh/h	102	724	71	31	714	41	316	0	51	204	0	122
Grp Sat Flow(s),veh/h/ln	1810	1805	1540	1810	1805	1544	112	0	1611	279	0	1611
Q Serve(g_s), s	3.9	17.1	3.3	1.2	17.6	2.0	0.0	0.0	1.4	0.0	0.0	3.5
Cycle Q Clear(g_c), s	3.9	17.1	3.3	1.2	17.6	2.0	54.0	0.0	1.4	54.0	0.0	3.5
Prop In Lane	1.00		1.00	1.00		1.00	0.39		1.00	0.20		1.00
Lane Grp Cap(c), veh/h	233	1056	451	197	932	399	114	0	901	201	0	901
V/C Ratio(X)	0.44	0.69	0.16	0.16	0.77	0.10	2.76	0.00	0.06	1.01	0.00	0.14
Avail Cap(c_a), veh/h	354	1796	766	267	1571	672	114	0	901	201	0	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.1	30.2	25.3	26.4	33.1	27.3	26.7	0.0	9.7	33.9	0.0	10.1
Incr Delay (d2), s/veh	1.3	0.8	0.2	0.4	1.3	0.1	817.6	0.0	0.1	67.4	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.0	8.7	1.4	0.6	9.0	0.8	27.6	0.0	0.6	7.9	0.0	1.6
LnGrp Delay(d), s/veh	26.4	31.0	25.5	26.7	34.4	27.4	844.3	0.0	9.8	101.4	0.0	10.4
LnGrp LOS	C	C	C	C	C	C	F		A	F		B
Approach Vol, veh/h		897			786			367			326	
Approach Delay, s/veh		30.0			33.8			728.4			67.4	
Approach LOS		C			C			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	6.3	32.2		58.0	9.6	28.9
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	6.0	48.0		54.0	12.0	42.0
Max Q Clear Time (g_c+I1), s		56.0	3.2	19.1		56.0	5.9	19.6
Green Ext Time (p_c), s		0.0	0.0	5.9		0.0	0.1	5.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	144.3
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1240	580	480	1680	170	850	1060	290	230	910	190
Future Volume (veh/h)	290	1240	580	480	1680	170	850	1060	290	230	910	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	309	1319	617	511	1787	181	904	1128	309	245	968	202
Adj No. of Lanes	2	3	0	2	3	1	2	3	1	2	3	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	319	1113	508	434	1840	569	782	1696	517	300	984	298
Arrive On Green	0.09	0.32	0.32	0.13	0.36	0.36	0.22	0.33	0.33	0.09	0.19	0.19
Sat Flow, veh/h	3476	3424	1562	3476	5136	1587	3476	5136	1566	3476	5136	1556
Grp Volume(v), veh/h	309	1319	617	511	1787	181	904	1128	309	245	968	202
Grp Sat Flow(s),veh/h/ln	1738	1712	1562	1738	1712	1587	1738	1712	1566	1738	1712	1556
Q Serve(g_s), s	10.6	39.0	39.0	15.0	41.1	9.9	27.0	22.6	19.8	8.3	22.5	14.5
Cycle Q Clear(g_c), s	10.6	39.0	39.0	15.0	41.1	9.9	27.0	22.6	19.8	8.3	22.5	14.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	1113	508	434	1840	569	782	1696	517	300	984	298
V/C Ratio(X)	0.97	1.19	1.22	1.18	0.97	0.32	1.16	0.67	0.60	0.82	0.98	0.68
Avail Cap(c_a), veh/h	319	1113	508	434	1840	569	782	1696	517	319	984	298
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.3	40.5	40.5	52.5	37.9	27.9	46.5	34.5	33.5	53.9	48.3	45.1
Incr Delay (d2), s/veh	42.2	92.7	113.8	101.0	14.7	0.3	84.4	2.1	5.0	14.4	25.0	11.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.0	32.7	32.8	13.3	21.9	4.4	22.1	11.0	9.3	4.6	12.9	7.2
LnGrp Delay(d), s/veh	96.5	133.2	154.3	153.5	52.6	28.2	130.9	36.6	38.6	68.3	73.3	56.8
LnGrp LOS	F	F	F	F	D	C	F	D	D	E	E	E
Approach Vol, veh/h		2245			2479			2341			1415	
Approach Delay, s/veh		134.0			71.6			73.2			70.1	
Approach LOS		F			E			E			E	

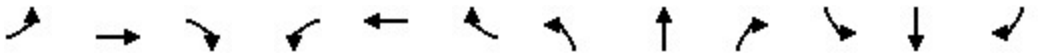
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.4	43.6	19.0	43.0	31.0	27.0	15.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	39.0	15.0	39.0	27.0	23.0	11.0	43.0
Max Q Clear Time (g_c+I1), s	10.3	24.6	17.0	41.0	29.0	24.5	12.6	43.1
Green Ext Time (p_c), s	0.1	7.2	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	88.3
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1430	380	400	1090	250	270	1540	270	340	1670	290
Future Volume (veh/h)	270	1430	380	400	1090	250	270	1540	270	340	1670	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	287	1521	404	426	1160	266	287	1638	287	362	1777	309
Adj No. of Lanes	1	3	0	2	3	1	2	3	1	2	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	302	1293	340	351	1297	394	234	1815	554	351	1703	293
Arrive On Green	0.17	0.32	0.32	0.10	0.25	0.25	0.07	0.35	0.35	0.10	0.38	0.38
Sat Flow, veh/h	1810	4082	1074	3510	5187	1575	3510	5187	1584	3510	4442	764
Grp Volume(v), veh/h	287	1286	639	426	1160	266	287	1638	287	362	1379	707
Grp Sat Flow(s),veh/h/ln	1810	1729	1698	1755	1729	1575	1755	1729	1584	1755	1729	1748
Q Serve(g_s), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	36.0	17.3	12.0	46.0	46.0
Cycle Q Clear(g_c), s	18.9	38.0	38.0	12.0	25.9	18.3	8.0	36.0	17.3	12.0	46.0	46.0
Prop In Lane	1.00		0.63	1.00		1.00	1.00		1.00	1.00		0.44
Lane Grp Cap(c), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	670
V/C Ratio(X)	0.95	1.17	1.19	1.21	0.89	0.68	1.23	0.90	0.52	1.03	1.04	1.06
Avail Cap(c_a), veh/h	302	1095	538	351	1297	394	234	1815	554	351	1326	670
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.5	41.0	41.0	54.0	43.5	40.6	56.0	37.0	31.0	54.0	37.0	37.0
Incr Delay (d2), s/veh	38.9	88.4	101.9	119.5	8.4	4.5	133.6	7.8	3.4	56.3	35.8	50.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.7	31.5	33.0	11.6	13.4	8.5	8.2	18.4	8.1	8.5	28.5	31.5
LnGrp Delay(d), s/veh	88.4	129.4	142.9	173.5	51.8	45.1	189.6	44.8	34.4	110.3	72.8	87.4
LnGrp LOS	F	F	F	F	D	D	F	D	C	F	F	F
Approach Vol, veh/h		2212			1852			2212			2448	
Approach Delay, s/veh		128.0			78.9			62.3			82.5	
Approach LOS		F			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	46.0	16.0	42.0	12.0	50.0	24.0	34.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	42.0	12.0	38.0	8.0	46.0	20.0	30.0
Max Q Clear Time (g_c+I1), s	14.0	38.0	14.0	40.0	10.0	48.0	20.9	27.9
Green Ext Time (p_c), s	0.0	3.3	0.0	0.0	0.0	0.0	0.0	1.5

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		88.1
HCM 2010 LOS		F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	190	30	750	140	470	30	1470	580	260	1390	40
Future Volume (vph)	90	190	30	750	140	470	30	1470	580	260	1390	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00	1.00	0.91	1.00	1.00	0.91	
Frpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	0.97	1.00	1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1805	1900	1615	1715	1745	1560	1805	5187	1594	1805	5158	
Flt Permitted	0.95	1.00	1.00	0.95	0.97	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1805	1900	1615	1715	1745	1560	1805	5187	1594	1805	5158	
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	94	198	31	781	146	490	31	1531	604	271	1448	42
RTOR Reduction (vph)	0	0	27	0	0	262	0	0	350	0	2	0
Lane Group Flow (vph)	94	198	4	461	466	228	31	1531	254	271	1488	0
Confl. Peds. (#/hr)	9					9	6					6
Confl. Bikes (#/hr)						3			1			5
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Split	NA	Perm	Split	NA	Perm	Prot	NA	Perm	Prot	NA	
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases			4			8			2			
Actuated Green, G (s)	15.2	15.2	15.2	33.0	33.0	33.0	5.2	37.7	37.7	19.0	51.5	
Effective Green, g (s)	15.2	15.2	15.2	33.0	33.0	33.0	5.2	37.7	37.7	19.0	51.5	
Actuated g/C Ratio	0.13	0.13	0.13	0.27	0.27	0.27	0.04	0.31	0.31	0.16	0.43	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	226	238	203	468	476	425	77	1617	497	283	2197	
v/s Ratio Prot	0.05	c0.10		c0.27	0.27		0.02	c0.30		c0.15	0.29	
v/s Ratio Perm			0.00			0.15			0.16			
v/c Ratio	0.42	0.83	0.02	0.99	0.98	0.54	0.40	0.95	0.51	0.96	0.68	
Uniform Delay, d1	48.8	51.6	46.3	43.7	43.6	37.4	56.3	40.6	34.1	50.6	28.0	
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.2	21.3	0.0	37.4	35.4	1.3	3.4	12.9	3.7	41.6	0.8	
Delay (s)	50.0	72.9	46.4	81.1	79.0	38.8	59.8	53.5	37.8	92.1	28.8	
Level of Service	D	E	D	F	E	D	E	D	D	F	C	
Approach Delay (s/veh)		63.7			65.8			49.2			38.6	
Approach LOS		E			E			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	50.9	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.6%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	130	60	70	200	530	110	1380	30	580	1160	50
Future Volume (veh/h)	60	130	60	70	200	530	110	1380	30	580	1160	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	61	133	61	71	204	541	112	1408	31	592	1184	51
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	2	2	1
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	110	314	261	187	314	576	139	1893	42	689	2323	1009
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.08	0.53	0.53	0.20	0.65	0.65
Sat Flow, veh/h	719	1881	1562	1191	1881	1552	1792	3574	79	3476	3574	1553
Grp Volume(v), veh/h	61	133	61	71	204	541	112	703	736	592	1184	51
Grp Sat Flow(s),veh/h/ln	719	1881	1562	1191	1881	1552	1792	1787	1866	1738	1787	1553
Q Serve(g_s), s	7.5	7.2	3.9	6.5	11.5	19.0	7.0	34.8	34.9	18.7	19.7	1.4
Cycle Q Clear(g_c), s	19.0	7.2	3.9	13.7	11.5	19.0	7.0	34.8	34.9	18.7	19.7	1.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.04	1.00		1.00
Lane Grp Cap(c), veh/h	110	314	261	187	314	576	139	946	988	689	2323	1009
V/C Ratio(X)	0.55	0.42	0.23	0.38	0.65	0.94	0.80	0.74	0.74	0.86	0.51	0.05
Avail Cap(c_a), veh/h	110	314	261	187	314	576	236	946	988	1007	2323	1009
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	42.5	41.1	48.7	44.3	35.1	51.6	20.8	20.8	44.1	10.4	7.2
Incr Delay (d2), s/veh	5.9	0.9	0.5	1.3	4.7	23.6	10.3	5.3	5.1	5.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.1	3.8	1.7	2.2	6.4	20.2	3.9	18.4	19.2	9.5	10.0	0.6
LnGrp Delay(d), s/veh	59.9	43.4	41.6	49.9	49.0	58.7	61.9	26.0	25.9	49.3	11.2	7.3
LnGrp LOS	E	D	D	D	D	E	E	C	C	D	B	A
Approach Vol, veh/h		255			816			1551			1827	
Approach Delay, s/veh		46.9			55.5			28.6			23.5	
Approach LOS		D			E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	26.6	64.3		23.0	12.9	78.0		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	33.0	56.0		19.0	15.0	74.0		19.0
Max Q Clear Time (g_c+I1), s	20.7	36.9		21.0	9.0	21.7		21.0
Green Ext Time (p_c), s	1.8	9.8		0.0	0.1	11.9		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	800	110	410	1090	300	90	1000	300	260	1020	150
Future Volume (veh/h)	220	800	110	410	1090	300	90	1000	300	260	1020	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	227	825	113	423	1124	309	93	1031	309	268	1052	155
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	225	733	100	374	1132	490	195	966	287	239	1275	188
Arrive On Green	0.09	0.23	0.23	0.17	0.32	0.32	0.05	0.36	0.36	0.10	0.41	0.41
Sat Flow, veh/h	1792	3140	430	1792	3574	1546	1792	2696	801	1792	3101	456
Grp Volume(v), veh/h	227	470	468	423	1124	309	93	681	659	268	605	602
Grp Sat Flow(s),veh/h/ln	1792	1787	1782	1792	1787	1546	1792	1787	1709	1792	1787	1770
Q Serve(g_s), s	11.0	28.0	28.0	21.0	37.6	20.5	3.9	43.0	43.0	12.0	36.2	36.4
Cycle Q Clear(g_c), s	11.0	28.0	28.0	21.0	37.6	20.5	3.9	43.0	43.0	12.0	36.2	36.4
Prop In Lane	1.00		0.24	1.00		1.00	1.00		0.47	1.00		0.26
Lane Grp Cap(c), veh/h	225	417	416	374	1132	490	195	640	613	239	735	728
V/C Ratio(X)	1.01	1.13	1.13	1.13	0.99	0.63	0.48	1.06	1.08	1.12	0.82	0.83
Avail Cap(c_a), veh/h	225	417	416	374	1132	490	200	640	613	239	735	728
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.6	46.0	46.0	36.7	40.9	35.0	27.1	38.5	38.5	36.7	31.4	31.5
Incr Delay (d2), s/veh	61.7	83.1	83.2	87.6	25.0	2.6	1.8	53.4	58.7	94.4	10.1	10.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.6	23.4	23.4	21.4	22.5	9.1	2.0	30.7	30.2	14.2	19.9	19.8
LnGrp Delay(d), s/veh	97.4	129.1	129.2	124.4	65.9	37.6	28.9	91.9	97.2	131.1	41.6	41.9
LnGrp LOS	F	F	F	F	E	D	C	F	F	F	D	D
Approach Vol, veh/h		1165			1856			1433			1475	
Approach Delay, s/veh		122.9			74.5			90.2			58.0	
Approach LOS		F			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.0	47.0	25.0	32.0	9.6	53.4	15.0	42.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	43.0	21.0	28.0	6.0	49.0	11.0	38.0
Max Q Clear Time (g_c+I1), s	14.0	45.0	23.0	30.0	5.9	38.4	13.0	39.6
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	5.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	83.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	110	420	1000	60	140	1100	260	80	1100	80
Future Volume (veh/h)	110	620	110	420	1000	60	140	1100	260	80	1100	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.95	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	116	653	116	442	1053	63	147	1158	274	84	1158	84
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	209	688	283	466	1271	540	199	1466	620	183	1324	96
Arrive On Green	0.06	0.19	0.19	0.22	0.36	0.36	0.06	0.41	0.41	0.04	0.39	0.39
Sat Flow, veh/h	1792	3574	1468	1792	3574	1518	1792	3574	1512	1792	3365	244
Grp Volume(v), veh/h	116	653	116	442	1053	63	147	1158	274	84	614	628
Grp Sat Flow(s),veh/h/ln	1792	1787	1468	1792	1787	1518	1792	1787	1512	1792	1787	1822
Q Serve(g_s), s	6.2	21.6	8.3	24.4	32.2	3.3	5.9	33.8	15.6	3.3	38.0	38.1
Cycle Q Clear(g_c), s	6.2	21.6	8.3	24.4	32.2	3.3	5.9	33.8	15.6	3.3	38.0	38.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.13
Lane Grp Cap(c), veh/h	209	688	283	466	1271	540	199	1466	620	183	703	717
V/C Ratio(X)	0.56	0.95	0.41	0.95	0.83	0.12	0.74	0.79	0.44	0.46	0.87	0.88
Avail Cap(c_a), veh/h	209	688	283	474	1286	546	199	1466	620	198	703	717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.7	47.7	42.3	33.2	35.2	25.9	27.8	30.8	25.4	25.4	33.5	33.5
Incr Delay (d2), s/veh	3.2	22.6	1.0	28.6	4.6	0.1	13.6	4.4	2.3	1.8	14.2	14.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	12.8	3.4	18.1	16.6	1.4	3.6	17.5	6.9	1.7	21.4	22.0
LnGrp Delay(d), s/veh	39.9	70.3	43.3	61.8	39.8	26.0	41.4	35.2	27.7	27.2	47.7	47.7
LnGrp LOS	D	E	D	E	D	C	D	D	C	C	D	D
Approach Vol, veh/h		885			1558			1579			1326	
Approach Delay, s/veh		62.8			45.5			34.5			46.4	
Approach LOS		E			D			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	53.0	30.5	27.0	11.0	51.0	11.0	46.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	48.0	27.0	23.0	7.0	47.0	7.0	43.0
Max Q Clear Time (g_c+I1), s	5.3	35.8	26.4	23.6	7.9	40.1	8.2	34.2
Green Ext Time (p_c), s	0.0	7.0	0.1	0.0	0.0	4.4	0.0	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	280	100	80	370	200	100	1170	180	180	1410	70
Future Volume (veh/h)	140	280	100	80	370	200	100	1170	180	180	1410	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.99	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	144	289	103	82	381	206	103	1206	186	186	1454	72
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	40	26	732	35	109	723	121	1311	570	212	1459	622
Arrive On Green	0.46	0.46	0.46	0.46	0.46	0.46	0.03	0.37	0.37	0.08	0.41	0.41
Sat Flow, veh/h	0	56	1597	0	238	1578	1792	3574	1556	1792	3574	1524
Grp Volume(v), veh/h	433	0	103	463	0	206	103	1206	186	186	1454	72
Grp Sat Flow(s),veh/h/ln	56	0	1597	238	0	1578	1792	1787	1556	1792	1787	1524
Q Serve(g_s), s	0.0	0.0	4.5	0.0	0.0	9.8	4.0	38.7	10.3	7.5	48.7	3.5
Cycle Q Clear(g_c), s	55.0	0.0	4.5	55.0	0.0	9.8	4.0	38.7	10.3	7.5	48.7	3.5
Prop In Lane	0.33		1.00	0.18		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	66	0	732	145	0	723	121	1311	570	212	1459	622
V/C Ratio(X)	6.60	0.00	0.14	3.20	0.00	0.28	0.85	0.92	0.33	0.88	1.00	0.12
Avail Cap(c_a), veh/h	66	0	732	145	0	723	121	1311	570	212	1459	622
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	38.8	0.0	18.8	39.8	0.0	20.2	33.3	36.3	27.3	28.2	35.4	22.0
Incr Delay (d2), s/veh	2549.8	0.0	0.1	1009.3	0.0	0.2	41.3	11.9	1.5	31.7	22.7	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	48.7	0.0	2.0	44.1	0.0	4.3	3.5	21.3	4.7	5.5	28.6	1.5
LnGrp Delay(d), s/veh	2588.6	0.0	18.9	1049.1	0.0	20.5	74.7	48.2	28.9	59.9	58.1	22.4
LnGrp LOS	F		B	F		C	E	D	C	E	E	C
Approach Vol, veh/h		536			669			1495			1712	
Approach Delay, s/veh		2094.8			732.3			47.6			56.8	
Approach LOS		F			F			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	13.0	48.0		59.0	8.0	53.0		59.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	9.0	44.0		55.0	4.0	49.0		55.0
Max Q Clear Time (g_c+I1), s	9.5	40.7		57.0	6.0	50.7		57.0
Green Ext Time (p_c), s	0.0	2.4		0.0	0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		403.7
HCM 2010 LOS		F

Intersection	
Int Delay, s/veh	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	0	0	20	0	0	20	0	1440	30	0	1630	20
Future Vol, veh/h	0	0	20	0	0	20	0	1440	30	0	1630	20
Conflicting Peds, #/hr	0	0	0	0	0	0	8	0	6	6	0	8
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Free	Free	Free	Free	Free	Free
RT Channelized	-	-	Stop	-	-	Stop	-	-	Free	-	-	Free
Storage Length	-	-	0	-	-	0	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	97	97	97	97	97	97	97	97	97	97	97	97
Heavy Vehicles, %	1	1	1	1	1	1	1	1	1	1	1	1
Mvmt Flow	0	0	21	0	0	21	0	1485	31	0	1680	21

Major/Minor	Minor2			Minor1			Major1			Major2		
Conflicting Flow All	-	-	840	-	-	743	-	0	-	-	-	0
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy	-	-	6.92	-	-	6.92	-	-	-	-	-	-
Critical Hdwy Stg 1	-	-	-	-	-	-	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-	-	-	-	-	-	-
Follow-up Hdwy	-	-	3.31	-	-	3.31	-	-	-	-	-	-
Pot Cap-1 Maneuver	0	0	311	0	0	360	0	-	0	0	-	0
Stage 1	0	0	-	0	0	-	0	-	0	0	-	0
Stage 2	0	0	-	0	0	-	0	-	0	0	-	0
Platoon blocked, %								-			-	
Mov Cap-1 Maneuver	-	-	311	-	-	360	-	-	-	-	-	-
Mov Cap-2 Maneuver	-	-	-	-	-	-	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-	-	-	-	-	-	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	17.4	15.6	0	0
HCM LOS	C	C		

Minor Lane/Major Mvmt	NBT	EBLn1	WBLn1	SBT
Capacity (veh/h)	-	311	360	-
HCM Lane V/C Ratio	-	0.066	0.057	-
HCM Control Delay (s/veh)	-	17.4	15.6	-
HCM Lane LOS	-	C	C	-
HCM 95th %tile Q(veh)	-	0.2	0.2	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	670	220	340	800	250	300	1550	480	310	1330	210
Future Volume (veh/h)	240	670	220	340	800	250	300	1550	480	310	1330	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.90	1.00		0.95	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	242	677	222	343	808	253	303	1566	485	313	1343	212
Adj No. of Lanes	2	3	1	2	2	1	2	2	1	2	3	0
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	261	998	271	397	834	334	366	1668	712	319	2011	317
Arrive On Green	0.08	0.19	0.19	0.11	0.23	0.23	0.11	0.47	0.47	0.09	0.45	0.45
Sat Flow, veh/h	3476	5136	1396	3476	3574	1432	3476	3574	1526	3476	4437	700
Grp Volume(v), veh/h	242	677	222	343	808	253	303	1566	485	313	1036	519
Grp Sat Flow(s),veh/h/ln	1738	1712	1396	1738	1787	1432	1738	1787	1526	1738	1712	1714
Q Serve(g_s), s	8.3	14.7	18.3	11.6	26.9	19.7	10.3	49.9	29.8	10.8	28.5	28.5
Cycle Q Clear(g_c), s	8.3	14.7	18.3	11.6	26.9	19.7	10.3	49.9	29.8	10.8	28.5	28.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.41
Lane Grp Cap(c), veh/h	261	998	271	397	834	334	366	1668	712	319	1551	776
V/C Ratio(X)	0.93	0.68	0.82	0.86	0.97	0.76	0.83	0.94	0.68	0.98	0.67	0.67
Avail Cap(c_a), veh/h	261	998	271	406	834	334	463	1668	712	319	1551	776
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	44.9	46.3	52.2	45.6	42.8	52.6	30.4	25.0	54.4	25.7	25.7
Incr Delay (d2), s/veh	37.0	1.9	17.7	17.2	23.7	9.5	9.7	11.6	5.2	45.5	2.3	4.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	7.1	8.4	6.5	16.0	8.7	5.4	27.3	13.6	7.2	13.9	14.4
LnGrp Delay(d), s/veh	92.2	46.7	64.0	69.4	69.3	52.4	62.3	42.0	30.2	99.9	28.0	30.3
LnGrp LOS	F	D	E	E	E	D	E	D	C	F	C	C
Approach Vol, veh/h		1141			1404			2354			1868	
Approach Delay, s/veh		59.7			66.3			42.2			40.7	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	60.0	17.7	27.3	16.6	58.4	13.0	32.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	56.0	14.0	23.0	16.0	51.0	9.0	28.0
Max Q Clear Time (g_c+I1), s	12.8	51.9	13.6	20.3	12.3	30.5	10.3	28.9
Green Ext Time (p_c), s	0.0	3.5	0.1	1.4	0.4	10.7	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	180	470	220	90	2120	0	0	1390	810
Future Volume (veh/h)	0	0	0	180	470	220	90	2120	0	0	1390	810
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				184	480	224	92	2163	0	0	1418	827
Adj No. of Lanes				1	2	1	2	3	0	0	3	0
Peak Hour Factor				0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				321	640	286	145	3853	0	0	2306	1052
Arrive On Green				0.18	0.18	0.18	0.04	0.75	0.00	0.00	0.67	0.67
Sat Flow, veh/h				1792	3574	1596	3476	5305	0	0	3593	1562
Grp Volume(v), veh/h				184	480	224	92	2163	0	0	1418	827
Grp Sat Flow(s),veh/h/ln				1792	1787	1596	1738	1712	0	0	1712	1562
Q Serve(g_s), s				10.6	14.4	15.2	3.0	20.6	0.0	0.0	26.2	41.6
Cycle Q Clear(g_c), s				10.6	14.4	15.2	3.0	20.6	0.0	0.0	26.2	41.6
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				321	640	286	145	3853	0	0	2306	1052
V/C Ratio(X)				0.57	0.75	0.78	0.64	0.56	0.00	0.00	0.62	0.79
Avail Cap(c_a), veh/h				427	852	380	215	3853	0	0	2306	1052
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				42.5	44.1	44.4	53.4	6.1	0.0	0.0	10.3	12.8
Incr Delay (d2), s/veh				1.6	2.6	7.5	4.6	0.6	0.0	0.0	1.2	5.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				5.4	7.4	7.3	1.5	9.8	0.0	0.0	12.6	19.4
LnGrp Delay(d), s/veh				44.2	46.7	51.9	58.0	6.7	0.0	0.0	11.6	18.8
LnGrp LOS				D	D	D	E	A			B	B
Approach Vol, veh/h					888			2255			2245	
Approach Delay, s/veh					47.5			8.8			14.2	
Approach LOS					D			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		89.0			8.7	80.3		24.3
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		85.0			7.0	74.0		27.0
Max Q Clear Time (g_c+I1), s		22.6			5.0	43.6		17.2
Green Ext Time (p_c), s		31.2			0.0	21.4		3.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	17.4
HCM 2010 LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	1180	370	200	0	0	0	0	1280	210	270	1270	0
Future Volume (veh/h)	1180	370	200	0	0	0	0	1280	210	270	1270	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881				0	1881	1881	1881	1881	0
Adj Flow Rate, veh/h	1204	378	204				0	1306	214	276	1296	0
Adj No. of Lanes	2	1	1				0	3	1	2	3	0
Peak Hour Factor	0.98	0.98	0.98				0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1				0	1	1	1	1	0
Cap, veh/h	1388	751	639				0	2024	616	344	2716	0
Arrive On Green	0.40	0.40	0.40				0.00	0.39	0.39	0.10	0.53	0.00
Sat Flow, veh/h	3476	1881	1599				0	5305	1563	3476	5305	0
Grp Volume(v), veh/h	1204	378	204				0	1306	214	276	1296	0
Grp Sat Flow(s),veh/h/ln	1738	1881	1599				0	1712	1563	1738	1712	0
Q Serve(g_s), s	35.5	16.8	9.8				0.0	23.0	10.7	8.7	17.7	0.0
Cycle Q Clear(g_c), s	35.5	16.8	9.8				0.0	23.0	10.7	8.7	17.7	0.0
Prop In Lane	1.00		1.00				0.00		1.00	1.00		0.00
Lane Grp Cap(c), veh/h	1388	751	639				0	2024	616	344	2716	0
V/C Ratio(X)	0.87	0.50	0.32				0.00	0.65	0.35	0.80	0.48	0.00
Avail Cap(c_a), veh/h	1652	894	760				0	2024	616	467	2716	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	30.8	25.2	23.1				0.0	27.5	23.7	49.2	16.6	0.0
Incr Delay (d2), s/veh	4.5	0.5	0.3				0.0	1.6	1.5	7.1	0.6	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	17.8	8.8	4.4				0.0	11.2	4.9	4.5	8.6	0.0
LnGrp Delay(d), s/veh	35.3	25.7	23.4				0.0	29.1	25.3	56.2	17.2	0.0
LnGrp LOS	D	C	C					C	C	E	B	
Approach Vol, veh/h		1786						1520			1572	
Approach Delay, s/veh		31.9						28.5			24.0	
Approach LOS		C						C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	15.0	48.0		48.5		63.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	15.0	40.0		53.0		59.0		
Max Q Clear Time (g_c+I1), s	10.7	25.0		37.5		19.7		
Green Ext Time (p_c), s	0.4	8.5		7.0		11.5		

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		28.3	
HCM 2010 LOS		C	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	570	1710	120	480	1170	230	110	990	530	220	720	290
Future Volume (veh/h)	570	1710	120	480	1170	230	110	990	530	220	720	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	600	1800	126	505	1232	242	116	1042	558	232	758	305
Adj No. of Lanes	2	3	1	2	3	1	1	2	1	2	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
Arrive On Green	0.19	0.34	0.34	0.15	0.30	0.30	0.08	0.31	0.31	0.07	0.30	0.30
Sat Flow, veh/h	3510	5187	1592	3510	5187	1612	1810	3610	1590	3510	3610	1585
Grp Volume(v), veh/h	600	1800	126	505	1232	242	116	1042	558	232	758	305
Grp Sat Flow(s),veh/h/ln	1755	1729	1592	1755	1729	1612	1810	1805	1590	1755	1805	1585
Q Serve(g_s), s	20.1	41.0	6.8	17.1	26.0	14.8	7.6	33.7	35.1	7.9	22.4	14.7
Cycle Q Clear(g_c), s	20.1	41.0	6.8	17.1	26.0	14.8	7.6	33.7	35.1	7.9	22.4	14.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	660	1772	544	527	1574	489	142	1113	733	234	1071	774
V/C Ratio(X)	0.91	1.02	0.23	0.96	0.78	0.49	0.82	0.94	0.76	0.99	0.71	0.39
Avail Cap(c_a), veh/h	702	1772	544	527	1574	489	166	1113	733	234	1071	774
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.7	39.5	28.2	50.6	38.2	34.2	54.5	40.4	27.1	56.0	37.6	19.7
Incr Delay (d2), s/veh	15.2	25.4	0.2	29.1	2.6	0.8	23.4	15.4	7.4	56.3	4.0	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.1	23.7	3.0	10.4	12.8	6.7	4.7	19.2	16.8	5.7	11.7	6.7
LnGrp Delay(d), s/veh	62.9	64.9	28.5	79.7	40.8	35.0	77.9	55.8	34.5	112.2	41.5	21.2
LnGrp LOS	E	F	C	E	D	D	E	E	C	F	D	C
Approach Vol, veh/h		2526			1979			1716			1295	
Approach Delay, s/veh		62.6			50.0			50.3			49.4	
Approach LOS		E			D			D			D	

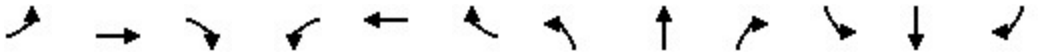
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	41.0	22.0	45.0	13.4	39.6	26.6	40.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	37.0	18.0	41.0	11.0	34.0	24.0	35.0
Max Q Clear Time (g_c+I1), s	9.9	37.1	19.1	43.0	9.6	24.4	22.1	28.0
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	4.0	0.5	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	870	150	550	1190	210	140	780	300	140	540	150
Future Volume (veh/h)	220	870	150	550	1190	210	140	780	300	140	540	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.86	1.00		0.87	1.00		0.83	1.00		0.83
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	242	956	165	604	1308	231	154	857	330	154	593	165
Adj No. of Lanes	1	2	0	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	269	1037	179	647	1380	538	215	999	371	191	736	204
Arrive On Green	0.15	0.35	0.35	0.18	0.38	0.38	0.06	0.28	0.28	0.06	0.28	0.28
Sat Flow, veh/h	1810	2997	516	3510	3610	1407	1810	3610	1340	1810	2660	736
Grp Volume(v), veh/h	242	575	546	604	1308	231	154	857	330	154	401	357
Grp Sat Flow(s),veh/h/ln	1810	1805	1708	1755	1805	1407	1810	1805	1340	1810	1805	1591
Q Serve(g_s), s	15.7	36.5	36.6	20.2	41.9	14.5	7.0	26.9	28.2	7.0	24.7	24.9
Cycle Q Clear(g_c), s	15.7	36.5	36.6	20.2	41.9	14.5	7.0	26.9	28.2	7.0	24.7	24.9
Prop In Lane	1.00		0.30	1.00		1.00	1.00		1.00	1.00		0.46
Lane Grp Cap(c), veh/h	269	625	591	647	1380	538	215	999	371	191	499	440
V/C Ratio(X)	0.90	0.92	0.92	0.93	0.95	0.43	0.72	0.86	0.89	0.81	0.80	0.81
Avail Cap(c_a), veh/h	273	636	601	647	1392	543	215	999	371	191	499	440
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	37.4	37.5	47.9	35.7	27.2	33.2	40.9	41.4	34.0	40.1	40.2
Incr Delay (d2), s/veh	30.0	18.7	19.8	20.6	13.6	0.5	10.8	9.5	25.9	21.7	12.9	14.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	21.5	20.5	11.7	23.5	5.7	4.2	14.6	13.1	4.7	14.1	12.7
LnGrp Delay(d), s/veh	79.9	56.1	57.3	68.5	49.3	27.8	44.0	50.4	67.3	55.7	53.0	55.1
LnGrp LOS	E	E	E	E	D	C	D	D	E	E	D	E
Approach Vol, veh/h		1363			2143			1341			912	
Approach Delay, s/veh		60.8			52.4			53.8			54.3	
Approach LOS		E			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	37.0	26.0	45.3	11.0	37.0	21.7	49.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	33.0	22.0	42.0	7.0	33.0	18.0	46.0
Max Q Clear Time (g_c+I1), s	9.0	30.2	22.2	38.6	9.0	26.9	17.7	43.9
Green Ext Time (p_c), s	0.0	1.8	0.0	2.2	0.0	2.5	0.0	1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	55.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	510	280	590	870	160	450	900	490	110	980	190
Future Volume (veh/h)	120	510	280	590	870	160	450	900	490	110	980	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.96	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	125	531	292	615	906	167	469	938	510	115	1021	198
Adj No. of Lanes	1	2	1	2	2	1	1	2	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	134	536	225	608	894	385	433	1730	756	274	993	192
Arrive On Green	0.08	0.15	0.15	0.17	0.25	0.25	0.21	0.48	0.48	0.06	0.33	0.33
Sat Flow, veh/h	1792	3574	1499	3476	3574	1541	1792	3574	1561	1792	2979	576
Grp Volume(v), veh/h	125	531	292	615	906	167	469	938	510	115	612	607
Grp Sat Flow(s),veh/h/ln	1792	1787	1499	1738	1787	1541	1792	1787	1561	1792	1787	1768
Q Serve(g_s), s	8.3	17.8	18.0	21.0	30.0	10.9	25.0	22.0	30.1	5.0	40.0	40.0
Cycle Q Clear(g_c), s	8.3	17.8	18.0	21.0	30.0	10.9	25.0	22.0	30.1	5.0	40.0	40.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.33
Lane Grp Cap(c), veh/h	134	536	225	608	894	385	433	1730	756	274	596	589
V/C Ratio(X)	0.93	0.99	1.30	1.01	1.01	0.43	1.08	0.54	0.68	0.42	1.03	1.03
Avail Cap(c_a), veh/h	134	536	225	608	894	385	433	1730	756	305	596	589
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	50.9	51.0	49.5	45.0	37.9	38.4	21.6	23.7	23.9	40.0	40.0
Incr Delay (d2), s/veh	56.7	36.3	162.9	39.3	33.6	0.8	67.2	1.2	4.8	1.0	43.9	45.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	11.5	17.6	13.4	18.9	4.7	22.4	11.1	13.9	2.5	27.0	26.9
LnGrp Delay(d), s/veh	111.9	87.2	213.9	88.8	78.6	38.6	105.7	22.9	28.5	24.9	83.9	85.2
LnGrp LOS	F	F	F	F	F	D	F	C	C	C	F	F
Approach Vol, veh/h		948			1688			1917			1334	
Approach Delay, s/veh		129.5			78.4			44.6			79.4	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.9	62.1	25.0	22.0	29.0	44.0	13.0	34.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	56.0	21.0	18.0	25.0	40.0	9.0	30.0
Max Q Clear Time (g_c+I1), s	7.0	32.1	23.0	20.0	27.0	42.0	10.3	32.0
Green Ext Time (p_c), s	0.0	9.1	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	0	340	30	10	10	270	1720	60	10	1700	150
Future Volume (veh/h)	100	0	340	30	10	10	270	1720	60	10	1700	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1900
Adj Flow Rate, veh/h	106	0	362	32	11	11	287	1830	64	11	1809	160
Adj No. of Lanes	1	1	0	1	1	0	1	2	1	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	273	0	258	61	140	140	316	2592	1121	185	2017	175
Arrive On Green	0.16	0.00	0.16	0.16	0.16	0.16	0.13	0.73	0.73	0.01	0.61	0.61
Sat Flow, veh/h	1395	0	1594	1026	863	863	1792	3574	1546	1792	3317	288
Grp Volume(v), veh/h	106	0	362	32	0	22	287	1830	64	11	959	1010
Grp Sat Flow(s),veh/h/ln	1395	0	1594	1026	0	1727	1792	1787	1546	1792	1787	1818
Q Serve(g_s), s	8.2	0.0	19.0	0.0	0.0	1.3	12.7	33.8	1.4	0.3	53.2	57.4
Cycle Q Clear(g_c), s	9.4	0.0	19.0	19.0	0.0	1.3	12.7	33.8	1.4	0.3	53.2	57.4
Prop In Lane	1.00		1.00	1.00		0.50	1.00		1.00	1.00		0.16
Lane Grp Cap(c), veh/h	273	0	258	61	0	280	316	2592	1121	185	1087	1105
V/C Ratio(X)	0.39	0.00	1.40	0.52	0.00	0.08	0.91	0.71	0.06	0.06	0.88	0.91
Avail Cap(c_a), veh/h	273	0	258	61	0	280	363	2592	1121	228	1087	1105
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	49.1	58.6	0.0	41.7	38.7	9.1	4.6	10.4	19.4	20.3
Incr Delay (d2), s/veh	0.9	0.0	202.1	7.7	0.0	0.1	23.9	1.6	0.1	0.1	10.4	12.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	0.0	22.8	1.2	0.0	0.6	11.2	17.1	0.6	0.1	29.3	32.6
LnGrp Delay(d), s/veh	46.6	0.0	251.2	66.3	0.0	41.8	62.6	10.7	4.7	10.5	29.9	33.2
LnGrp LOS	D		F	E		D	E	B	A	B	C	C
Approach Vol, veh/h		468			54			2181			1980	
Approach Delay, s/veh		204.9			56.3			17.4			31.4	
Approach LOS		F			E			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	5.2	89.0		23.0	18.9	75.3		23.0
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	4.0	85.0		19.0	18.0	71.0		19.0
Max Q Clear Time (g_c+I1), s	2.3	35.8		21.0	14.7	59.4		21.0
Green Ext Time (p_c), s	0.0	23.6		0.0	0.3	9.3		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		42.5
HCM 2010 LOS		D

Intersection	
Int Delay, s/veh	4.3

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	10	10	10	20	20	10
Future Vol, veh/h	10	10	10	20	20	10
Conflicting Peds, #/hr	0	10	10	0	1	1
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	0	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	59	59	59	59	59	59
Heavy Vehicles, %	0	0	0	0	0	0
Mvmt Flow	17	17	17	34	34	17

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	44	0	105	37
Stage 1	-	-	-	-	36	-
Stage 2	-	-	-	-	69	-
Critical Hdwy	-	-	4.1	-	6.4	6.2
Critical Hdwy Stg 1	-	-	-	-	5.4	-
Critical Hdwy Stg 2	-	-	-	-	5.4	-
Follow-up Hdwy	-	-	2.2	-	3.5	3.3
Pot Cap-1 Maneuver	-	-	1577	-	898	1041
Stage 1	-	-	-	-	992	-
Stage 2	-	-	-	-	959	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1564	-	880	1031
Mov Cap-2 Maneuver	-	-	-	-	880	-
Stage 1	-	-	-	-	984	-
Stage 2	-	-	-	-	947	-

Approach	EB	WB	NB
HCM Control Delay, s/v	0	2.4	9.1
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	NBLn2	EBT	EBR	WBL	WBT
Capacity (veh/h)	880	1031	-	-	1564	-
HCM Lane V/C Ratio	0.039	0.016	-	-	0.011	-
HCM Control Delay (s/veh)	9.3	8.6	-	-	7.3	0
HCM Lane LOS	A	A	-	-	A	A
HCM 95th %tile Q(veh)	0.1	0.1	-	-	0	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	810	190	250	770	290	290	1350	80	280	1490	230
Future Volume (veh/h)	290	810	190	250	770	290	290	1350	80	280	1490	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.95	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	293	818	192	253	778	293	293	1364	81	283	1505	232
Adj No. of Lanes	1	3	0	2	2	0	1	2	1	1	2	1
Peak Hour Factor	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	239	1244	289	314	646	243	209	1370	593	225	1400	607
Arrive On Green	0.13	0.30	0.30	0.09	0.26	0.26	0.08	0.38	0.38	0.09	0.39	0.39
Sat Flow, veh/h	1792	4129	960	3476	2502	942	1792	3574	1547	1792	3574	1551
Grp Volume(v), veh/h	293	677	333	253	555	516	293	1364	81	283	1505	232
Grp Sat Flow(s),veh/h/ln	1792	1712	1666	1738	1787	1657	1792	1787	1547	1792	1787	1551
Q Serve(g_s), s	16.0	20.7	20.9	8.6	31.0	31.0	10.0	45.7	4.1	11.0	47.0	12.8
Cycle Q Clear(g_c), s	16.0	20.7	20.9	8.6	31.0	31.0	10.0	45.7	4.1	11.0	47.0	12.8
Prop In Lane	1.00		0.58	1.00		0.57	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	239	1032	502	314	462	428	209	1370	593	225	1400	607
V/C Ratio(X)	1.23	0.66	0.66	0.81	1.20	1.20	1.40	1.00	0.14	1.26	1.08	0.38
Avail Cap(c_a), veh/h	239	1032	502	406	462	428	209	1370	593	225	1400	607
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	36.5	36.6	53.5	44.5	44.5	35.2	36.9	24.1	35.9	36.5	26.1
Incr Delay (d2), s/veh	133.2	1.5	3.3	8.9	110.5	112.3	206.2	23.3	0.5	146.2	47.0	1.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	16.7	10.0	10.1	4.5	29.4	27.5	18.9	27.0	1.8	16.6	32.3	5.8
LnGrp Delay(d), s/veh	185.2	38.0	39.9	62.4	155.0	156.8	241.4	60.2	24.6	182.2	83.5	27.9
LnGrp LOS	F	D	D	E	F	F	F	E	C	F	F	C
Approach Vol, veh/h		1303			1324			1738			2020	
Approach Delay, s/veh		71.6			138.0			89.1			91.0	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	15.0	50.0	14.8	40.2	14.0	51.0	20.0	35.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	46.0	14.0	33.0	10.0	47.0	16.0	31.0
Max Q Clear Time (g_c+I1), s	13.0	47.7	10.6	22.9	12.0	49.0	18.0	33.0
Green Ext Time (p_c), s	0.0	0.0	0.3	4.5	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	96.2
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	240	350	690	110	1320	0	0	1690	390
Future Volume (veh/h)	0	0	0	240	350	690	110	1320	0	0	1690	390
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.98
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1900	1881	1881	1881	1881	0	0	1881	1900
Adj Flow Rate, veh/h				250	365	719	115	1375	0	0	1760	406
Adj No. of Lanes				0	2	1	1	3	0	0	3	0
Peak Hour Factor				0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %				1	1	1	1	1	0	0	1	1
Cap, veh/h				569	900	653	119	2696	0	0	1773	401
Arrive On Green				0.41	0.41	0.41	0.07	0.52	0.00	0.00	0.43	0.43
Sat Flow, veh/h				1394	2205	1599	1792	5305	0	0	4342	944
Grp Volume(v), veh/h				325	290	719	115	1375	0	0	1438	728
Grp Sat Flow(s),veh/h/ln				1811	1787	1599	1792	1712	0	0	1712	1693
Q Serve(g_s), s				15.5	13.8	49.0	7.7	20.8	0.0	0.0	50.0	51.0
Cycle Q Clear(g_c), s				15.5	13.8	49.0	7.7	20.8	0.0	0.0	50.0	51.0
Prop In Lane				0.77		1.00	1.00		0.00	0.00		0.56
Lane Grp Cap(c), veh/h				740	730	653	119	2696	0	0	1455	719
V/C Ratio(X)				0.44	0.40	1.10	0.96	0.51	0.00	0.00	0.99	1.01
Avail Cap(c_a), veh/h				740	730	653	119	2696	0	0	1455	719
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				25.6	25.1	35.5	55.9	18.5	0.0	0.0	34.2	34.5
Incr Delay (d2), s/veh				0.4	0.4	66.2	70.5	0.7	0.0	0.0	21.0	36.6
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				7.8	6.8	33.6	6.1	10.0	0.0	0.0	27.8	31.1
LnGrp Delay(d), s/veh				26.0	25.4	101.7	126.3	19.2	0.0	0.0	55.2	71.1
LnGrp LOS				C	C	F	F	B			E	F
Approach Vol, veh/h					1334			1490			2166	
Approach Delay, s/veh					66.7			27.5			60.5	
Approach LOS					E			C			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		67.0			12.0	55.0		53.0
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		63.0			8.0	51.0		49.0
Max Q Clear Time (g_c+I1), s		22.8			9.7	53.0		51.0
Green Ext Time (p_c), s		12.6			0.0	0.0		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		52.3
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	420	70	0	0	0	0	1240	400	780	1140	0
Future Volume (veh/h)	320	420	70	0	0	0	0	1240	400	780	1140	0
Number	7	4	14				5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0				0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00				1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863				0	1863	1900	1863	1863	0
Adj Flow Rate, veh/h	330	433	72				0	1278	412	804	1175	0
Adj No. of Lanes	0	2	1				0	3	0	2	2	0
Peak Hour Factor	0.97	0.97	0.97				0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2				0	2	2	2	2	0
Cap, veh/h	444	442	396				0	1507	484	868	2418	0
Arrive On Green	0.25	0.25	0.25				0.00	0.40	0.40	0.25	0.68	0.00
Sat Flow, veh/h	1774	1770	1583				0	3958	1218	3442	3632	0
Grp Volume(v), veh/h	330	433	72				0	1143	547	804	1175	0
Grp Sat Flow(s),veh/h/ln	1774	1770	1583				0	1695	1618	1721	1770	0
Q Serve(g_s), s	20.6	29.2	4.3				0.0	36.8	36.9	27.3	18.9	0.0
Cycle Q Clear(g_c), s	20.6	29.2	4.3				0.0	36.8	36.9	27.3	18.9	0.0
Prop In Lane	1.00		1.00				0.00		0.75	1.00		0.00
Lane Grp Cap(c), veh/h	444	442	396				0	1348	644	868	2418	0
V/C Ratio(X)	0.74	0.98	0.18				0.00	0.85	0.85	0.93	0.49	0.00
Avail Cap(c_a), veh/h	444	442	396				0	1348	644	918	2418	0
HCM Platoon Ratio	1.00	1.00	1.00				1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00				0.00	1.00	1.00	1.00	1.00	0.00
Uniform Delay (d), s/veh	41.5	44.7	35.4				0.0	32.8	32.9	43.8	9.0	0.0
Incr Delay (d2), s/veh	6.7	37.1	0.2				0.0	6.8	13.3	14.5	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0				0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	18.8	1.9				0.0	18.4	18.8	14.7	9.4	0.0
LnGrp Delay(d), s/veh	48.1	81.8	35.6				0.0	39.6	46.2	58.3	9.7	0.0
LnGrp LOS	D	F	D					D	D	E	A	
Approach Vol, veh/h		835						1690			1979	
Approach Delay, s/veh		64.5						41.7			29.4	
Approach LOS		E						D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4		6		
Phs Duration (G+Y+Rc), s	34.3	51.7		34.0		86.0		
Change Period (Y+Rc), s	4.0	4.0		4.0		4.0		
Max Green Setting (Gmax), s	32.0	46.0		30.0		82.0		
Max Q Clear Time (g_c+I1), s	29.3	38.9		31.2		20.9		
Green Ext Time (p_c), s	0.9	5.3		0.0		11.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1360	110	200	2560	140	120	120	130	110	120	70
Future Volume (veh/h)	60	1360	110	200	2560	140	120	120	130	110	120	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.96	0.97		0.93	0.97		0.93
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	62	1417	115	208	2667	146	125	125	135	115	125	73
Adj No. of Lanes	1	2	0	1	2	0	1	1	1	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	113	2165	175	295	2327	126	210	254	201	201	296	158
Arrive On Green	0.03	0.64	0.64	0.06	0.67	0.67	0.03	0.13	0.13	0.03	0.13	0.13
Sat Flow, veh/h	1810	3377	273	1810	3476	188	1810	1900	1502	1810	2209	1179
Grp Volume(v), veh/h	62	754	778	208	1370	1443	125	125	135	115	100	98
Grp Sat Flow(s),veh/h/ln	1810	1805	1845	1810	1805	1859	1810	1900	1502	1810	1805	1583
Q Serve(g_s), s	1.4	30.8	31.3	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Cycle Q Clear(g_c), s	1.4	30.8	31.3	4.5	80.0	80.0	4.0	7.3	10.2	4.0	6.1	6.8
Prop In Lane	1.00		0.15	1.00		0.10	1.00		1.00	1.00		0.74
Lane Grp Cap(c), veh/h	113	1157	1183	295	1208	1244	210	254	201	201	242	212
V/C Ratio(X)	0.55	0.65	0.66	0.70	1.13	1.16	0.60	0.49	0.67	0.57	0.41	0.46
Avail Cap(c_a), veh/h	121	1157	1183	464	1208	1244	210	254	201	201	242	212
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.3	13.2	13.3	16.9	19.7	19.7	48.0	48.0	49.2	47.6	47.4	47.8
Incr Delay (d2), s/veh	4.5	1.3	1.3	3.1	71.0	81.0	4.5	6.6	16.4	3.8	5.2	7.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	15.5	16.2	4.8	63.1	68.4	3.8	4.3	5.2	3.5	3.4	3.4
LnGrp Delay(d), s/veh	35.7	14.5	14.7	19.9	90.8	100.7	52.5	54.6	65.7	51.4	52.6	54.9
LnGrp LOS	D	B	B	B	F	F	D	D	E	D	D	D
Approach Vol, veh/h		1594			3021			385			313	
Approach Delay, s/veh		15.4			90.6			57.8			52.9	
Approach LOS		B			F			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	20.0	10.9	80.6	8.0	20.0	7.5	84.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	16.0	18.0	66.0	4.0	16.0	4.0	80.0
Max Q Clear Time (g_c+I1), s	6.0	12.2	6.5	33.3	6.0	8.8	3.4	82.0
Green Ext Time (p_c), s	0.0	0.4	0.4	13.5	0.0	0.6	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	63.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Future Volume (veh/h)	220	800	130	30	1160	50	140	100	20	90	100	240
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	224	816	133	31	1184	51	143	102	20	92	102	245
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	295	1480	241	293	1436	62	337	832	159	493	454	397
Arrive On Green	0.09	0.48	0.48	0.02	0.41	0.41	0.08	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1810	3100	505	1810	3526	152	1810	3015	575	1810	1805	1581
Grp Volume(v), veh/h	224	475	474	31	606	629	143	60	62	92	102	245
Grp Sat Flow(s),veh/h/ln	1810	1805	1800	1810	1805	1872	1810	1805	1784	1810	1805	1581
Q Serve(g_s), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Cycle Q Clear(g_c), s	6.4	17.6	17.6	0.9	28.2	28.3	5.4	2.3	2.5	3.5	4.2	12.9
Prop In Lane	1.00		0.28	1.00		0.08	1.00		0.32	1.00		1.00
Lane Grp Cap(c), veh/h	295	861	859	293	735	763	337	498	492	493	454	397
V/C Ratio(X)	0.76	0.55	0.55	0.11	0.82	0.83	0.42	0.12	0.13	0.19	0.22	0.62
Avail Cap(c_a), veh/h	529	1303	1300	328	977	1014	426	498	492	512	454	397
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.8	17.5	17.5	16.2	24.9	24.9	23.8	25.5	25.6	24.0	28.0	31.2
Incr Delay (d2), s/veh	4.0	0.6	0.6	0.2	4.4	4.3	0.8	0.5	0.5	0.2	1.1	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	8.8	8.8	0.5	14.9	15.4	2.7	1.2	1.3	1.8	2.2	6.4
LnGrp Delay(d), s/veh	23.8	18.0	18.0	16.4	29.3	29.2	24.7	26.0	26.1	24.2	29.1	38.3
LnGrp LOS	C	B	B	B	C	C	C	C	C	C	C	D
Approach Vol, veh/h		1173			1266			265			439	
Approach Delay, s/veh		19.1			28.9			25.3			33.2	
Approach LOS		B			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.0	30.0	6.2	49.0	11.3	27.7	12.8	42.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	26.0	4.0	68.0	12.0	20.0	21.0	51.0
Max Q Clear Time (g_c+I1), s	5.5	4.5	2.9	19.6	7.4	14.9	8.4	30.3
Green Ext Time (p_c), s	0.0	0.6	0.0	6.9	0.1	0.9	0.5	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	700	250	380	1100	130	280	290	220	90	280	180
Future Volume (veh/h)	140	700	250	380	1100	130	280	290	220	90	280	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1845
Adj Flow Rate, veh/h	147	737	263	400	1158	137	295	305	232	95	295	189
Adj No. of Lanes	1	3	0	2	3	0	1	2	0	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	179	1019	359	482	1451	172	511	712	526	376	1016	444
Arrive On Green	0.10	0.28	0.28	0.14	0.32	0.32	0.14	0.37	0.37	0.05	0.29	0.29
Sat Flow, veh/h	1757	3649	1285	3408	4552	538	1757	1907	1409	1757	3505	1532
Grp Volume(v), veh/h	147	677	323	400	854	441	295	280	257	95	295	189
Grp Sat Flow(s),veh/h/ln	1757	1679	1577	1704	1679	1733	1757	1752	1564	1757	1752	1532
Q Serve(g_s), s	8.6	19.0	19.4	11.9	24.3	24.3	11.7	12.4	12.9	3.9	6.8	10.4
Cycle Q Clear(g_c), s	8.6	19.0	19.4	11.9	24.3	24.3	11.7	12.4	12.9	3.9	6.8	10.4
Prop In Lane	1.00		0.81	1.00		0.31	1.00		0.90	1.00		1.00
Lane Grp Cap(c), veh/h	179	937	440	482	1070	552	511	654	584	376	1016	444
V/C Ratio(X)	0.82	0.72	0.73	0.83	0.80	0.80	0.58	0.43	0.44	0.25	0.29	0.43
Avail Cap(c_a), veh/h	303	1221	574	685	1318	680	657	654	584	383	1016	444
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	34.0	34.1	43.6	32.5	32.5	19.8	24.4	24.6	23.9	28.8	30.1
Incr Delay (d2), s/veh	9.1	1.5	3.4	5.9	2.9	5.5	1.0	2.0	2.4	0.4	0.7	3.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	9.0	8.8	6.0	11.7	12.5	5.7	6.4	6.0	1.9	3.4	4.8
LnGrp Delay(d), s/veh	55.1	35.5	37.6	49.6	35.4	38.0	20.9	26.4	27.0	24.3	29.5	33.0
LnGrp LOS	E	D	D	D	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1147			1695			832			579	
Approach Delay, s/veh		38.6			39.4			24.6			29.8	
Approach LOS		D			D			C			C	

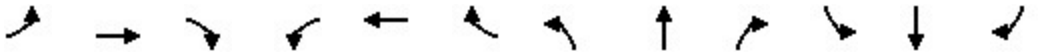
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.5	43.0	18.8	33.2	18.3	34.3	14.6	37.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	39.0	21.0	38.0	23.0	22.0	18.0	41.0
Max Q Clear Time (g_c+I1), s	5.9	14.9	13.9	21.4	13.7	12.4	10.6	26.3
Green Ext Time (p_c), s	0.0	3.2	0.8	6.0	0.6	1.7	0.2	7.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	520	1460	70	190	1990	170	110	360	100	250	490	510
Future Volume (veh/h)	520	1460	70	190	1990	170	110	360	100	250	490	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.91	1.00		0.92
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	553	1553	74	202	2117	181	117	383	106	266	521	543
Adj No. of Lanes	2	2	1	1	2	1	1	2	1	2	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	463	1865	809	229	1847	801	90	566	231	203	596	458
Arrive On Green	0.13	0.52	0.52	0.13	0.52	0.52	0.05	0.16	0.16	0.06	0.17	0.17
Sat Flow, veh/h	3476	3574	1551	1792	3574	1551	1792	3574	1459	3476	3574	1471
Grp Volume(v), veh/h	553	1553	74	202	2117	181	117	383	106	266	521	543
Grp Sat Flow(s),veh/h/ln	1738	1787	1551	1792	1787	1551	1792	1787	1459	1738	1787	1471
Q Serve(g_s), s	16.0	44.1	2.9	13.3	62.0	7.7	6.0	12.1	7.9	7.0	17.1	20.0
Cycle Q Clear(g_c), s	16.0	44.1	2.9	13.3	62.0	7.7	6.0	12.1	7.9	7.0	17.1	20.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	463	1865	809	229	1847	801	90	566	231	203	596	458
V/C Ratio(X)	1.19	0.83	0.09	0.88	1.15	0.23	1.31	0.68	0.46	1.31	0.87	1.18
Avail Cap(c_a), veh/h	463	1865	809	254	1847	801	90	566	231	203	596	458
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	24.3	14.4	51.4	29.0	15.9	57.0	47.6	45.8	56.5	48.8	42.4
Incr Delay (d2), s/veh	106.5	3.4	0.0	26.3	72.8	0.1	197.5	6.4	6.4	171.0	16.3	103.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	14.5	22.4	1.2	8.2	48.9	3.3	7.9	6.5	3.6	8.2	9.7	28.3
LnGrp Delay(d), s/veh	158.5	27.6	14.4	77.8	101.8	16.0	254.5	54.0	52.3	227.5	65.1	145.8
LnGrp LOS	F	C	B	E	F	B	F	D	D	F	E	F
Approach Vol, veh/h		2180			2500			606			1330	
Approach Delay, s/veh		60.4			93.6			92.4			130.5	
Approach LOS		E			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	23.0	19.4	66.6	10.0	24.0	20.0	66.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	19.0	17.0	61.0	6.0	20.0	16.0	62.0
Max Q Clear Time (g_c+I1), s	9.0	14.1	15.3	46.1	8.0	22.0	18.0	64.0
Green Ext Time (p_c), s	0.0	1.2	0.1	9.6	0.0	0.0	0.0	0.0

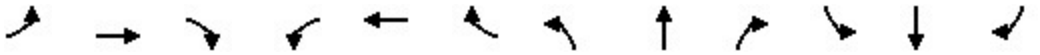
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	90.0
HCM 2010 LOS	F



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Future Volume (veh/h)	200	320	250	140	260	30	490	1040	140	40	810	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.97	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1900	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	215	344	269	151	280	32	527	1118	151	43	871	247
Adj No. of Lanes	1	2	0	1	2	0	1	2	0	1	1	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	248	285	218	165	431	49	463	2002	270	295	815	677
Arrive On Green	0.08	0.15	0.15	0.06	0.13	0.13	0.22	0.63	0.63	0.03	0.43	0.43
Sat Flow, veh/h	1792	1903	1456	1792	3232	366	1792	3163	426	1792	1881	1562
Grp Volume(v), veh/h	215	323	290	151	154	158	527	631	638	43	871	247
Grp Sat Flow(s),veh/h/ln	1792	1787	1572	1792	1787	1811	1792	1787	1803	1792	1881	1562
Q Serve(g_s), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Cycle Q Clear(g_c), s	9.0	18.0	18.0	7.0	9.8	10.0	27.0	24.0	24.2	1.6	52.0	12.8
Prop In Lane	1.00		0.93	1.00		0.20	1.00		0.24	1.00		1.00
Lane Grp Cap(c), veh/h	248	268	236	165	238	241	463	1131	1141	295	815	677
V/C Ratio(X)	0.87	1.20	1.23	0.92	0.64	0.66	1.14	0.56	0.56	0.15	1.07	0.36
Avail Cap(c_a), veh/h	248	268	236	165	238	241	463	1131	1141	309	815	677
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.4	51.0	51.0	46.5	49.3	49.4	39.7	12.5	12.5	18.0	34.0	22.9
Incr Delay (d2), s/veh	26.1	121.6	135.4	46.9	5.9	6.3	85.4	2.0	2.0	0.2	51.4	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.5	17.9	16.7	6.4	5.2	5.4	26.3	12.4	12.5	0.8	38.6	5.8
LnGrp Delay(d), s/veh	72.5	172.6	186.4	93.4	55.2	55.7	125.1	14.5	14.5	18.2	85.4	24.4
LnGrp LOS	E	F	F	F	E	E	F	B	B	B	F	C
Approach Vol, veh/h		828			463			1796			1161	
Approach Delay, s/veh		151.4			67.8			46.9			70.0	
Approach LOS		F			E			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.0	80.0	11.0	22.0	31.0	56.0	13.0	20.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	75.0	7.0	18.0	27.0	52.0	9.0	16.0
Max Q Clear Time (g_c+I1), s	3.6	26.2	9.0	20.0	29.0	54.0	11.0	12.0
Green Ext Time (p_c), s	0.0	11.6	0.0	0.0	0.0	0.0	0.0	0.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	75.9
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	960	350	480	1120	60	390	270	300	130	280	60
Future Volume (veh/h)	60	960	350	480	1120	60	390	270	300	130	280	60
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.98	0.99		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1900
Adj Flow Rate, veh/h	64	1021	372	511	1191	64	415	287	319	138	298	64
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	3	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	246	991	361	528	2463	132	454	852	372	317	590	121
Arrive On Green	0.04	0.28	0.28	0.27	0.50	0.50	0.18	0.24	0.24	0.08	0.14	0.14
Sat Flow, veh/h	1757	3605	1313	1757	4886	262	1757	3505	1531	1757	4165	854
Grp Volume(v), veh/h	64	951	442	511	818	437	415	287	319	138	237	125
Grp Sat Flow(s),veh/h/ln	1757	1679	1561	1757	1679	1791	1757	1752	1531	1757	1679	1661
Q Serve(g_s), s	3.1	33.0	33.0	30.3	19.2	19.2	22.0	8.1	23.9	7.9	7.8	8.3
Cycle Q Clear(g_c), s	3.1	33.0	33.0	30.3	19.2	19.2	22.0	8.1	23.9	7.9	7.8	8.3
Prop In Lane	1.00		0.84	1.00		0.15	1.00		1.00	1.00		0.51
Lane Grp Cap(c), veh/h	246	923	429	528	1692	903	454	852	372	317	476	235
V/C Ratio(X)	0.26	1.03	1.03	0.97	0.48	0.48	0.91	0.34	0.86	0.44	0.50	0.53
Avail Cap(c_a), veh/h	267	923	429	528	1692	903	454	852	372	319	476	235
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.4	43.5	43.5	35.4	19.5	19.5	36.0	37.5	43.4	39.2	47.6	47.8
Incr Delay (d2), s/veh	0.6	37.5	51.4	30.8	0.2	0.4	22.8	1.1	21.7	0.9	3.7	8.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.5	20.1	20.3	21.1	8.9	9.6	6.0	4.0	12.3	3.9	3.9	4.4
LnGrp Delay(d), s/veh	30.0	81.0	94.9	66.2	19.7	19.9	58.8	38.5	65.2	40.2	51.3	56.1
LnGrp LOS	C	F	F	E	B	B	E	D	E	D	D	E
Approach Vol, veh/h		1457			1766			1021			500	
Approach Delay, s/veh		83.0			33.2			55.1			49.4	
Approach LOS		F			C			E			D	

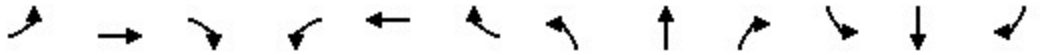
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.8	33.2	36.0	37.0	26.0	21.0	8.5	64.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	10.0	29.0	32.0	33.0	22.0	17.0	6.0	59.0
Max Q Clear Time (g_c+I1), s	9.9	25.9	32.3	35.0	24.0	10.3	5.1	21.2
Green Ext Time (p_c), s	0.0	0.9	0.0	0.0	0.0	1.1	0.0	9.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	54.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1830	30	320	2140	120	30	170	190	100	200	180
Future Volume (veh/h)	120	1830	30	320	2140	120	30	170	190	100	200	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	0.98		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1900	1881	1881	1881	1881	1881	1900	1881	1881	1881
Adj Flow Rate, veh/h	124	1887	31	330	2206	124	31	175	196	103	206	186
Adj No. of Lanes	1	2	0	1	2	1	1	2	0	1	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	151	1946	32	352	2351	1026	160	358	286	134	377	286
Arrive On Green	0.04	0.54	0.54	0.16	0.66	0.66	0.20	0.20	0.20	0.20	0.20	0.20
Sat Flow, veh/h	1792	3597	59	1792	3574	1560	981	1787	1427	1013	1881	1428
Grp Volume(v), veh/h	124	935	983	330	2206	124	31	175	196	103	206	186
Grp Sat Flow(s),veh/h/ln	1792	1787	1869	1792	1787	1560	981	1787	1427	1013	1881	1428
Q Serve(g_s), s	3.7	60.3	61.1	17.2	66.1	3.5	3.5	10.4	15.3	8.7	11.8	14.3
Cycle Q Clear(g_c), s	3.7	60.3	61.1	17.2	66.1	3.5	15.3	10.4	15.3	24.0	11.8	14.3
Prop In Lane	1.00		0.03	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	151	967	1011	352	2351	1026	160	358	286	134	377	286
V/C Ratio(X)	0.82	0.97	0.97	0.94	0.94	0.12	0.19	0.49	0.69	0.77	0.55	0.65
Avail Cap(c_a), veh/h	151	970	1014	352	2357	1029	160	358	286	134	377	286
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.9	26.5	26.6	40.9	18.3	7.6	49.9	42.5	44.4	56.8	43.0	44.0
Incr Delay (d2), s/veh	28.5	21.2	21.8	32.5	8.1	0.1	2.7	4.7	12.6	33.6	5.6	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.4	35.3	37.3	13.9	34.8	1.5	1.1	5.6	7.0	4.6	6.7	6.5
LnGrp Delay(d), s/veh	56.4	47.6	48.5	73.5	26.4	7.7	52.6	47.2	57.0	90.4	48.6	55.0
LnGrp LOS	E	D	D	E	C	A	D	D	E	F	D	D
Approach Vol, veh/h		2042			2660			402			495	
Approach Delay, s/veh		48.6			31.4			52.4			59.7	
Approach LOS		D			C			D			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		28.0	23.0	68.8		28.0	9.0	82.8
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		24.0	19.0	65.0		24.0	5.0	79.0
Max Q Clear Time (g_c+I1), s		17.3	19.2	63.1		26.0	5.7	68.1
Green Ext Time (p_c), s		1.3	0.0	1.7		0.0	0.0	9.6

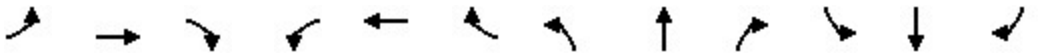
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1110	610	250	2060	0	0	0	0	170	110	210
Future Volume (veh/h)	0	1110	610	250	2060	0	0	0	0	170	110	210
Number	7	4	14	3	8	18				1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0				0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00				1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1881	1900	1881	1881	0				1900	1881	1881
Adj Flow Rate, veh/h	0	1144	629	258	2124	0				175	113	216
Adj No. of Lanes	0	3	0	1	2	0				0	1	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97				0.97	0.97	0.97
Percent Heavy Veh, %	0	1	1	1	1	0				1	1	1
Cap, veh/h	0	1622	739	292	2403	0				285	184	411
Arrive On Green	0.00	0.47	0.47	0.16	0.67	0.00				0.26	0.26	0.26
Sat Flow, veh/h	0	3593	1560	1792	3668	0				1109	716	1599
Grp Volume(v), veh/h	0	1144	629	258	2124	0				288	0	216
Grp Sat Flow(s),veh/h/ln	0	1712	1560	1792	1787	0				1826	0	1599
Q Serve(g_s), s	0.0	29.8	40.2	15.9	54.2	0.0				15.7	0.0	13.1
Cycle Q Clear(g_c), s	0.0	29.8	40.2	15.9	54.2	0.0				15.7	0.0	13.1
Prop In Lane	0.00		1.00	1.00		0.00				0.61		1.00
Lane Grp Cap(c), veh/h	0	1622	739	292	2403	0				469	0	411
V/C Ratio(X)	0.00	0.71	0.85	0.88	0.88	0.00				0.61	0.00	0.53
Avail Cap(c_a), veh/h	0	1622	739	444	2628	0				469	0	411
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00				1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00				1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	23.5	26.2	46.2	14.9	0.0				37.0	0.0	36.0
Incr Delay (d2), s/veh	0.0	1.4	9.4	12.8	3.7	0.0				5.9	0.0	4.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0				0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	14.3	19.2	8.9	27.5	0.0				8.7	0.0	6.3
LnGrp Delay(d), s/veh	0.0	24.9	35.6	59.0	18.7	0.0				42.9	0.0	40.8
LnGrp LOS		C	D	E	B					D		D
Approach Vol, veh/h		1773			2382						504	
Approach Delay, s/veh		28.7			23.0						42.0	
Approach LOS		C			C						D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs			3	4		6		8
Phs Duration (G+Y+Rc), s			22.4	57.5		33.0		79.9
Change Period (Y+Rc), s			4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s			28.0	51.0		29.0		83.0
Max Q Clear Time (g_c+I1), s			17.9	42.2		17.7		56.2
Green Ext Time (p_c), s			0.5	6.7		1.7		19.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	160	850	0	0	1110	270	1000	0	880	0	0	0
Future Volume (vph)	160	850	0	0	1110	270	1000	0	880	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.95		0.95	0.91	0.95			
Frpb, ped/bikes	1.00	1.00			0.99		1.00	1.00	1.00			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.97		1.00	0.93	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	1805	3610			3479		1715	1570	1534			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	1805	3610			3479		1715	1570	1534			
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	165	876	0	0	1144	278	1031	0	907	0	0	0
RTOR Reduction (vph)	0	0	0	0	18	0	0	27	67	0	0	0
Lane Group Flow (vph)	165	876	0	0	1404	0	670	624	550	0	0	0
Confl. Peds. (#/hr)	3		10	10		3						
Confl. Bikes (#/hr)			11			6						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Prot			
Protected Phases	7	4			8		2	2	2			
Permitted Phases												
Actuated Green, G (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Effective Green, g (s)	12.0	63.0			47.0		49.0	49.0	49.0			
Actuated g/C Ratio	0.10	0.53			0.39		0.41	0.41	0.41			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	180	1895			1362		700	641	626			
v/s Ratio Prot	c0.09	0.24			c0.40		0.39	c0.40	0.36			
v/s Ratio Perm												
v/c Ratio	0.92	0.46			1.03		0.96	0.97	0.88			
Uniform Delay, d1	53.5	17.9			36.5		34.5	34.9	32.7			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	43.6	0.2			32.7		25.0	29.7	16.0			
Delay (s)	97.1	18.1			69.2		59.5	64.6	48.7			
Level of Service	F	B			E		E	E	D			
Approach Delay (s/veh)		30.6			69.2			57.8			0.0	
Approach LOS		C			E			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	55.0	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	129.6%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	270	1320	180	120	870	190	500	670	160	330	440	210
Future Volume (veh/h)	270	1320	180	120	870	190	500	670	160	330	440	210
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	284	1389	189	126	916	200	526	705	168	347	463	221
Adj No. of Lanes	2	2	1	1	2	1	2	2	0	1	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	342	1324	837	121	1213	521	584	716	170	332	627	297
Arrive On Green	0.10	0.37	0.37	0.07	0.34	0.34	0.17	0.25	0.25	0.18	0.27	0.27
Sat Flow, veh/h	3510	3610	1551	1810	3610	1550	3510	2863	682	1810	2347	1110
Grp Volume(v), veh/h	284	1389	189	126	916	200	526	444	429	347	355	329
Grp Sat Flow(s),veh/h/ln	1755	1805	1551	1810	1805	1550	1755	1805	1740	1810	1805	1652
Q Serve(g_s), s	9.5	44.0	7.8	8.0	27.1	11.8	17.6	29.4	29.4	22.0	21.5	21.9
Cycle Q Clear(g_c), s	9.5	44.0	7.8	8.0	27.1	11.8	17.6	29.4	29.4	22.0	21.5	21.9
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.39	1.00		0.67
Lane Grp Cap(c), veh/h	342	1324	837	121	1213	521	584	451	435	332	482	441
V/C Ratio(X)	0.83	1.05	0.23	1.04	0.76	0.38	0.90	0.98	0.99	1.05	0.74	0.75
Avail Cap(c_a), veh/h	380	1324	837	121	1213	521	614	451	435	332	482	441
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	38.0	14.9	56.0	35.5	30.4	49.1	44.8	44.8	49.0	40.1	40.2
Incr Delay (d2), s/veh	13.3	38.8	0.1	94.3	2.8	0.5	16.0	38.7	39.7	61.9	9.7	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.2	29.0	3.3	7.1	13.9	5.1	9.8	19.5	19.0	16.7	12.0	11.3
LnGrp Delay(d), s/veh	66.5	76.8	15.0	150.8	38.2	30.8	65.1	83.5	84.5	110.9	49.8	51.1
LnGrp LOS	E	F	B	F	D	C	E	F	F	F	D	D
Approach Vol, veh/h		1862			1242			1399			1031	
Approach Delay, s/veh		68.9			48.4			76.9			70.8	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	26.0	34.0	12.0	48.0	24.0	36.0	15.7	44.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	30.0	8.0	44.0	21.0	31.0	13.0	39.0
Max Q Clear Time (g_c+I1), s	24.0	31.4	10.0	46.0	19.6	23.9	11.5	29.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.3	2.3	0.2	4.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	66.7
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Future Volume (veh/h)	480	300	240	180	250	110	100	1330	80	100	1050	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	0.99		0.95	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	495	309	247	186	258	113	103	1371	82	103	1082	124
Adj No. of Lanes	1	1	1	1	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	520	558	458	372	286	231	211	1510	90	146	1381	158
Arrive On Green	0.24	0.29	0.29	0.10	0.15	0.15	0.05	0.44	0.44	0.03	0.42	0.42
Sat Flow, veh/h	1810	1900	1559	1810	1900	1537	1810	3455	206	1810	3262	373
Grp Volume(v), veh/h	495	309	247	186	258	113	103	714	739	103	598	608
Grp Sat Flow(s),veh/h/ln	1810	1900	1559	1810	1900	1537	1810	1805	1856	1810	1805	1830
Q Serve(g_s), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Cycle Q Clear(g_c), s	26.8	16.3	15.8	10.2	15.9	8.0	3.8	43.8	44.3	3.9	34.0	34.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.11	1.00		0.20
Lane Grp Cap(c), veh/h	520	558	458	372	286	231	211	789	811	146	764	775
V/C Ratio(X)	0.95	0.55	0.54	0.50	0.90	0.49	0.49	0.91	0.91	0.71	0.78	0.78
Avail Cap(c_a), veh/h	534	575	472	372	288	233	231	789	811	146	764	775
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	35.4	35.2	37.1	49.7	46.3	23.9	31.2	31.3	28.3	29.6	29.6
Incr Delay (d2), s/veh	27.0	1.1	1.2	1.0	29.3	1.6	1.8	15.9	16.1	14.6	7.8	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.9	8.8	6.9	5.2	10.6	3.5	2.0	25.3	26.2	2.5	18.6	18.9
LnGrp Delay(d), s/veh	58.0	36.5	36.4	38.2	78.9	47.9	25.7	47.1	47.4	42.9	37.4	37.4
LnGrp LOS	E	D	D	D	E	D	C	D	D	D	D	D
Approach Vol, veh/h		1051			557			1556			1309	
Approach Delay, s/veh		46.6			59.0			45.8			37.8	
Approach LOS		D			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	56.0	16.0	38.9	9.6	54.4	33.0	21.9
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	52.0	12.0	36.0	7.0	49.0	30.0	18.0
Max Q Clear Time (g_c+I1), s	5.9	46.3	12.2	18.3	5.8	36.1	28.8	17.9
Green Ext Time (p_c), s	0.0	4.1	0.0	2.5	0.0	6.4	0.2	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		45.3
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Future Volume (veh/h)	100	20	20	10	30	50	10	420	10	40	540	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.99		0.99	0.99		0.99	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adj Flow Rate, veh/h	106	21	21	11	32	53	11	447	11	43	574	106
Adj No. of Lanes	1	1	0	1	1	0	1	1	1	1	1	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	0	0	0	0	0	0	0	0	0	0	0	0
Cap, veh/h	203	127	127	240	94	155	594	1478	1217	740	1478	1213
Arrive On Green	0.15	0.15	0.15	0.15	0.15	0.15	0.78	0.78	0.78	0.78	0.78	0.78
Sat Flow, veh/h	1327	870	870	1378	641	1062	771	1900	1564	946	1900	1559
Grp Volume(v), veh/h	106	0	42	11	0	85	11	447	11	43	574	106
Grp Sat Flow(s),veh/h/ln	1327	0	1739	1378	0	1704	771	1900	1564	946	1900	1559
Q Serve(g_s), s	8.2	0.0	2.2	0.7	0.0	4.7	0.5	7.2	0.2	1.5	10.1	1.7
Cycle Q Clear(g_c), s	13.0	0.0	2.2	3.0	0.0	4.7	10.6	7.2	0.2	8.7	10.1	1.7
Prop In Lane	1.00		0.50	1.00		0.62	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	203	0	254	240	0	249	594	1478	1217	740	1478	1213
V/C Ratio(X)	0.52	0.00	0.17	0.05	0.00	0.34	0.02	0.30	0.01	0.06	0.39	0.09
Avail Cap(c_a), veh/h	386	0	495	431	0	485	594	1478	1217	740	1478	1213
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.3	0.0	39.4	40.7	0.0	40.4	5.4	3.4	2.6	4.6	3.7	2.8
Incr Delay (d2), s/veh	2.1	0.0	0.3	0.1	0.0	0.8	0.1	0.5	0.0	0.2	0.8	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	0.0	1.1	0.3	0.0	2.3	0.1	3.9	0.1	0.4	5.6	0.8
LnGrp Delay(d), s/veh	48.4	0.0	39.7	40.8	0.0	41.3	5.5	3.9	2.6	4.8	4.5	2.9
LnGrp LOS	D		D	D		D	A	A	A	A	A	A
Approach Vol, veh/h		148			96			469			723	
Approach Delay, s/veh		45.9			41.2			3.9			4.3	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		86.0		19.4		86.0		19.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		82.0		30.0		82.0		30.0
Max Q Clear Time (g_c+I1), s		12.6		15.0		12.1		6.7
Green Ext Time (p_c), s		3.3		0.4		5.2		0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.9
HCM 2010 LOS	B

Intersection	
Intersection Delay, s/veh	12.1
Intersection LOS	B

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	20	20	10	20	40	220	30	140	40	180	20	20
Future Vol, veh/h	20	20	10	20	40	220	30	140	40	180	20	20
Peak Hour Factor	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86	0.86
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	23	23	12	23	47	256	35	163	47	209	23	23
Number of Lanes	0	1	1	0	1	1	0	1	0	0	1	1

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	2	2	2	1
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	2	1	2	2
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	1	2	2	2
HCM Control Delay, s/veh	9.9	11.2	12.9	13.1
HCM LOS	A	B	B	B

Lane	NBLn1	EBLn1	EBLn2	WBLn1	WBLn2	SBLn1	SBLn2
Vol Left, %	14%	50%	0%	33%	0%	90%	0%
Vol Thru, %	67%	50%	0%	67%	0%	10%	0%
Vol Right, %	19%	0%	100%	0%	100%	0%	100%
Sign Control	Stop	Stop	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	210	40	10	60	220	200	20
LT Vol	30	20	0	20	0	180	0
Through Vol	140	20	0	40	0	20	0
RT Vol	40	0	10	0	220	0	20
Lane Flow Rate	244	47	12	70	256	233	23
Geometry Grp	6	7	7	7	7	7	7
Degree of Util (X)	0.402	0.088	0.019	0.122	0.384	0.412	0.034
Departure Headway (Hd)	5.92	6.792	5.823	6.277	5.398	6.383	5.22
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Cap	608	527	613	571	665	563	684
Service Time	3.962	4.549	3.579	4.02	3.14	4.126	2.962
HCM Lane V/C Ratio	0.401	0.089	0.02	0.123	0.385	0.414	0.034
HCM Control Delay, s/veh	12.9	10.2	8.7	9.9	11.5	13.6	8.1
HCM Lane LOS	B	B	A	A	B	B	A
HCM 95th-tile Q	1.9	0.3	0.1	0.4	1.8	2	0.1

Intersection	
Int Delay, s/veh	2.3

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Future Vol, veh/h	10	170	30	30	220	10	10	10	30	10	10	10
Conflicting Peds, #/hr	6	0	4	4	0	6	3	0	3	3	0	3
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	93	93	93	93	93	93	93	93	93	93	93	93
Heavy Vehicles, %	0	0	0	0	0	0	0	0	0	0	0	0
Mvmt Flow	11	183	32	32	237	11	11	11	32	11	11	11

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	254	0	0	219	0	0	546	543	206	559	554	252
Stage 1	-	-	-	-	-	-	225	225	-	313	313	-
Stage 2	-	-	-	-	-	-	321	318	-	246	241	-
Critical Hdwy	4.1	-	-	4.1	-	-	7.1	6.5	6.2	7.1	6.5	6.2
Critical Hdwy Stg 1	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.1	5.5	-	6.1	5.5	-
Follow-up Hdwy	2.2	-	-	2.2	-	-	3.5	4	3.3	3.5	4	3.3
Pot Cap-1 Maneuver	1323	-	-	1362	-	-	452	450	840	443	443	792
Stage 1	-	-	-	-	-	-	782	721	-	702	661	-
Stage 2	-	-	-	-	-	-	695	657	-	762	710	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1316	-	-	1357	-	-	423	430	835	403	424	786
Mov Cap-2 Maneuver	-	-	-	-	-	-	423	430	-	403	424	-
Stage 1	-	-	-	-	-	-	772	712	-	691	640	-
Stage 2	-	-	-	-	-	-	654	636	-	712	701	-

Approach	EB	WB	NB	SB
HCM Control Delay, s/v	0.4	0.9	11.5	12.8
HCM LOS			B	B

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	604	1316	-	-	1357	-	-	491
HCM Lane V/C Ratio	0.089	0.008	-	-	0.024	-	-	0.066
HCM Control Delay (s/veh)	11.5	7.8	0	-	7.7	0	-	12.8
HCM Lane LOS	B	A	A	-	A	A	-	B
HCM 95th %tile Q(veh)	0.3	0	-	-	0.1	-	-	0.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	130	80	80	150	20	90	1400	60	40	1480	70
Future Volume (veh/h)	50	130	80	80	150	20	90	1400	60	40	1480	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	0.98		0.96	1.00		0.92	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	51	133	82	82	153	20	92	1429	61	41	1510	71
Adj No. of Lanes	0	1	1	1	1	0	1	2	0	1	2	0
Peak Hour Factor	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	91	209	306	123	323	42	231	2558	109	255	2546	119
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.73	0.73	0.73	0.73	0.73	0.73
Sat Flow, veh/h	261	1043	1528	1173	1613	211	326	3488	149	355	3471	163
Grp Volume(v), veh/h	184	0	82	82	0	173	92	730	760	41	775	806
Grp Sat Flow(s),veh/h/ln	1304	0	1528	1173	0	1824	326	1787	1850	355	1787	1847
Q Serve(g_s), s	7.5	0.0	5.4	6.4	0.0	10.1	22.4	22.1	22.3	7.1	24.5	24.8
Cycle Q Clear(g_c), s	17.6	0.0	5.4	24.0	0.0	10.1	47.2	22.1	22.3	29.4	24.5	24.8
Prop In Lane	0.28		1.00	1.00		0.12	1.00		0.08	1.00		0.09
Lane Grp Cap(c), veh/h	299	0	306	123	0	365	231	1311	1357	255	1311	1354
V/C Ratio(X)	0.62	0.00	0.27	0.67	0.00	0.47	0.40	0.56	0.56	0.16	0.59	0.60
Avail Cap(c_a), veh/h	299	0	306	123	0	365	231	1311	1357	255	1311	1354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	45.7	0.0	40.6	57.6	0.0	42.4	18.7	7.2	7.2	13.9	7.5	7.6
Incr Delay (d2), s/veh	3.7	0.0	0.5	13.1	0.0	1.0	5.0	1.7	1.7	1.4	2.0	1.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.1	0.0	2.3	3.2	0.0	5.1	2.3	11.4	11.8	0.8	12.6	13.3
LnGrp Delay(d), s/veh	49.4	0.0	41.0	70.7	0.0	43.4	23.8	8.9	8.9	15.2	9.5	9.5
LnGrp LOS	D		D	E		D	C	A	A	B	A	A
Approach Vol, veh/h		266			255			1582			1622	
Approach Delay, s/veh		46.8			52.2			9.8			9.6	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		28.0		92.0		28.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		24.0		88.0		24.0
Max Q Clear Time (g_c+I1), s		49.2		19.6		31.4		26.0
Green Ext Time (p_c), s		17.0		0.5		19.7		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.3
HCM 2010 LOS	B

Intersection	
Int Delay, s/veh	18

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	60	60	2030	2060	30
Future Vol, veh/h	20	60	60	2030	2060	30
Conflicting Peds, #/hr	2	2	9	0	0	9
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	100	150	-	-	75
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	93	93	93	93	93	93
Heavy Vehicles, %	1	1	1	1	1	1
Mvmt Flow	22	65	65	2183	2215	32

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	3448	1119	2256	0	-	0
Stage 1	2224	-	-	-	-	-
Stage 2	1224	-	-	-	-	-
Critical Hdwy	6.82	6.92	4.12	-	-	-
Critical Hdwy Stg 1	5.82	-	-	-	-	-
Critical Hdwy Stg 2	5.82	-	-	-	-	-
Follow-up Hdwy	3.51	3.31	2.21	-	-	-
Pot Cap-1 Maneuver	~ 5	203	228	-	-	-
Stage 1	69	-	-	-	-	-
Stage 2	243	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 4	201	226	-	-	-
Mov Cap-2 Maneuver	~ 4	-	-	-	-	-
Stage 1	49	-	-	-	-	-
Stage 2	241	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	$ 939.3	0.8	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	226	-	4	201	-	-
HCM Lane V/C Ratio	0.285	-	5.376	0.321	-	-
HCM Control Delay (s/veh)	27.2	-	$ 3663.7	31.2	-	-
HCM Lane LOS	D	-	F	D	-	-
HCM 95th %tile Q(veh)	1.1	-	4.1	1.3	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	50	70	90	50	70	110	1790	50	100	1880	120
Future Volume (veh/h)	150	50	70	90	50	70	110	1790	50	100	1880	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.94	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1881	1900	1881	1881	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	155	52	72	93	52	72	113	1845	52	103	1938	124
Adj No. of Lanes	0	1	1	0	1	1	1	2	0	1	2	0
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	52	0	270	49	14	264	148	2690	75	178	2583	163
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	0	0	1542	0	79	1510	204	3547	99	240	3407	215
Grp Volume(v), veh/h	207	0	72	145	0	72	113	925	972	103	1005	1057
Grp Sat Flow(s),veh/h/ln	0	0	1542	79	0	1510	204	1787	1860	240	1787	1835
Q Serve(g_s), s	0.0	0.0	4.8	0.0	0.0	5.0	51.6	31.1	31.8	45.9	37.2	39.4
Cycle Q Clear(g_c), s	21.0	0.0	4.8	21.0	0.0	5.0	91.0	31.1	31.8	77.6	37.2	39.4
Prop In Lane	0.75		1.00	0.64		1.00	1.00		0.05	1.00		0.12
Lane Grp Cap(c), veh/h	52	0	270	63	0	264	148	1355	1410	178	1355	1391
V/C Ratio(X)	3.95	0.00	0.27	2.30	0.00	0.27	0.77	0.68	0.69	0.58	0.74	0.76
Avail Cap(c_a), veh/h	52	0	270	63	0	264	148	1355	1410	178	1355	1391
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.0	0.0	42.8	55.5	0.0	42.9	40.0	7.3	7.3	27.0	8.0	8.3
Incr Delay (d2), s/veh	1370.0	0.0	0.5	630.6	0.0	0.6	30.9	2.8	2.8	13.0	3.7	4.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	21.7	0.0	2.1	13.1	0.0	2.1	5.0	16.2	17.0	3.6	19.2	21.2
LnGrp Delay(d), s/veh	1430.0	0.0	43.4	686.1	0.0	43.4	70.9	10.1	10.1	40.0	11.7	12.2
LnGrp LOS	F		D	F		D	E	B	B	D	B	B
Approach Vol, veh/h		279			217			2010			2165	
Approach Delay, s/veh		1072.1			472.9			13.5			13.3	
Approach LOS		F			F			B			B	

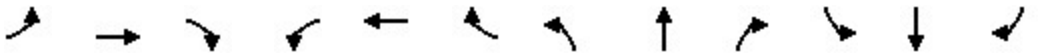
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		25.0		95.0		25.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		21.0		91.0		21.0
Max Q Clear Time (g_c+I1), s		93.0		23.0		79.6		23.0
Green Ext Time (p_c), s		0.0		0.0		10.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	98.0
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	800	70	150	1080	110	60	360	90	240	400	460
Future Volume (veh/h)	330	800	70	150	1080	110	60	360	90	240	400	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.96	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	347	842	74	158	1137	0	63	379	95	253	421	484
Adj No. of Lanes	1	3	0	1	3	1	1	2	1	2	2	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	381	1762	154	189	1334	415	81	1001	431	321	585	506
Arrive On Green	0.21	0.37	0.37	0.11	0.26	0.00	0.05	0.28	0.28	0.09	0.33	0.33
Sat Flow, veh/h	1774	4755	416	1774	5085	1583	1774	3539	1525	3442	1770	1531
Grp Volume(v), veh/h	347	599	317	158	1137	0	63	379	95	253	421	484
Grp Sat Flow(s),veh/h/ln	1774	1695	1781	1774	1695	1583	1774	1770	1525	1721	1770	1531
Q Serve(g_s), s	20.8	14.7	14.8	9.5	23.2	0.0	3.8	9.4	5.2	7.8	22.8	33.7
Cycle Q Clear(g_c), s	20.8	14.7	14.8	9.5	23.2	0.0	3.8	9.4	5.2	7.8	22.8	33.7
Prop In Lane	1.00		0.23	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	381	1256	660	189	1334	415	81	1001	431	321	585	506
V/C Ratio(X)	0.91	0.48	0.48	0.84	0.85	0.00	0.78	0.38	0.22	0.79	0.72	0.96
Avail Cap(c_a), veh/h	488	1338	703	293	1447	450	114	1001	431	442	585	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	26.2	26.3	47.7	38.2	0.0	51.5	31.4	29.9	48.4	32.1	35.7
Incr Delay (d2), s/veh	18.1	0.3	0.5	11.6	4.8	0.0	19.5	1.1	1.2	6.5	7.5	30.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.1	7.0	7.4	5.3	11.4	0.0	2.3	4.7	2.3	4.0	12.3	18.6
LnGrp Delay(d), s/veh	59.8	26.5	26.8	59.3	43.0	0.0	71.0	32.5	31.1	54.8	39.5	66.3
LnGrp LOS	E	C	C	E	D		E	C	C	D	D	E
Approach Vol, veh/h		1263			1295			537			1158	
Approach Delay, s/veh		35.7			45.0			36.7			54.1	
Approach LOS		D			D			D			D	

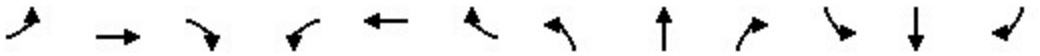
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	34.8	15.6	44.4	9.0	40.0	27.4	32.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	29.0	18.0	43.0	7.0	36.0	30.0	31.0
Max Q Clear Time (g_c+I1), s	9.8	11.4	11.5	16.8	5.8	35.7	22.8	25.2
Green Ext Time (p_c), s	0.3	2.4	0.2	5.9	0.0	0.2	0.6	3.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.7
HCM 2010 LOS	D



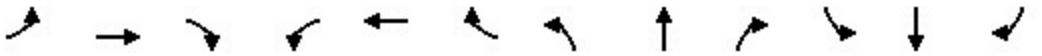
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	840	1140	160	1280	0	0	0	0	150	240	620
Future Volume (vph)	0	840	1140	160	1280	0	0	0	0	150	240	620
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	0.91	0.97	0.95					0.95	0.91	0.95
Frpb, ped/bikes		0.97	0.93	1.00	1.00					1.00	1.00	1.00
Flpb, ped/bikes		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Frt		0.94	0.85	1.00	1.00					1.00	0.93	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (prot)		3175	1372	3502	3610					1715	1613	1534
Flt Permitted		1.00	1.00	0.95	1.00					0.95	1.00	1.00
Satd. Flow (perm)		3175	1372	3502	3610					1715	1613	1534
Peak-hour factor, PHF	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87	0.87
Adj. Flow (vph)	0	966	1310	184	1471	0	0	0	0	172	276	713
RTOR Reduction (vph)	0	70	180	0	0	0	0	0	0	0	9	29
Lane Group Flow (vph)	0	1499	527	184	1471	0	0	0	0	155	512	456
Confl. Peds. (#/hr)	174		24	24		174						
Confl. Bikes (#/hr)			4			31						
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		58.0	58.0	7.0	69.0					43.0	43.0	43.0
Effective Green, g (s)		58.0	58.0	7.0	69.0					43.0	43.0	43.0
Actuated g/C Ratio		0.48	0.48	0.06	0.57					0.36	0.36	0.36
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1534	663	204	2075					614	577	549
v/s Ratio Prot		c0.47		c0.05	0.41					0.09	c0.32	0.30
v/s Ratio Perm			0.38									
v/c Ratio		0.98	0.79	0.90	0.71					0.25	0.89	0.83
Uniform Delay, d1		30.4	26.0	56.2	18.3					27.2	36.2	35.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		17.6	6.5	37.1	1.1					1.0	18.1	13.7
Delay (s)		48.0	32.5	93.2	19.4					28.1	54.3	48.8
Level of Service		D	C	F	B					C	D	D
Approach Delay (s/veh)		43.2			27.6			0.0			48.5	
Approach LOS		D			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	39.4	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.94		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	280	800	0	20	950	360	10	10	10	170	10	260
Future Volume (vph)	280	800	0	20	950	360	10	10	10	170	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor	0.97	0.91		1.00	0.91	1.00		1.00	1.00	0.95	0.95	
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00	1.00	1.00	1.00	
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt	1.00	1.00		1.00	1.00	0.85		1.00	0.85	1.00	0.86	
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (prot)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.98	1.00	0.95	1.00	
Satd. Flow (perm)	3400	5036		1752	5036	1544		1800	1568	1665	1510	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	298	851	0	21	1011	383	11	11	11	181	11	277
RTOR Reduction (vph)	0	0	0	0	0	212	0	0	9	0	233	0
Lane Group Flow (vph)	298	851	0	21	1011	171	0	22	2	163	73	0
Confl. Peds. (#/hr)	1		3	3		1						
Confl. Bikes (#/hr)			4			2						
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA	Perm	Split	NA	
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8			2			
Actuated Green, G (s)	13.9	44.5		1.7	32.3	32.3		19.5	19.5	15.6	15.6	
Effective Green, g (s)	13.9	44.5		1.7	32.3	32.3		19.5	19.5	15.6	15.6	
Actuated g/C Ratio	0.14	0.46		0.02	0.33	0.33		0.20	0.20	0.16	0.16	
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	485	2303		30	1671	512		360	314	266	242	
v/s Ratio Prot	c0.09	0.17		0.01	c0.20			c0.01		c0.10	0.05	
v/s Ratio Perm						0.11			0.00			
v/c Ratio	0.61	0.37		0.70	0.61	0.33		0.06	0.01	0.61	0.30	
Uniform Delay, d1	39.2	17.2		47.5	27.2	24.4		31.5	31.1	38.0	36.1	
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2	2.3	0.1		54.0	0.6	0.4		0.3	0.0	4.1	0.7	
Delay (s)	41.5	17.3		101.5	27.8	24.8		31.8	31.2	42.2	36.8	
Level of Service	D	B		F	C	C		C	C	D	D	
Approach Delay (s/veh)		23.6			28.1			31.6			38.6	
Approach LOS		C			C			C			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	97.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	56.0%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	260	560	0	0	650	80	750	280	250	0	0	0
Future Volume (vph)	260	560	0	0	650	80	750	280	250	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Lane Util. Factor	0.97	0.95			0.95		0.91	0.86	0.91			
Frpb, ped/bikes	1.00	1.00			0.96		1.00	1.00	0.98			
Flpb, ped/bikes	1.00	1.00			1.00		1.00	1.00	1.00			
Frt	1.00	1.00			0.98		1.00	0.99	0.85			
Flt Protected	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (prot)	3502	3610			3422		1643	3161	1442			
Flt Permitted	0.95	1.00			1.00		0.95	0.97	1.00			
Satd. Flow (perm)	3502	3610			3422		1643	3161	1442			
Peak-hour factor, PHF	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Adj. Flow (vph)	292	629	0	0	730	90	843	315	281	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	2	104	0	0	0
Lane Group Flow (vph)	292	629	0	0	820	0	421	763	149	0	0	0
Confl. Peds. (#/hr)	162		26	26		162			3	3		
Confl. Bikes (#/hr)			9			51			1			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Prot	NA			NA		Split	NA	Perm			
Protected Phases	7	4			8		2	2				
Permitted Phases									2			
Actuated Green, G (s)	14.0	50.7			32.7		50.4	50.4	50.4			
Effective Green, g (s)	14.0	50.7			32.7		50.4	50.4	50.4			
Actuated g/C Ratio	0.13	0.46			0.30		0.46	0.46	0.46			
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0			
Lane Grp Cap (vph)	449	1677			1025		759	1460	666			
v/s Ratio Prot	c0.08	0.17			c0.24		c0.26	0.24				
v/s Ratio Perm									0.10			
v/c Ratio	0.65	0.38			0.80		0.55	0.52	0.22			
Uniform Delay, d1	45.2	18.9			35.2		21.2	20.8	17.6			
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00			
Incremental Delay, d2	3.4	0.1			4.5		2.9	1.3	0.8			
Delay (s)	48.6	19.1			39.7		24.1	22.2	18.4			
Level of Service	D	B			D		C	C	B			
Approach Delay (s/veh)		28.4			39.7			22.1			0.0	
Approach LOS		C			D			C			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	28.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.65		
Actuated Cycle Length (s)	109.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	113.4%	ICU Level of Service	H
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	760	0	0	1090	550	270	0	360	0	0	0
Future Volume (veh/h)	230	760	0	0	1090	550	270	0	360	0	0	0
Number	7	4	14	3	8	18	5	2	12			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		0.98	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1845	1845	0	0	1845	1900	1845	0	1845			
Adj Flow Rate, veh/h	247	817	0	0	1172	591	290	0	387			
Adj No. of Lanes	2	3	0	0	3	0	2	0	1			
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93			
Percent Heavy Veh, %	3	3	0	0	3	3	3	0	3			
Cap, veh/h	311	2856	0	0	1479	675	1235	0	568			
Arrive On Green	0.09	0.57	0.00	0.00	0.44	0.44	0.36	0.00	0.36			
Sat Flow, veh/h	3408	5202	0	0	3523	1532	3408	0	1568			
Grp Volume(v), veh/h	247	817	0	0	1172	591	290	0	387			
Grp Sat Flow(s),veh/h/ln	1704	1679	0	0	1679	1532	1704	0	1568			
Q Serve(g_s), s	8.0	9.5	0.0	0.0	34.0	39.8	6.7	0.0	23.7			
Cycle Q Clear(g_c), s	8.0	9.5	0.0	0.0	34.0	39.8	6.7	0.0	23.7			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	311	2856	0	0	1479	675	1235	0	568			
V/C Ratio(X)	0.79	0.29	0.00	0.00	0.79	0.88	0.23	0.00	0.68			
Avail Cap(c_a), veh/h	422	3159	0	0	1572	718	1235	0	568			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	50.4	12.7	0.0	0.0	27.2	28.8	25.2	0.0	30.6			
Incr Delay (d2), s/veh	7.3	0.1	0.0	0.0	2.7	11.3	0.4	0.0	6.5			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	4.1	4.4	0.0	0.0	16.2	18.9	3.2	0.0	11.2			
LnGrp Delay(d), s/veh	57.7	12.7	0.0	0.0	29.9	40.1	25.6	0.0	37.0			
LnGrp LOS	E	B			C	D	C		D			
Approach Vol, veh/h		1064			1763			677				
Approach Delay, s/veh		23.1			33.4			32.1				
Approach LOS		C			C			C				

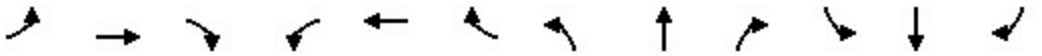
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4			7	8
Phs Duration (G+Y+Rc), s		45.0		68.2			14.3	53.9
Change Period (Y+Rc), s		4.0		4.0			4.0	4.0
Max Green Setting (Gmax), s		41.0		71.0			14.0	53.0
Max Q Clear Time (g_c+I1), s		25.7		11.5			10.0	41.8
Green Ext Time (p_c), s		2.3		6.4			0.3	8.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	230	1480	440	340	1660	190	420	870	230	210	690	230
Future Volume (veh/h)	230	1480	440	340	1660	190	420	870	230	210	690	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	258	1663	494	382	1865	213	472	978	258	236	775	258
Adj No. of Lanes	2	3	1	2	3	1	2	3	1	2	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	290	1792	543	406	1964	596	493	1620	490	296	925	401
Arrive On Green	0.08	0.35	0.35	0.12	0.38	0.38	0.14	0.32	0.32	0.09	0.26	0.26
Sat Flow, veh/h	3476	5136	1556	3476	5136	1558	3476	5136	1553	3476	3574	1548
Grp Volume(v), veh/h	258	1663	494	382	1865	213	472	978	258	236	775	258
Grp Sat Flow(s),veh/h/ln	1738	1712	1556	1738	1712	1558	1738	1712	1553	1738	1787	1548
Q Serve(g_s), s	8.8	37.4	36.3	13.1	42.2	11.7	16.2	19.3	16.3	8.0	24.6	17.8
Cycle Q Clear(g_c), s	8.8	37.4	36.3	13.1	42.2	11.7	16.2	19.3	16.3	8.0	24.6	17.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	290	1792	543	406	1964	596	493	1620	490	296	925	401
V/C Ratio(X)	0.89	0.93	0.91	0.94	0.95	0.36	0.96	0.60	0.53	0.80	0.84	0.64
Avail Cap(c_a), veh/h	290	1800	545	406	1972	598	493	1620	490	377	925	401
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.4	37.5	37.2	52.5	35.9	26.5	51.0	34.7	33.7	53.8	42.0	39.5
Incr Delay (d2), s/veh	26.8	8.9	19.3	30.0	10.7	0.4	29.8	1.7	4.0	9.0	9.0	7.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.3	19.0	18.4	8.0	21.8	5.1	9.8	9.4	7.6	4.2	13.3	8.4
LnGrp Delay(d), s/veh	81.2	46.5	56.5	82.5	46.6	26.8	80.9	36.4	37.7	62.8	51.0	47.3
LnGrp LOS	F	D	E	F	D	C	F	D	D	E	D	D
Approach Vol, veh/h		2415			2460			1708			1269	
Approach Delay, s/veh		52.2			50.5			48.9			52.4	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.2	41.8	18.0	45.8	21.0	35.0	14.0	49.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	35.0	14.0	42.0	17.0	31.0	10.0	46.0
Max Q Clear Time (g_c+I1), s	10.0	21.3	15.1	39.4	18.2	26.6	10.8	44.2
Green Ext Time (p_c), s	0.2	6.0	0.0	2.4	0.0	2.4	0.0	1.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	51.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	200	40	740	270	330	50	870	710	220	540	100
Future Volume (vph)	110	200	40	740	270	330	50	870	710	220	540	100
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		0.91		0.91	0.91	1.00	1.00	0.95	1.00	0.97	0.91	
Frpb, ped/bikes		0.99		1.00	1.00	0.99	1.00	1.00	0.98	1.00	1.00	
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Frt		0.98		1.00	1.00	0.85	1.00	1.00	0.85	1.00	0.98	
Flt Protected		0.98		0.95	0.99	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (prot)		4981		3285	1704	1594	1805	3610	1579	3502	5046	
Flt Permitted		0.75		0.95	0.78	1.00	0.95	1.00	1.00	0.95	1.00	
Satd. Flow (perm)		3799		3285	1350	1594	1805	3610	1579	3502	5046	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	217	43	804	293	359	54	946	772	239	587	109
RTOR Reduction (vph)	0	14	0	0	0	119	0	0	22	0	22	0
Lane Group Flow (vph)	0	366	0	724	373	240	54	946	750	239	674	0
Confl. Peds. (#/hr)			25	25			1		11	11		1
Confl. Bikes (#/hr)			1			2			2			
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%	0%
Turn Type	Perm	NA		Prot	NA	Perm	Prot	NA	pm+ov	Prot	NA	
Protected Phases		4		3	8		5	2	3	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		17.2		30.8	52.0	52.0	6.9	45.8	76.6	10.8	49.7	
Effective Green, g (s)		17.2		30.8	52.0	52.0	6.9	45.8	76.6	10.8	49.7	
Actuated g/C Ratio		0.14		0.26	0.43	0.43	0.06	0.38	0.64	0.09	0.41	
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		541		838	672	687	103	1370	1055	313	2079	
v/s Ratio Prot				c0.22	0.14		0.03	0.26	c0.18	c0.07	c0.13	
v/s Ratio Perm		c0.10			0.10	0.15			0.29			
v/c Ratio		0.68		0.86	0.56	0.35	0.52	0.69	0.71	0.76	0.32	
Uniform Delay, d1		49.1		42.9	25.6	23.0	55.3	31.4	14.6	53.7	24.1	
Progression Factor		1.00		1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		3.4		9.2	1.0	0.3	4.7	2.9	2.3	10.5	0.4	
Delay (s)		52.4		52.1	26.6	23.3	60.0	34.3	16.9	64.2	24.5	
Level of Service		D		D	C	C	E	C	B	E	C	
Approach Delay (s/veh)		52.4			38.5			27.5			34.6	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.6	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	120.6	Sum of lost time (s)	16.0
Intersection Capacity Utilization	72.7%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations		↑↑↑	↑↑↑		↖	↗
Traffic Volume (veh/h)	0	1020	1380	0	410	240
Future Volume (veh/h)	0	1020	1380	0	410	240
Number	7	4	8	18	1	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00			1.00	1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1900	1900	0	1900	1900
Adj Flow Rate, veh/h	0	1109	1500	0	446	261
Adj No. of Lanes	0	3	3	0	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	0	0	0	0	0
Cap, veh/h	0	2011	2011	0	970	865
Arrive On Green	0.00	0.39	0.39	0.00	0.54	0.54
Sat Flow, veh/h	0	5529	5529	0	1810	1615
Grp Volume(v), veh/h	0	1109	1500	0	446	261
Grp Sat Flow(s),veh/h/ln	0	1729	1729	0	1810	1615
Q Serve(g_s), s	0.0	17.4	26.0	0.0	15.9	9.4
Cycle Q Clear(g_c), s	0.0	17.4	26.0	0.0	15.9	9.4
Prop In Lane	0.00			0.00	1.00	1.00
Lane Grp Cap(c), veh/h	0	2011	2011	0	970	865
V/C Ratio(X)	0.00	0.55	0.75	0.00	0.46	0.30
Avail Cap(c_a), veh/h	0	2779	2779	0	970	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	0.0	24.9	27.6	0.0	14.9	13.4
Incr Delay (d2), s/veh	0.0	0.2	0.7	0.0	1.6	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	8.4	12.5	0.0	8.4	4.3
LnGrp Delay(d), s/veh	0.0	25.2	28.3	0.0	16.5	14.3
LnGrp LOS		C	C		B	B
Approach Vol, veh/h		1109	1500		707	
Approach Delay, s/veh		25.2	28.3		15.7	
Approach LOS		C	C		B	

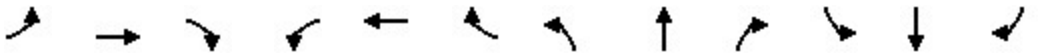
Timer	1	2	3	4	5	6	7	8
Assigned Phs				4		6		8
Phs Duration (G+Y+Rc), s				44.5		60.0		44.5
Change Period (Y+Rc), s				4.0		4.0		4.0
Max Green Setting (Gmax), s				56.0		56.0		56.0
Max Q Clear Time (g_c+I1), s				19.4		17.9		28.0
Green Ext Time (p_c), s				9.1		2.5		12.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.6
HCM 2010 LOS	C



Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (vph)	1270	0	0	1270	550	1170
Future Volume (vph)	1270	0	0	1270	550	1170
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0			4.0	4.0	4.0
Lane Util. Factor	0.91			0.91	1.00	0.95
Frpb, ped/bikes	1.00			1.00	1.00	1.00
Flpb, ped/bikes	1.00			1.00	1.00	1.00
Frt	1.00			1.00	0.94	0.85
Flt Protected	1.00			1.00	0.97	1.00
Satd. Flow (prot)	5187			5187	1738	1534
Flt Permitted	1.00			1.00	0.97	1.00
Satd. Flow (perm)	5187			5187	1738	1534
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	1337	0	0	1337	579	1232
RTOR Reduction (vph)	0	0	0	0	0	0
Lane Group Flow (vph)	1337	0	0	1337	936	875
Confl. Peds. (#/hr)		7	7		5	
Confl. Bikes (#/hr)		3				
Heavy Vehicles (%)	0%	0%	0%	0%	0%	0%
Turn Type	NA			NA	Prot	Perm
Protected Phases	4			8	2	
Permitted Phases						2
Actuated Green, G (s)	33.9			33.9	78.0	78.0
Effective Green, g (s)	33.9			33.9	78.0	78.0
Actuated g/C Ratio	0.28			0.28	0.65	0.65
Clearance Time (s)	4.0			4.0	4.0	4.0
Vehicle Extension (s)	3.0			3.0	3.0	3.0
Lane Grp Cap (vph)	1466			1466	1130	997
v/s Ratio Prot	c0.26			0.26	0.54	
v/s Ratio Perm						c0.57
v/c Ratio	0.91			0.91	0.83	0.88
Uniform Delay, d1	41.6			41.6	15.9	17.1
Progression Factor	1.00			1.00	1.00	1.00
Incremental Delay, d2	8.9			8.9	7.0	10.8
Delay (s)	50.5			50.5	22.9	27.8
Level of Service	D			D	C	C
Approach Delay (s/veh)	50.5			50.5	25.3	
Approach LOS	D			D	C	

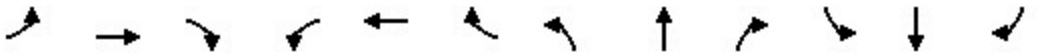
Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.89		
Actuated Cycle Length (s)	119.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	92.2%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Future Volume (vph)	270	0	590	0	0	0	0	620	450	320	480	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.95						0.91	1.00	1.00	0.95	
Frpb, ped/bikes	1.00	1.00						1.00	0.99	1.00	1.00	
Flpb, ped/bikes	1.00	1.00						1.00	1.00	1.00	1.00	
Frt	1.00	0.86						1.00	0.85	1.00	1.00	
Flt Protected	0.95	1.00						1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1681	1512						5085	1564	1770	3539	
Flt Permitted	0.95	1.00						1.00	1.00	0.38	1.00	
Satd. Flow (perm)	1681	1512						5085	1564	711	3539	
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	284	0	621	0	0	0	0	653	474	337	505	0
RTOR Reduction (vph)	0	273	0	0	0	0	0	0	163	0	0	0
Lane Group Flow (vph)	256	376	0	0	0	0	0	653	311	337	505	0
Confl. Peds. (#/hr)							5					5
Confl. Bikes (#/hr)									1			10
Turn Type	Perm	NA						NA	Perm	Perm	NA	
Protected Phases		4						2			6	
Permitted Phases	4								2	6		
Actuated Green, G (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Effective Green, g (s)	31.6	31.6						75.3	75.3	75.3	75.3	
Actuated g/C Ratio	0.28	0.28						0.66	0.66	0.66	0.66	
Clearance Time (s)	4.0	4.0						4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0						3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	462	415						3332	1024	465	2319	
v/s Ratio Prot								0.13			0.14	
v/s Ratio Perm	0.15	0.25							0.20	c0.47		
v/c Ratio	0.55	0.91						0.20	0.30	0.72	0.22	
Uniform Delay, d1	35.6	40.2						7.8	8.5	13.0	8.0	
Progression Factor	1.00	1.00						1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.4	22.9						0.1	0.8	9.5	0.2	
Delay (s)	37.1	63.2						8.0	9.3	22.5	8.2	
Level of Service	D	E						A	A	C	A	
Approach Delay (s/veh)		55.8			0.0			8.5			13.9	
Approach LOS		E			A			A			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.78		
Actuated Cycle Length (s)	114.9	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Future Volume (vph)	0	0	0	220	0	170	360	540	0	0	630	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	1.00	0.95			0.91	1.00
Frpb, ped/bikes				1.00		1.00	1.00	1.00			1.00	0.95
Flpb, ped/bikes				1.00		1.00	0.99	1.00			1.00	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1736		1553	1720	3471			4988	1479
Flt Permitted				0.95		1.00	0.38	1.00			1.00	1.00
Satd. Flow (perm)				1736		1553	696	3471			4988	1479
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	0	0	0	234	0	181	383	574	0	0	670	585
RTOR Reduction (vph)	0	0	0	0	0	152	0	0	0	0	0	134
Lane Group Flow (vph)	0	0	0	234	0	29	383	574	0	0	670	451
Confl. Peds. (#/hr)							6		2	2		6
Confl. Bikes (#/hr)									1			12
Heavy Vehicles (%)	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%	4%
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				19.2		19.2	91.5	91.5			91.5	91.5
Effective Green, g (s)				19.2		19.2	91.5	91.5			91.5	91.5
Actuated g/C Ratio				0.16		0.16	0.77	0.77			0.77	0.77
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				280		251	536	2675			3845	1140
v/s Ratio Prot								0.17			0.13	
v/s Ratio Perm				c0.13		0.02	c0.55					0.30
v/c Ratio				0.84		0.12	0.71	0.21			0.17	0.40
Uniform Delay, d1				48.2		42.5	6.9	3.7			3.6	4.5
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				18.9		0.2	7.9	0.2			0.1	1.0
Delay (s)				67.2		42.7	14.9	3.9			3.7	5.5
Level of Service				E		D	B	A			A	A
Approach Delay (s/veh)		0.0			56.5			8.3			4.5	
Approach LOS		A			E			A			A	

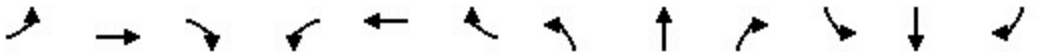
Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.73		
Actuated Cycle Length (s)	118.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	81.2%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Future Volume (veh/h)	0	0	0	460	0	340	190	1600	0	0	1270	330
Number				3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh				0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)				1.00		1.00	1.00		1.00	1.00		0.97
Parking Bus, Adj				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln				1881	0	1881	1881	1881	0	0	1881	1881
Adj Flow Rate, veh/h				484	0	358	200	1684	0	0	1337	347
Adj No. of Lanes				1	0	2	2	2	0	0	3	1
Peak Hour Factor				0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %				1	0	1	1	1	0	0	1	1
Cap, veh/h				541	0	850	266	2232	0	0	2625	794
Arrive On Green				0.30	0.00	0.30	0.08	0.62	0.00	0.00	0.51	0.51
Sat Flow, veh/h				1792	0	2814	3476	3668	0	0	5305	1552
Grp Volume(v), veh/h				484	0	358	200	1684	0	0	1337	347
Grp Sat Flow(s),veh/h/ln				1792	0	1407	1738	1787	0	0	1712	1552
Q Serve(g_s), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Cycle Q Clear(g_c), s				28.1	0.0	11.1	6.1	36.4	0.0	0.0	18.7	15.3
Prop In Lane				1.00		1.00	1.00		0.00	0.00		1.00
Lane Grp Cap(c), veh/h				541	0	850	266	2232	0	0	2625	794
V/C Ratio(X)				0.89	0.00	0.42	0.75	0.75	0.00	0.00	0.51	0.44
Avail Cap(c_a), veh/h				724	0	1137	383	2232	0	0	2625	794
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	0.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				36.3	0.0	30.4	49.3	14.5	0.0	0.0	17.6	16.7
Incr Delay (d2), s/veh				11.0	0.0	0.3	4.9	2.4	0.0	0.0	0.7	1.7
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				15.5	0.0	4.3	3.1	18.5	0.0	0.0	9.0	6.9
LnGrp Delay(d), s/veh				47.3	0.0	30.7	54.2	16.9	0.0	0.0	18.3	18.5
LnGrp LOS				D		C	D	B			B	B
Approach Vol, veh/h					842			1884			1684	
Approach Delay, s/veh					40.3			20.9			18.3	
Approach LOS					D			C			B	

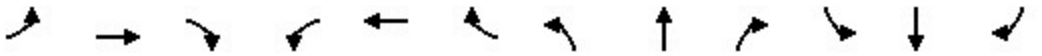
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		72.0			12.3	59.7		36.9
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		68.0			12.0	52.0		44.0
Max Q Clear Time (g_c+I1), s		38.4			8.1	20.7		30.1
Green Ext Time (p_c), s		16.4			0.2	13.7		2.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.6
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Future Volume (vph)	510	0	210	0	0	0	0	1360	570	360	1410	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91	1.00	0.97	0.95	
Frpb, ped/bikes	1.00	1.00	1.00					1.00	0.96	1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Frt	1.00	0.99	0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1698	1617	1519					5136	1533	3467	3574	
Flt Permitted	0.95	0.96	1.00					1.00	1.00	0.95	1.00	
Satd. Flow (perm)	1698	1617	1519					5136	1533	3467	3574	
Peak-hour factor, PHF	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
Adj. Flow (vph)	520	0	214	0	0	0	0	1388	582	367	1439	0
RTOR Reduction (vph)	0	32	39	0	0	0	0	0	308	0	0	0
Lane Group Flow (vph)	270	239	154	0	0	0	0	1388	274	367	1439	0
Confl. Peds. (#/hr)							6		12	12		6
Confl. Bikes (#/hr)									6			6
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Prot	NA	Perm					NA	Perm	Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4						2			
Actuated Green, G (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Effective Green, g (s)	34.0	34.0	34.0					56.4	56.4	17.6	78.0	
Actuated g/C Ratio	0.28	0.28	0.28					0.47	0.47	0.15	0.65	
Clearance Time (s)	4.0	4.0	4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	481	458	430					2413	720	508	2323	
v/s Ratio Prot	c0.16	0.15						0.27		c0.11	c0.40	
v/s Ratio Perm			0.10						0.18			
v/c Ratio	0.56	0.52	0.36					0.58	0.38	0.72	0.62	
Uniform Delay, d1	36.6	36.2	34.3					23.1	20.5	48.9	12.3	
Progression Factor	1.00	1.00	1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	1.5	1.1	0.5					1.0	1.5	5.0	1.3	
Delay (s)	38.1	37.2	34.8					24.1	22.0	53.9	13.6	
Level of Service	D	D	C					C	C	D	B	
Approach Delay (s/veh)		36.9			0.0			23.5			21.8	
Approach LOS		D			A			C			C	

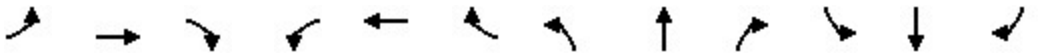
Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.0	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.63		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.4%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Future Volume (vph)	170	0	300	0	0	0	0	870	260	380	560	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	0.95	0.91	0.95					0.91		0.97	0.91	
Frpb, ped/bikes	1.00	1.00	1.00					0.99		1.00	1.00	
Flpb, ped/bikes	1.00	1.00	1.00					1.00		1.00	1.00	
Frt	1.00	0.87	0.85					0.97		1.00	1.00	
Flt Protected	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1681	1461	1504					4868		3433	5085	
Flt Permitted	0.95	0.99	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1681	1461	1504					4868		3433	5085	
Peak-hour factor, PHF	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Adj. Flow (vph)	187	0	330	0	0	0	0	956	286	418	615	0
RTOR Reduction (vph)	0	126	143	0	0	0	0	36	0	0	0	0
Lane Group Flow (vph)	168	48	32	0	0	0	0	1206	0	418	615	0
Confl. Peds. (#/hr)							1		11	11		1
Confl. Bikes (#/hr)									4			3
Turn Type	Prot	NA	Perm					NA		Prot	NA	
Protected Phases	7	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Effective Green, g (s)	21.0	21.0	21.0					61.4		19.0	84.4	
Actuated g/C Ratio	0.19	0.19	0.19					0.54		0.17	0.74	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	311	270	278					2635		575	3784	
v/s Ratio Prot	c0.10	0.03						c0.25		c0.12	0.12	
v/s Ratio Perm			0.02									
v/c Ratio	0.54	0.18	0.12					0.46		0.73	0.16	
Uniform Delay, d1	41.8	38.9	38.5					15.9		44.7	4.2	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.3	0.2					0.6		4.6	0.1	
Delay (s)	43.7	39.2	38.7					16.4		49.3	4.3	
Level of Service	D	D	D					B		D	A	
Approach Delay (s/veh)		40.5			0.0			16.4			22.5	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.1	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	113.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Future Volume (vph)	0	0	0	190	0	220	330	690	0	0	760	550
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Lane Util. Factor				0.95	0.91	0.95	0.97	0.91			0.91	
Frpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			0.99	
Flpb, ped/bikes				1.00	1.00	1.00	1.00	1.00			1.00	
Frt				1.00	0.90	0.85	1.00	1.00			0.94	
Flt Protected				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (prot)				1665	1489	1490	3400	5036			4718	
Flt Permitted				0.95	0.98	1.00	0.95	1.00			1.00	
Satd. Flow (perm)				1665	1489	1490	3400	5036			4718	
Peak-hour factor, PHF	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Adj. Flow (vph)	0	0	0	204	0	237	355	742	0	0	817	591
RTOR Reduction (vph)	0	0	0	0	58	116	0	0	0	0	92	0
Lane Group Flow (vph)	0	0	0	153	88	26	355	742	0	0	1316	0
Confl. Peds. (#/hr)							2		12	12		2
Confl. Bikes (#/hr)									4			4
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	0%
Turn Type				Prot	NA	Perm	Prot	NA			NA	
Protected Phases				3	8		5	2			6	
Permitted Phases						8						
Actuated Green, G (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Effective Green, g (s)				21.6	21.6	21.6	17.4	87.3			65.9	
Actuated g/C Ratio				0.18	0.18	0.18	0.15	0.75			0.56	
Clearance Time (s)				4.0	4.0	4.0	4.0	4.0			4.0	
Vehicle Extension (s)				3.0	3.0	3.0	3.0	3.0			3.0	
Lane Grp Cap (vph)				307	275	275	506	3760			2659	
v/s Ratio Prot				c0.09	0.06		c0.10	0.15			c0.28	
v/s Ratio Perm						0.02						
v/c Ratio				0.50	0.32	0.10	0.70	0.20			0.49	
Uniform Delay, d1				42.8	41.3	39.5	47.3	4.4			15.4	
Progression Factor				1.00	1.00	1.00	1.00	1.00			1.00	
Incremental Delay, d2				1.3	0.7	0.2	4.4	0.1			0.7	
Delay (s)				44.1	42.0	39.7	51.7	4.5			16.1	
Level of Service				D	D	D	D	A			B	
Approach Delay (s/veh)		0.0			42.0			19.8			16.1	
Approach LOS		A			D			B			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	116.9	Sum of lost time (s)	12.0
Intersection Capacity Utilization	54.0%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

NORWALK - 2040 PLUS PROJECT AM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1470	270	10	1680	410	950	1260	0	280	770	10
Future Volume (vph)	0	1470	270	10	1680	410	950	1260	0	280	770	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.98
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.98		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (prot)		4955		1770	5085	1551	1522	4748		1522	4797	1560
Flt Permitted		1.00		0.05	1.00	1.00	0.95	0.99		0.95	1.00	1.00
Satd. Flow (perm)		4955		98	5085	1551	1522	4748		1522	4797	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1633	300	11	1867	456	1056	1400	0	311	856	11
RTOR Reduction (vph)	0	18	0	0	0	74	0	0	0	0	0	9
Lane Group Flow (vph)	0	1915	0	11	1867	382	602	1854	0	280	887	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		76.0		76.0	76.0	76.0	40.0	40.0		22.0	22.0	22.0
Effective Green, g (s)		76.0		76.0	76.0	76.0	40.0	40.0		22.0	22.0	22.0
Actuated g/C Ratio		0.51		0.51	0.51	0.51	0.27	0.27		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2510		49	2576	785	405	1266		223	703	228
v/s Ratio Prot		c0.39			0.37		c0.40	0.39		0.18	c0.18	
v/s Ratio Perm				0.11		0.25						0.00
v/c Ratio		0.76		0.22	0.72	0.49	1.49	1.46		1.26	1.26	0.01
Uniform Delay, d1		29.8		20.6	28.8	24.2	55.0	55.0		64.0	64.0	54.7
Progression Factor		0.87		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1		2.3	1.0	0.5	231.7	213.4		146.2	129.0	0.1
Delay (s)		26.1		22.9	29.9	24.7	286.7	268.4		210.2	193.0	54.7
Level of Service		C		C	C	C	F	F		F	F	D
Approach Delay (s/veh)		26.1			28.8			272.9			195.8	
Approach LOS		C			C			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	128.9	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.05		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	92.6%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Future Volume (veh/h)	150	990	170	90	1400	130	360	610	140	160	460	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.87	1.00		0.86
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
Arrive On Green	0.06	0.50	0.50	0.04	0.48	0.48	0.13	0.26	0.26	0.09	0.22	0.22
Sat Flow, veh/h	1757	3505	1523	1757	3505	1542	3408	3505	1367	1757	3505	1353
Grp Volume(v), veh/h	161	1065	183	97	1505	140	387	656	151	172	495	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1523	1757	1752	1542	1704	1752	1367	1757	1752	1353
Q Serve(g_s), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Cycle Q Clear(g_c), s	6.6	30.7	9.6	3.9	55.1	7.3	15.6	23.9	12.9	10.5	18.0	9.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	185	1740	756	247	1669	734	438	903	352	266	766	296
V/C Ratio(X)	0.87	0.61	0.24	0.39	0.90	0.19	0.88	0.73	0.43	0.65	0.65	0.37
Avail Cap(c_a), veh/h	240	1906	828	286	1806	795	488	903	352	273	766	296
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	32.0	25.4	20.1	20.7	33.6	21.1	59.9	47.4	43.3	38.7	49.7	46.4
Incr Delay (d2), s/veh	22.5	0.5	0.2	1.0	6.4	0.1	16.1	5.1	3.8	5.0	4.2	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	14.9	4.1	2.0	28.0	3.1	8.3	12.2	5.2	5.4	9.1	3.8
LnGrp Delay(d), s/veh	54.5	25.9	20.3	21.8	40.0	21.2	76.0	52.4	47.1	43.7	53.8	49.8
LnGrp LOS	D	C	C	C	D	C	E	D	D	D	D	D
Approach Vol, veh/h		1409			1742			1194			775	
Approach Delay, s/veh		28.5			37.5			59.4			51.0	
Approach LOS		C			D			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.5	40.0	9.8	73.4	22.0	34.5	12.7	70.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	36.0	9.0	76.0	20.0	29.0	13.0	72.0
Max Q Clear Time (g_c+I1), s	12.5	25.9	5.9	32.7	17.6	20.0	8.6	57.1
Green Ext Time (p_c), s	0.0	3.4	0.1	10.1	0.4	2.4	0.2	9.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	290	1300	120	140	1340	70	50	520	150	80	430	370
Future Volume (veh/h)	290	1300	120	140	1340	70	50	520	150	80	430	370
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	299	1340	124	144	1381	72	52	536	155	82	443	381
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	331	2171	662	172	1714	529	67	1101	488	129	1100	488
Arrive On Green	0.19	0.43	0.43	0.10	0.34	0.34	0.04	0.31	0.31	0.04	0.31	0.31
Sat Flow, veh/h	1774	5085	1552	1774	5085	1568	1774	3539	1570	3442	3539	1570
Grp Volume(v), veh/h	299	1340	124	144	1381	72	52	536	155	82	443	381
Grp Sat Flow(s),veh/h/ln	1774	1695	1552	1774	1695	1568	1774	1770	1570	1721	1770	1570
Q Serve(g_s), s	20.7	25.7	6.2	10.0	31.0	4.0	3.6	15.4	9.5	2.9	12.4	27.7
Cycle Q Clear(g_c), s	20.7	25.7	6.2	10.0	31.0	4.0	3.6	15.4	9.5	2.9	12.4	27.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	331	2171	662	172	1714	529	67	1101	488	129	1100	488
V/C Ratio(X)	0.90	0.62	0.19	0.84	0.81	0.14	0.78	0.49	0.32	0.64	0.40	0.78
Avail Cap(c_a), veh/h	524	2718	829	297	2069	638	142	1101	488	192	1100	488
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.9	27.9	22.4	55.6	37.8	28.9	59.8	35.0	33.0	59.5	34.0	39.3
Incr Delay (d2), s/veh	12.8	0.3	0.1	10.3	2.0	0.1	17.1	1.5	1.7	5.1	1.1	11.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.3	12.1	2.7	5.4	14.8	1.7	2.1	7.8	4.3	1.5	6.2	13.6
LnGrp Delay(d), s/veh	62.7	28.2	22.5	65.9	39.8	29.0	76.9	36.6	34.7	64.6	35.1	51.1
LnGrp LOS	E	C	C	E	D	C	E	D	C	E	D	D
Approach Vol, veh/h		1763			1597			743			906	
Approach Delay, s/veh		33.7			41.7			39.0			44.5	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.7	43.0	16.1	57.5	8.7	42.9	27.4	46.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	39.0	21.0	67.0	10.0	36.0	37.0	51.0
Max Q Clear Time (g_c+I1), s	4.9	17.4	12.0	27.7	5.6	29.7	22.7	33.0
Green Ext Time (p_c), s	0.0	3.9	0.2	12.8	0.0	2.2	0.7	9.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Future Volume (veh/h)	220	1070	230	100	1430	120	210	620	100	70	520	170
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	232	1126	242	105	1505	126	221	653	105	74	547	179
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	258	2202	674	128	1718	144	247	1084	476	93	777	576
Arrive On Green	0.15	0.44	0.44	0.07	0.37	0.37	0.14	0.31	0.31	0.05	0.22	0.22
Sat Flow, veh/h	1740	4988	1526	1740	4683	392	1740	3471	1525	1740	3471	1545
Grp Volume(v), veh/h	232	1126	242	105	1068	563	221	653	105	74	547	179
Grp Sat Flow(s),veh/h/ln	1740	1663	1526	1740	1663	1750	1740	1736	1525	1740	1736	1545
Q Serve(g_s), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Cycle Q Clear(g_c), s	17.6	21.9	14.2	8.0	40.3	40.4	16.8	21.4	6.8	5.7	19.5	11.1
Prop In Lane	1.00		1.00	1.00		0.22	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	258	2202	674	128	1220	642	247	1084	476	93	777	576
V/C Ratio(X)	0.90	0.51	0.36	0.82	0.88	0.88	0.89	0.60	0.22	0.79	0.70	0.31
Avail Cap(c_a), veh/h	336	2335	715	207	1310	689	323	1084	476	168	777	576
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	27.1	24.9	61.4	39.7	39.7	56.7	39.2	34.2	62.9	48.1	30.0
Incr Delay (d2), s/veh	21.6	0.2	0.3	12.6	6.6	11.7	21.5	2.5	1.1	13.8	5.3	1.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	10.0	6.0	4.3	19.7	21.6	9.6	10.6	3.0	3.1	9.9	4.9
LnGrp Delay(d), s/veh	77.9	27.3	25.3	74.0	46.4	51.4	78.2	41.7	35.2	76.7	53.4	31.4
LnGrp LOS	E	C	C	E	D	D	E	D	D	E	D	C
Approach Vol, veh/h		1600			1736			979			800	
Approach Delay, s/veh		34.3			49.7			49.2			50.6	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.2	46.0	13.9	63.4	23.1	34.1	24.0	53.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	42.0	16.0	63.0	25.0	30.0	26.0	53.0
Max Q Clear Time (g_c+I1), s	7.7	23.4	10.0	23.9	18.8	21.5	19.6	42.4
Green Ext Time (p_c), s	0.1	4.2	0.1	10.4	0.3	2.6	0.3	7.0

Intersection Summary			
HCM 2010 Ctrl Delay, s/veh		44.9	
HCM 2010 LOS		D	

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Future Volume (veh/h)	190	840	190	160	1260	60	200	600	120	70	520	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
Arrive On Green	0.10	0.47	0.47	0.07	0.45	0.45	0.11	0.30	0.30	0.04	0.23	0.23
Sat Flow, veh/h	1740	3471	1525	1740	3471	1526	1740	3471	1547	1740	3471	1525
Grp Volume(v), veh/h	216	955	216	182	1432	68	227	682	136	80	591	148
Grp Sat Flow(s),veh/h/ln	1740	1736	1525	1740	1736	1526	1740	1736	1547	1740	1736	1525
Q Serve(g_s), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Cycle Q Clear(g_c), s	11.7	28.5	12.4	8.0	55.4	3.7	13.7	24.3	9.6	5.0	22.5	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	240	1640	720	303	1550	682	297	1047	467	209	805	354
V/C Ratio(X)	0.90	0.58	0.30	0.60	0.92	0.10	0.76	0.65	0.29	0.38	0.73	0.42
Avail Cap(c_a), veh/h	290	1704	749	361	1631	717	335	1047	467	209	805	354
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	40.4	27.4	23.1	22.0	37.2	22.8	36.9	43.3	38.1	40.2	50.7	46.6
Incr Delay (d2), s/veh	25.9	0.5	0.2	2.0	9.0	0.1	8.9	3.1	1.6	1.1	5.9	3.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.1	13.8	5.3	4.0	28.4	1.6	7.3	12.1	4.3	2.4	11.4	5.3
LnGrp Delay(d), s/veh	66.3	27.8	23.3	24.0	46.2	22.9	45.9	46.4	39.7	41.3	56.5	50.2
LnGrp LOS	E	C	C	C	D	C	D	D	D	D	E	D
Approach Vol, veh/h		1387			1682			1045			819	
Approach Delay, s/veh		33.1			42.8			45.4			53.9	
Approach LOS		C			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	47.0	14.2	71.3	19.9	37.1	17.9	67.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	43.0	15.0	70.0	19.0	30.0	18.0	67.0
Max Q Clear Time (g_c+I1), s	7.0	26.3	10.0	30.5	15.7	24.5	13.7	57.4
Green Ext Time (p_c), s	0.0	4.5	0.2	8.8	0.2	2.0	0.2	6.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		42.5
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1460	300	230	1790	60	390	1030	490	140	800	160
Future Volume (veh/h)	200	1460	300	230	1790	60	390	1030	490	140	800	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	1537	316	242	1884	63	411	1084	516	147	842	168
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	211	1712	519	258	1847	560	398	1122	719	152	906	272
Arrive On Green	0.12	0.34	0.34	0.15	0.37	0.37	0.23	0.32	0.32	0.09	0.18	0.18
Sat Flow, veh/h	1757	5036	1525	1757	5036	1527	1757	3505	1529	1757	5036	1511
Grp Volume(v), veh/h	211	1537	316	242	1884	63	411	1084	516	147	842	168
Grp Sat Flow(s),veh/h/ln	1757	1679	1525	1757	1679	1527	1757	1752	1529	1757	1679	1511
Q Serve(g_s), s	18.0	43.5	25.9	20.4	55.0	4.1	34.0	45.7	40.8	12.5	24.7	15.4
Cycle Q Clear(g_c), s	18.0	43.5	25.9	20.4	55.0	4.1	34.0	45.7	40.8	12.5	24.7	15.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	211	1712	519	258	1847	560	398	1122	719	152	906	272
V/C Ratio(X)	1.00	0.90	0.61	0.94	1.02	0.11	1.03	0.97	0.72	0.97	0.93	0.62
Avail Cap(c_a), veh/h	211	1712	519	258	1847	560	398	1122	719	152	906	272
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	66.0	47.0	41.2	63.3	47.5	31.4	58.0	50.2	32.2	68.3	60.6	56.7
Incr Delay (d2), s/veh	62.2	6.8	2.1	39.8	26.2	0.1	53.6	19.9	6.1	62.4	17.0	10.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	12.4	21.3	11.2	12.8	30.0	1.7	22.4	25.2	18.4	8.7	12.9	7.2
LnGrp Delay(d), s/veh	128.2	53.8	43.3	103.1	73.7	31.5	111.6	70.1	38.3	130.6	77.5	66.8
LnGrp LOS	F	D	D	F	F	C	F	E	D	F	E	E
Approach Vol, veh/h		2064			2189			2011			1157	
Approach Delay, s/veh		59.8			75.7			70.4			82.7	
Approach LOS		E			E			E			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	52.0	26.0	55.0	38.0	31.0	22.0	59.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	13.0	48.0	22.0	51.0	34.0	27.0	18.0	55.0
Max Q Clear Time (g_c+I1), s	14.5	47.7	22.4	45.5	36.0	26.7	20.0	57.0
Green Ext Time (p_c), s	0.0	0.3	0.0	4.4	0.0	0.2	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	71.0
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Future Volume (veh/h)	200	780	140	40	1260	170	90	580	80	60	610	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
Arrive On Green	0.14	0.44	0.44	0.03	0.33	0.33	0.44	0.44	0.44	0.44	0.44	0.44
Sat Flow, veh/h	1757	5036	1543	1757	5036	1541	584	3505	1546	739	3505	1545
Grp Volume(v), veh/h	211	821	147	42	1326	179	95	611	84	63	642	305
Grp Sat Flow(s),veh/h/ln	1757	1679	1543	1757	1679	1541	584	1752	1546	739	1752	1545
Q Serve(g_s), s	15.0	14.0	7.6	3.0	30.5	11.2	17.0	15.1	4.1	8.1	16.0	17.6
Cycle Q Clear(g_c), s	15.0	14.0	7.6	3.0	30.5	11.2	33.0	15.1	4.1	23.1	16.0	17.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	2194	672	54	1658	508	240	1541	680	294	1541	679
V/C Ratio(X)	0.88	0.37	0.22	0.78	0.80	0.35	0.40	0.40	0.12	0.21	0.42	0.45
Avail Cap(c_a), veh/h	414	2886	884	124	2056	629	240	1541	680	294	1541	679
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.9	24.2	22.4	61.3	38.9	32.4	35.8	24.2	21.2	32.1	24.5	24.9
Incr Delay (d2), s/veh	10.4	0.1	0.2	21.2	1.9	0.4	4.8	0.8	0.4	1.7	0.8	2.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	6.5	3.3	1.8	14.4	4.8	3.1	7.5	1.8	1.8	7.9	7.9
LnGrp Delay(d), s/veh	64.4	24.3	22.6	82.5	40.8	32.8	40.6	25.0	21.5	33.7	25.3	27.1
LnGrp LOS	E	C	C	F	D	C	D	C	C	C	C	C
Approach Vol, veh/h		1179			1547			790			1010	
Approach Delay, s/veh		31.3			41.0			26.5			26.4	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		60.0	7.9	59.5		60.0	21.4	46.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		56.0	9.0	73.0		56.0	30.0	52.0
Max Q Clear Time (g_c+I1), s		35.0	5.0	16.0		25.1	17.0	32.5
Green Ext Time (p_c), s		5.0	0.0	6.8		6.1	0.4	9.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	32.7
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Future Volume (veh/h)	140	810	130	230	1270	60	90	650	110	60	600	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
Arrive On Green	0.10	0.38	0.38	0.16	0.43	0.43	0.38	0.38	0.38	0.38	0.38	0.38
Sat Flow, veh/h	1757	3505	1546	1757	3505	1547	706	3505	1545	665	3505	1544
Grp Volume(v), veh/h	149	862	138	245	1351	64	96	691	117	64	638	106
Grp Sat Flow(s),veh/h/ln	1757	1752	1546	1757	1752	1547	706	1752	1545	665	1752	1544
Q Serve(g_s), s	11.4	27.8	8.4	18.7	48.6	3.3	16.3	20.8	6.9	11.2	18.9	6.2
Cycle Q Clear(g_c), s	11.4	27.8	8.4	18.7	48.6	3.3	35.2	20.8	6.9	32.0	18.9	6.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	174	1321	583	273	1518	670	224	1333	587	204	1333	587
V/C Ratio(X)	0.86	0.65	0.24	0.90	0.89	0.10	0.43	0.52	0.20	0.31	0.48	0.18
Avail Cap(c_a), veh/h	244	1384	611	411	1717	758	224	1333	587	204	1333	587
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	60.7	35.2	29.2	56.7	35.8	22.9	45.4	32.7	28.4	45.1	32.1	28.2
Incr Delay (d2), s/veh	18.7	1.0	0.2	15.9	5.7	0.1	5.9	1.4	0.8	4.0	1.2	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	13.6	3.6	10.3	24.7	1.4	3.5	10.3	3.1	2.3	9.4	2.8
LnGrp Delay(d), s/veh	79.4	36.3	29.4	72.6	41.5	23.0	51.3	34.2	29.2	49.0	33.3	28.9
LnGrp LOS	E	D	C	E	D	C	D	C	C	D	C	C
Approach Vol, veh/h		1149			1660			904			808	
Approach Delay, s/veh		41.0			45.4			35.3			34.0	
Approach LOS		D			D			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		56.0	25.2	55.5		56.0	17.5	63.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		52.0	32.0	54.0		52.0	19.0	67.0
Max Q Clear Time (g_c+I1), s		37.2	20.7	29.8		34.0	13.4	50.6
Green Ext Time (p_c), s		4.8	0.5	6.3		4.6	0.2	8.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	40.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Future Volume (veh/h)	100	160	110	190	380	90	70	710	50	120	720	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
Arrive On Green	0.34	0.34	0.34	0.34	0.34	0.34	0.60	0.60	0.60	0.60	0.60	0.60
Sat Flow, veh/h	872	1845	1547	1067	1845	1567	616	3505	1529	649	3505	1530
Grp Volume(v), veh/h	110	176	121	209	418	99	77	780	55	132	791	99
Grp Sat Flow(s),veh/h/ln	872	1845	1547	1067	1845	1567	616	1752	1529	649	1752	1530
Q Serve(g_s), s	16.6	9.4	7.6	24.0	26.1	6.0	10.0	15.6	2.0	17.9	15.9	3.8
Cycle Q Clear(g_c), s	42.7	9.4	7.6	33.3	26.1	6.0	25.9	15.6	2.0	33.5	15.9	3.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	184	632	530	345	632	537	350	2096	914	367	2096	915
V/C Ratio(X)	0.60	0.28	0.23	0.61	0.66	0.18	0.22	0.37	0.06	0.36	0.38	0.11
Avail Cap(c_a), veh/h	278	831	697	460	831	706	350	2096	914	367	2096	915
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.9	32.3	31.7	44.4	37.8	31.2	20.8	14.1	11.3	22.7	14.1	11.7
Incr Delay (d2), s/veh	3.1	0.2	0.2	1.7	1.2	0.2	1.4	0.5	0.1	2.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.2	4.8	3.3	7.2	13.5	2.6	1.9	7.6	0.9	3.5	7.8	1.7
LnGrp Delay(d), s/veh	59.0	32.6	31.9	46.2	39.0	31.4	22.3	14.6	11.5	25.5	14.6	11.9
LnGrp LOS	E	C	C	D	D	C	C	B	B	C	B	B
Approach Vol, veh/h		407			726			912			1022	
Approach Delay, s/veh		39.5			40.0			15.0			15.8	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		85.0		50.4		85.0		50.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		81.0		61.0		81.0		61.0
Max Q Clear Time (g_c+I1), s		27.9		44.7		35.5		35.3
Green Ext Time (p_c), s		7.0		1.7		8.0		3.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1460	60	270	1970	110	90	790	340	80	450	190
Future Volume (veh/h)	140	1460	60	270	1970	110	90	790	340	80	450	190
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	157	1640	67	303	2213	124	101	888	382	90	506	213
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	164	1889	564	325	2273	126	122	981	427	94	924	407
Arrive On Green	0.09	0.38	0.38	0.18	0.47	0.47	0.07	0.28	0.28	0.05	0.26	0.26
Sat Flow, veh/h	1757	5036	1504	1757	4871	271	1757	3505	1527	1757	3505	1545
Grp Volume(v), veh/h	157	1640	67	303	1520	817	101	888	382	90	506	213
Grp Sat Flow(s),veh/h/ln	1757	1679	1504	1757	1679	1785	1757	1752	1527	1757	1752	1545
Q Serve(g_s), s	13.3	45.3	4.4	25.5	66.2	67.6	8.5	36.6	36.0	7.7	18.6	17.7
Cycle Q Clear(g_c), s	13.3	45.3	4.4	25.5	66.2	67.6	8.5	36.6	36.0	7.7	18.6	17.7
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	164	1889	564	325	1566	833	122	981	427	94	924	407
V/C Ratio(X)	0.96	0.87	0.12	0.93	0.97	0.98	0.83	0.90	0.89	0.96	0.55	0.52
Avail Cap(c_a), veh/h	164	1889	564	351	1567	833	187	981	427	94	924	407
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	67.7	43.4	30.6	60.2	39.0	39.4	68.9	52.1	51.8	70.8	47.5	47.2
Incr Delay (d2), s/veh	57.5	4.6	0.1	30.3	16.1	26.6	16.0	13.3	23.7	79.8	2.3	4.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.1	21.8	1.8	15.1	34.1	39.3	4.7	19.6	18.0	5.8	9.3	8.1
LnGrp Delay(d), s/veh	125.2	48.0	30.7	90.5	55.1	65.9	84.9	65.4	75.5	150.6	49.8	51.9
LnGrp LOS	F	D	C	F	E	E	F	E	E	F	D	D
Approach Vol, veh/h		1864			2640			1371			809	
Approach Delay, s/veh		53.9			62.5			69.6			61.6	
Approach LOS		D			E			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.0	46.0	31.7	60.3	14.4	43.6	18.0	74.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	42.0	30.0	54.0	16.0	34.0	14.0	70.0
Max Q Clear Time (g_c+I1), s	9.7	38.6	27.5	47.3	10.5	20.6	15.3	69.6
Green Ext Time (p_c), s	0.0	2.1	0.2	5.1	0.1	3.2	0.0	0.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	61.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1200	210	130	1690	10	180	10	40	0	0	0
Future Volume (veh/h)	0	1200	210	130	1690	10	180	10	40	0	0	0
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.97	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	0	1333	233	144	1878	11	200	11	44	0	0	0
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	65	1771	309	227	2656	16	773	130	521	0	746	0
Arrive On Green	0.00	0.42	0.42	0.07	0.52	0.52	0.41	0.41	0.41	0.00	0.00	0.00
Sat Flow, veh/h	234	4238	741	1740	5115	30	1734	319	1277	0	1827	0
Grp Volume(v), veh/h	0	1046	520	144	1221	668	200	0	55	0	0	0
Grp Sat Flow(s),veh/h/ln	234	1663	1654	1740	1663	1820	1734	0	1596	0	1827	0
Q Serve(g_s), s	0.0	29.4	29.5	5.0	30.7	30.8	8.5	0.0	2.3	0.0	0.0	0.0
Cycle Q Clear(g_c), s	0.0	29.4	29.5	5.0	30.7	30.8	8.5	0.0	2.3	0.0	0.0	0.0
Prop In Lane	1.00		0.45	1.00		0.02	1.00		0.80	0.00		0.00
Lane Grp Cap(c), veh/h	65	1389	691	227	1726	945	773	0	652	0	746	0
V/C Ratio(X)	0.00	0.75	0.75	0.63	0.71	0.71	0.26	0.00	0.08	0.00	0.00	0.00
Avail Cap(c_a), veh/h	118	2142	1065	461	2926	1602	773	0	652	0	746	0
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	0.00
Uniform Delay (d), s/veh	0.0	27.2	27.3	22.7	20.1	20.1	21.8	0.0	20.0	0.0	0.0	0.0
Incr Delay (d2), s/veh	0.0	0.8	1.7	2.9	0.5	1.0	0.8	0.0	0.3	0.0	0.0	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	13.7	13.8	2.5	14.2	15.7	4.2	0.0	1.1	0.0	0.0	0.0
LnGrp Delay(d), s/veh	0.0	28.1	28.9	25.6	20.7	21.1	22.6	0.0	20.2	0.0	0.0	0.0
LnGrp LOS		C	C	C	C	C	C		C			
Approach Vol, veh/h		1566			2033			255			0	
Approach Delay, s/veh		28.4			21.2			22.1			0.0	
Approach LOS		C			C			C				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		49.0	11.2	50.1		49.0		61.2
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0	22.0	71.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		10.5	7.0	31.5		0.0		32.8
Green Ext Time (p_c), s		0.9	0.3	14.6		0.0		22.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	24.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Future Volume (veh/h)	120	660	150	80	1420	70	160	500	60	20	450	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	129	710	161	86	1527	75	172	538	65	22	484	54
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	962	107
Arrive On Green	0.65	0.65	0.65	0.65	0.65	0.65	0.30	0.30	0.30	0.30	0.30	0.30
Sat Flow, veh/h	316	3539	1562	633	3539	1561	864	3539	1559	813	3206	356
Grp Volume(v), veh/h	129	710	161	86	1527	75	172	538	65	22	266	272
Grp Sat Flow(s),veh/h/ln	316	1770	1562	633	1770	1561	864	1770	1559	813	1770	1793
Q Serve(g_s), s	56.8	13.3	6.1	10.4	40.2	2.7	26.2	18.8	4.6	3.4	18.6	18.8
Cycle Q Clear(g_c), s	97.0	13.3	6.1	23.7	40.2	2.7	45.0	18.8	4.6	22.3	18.6	18.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.20
Lane Grp Cap(c), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
V/C Ratio(X)	0.77	0.31	0.16	0.21	0.67	0.07	0.86	0.51	0.14	0.12	0.50	0.51
Avail Cap(c_a), veh/h	168	2289	1010	401	2289	1010	199	1062	468	190	531	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.7	11.7	10.4	17.0	16.5	9.8	63.5	43.3	38.3	52.5	43.3	43.3
Incr Delay (d2), s/veh	19.4	0.1	0.1	0.3	0.8	0.0	36.1	1.7	0.6	1.2	3.4	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.2	6.5	2.6	1.8	19.8	1.2	9.1	9.4	2.0	0.8	9.6	9.8
LnGrp Delay(d), s/veh	68.0	11.8	10.5	17.2	17.2	9.9	99.6	45.1	39.0	53.8	46.6	46.7
LnGrp LOS	E	B	B	B	B	A	F	D	D	D	D	D
Approach Vol, veh/h		1000			1688			775			560	
Approach Delay, s/veh		18.8			16.9			56.7			46.9	
Approach LOS		B			B			E			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		49.0		101.0		49.0		101.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0		97.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		47.0		99.0		24.3		42.2
Green Ext Time (p_c), s		0.0		0.0		3.1		18.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.2
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	970	130	30	1510	150	130	40	30	220	60	140
Future Volume (veh/h)	110	970	130	30	1510	150	130	40	30	220	60	140
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	115	1010	135	31	1573	156	135	42	31	229	62	146
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	142	2237	298	39	2042	202	443	397	330	525	474	394
Arrive On Green	0.08	0.50	0.50	0.02	0.44	0.44	0.08	0.22	0.22	0.12	0.26	0.26
Sat Flow, veh/h	1740	4443	592	1740	4600	456	1740	1827	1518	1740	1827	1521
Grp Volume(v), veh/h	115	755	390	31	1136	593	135	42	31	229	62	146
Grp Sat Flow(s),veh/h/ln	1740	1663	1710	1740	1663	1731	1740	1827	1518	1740	1827	1521
Q Serve(g_s), s	7.5	16.9	17.0	2.1	33.4	33.5	6.9	2.1	1.9	11.3	3.0	9.1
Cycle Q Clear(g_c), s	7.5	16.9	17.0	2.1	33.4	33.5	6.9	2.1	1.9	11.3	3.0	9.1
Prop In Lane	1.00		0.35	1.00		0.26	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	142	1674	861	39	1476	768	443	397	330	525	474	394
V/C Ratio(X)	0.81	0.45	0.45	0.80	0.77	0.77	0.30	0.11	0.09	0.44	0.13	0.37
Avail Cap(c_a), veh/h	301	2385	1227	105	2011	1047	520	397	330	649	474	394
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.2	18.5	18.5	56.3	27.2	27.2	31.2	36.3	36.2	27.9	32.9	35.1
Incr Delay (d2), s/veh	10.3	0.2	0.4	30.8	1.3	2.5	0.4	0.5	0.6	0.6	0.6	2.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	7.8	8.1	1.3	15.6	16.5	3.3	1.1	0.8	5.5	1.6	4.1
LnGrp Delay(d), s/veh	62.6	18.6	18.8	87.2	28.5	29.7	31.6	36.8	36.7	28.5	33.4	37.8
LnGrp LOS	E	B	B	F	C	C	C	D	D	C	C	D
Approach Vol, veh/h		1260			1760			208			437	
Approach Delay, s/veh		22.7			29.9			33.4			32.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.7	29.2	6.6	62.3	12.9	34.0	13.5	55.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	22.0	22.0	7.0	83.0	14.0	30.0	20.0	70.0
Max Q Clear Time (g_c+I1), s	13.3	4.1	4.1	19.0	8.9	11.1	9.5	35.5
Green Ext Time (p_c), s	0.4	0.2	0.0	9.5	0.1	0.7	0.2	15.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	960	120	50	1110	10	110	20	20	20	60	590
Future Volume (veh/h)	200	960	120	50	1110	10	110	20	20	20	60	590
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	206	990	124	52	1144	10	113	21	21	21	62	608
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	281	1563	195	67	1553	14	428	912	773	724	912	1360
Arrive On Green	0.08	0.35	0.35	0.04	0.30	0.30	0.50	0.50	0.50	0.50	0.50	0.50
Sat Flow, veh/h	3375	4474	559	1740	5099	45	749	1827	1548	1329	1827	2725
Grp Volume(v), veh/h	206	735	379	52	746	408	113	21	21	21	62	608
Grp Sat Flow(s),veh/h/ln	1688	1663	1708	1740	1663	1819	749	1827	1548	1329	1827	1362
Q Serve(g_s), s	6.3	19.6	19.7	3.1	21.4	21.4	9.8	0.6	0.7	0.9	1.9	15.3
Cycle Q Clear(g_c), s	6.3	19.6	19.7	3.1	21.4	21.4	11.7	0.6	0.7	1.5	1.9	15.3
Prop In Lane	1.00		0.33	1.00		0.02	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	281	1162	597	67	1013	554	428	912	773	724	912	1360
V/C Ratio(X)	0.73	0.63	0.63	0.78	0.74	0.74	0.26	0.02	0.03	0.03	0.07	0.45
Avail Cap(c_a), veh/h	731	2161	1110	262	1941	1062	428	912	773	724	912	1360
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	47.5	28.8	28.9	50.6	33.1	33.1	16.8	13.5	13.5	13.9	13.8	17.1
Incr Delay (d2), s/veh	3.7	0.6	1.1	17.4	1.1	1.9	1.5	0.0	0.1	0.1	0.1	1.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.1	9.1	9.4	1.8	9.9	11.0	2.2	0.3	0.3	0.3	1.0	5.9
LnGrp Delay(d), s/veh	51.2	29.4	30.0	68.0	34.2	35.0	18.3	13.5	13.6	13.9	13.9	18.2
LnGrp LOS	D	C	C	E	C	D	B	B	B	B	B	B
Approach Vol, veh/h		1320			1206			155			691	
Approach Delay, s/veh		33.0			35.9			17.0			17.7	
Approach LOS		C			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		57.0	8.1	41.1		57.0	12.9	36.3
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		53.0	16.0	69.0		53.0	23.0	62.0
Max Q Clear Time (g_c+I1), s		13.7	5.1	21.7		17.3	8.3	23.4
Green Ext Time (p_c), s		1.1	0.1	9.0		3.1	0.5	9.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.2
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Future Volume (veh/h)	230	560	20	190	650	120	100	550	100	80	1390	190
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	240	583	21	198	677	125	104	573	104	83	1448	198
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	267	1104	488	226	1021	446	127	1660	295	104	1669	228
Arrive On Green	0.15	0.31	0.31	0.13	0.29	0.29	0.07	0.38	0.38	0.06	0.37	0.37
Sat Flow, veh/h	1774	3539	1565	1774	3539	1544	1774	4325	770	1774	4501	615
Grp Volume(v), veh/h	240	583	21	198	677	125	104	447	230	83	1090	556
Grp Sat Flow(s),veh/h/ln	1774	1770	1565	1774	1770	1544	1774	1695	1704	1774	1695	1725
Q Serve(g_s), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Cycle Q Clear(g_c), s	18.0	18.3	1.3	14.8	22.7	8.5	7.8	12.6	13.0	6.2	40.3	40.4
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.45	1.00		0.36
Lane Grp Cap(c), veh/h	267	1104	488	226	1021	446	127	1301	654	104	1257	640
V/C Ratio(X)	0.90	0.53	0.04	0.88	0.66	0.28	0.82	0.34	0.35	0.80	0.87	0.87
Avail Cap(c_a), veh/h	354	1104	488	354	1021	446	184	1380	694	171	1355	689
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.4	38.3	32.4	57.9	42.3	37.2	61.9	29.6	29.7	62.8	39.4	39.5
Incr Delay (d2), s/veh	20.4	1.8	0.2	14.1	3.4	1.6	16.8	0.2	0.3	12.8	5.9	10.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.3	9.3	0.6	8.1	11.6	3.8	4.4	5.9	6.2	3.4	19.8	21.2
LnGrp Delay(d), s/veh	76.8	40.1	32.6	72.0	45.7	38.8	78.7	29.7	30.0	75.7	45.3	50.4
LnGrp LOS	E	D	C	E	D	D	E	C	C	E	D	D
Approach Vol, veh/h		844			1000			781			1729	
Approach Delay, s/veh		50.3			50.0			36.3			48.4	
Approach LOS		D			D			D			D	

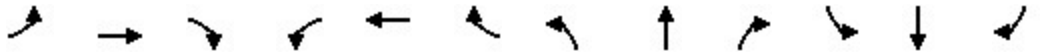
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.2	46.2	11.9	55.9	24.3	43.0	13.7	54.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	39.0	13.0	55.0	27.0	39.0	14.0	54.0
Max Q Clear Time (g_c+I1), s	16.8	20.3	8.2	15.0	20.0	24.7	9.8	42.4
Green Ext Time (p_c), s	0.4	3.7	0.1	4.6	0.4	4.2	0.1	7.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Future Volume (veh/h)	110	490	80	140	1380	30	200	630	120	40	700	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
Arrive On Green	0.08	0.42	0.42	0.10	0.44	0.44	0.10	0.34	0.34	0.03	0.27	0.27
Sat Flow, veh/h	1774	3539	1553	1774	3539	1574	1774	3539	1550	1774	3539	1521
Grp Volume(v), veh/h	115	510	83	146	1438	31	208	656	125	42	729	115
Grp Sat Flow(s),veh/h/ln	1774	1770	1553	1774	1770	1574	1774	1770	1550	1774	1770	1521
Q Serve(g_s), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Cycle Q Clear(g_c), s	9.1	13.9	4.6	11.6	54.5	1.6	11.7	21.3	8.2	2.4	27.0	8.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	137	1499	658	170	1565	696	276	1214	532	228	960	413
V/C Ratio(X)	0.84	0.34	0.13	0.86	0.92	0.04	0.75	0.54	0.24	0.18	0.76	0.28
Avail Cap(c_a), veh/h	161	1499	658	261	1660	738	303	1214	532	246	960	413
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	65.0	27.7	25.1	63.6	37.4	22.7	35.2	37.8	33.5	36.7	47.8	41.0
Incr Delay (d2), s/veh	27.0	0.1	0.1	15.7	8.4	0.0	9.4	1.7	1.0	0.4	5.6	1.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.5	6.8	2.0	6.4	28.4	0.7	6.4	10.8	3.7	1.2	13.9	3.8
LnGrp Delay(d), s/veh	92.0	27.9	25.2	79.3	45.8	22.7	44.6	39.6	34.6	37.0	53.4	42.7
LnGrp LOS	F	C	C	E	D	C	D	D	C	D	D	D
Approach Vol, veh/h		708			1615			989			886	
Approach Delay, s/veh		38.0			48.4			40.0			51.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	7.6	53.0	17.7	64.5	17.8	42.8	15.1	67.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	5.0	49.0	21.0	59.0	16.0	38.0	13.0	67.0
Max Q Clear Time (g_c+I1), s	4.4	23.3	13.6	15.9	13.7	29.0	11.1	56.5
Green Ext Time (p_c), s	0.0	5.1	0.2	3.8	0.1	3.5	0.0	6.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Future Volume (veh/h)	30	200	20	300	590	50	30	630	140	110	700	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
Arrive On Green	0.37	0.37	0.37	0.37	0.37	0.37	0.56	0.56	0.56	0.56	0.56	0.56
Sat Flow, veh/h	756	3539	1562	1141	3539	1562	678	3539	1560	665	3539	1559
Grp Volume(v), veh/h	32	213	21	319	628	53	32	670	149	117	745	53
Grp Sat Flow(s),veh/h/ln	756	1770	1562	1141	1770	1562	678	1770	1560	665	1770	1559
Q Serve(g_s), s	4.1	4.9	1.0	31.4	16.4	2.7	3.3	12.3	5.5	13.8	14.0	1.8
Cycle Q Clear(g_c), s	20.5	4.9	1.0	36.2	16.4	2.7	17.3	12.3	5.5	26.1	14.0	1.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	236	1308	577	435	1308	577	364	1997	880	367	1997	879
V/C Ratio(X)	0.14	0.16	0.04	0.73	0.48	0.09	0.09	0.34	0.17	0.32	0.37	0.06
Avail Cap(c_a), veh/h	421	2173	959	714	2173	959	364	1997	880	367	1997	879
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	37.0	25.5	24.3	37.7	29.1	24.8	19.3	14.1	12.7	21.1	14.5	11.8
Incr Delay (d2), s/veh	0.3	0.1	0.0	2.4	0.3	0.1	0.5	0.5	0.4	2.3	0.5	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.9	2.4	0.5	10.1	8.1	1.2	0.7	6.1	2.5	2.8	7.0	0.8
LnGrp Delay(d), s/veh	37.2	25.6	24.3	40.1	29.4	24.9	19.8	14.6	13.1	23.4	15.0	12.0
LnGrp LOS	D	C	C	D	C	C	B	B	B	C	B	B
Approach Vol, veh/h		266			1000			851			915	
Approach Delay, s/veh		26.9			32.6			14.5			15.9	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		72.0		48.5		72.0		48.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		68.0		74.0		68.0		74.0
Max Q Clear Time (g_c+I1), s		19.3		22.5		28.1		38.2
Green Ext Time (p_c), s		6.1		1.7		7.5		6.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	160	150	990	50	190	670	70	90	870	40
Future Volume (veh/h)	80	780	160	150	990	50	190	670	70	90	870	40
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	87	848	174	163	1076	54	207	728	76	98	946	43
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	108	993	202	188	1390	70	335	1743	769	371	1624	716
Arrive On Green	0.06	0.24	0.24	0.11	0.28	0.28	0.08	0.50	0.50	0.04	0.46	0.46
Sat Flow, veh/h	1757	4180	852	1757	4911	246	1757	3505	1547	1757	3505	1546
Grp Volume(v), veh/h	87	680	342	163	735	395	207	728	76	98	946	43
Grp Sat Flow(s),veh/h/ln	1757	1679	1675	1757	1679	1800	1757	1752	1547	1757	1752	1546
Q Serve(g_s), s	6.8	26.9	27.1	12.7	27.9	27.9	8.3	18.3	3.6	4.1	27.5	2.1
Cycle Q Clear(g_c), s	6.8	26.9	27.1	12.7	27.9	27.9	8.3	18.3	3.6	4.1	27.5	2.1
Prop In Lane	1.00		0.51	1.00		0.14	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	798	398	188	950	509	335	1743	769	371	1624	716
V/C Ratio(X)	0.80	0.85	0.86	0.87	0.77	0.77	0.62	0.42	0.10	0.26	0.58	0.06
Avail Cap(c_a), veh/h	190	895	447	279	1065	571	466	1743	769	372	1624	716
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.3	50.6	50.7	61.0	45.7	45.7	20.6	22.1	18.4	18.7	27.4	20.6
Incr Delay (d2), s/veh	12.8	7.3	14.3	16.9	3.2	5.9	1.9	0.7	0.3	0.4	1.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.3	14.1	7.0	13.4	14.8	4.1	9.0	1.6	2.0	13.6	0.9
LnGrp Delay(d), s/veh	77.1	57.9	65.0	77.8	48.9	51.6	22.4	22.9	18.7	19.1	28.9	20.7
LnGrp LOS	E	E	E	E	D	D	C	C	B	B	C	C
Approach Vol, veh/h		1109			1293			1011			1087	
Approach Delay, s/veh		61.6			53.4			22.5			27.7	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.9	73.0	18.9	37.0	14.6	68.3	12.6	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	6.0	69.0	22.0	37.0	21.0	54.0	15.0	44.0
Max Q Clear Time (g_c+I1), s	6.1	20.3	14.7	29.1	10.3	29.5	8.8	29.9
Green Ext Time (p_c), s	0.0	5.5	0.2	3.8	0.4	7.3	0.1	6.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.2
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Future Volume (veh/h)	30	460	170	150	1250	130	80	600	30	360	1150	50
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	32	484	179	158	1316	137	84	632	0	379	1211	53
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	116	1439	641	409	1460	151	105	967	0	408	1801	79
Arrive On Green	0.02	0.40	0.40	0.06	0.45	0.45	0.06	0.19	0.00	0.23	0.36	0.36
Sat Flow, veh/h	1792	3574	1592	1792	3268	339	1792	5305	0	1792	5043	221
Grp Volume(v), veh/h	32	484	179	158	717	736	84	632	0	379	822	442
Grp Sat Flow(s),veh/h/ln	1792	1787	1592	1792	1787	1820	1792	1712	0	1792	1712	1840
Q Serve(g_s), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Cycle Q Clear(g_c), s	1.4	12.8	10.4	6.9	50.9	51.5	6.4	15.6	0.0	28.4	27.9	27.9
Prop In Lane	1.00		1.00	1.00		0.19	1.00		0.00	1.00		0.12
Lane Grp Cap(c), veh/h	116	1439	641	409	799	813	105	967	0	408	1223	657
V/C Ratio(X)	0.28	0.34	0.28	0.39	0.90	0.90	0.80	0.65	0.00	0.93	0.67	0.67
Avail Cap(c_a), veh/h	131	1589	708	423	873	889	183	967	0	522	1223	657
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.5	28.3	27.6	21.2	35.1	35.2	63.8	51.5	0.0	51.9	37.3	37.3
Incr Delay (d2), s/veh	1.3	0.1	0.2	0.6	11.4	12.0	12.7	3.4	0.0	20.2	3.0	5.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.7	6.3	4.6	3.4	27.6	28.5	3.5	7.7	0.0	16.4	13.6	15.1
LnGrp Delay(d), s/veh	32.8	28.5	27.8	21.8	46.5	47.3	76.4	55.0	0.0	72.1	40.3	42.7
LnGrp LOS	C	C	C	C	D	D	E	D		E	D	D
Approach Vol, veh/h		695			1611			716			1643	
Approach Delay, s/veh		28.5			44.4			57.5			48.3	
Approach LOS		C			D			E			D	

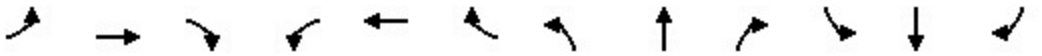
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	12.1	53.0	12.9	59.2	35.2	29.8	6.8	65.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	14.0	49.0	10.0	61.0	40.0	23.0	4.0	67.0
Max Q Clear Time (g_c+I1), s	8.4	29.9	8.9	14.8	30.4	17.6	3.4	53.5
Green Ext Time (p_c), s	0.1	7.7	0.0	4.0	0.8	1.8	0.0	7.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1820	120	50	1360	970	640	250	20	0	0	0
Future Volume (veh/h)	200	1820	120	50	1360	970	640	250	20	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	217	1978	130	54	1478	1054	696	272	22			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	229	2931	192	69	2916	908	497	495	443			
Arrive On Green	0.07	0.60	0.60	0.04	0.57	0.57	0.28	0.28	0.28			
Sat Flow, veh/h	3442	4877	319	1774	5085	1583	1774	1770	1583			
Grp Volume(v), veh/h	217	1372	736	54	1478	1054	696	272	22			
Grp Sat Flow(s),veh/h/ln	1721	1695	1806	1774	1695	1583	1774	1770	1583			
Q Serve(g_s), s	9.4	40.7	41.1	4.5	26.2	86.0	42.0	19.6	1.5			
Cycle Q Clear(g_c), s	9.4	40.7	41.1	4.5	26.2	86.0	42.0	19.6	1.5			
Prop In Lane	1.00		0.18	1.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	229	2037	1086	69	2916	908	497	495	443			
V/C Ratio(X)	0.95	0.67	0.68	0.78	0.51	1.16	1.40	0.55	0.05			
Avail Cap(c_a), veh/h	229	2037	1086	118	2916	908	497	495	443			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	69.7	20.1	20.1	71.4	19.2	32.0	54.0	45.9	39.4			
Incr Delay (d2), s/veh	44.4	1.8	3.4	17.0	0.1	84.7	192.4	1.3	0.0			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	5.9	19.4	21.5	2.5	12.2	58.7	47.1	9.8	0.7			
LnGrp Delay(d), s/veh	114.1	21.9	23.6	88.4	19.4	116.7	246.4	47.2	39.5			
LnGrp LOS	F	C	C	F	B	F	F	D	D			
Approach Vol, veh/h		2325			2586			990				
Approach Delay, s/veh		31.0			60.5			187.1				
Approach LOS		C			E			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	9.9	94.1			14.0	90.0		46.0
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	10.0	86.0			10.0	86.0		42.0
Max Q Clear Time (g_c+I1), s	6.5	43.1			11.4	88.0		44.0
Green Ext Time (p_c), s	0.0	23.5			0.0	0.0		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	70.1
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1230	170	180	1970	0	0	0	0	930	50	30
Future Volume (vph)	0	1230	170	180	1970	0	0	0	0	930	50	30
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3244	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3244	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1337	185	196	2141	0	0	0	0	1011	54	33
RTOR Reduction (vph)	0	0	57	0	0	0	0	0	0	0	0	21
Lane Group Flow (vph)	0	1337	128	196	2141	0	0	0	0	505	560	12
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		61.4	61.4	12.2	77.6					49.2	49.2	49.2
Effective Green, g (s)		61.4	61.4	12.2	77.6					49.2	49.2	49.2
Actuated g/C Ratio		0.46	0.46	0.09	0.58					0.36	0.36	0.36
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2316	721	310	2927					587	1184	577
v/s Ratio Prot		0.26		0.06	c0.42					c0.31	0.17	
v/s Ratio Perm			0.08									0.01
v/c Ratio		0.58	0.18	0.63	0.73					0.86	0.47	0.02
Uniform Delay, d1		27.1	21.7	59.1	21.0					39.6	32.8	27.4
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		0.4	0.1	4.2	1.7					12.3	0.3	0.0
Delay (s)		27.5	21.9	63.3	22.6					51.9	33.1	27.4
Level of Service		C	C	E	C					D	C	C
Approach Delay (s/veh)		26.8			26.0			0.0			41.6	
Approach LOS		C			C			A			D	

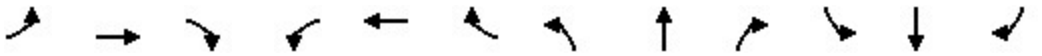
Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	134.8	Sum of lost time (s)	12.0
Intersection Capacity Utilization	70.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	0	50	60	870	650	210	620	0	0	970	20
Future Volume (veh/h)	40	0	50	60	870	650	210	620	0	0	970	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	43	0	54	65	946	707	228	674	0	0	1054	22
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	110	1687	786	284	2246	0	0	1682	35
Arrive On Green	0.00	0.00	0.00	0.50	0.50	0.50	0.08	0.44	0.00	0.00	0.33	0.33
Sat Flow, veh/h		0		222	3399	1583	3442	5253	0	0	5295	107
Grp Volume(v), veh/h		0.0		542	469	707	228	674	0	0	697	379
Grp Sat Flow(s),veh/h/ln				1852	1770	1583	1721	1695	0	0	1695	1844
Q Serve(g_s), s				26.9	23.5	52.4	8.4	11.0	0.0	0.0	22.4	22.5
Cycle Q Clear(g_c), s				26.9	23.5	52.4	8.4	11.0	0.0	0.0	22.4	22.5
Prop In Lane				0.12		1.00	1.00		0.00	0.00		0.06
Lane Grp Cap(c), veh/h				919	878	786	284	2246	0	0	1112	605
V/C Ratio(X)				0.59	0.53	0.90	0.80	0.30	0.00	0.00	0.63	0.63
Avail Cap(c_a), veh/h				1062	1015	908	373	2246	0	0	1112	605
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				23.1	22.3	29.6	58.2	23.2	0.0	0.0	36.7	36.7
Incr Delay (d2), s/veh				0.6	0.5	10.8	9.1	0.3	0.0	0.0	2.7	4.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				13.9	11.6	25.1	4.4	5.2	0.0	0.0	10.9	12.3
LnGrp Delay(d), s/veh				23.8	22.8	40.4	67.3	23.5	0.0	0.0	39.3	41.5
LnGrp LOS				C	C	D	E	C			D	D
Approach Vol, veh/h					1718			902			1076	
Approach Delay, s/veh					30.3			34.6			40.1	
Approach LOS					C			C			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		61.0			14.6	46.4		68.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		57.0			14.0	39.0		74.0
Max Q Clear Time (g_c+I1), s		13.0			10.4	24.5		54.4
Green Ext Time (p_c), s		5.2			0.2	6.0		9.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.2
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	50	30	160	0	0	0	0	720	260	470	610	0
Future Volume (vph)	50	30	160	0	0	0	0	720	260	470	610	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.89	0.85					0.96		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	3022	1441					4883		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	3022	1441					4883		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	33	174	0	0	0	0	783	283	511	663	0
RTOR Reduction (vph)	0	81	81	0	0	0	0	27	0	0	0	0
Lane Group Flow (vph)	54	39	6	0	0	0	0	1039	0	511	663	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	9.5	9.5	9.5					88.6		25.5	118.1	
Effective Green, g (s)	9.5	9.5	9.5					88.6		25.5	118.1	
Actuated g/C Ratio	0.07	0.07	0.07					0.65		0.19	0.87	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	124	211	100					3190		645	4428	
v/s Ratio Prot	c0.03	0.01						c0.21		c0.15	0.13	
v/s Ratio Perm			0.00									
v/c Ratio	0.44	0.19	0.06					0.33		0.79	0.15	
Uniform Delay, d1	60.5	59.4	58.9					10.3		52.5	1.3	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	2.4	0.4	0.3					0.3		6.6	0.1	
Delay (s)	62.9	59.8	59.1					10.6		59.1	1.4	
Level of Service	E	E	E					B		E	A	
Approach Delay (s/veh)		60.2			0.0			10.6			26.5	
Approach LOS		E			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	23.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.43		
Actuated Cycle Length (s)	135.6	Sum of lost time (s)	12.0
Intersection Capacity Utilization	46.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Future Volume (veh/h)	110	620	440	350	1370	40	430	400	210	30	420	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	115	646	458	365	1427	42	448	417	219	31	438	52
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	185	1880	866	237	2814	83	305	859	446	238	1221	144
Arrive On Green	0.56	0.56	0.56	0.56	0.56	0.56	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	356	3357	1546	504	5026	148	894	2221	1153	781	3158	373
Grp Volume(v), veh/h	115	646	458	365	953	516	448	328	308	31	242	248
Grp Sat Flow(s),veh/h/ln	356	1679	1546	504	1679	1816	894	1752	1622	781	1752	1778
Q Serve(g_s), s	44.1	15.7	27.8	56.2	26.2	26.2	43.1	21.2	21.6	4.7	14.7	14.9
Cycle Q Clear(g_c), s	70.2	15.7	27.8	84.0	26.2	26.2	58.0	21.2	21.6	26.3	14.7	14.9
Prop In Lane	1.00		1.00	1.00		0.08	1.00		0.71	1.00		0.21
Lane Grp Cap(c), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
V/C Ratio(X)	0.62	0.34	0.53	1.54	0.51	0.51	1.47	0.48	0.49	0.13	0.36	0.36
Avail Cap(c_a), veh/h	185	1880	866	237	1880	1017	305	678	627	238	678	688
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.9	18.0	20.6	52.6	20.3	20.3	56.8	34.7	34.8	44.8	32.7	32.8
Incr Delay (d2), s/veh	6.3	0.1	0.6	263.9	0.2	0.4	228.4	2.5	2.7	1.1	1.5	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.6	7.3	12.0	27.1	12.1	13.2	32.0	10.7	10.1	1.1	7.4	7.6
LnGrp Delay(d), s/veh	48.1	18.1	21.2	316.5	20.5	20.7	285.3	37.2	37.6	45.9	34.2	34.3
LnGrp LOS	D	B	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1219			1834			1084			521	
Approach Delay, s/veh		22.1			79.5			139.8			34.9	
Approach LOS		C			E			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		88.0		62.0		88.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		60.0		72.2		28.3		86.0
Green Ext Time (p_c), s		0.0		6.8		3.1		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.5
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Future Volume (veh/h)	130	80	40	190	60	250	20	560	140	160	370	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	140	86	43	204	65	269	22	602	151	172	398	118
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	253	151	69	254	72	289	472	1487	372	341	1892	831
Arrive On Green	0.41	0.41	0.41	0.41	0.41	0.41	0.53	0.53	0.53	0.53	0.53	0.53
Sat Flow, veh/h	522	373	170	535	179	713	878	2781	696	707	3539	1555
Grp Volume(v), veh/h	269	0	0	538	0	0	22	382	371	172	398	118
Grp Sat Flow(s),veh/h/ln	1066	0	0	1426	0	0	878	1770	1707	707	1770	1555
Q Serve(g_s), s	0.0	0.0	0.0	21.3	0.0	0.0	1.8	17.0	17.1	25.4	7.8	5.1
Cycle Q Clear(g_c), s	26.8	0.0	0.0	48.1	0.0	0.0	9.6	17.0	17.1	42.5	7.8	5.1
Prop In Lane	0.52		0.16	0.38		0.50	1.00		0.41	1.00		1.00
Lane Grp Cap(c), veh/h	473	0	0	615	0	0	472	946	912	341	1892	831
V/C Ratio(X)	0.57	0.00	0.00	0.87	0.00	0.00	0.05	0.40	0.41	0.50	0.21	0.14
Avail Cap(c_a), veh/h	640	0	0	804	0	0	472	946	912	341	1892	831
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	30.9	0.0	0.0	38.0	0.0	0.0	18.7	18.4	18.4	31.0	16.2	15.6
Incr Delay (d2), s/veh	1.1	0.0	0.0	8.5	0.0	0.0	0.2	1.3	1.3	5.2	0.3	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.0	0.0	0.0	20.3	0.0	0.0	0.5	8.6	8.4	5.5	3.9	2.2
LnGrp Delay(d), s/veh	32.0	0.0	0.0	46.5	0.0	0.0	18.9	19.6	19.7	36.3	16.5	15.9
LnGrp LOS	C			D			B	B	B	D	B	B
Approach Vol, veh/h		269			538			775			688	
Approach Delay, s/veh		32.0			46.5			19.7			21.3	
Approach LOS		C			D			B			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		75.0		57.8		75.0		57.8
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		71.0		71.0		71.0		71.0
Max Q Clear Time (g_c+I1), s		19.1		28.8		44.5		50.1
Green Ext Time (p_c), s		5.3		2.2		4.5		3.8

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		28.0
HCM 2010 LOS		C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Future Volume (veh/h)	40	180	20	80	280	130	140	940	160	90	960	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	196	22	87	304	141	152	1022	174	98	1043	174
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	58	236	24	164	475	401	301	2405	1050	308	2405	1051
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.69	0.69	0.69	0.69	0.69	0.69
Sat Flow, veh/h	111	917	95	1147	1845	1561	452	3505	1530	462	3505	1531
Grp Volume(v), veh/h	261	0	0	87	304	141	152	1022	174	98	1043	174
Grp Sat Flow(s),veh/h/ln	1123	0	0	1147	1845	1561	452	1752	1530	462	1752	1531
Q Serve(g_s), s	12.6	0.0	0.0	0.0	20.7	10.4	32.0	18.3	5.7	16.9	18.8	5.7
Cycle Q Clear(g_c), s	33.3	0.0	0.0	31.8	20.7	10.4	50.8	18.3	5.7	35.1	18.8	5.7
Prop In Lane	0.16		0.08	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	319	0	0	164	475	401	301	2405	1050	308	2405	1051
V/C Ratio(X)	0.82	0.00	0.00	0.53	0.64	0.35	0.50	0.42	0.17	0.32	0.43	0.17
Avail Cap(c_a), veh/h	414	0	0	234	587	497	301	2405	1050	308	2405	1051
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	51.5	0.0	0.0	50.8	46.7	42.9	21.3	9.8	7.9	17.6	9.9	7.9
Incr Delay (d2), s/veh	9.6	0.0	0.0	2.7	1.6	0.5	5.9	0.6	0.3	2.7	0.6	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.9	0.0	0.0	3.4	10.8	4.6	4.5	9.0	2.5	2.4	9.2	2.5
LnGrp Delay(d), s/veh	61.2	0.0	0.0	53.4	48.3	43.4	27.2	10.4	8.2	20.3	10.5	8.2
LnGrp LOS	E			D	D	D	C	B	A	C	B	A
Approach Vol, veh/h		261			532			1348			1315	
Approach Delay, s/veh		61.2			47.9			12.0			10.9	
Approach LOS		E			D			B			B	

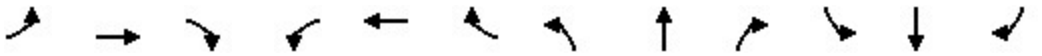
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		101.0		40.4		101.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		97.0		45.0		97.0		45.0
Max Q Clear Time (g_c+I1), s		52.8		35.3		37.1		33.8
Green Ext Time (p_c), s		13.4		1.0		12.7		1.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Future Volume (veh/h)	0	1040	330	1010	1140	0	0	0	0	250	0	510
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1130	359	1098	1239	0	0	0	0	272	0	554
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1071	340	1101	2218	0	0	596	0	1197	0	507
Arrive On Green	0.00	0.28	0.28	0.32	0.63	0.00	0.00	0.00	0.00	0.32	0.00	0.32
Sat Flow, veh/h	0	3991	1215	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1002	487	1098	1239	0	0	0	0	272	0	554
Grp Sat Flow(s),veh/h/ln	0	1695	1648	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Cycle Q Clear(g_c), s	0.0	42.0	42.0	47.8	30.2	0.0	0.0	0.0	0.0	8.8	0.0	48.0
Prop In Lane	0.00		0.74	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
V/C Ratio(X)	0.00	1.06	1.06	1.00	0.56	0.00	0.00	0.00	0.00	0.23	0.00	1.09
Avail Cap(c_a), veh/h	0	949	462	1101	2218	0	0	596	0	1197	0	507
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	54.0	54.0	50.9	16.1	0.0	0.0	0.0	0.0	37.7	0.0	51.0
Incr Delay (d2), s/veh	0.0	45.0	57.3	26.3	0.3	0.0	0.0	0.0	0.0	0.4	0.0	67.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	25.6	26.4	26.8	14.7	0.0	0.0	0.0	0.0	4.2	0.0	30.5
LnGrp Delay(d), s/veh	0.0	99.0	111.3	77.3	16.4	0.0	0.0	0.0	0.0	38.1	0.0	118.8
LnGrp LOS		F	F	E	B					D		F
Approach Vol, veh/h		1489			2337			0			826	
Approach Delay, s/veh		103.0			45.0			0.0			92.2	
Approach LOS		F			D						F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		52.0	52.0	46.0		52.0		98.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		48.0	48.0	42.0		48.0		94.0
Max Q Clear Time (g_c+I1), s		0.0	49.8	44.0		50.0		32.2
Green Ext Time (p_c), s		0.0	0.0	0.0		0.0		12.0

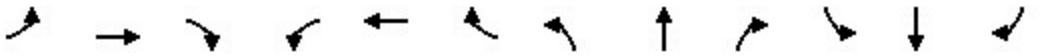
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	72.0
HCM 2010 LOS	E



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Future Volume (vph)	10	940	240	220	1820	10	290	10	210	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3378	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.61	1.00	0.65	1.00	
Satd. Flow (perm)	1770	3378	1441	3433	3536		1681	1074	2787	1210	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1022	261	239	1978	11	315	11	228	11	11	11
RTOR Reduction (vph)	0	1	114	0	0	0	0	0	160	0	9	0
Lane Group Flow (vph)	11	1047	121	239	1989	0	164	162	68	11	13	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Effective Green, g (s)	1.5	72.5	72.5	14.1	85.1		17.7	42.3	42.3	20.6	20.6	
Actuated g/C Ratio	0.01	0.51	0.51	0.10	0.60		0.13	0.30	0.30	0.15	0.15	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1738	741	343	2135		211	399	836	176	251	
v/s Ratio Prot	0.01	0.31		c0.07	c0.56		c0.10	0.05			0.01	
v/s Ratio Perm			0.08					c0.07	0.02	0.01		
v/c Ratio	0.61	0.60	0.16	0.70	0.93		0.78	0.41	0.08	0.06	0.05	
Uniform Delay, d1	69.4	24.1	18.1	61.3	25.3		59.7	39.3	35.4	51.8	51.7	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	0.6	0.1	6.1	8.1		16.3	0.7	0.2	0.7	0.4	
Delay (s)	118.1	24.7	18.2	67.4	33.3		76.0	40.0	35.6	52.5	52.1	
Level of Service	F	C	B	E	C		E	D	D	D	D	
Approach Delay (s/veh)		24.3			37.0			48.8			52.2	
Approach LOS		C			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	140.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.9%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Future Volume (vph)	90	10	10	10	20	20	590	380	10	20	230	330
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.97			0.95		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.97			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1668			1745		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.87			0.95		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1496			1669		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	11	11	11	22	22	641	413	11	22	250	359
RTOR Reduction (vph)	0	5	0	0	14	0	0	0	4	0	0	253
Lane Group Flow (vph)	61	54	0	0	41	0	641	413	7	22	250	106
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Effective Green, g (s)	9.1	31.7			18.6		57.6	96.3	96.3	3.5	42.2	42.2
Actuated g/C Ratio	0.06	0.22			0.13		0.40	0.67	0.67	0.02	0.29	0.29
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	106	341			216		710	2374	1062	43	1040	465
v/s Ratio Prot	c0.04	0.01					c0.36	0.12		0.01	c0.07	
v/s Ratio Perm		0.03			c0.02				0.00			0.07
v/c Ratio	0.58	0.16			0.19		0.90	0.17	0.01	0.51	0.24	0.23
Uniform Delay, d1	65.3	45.1			55.7		40.3	8.8	7.8	69.2	38.5	38.3
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.4	0.2			0.4		14.8	0.2	0.0	9.9	0.5	1.1
Delay (s)	72.7	45.4			56.2		55.1	8.9	7.8	79.1	39.0	39.4
Level of Service	E	D			E		E	A	A	E	D	D
Approach Delay (s/veh)		59.2			56.2			36.7			40.7	
Approach LOS		E			E			D			D	

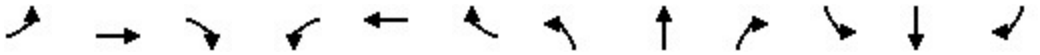
Intersection Summary			
HCM 2000 Control Delay (s/veh)	40.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.56		
Actuated Cycle Length (s)	143.5	Sum of lost time (s)	16.0
Intersection Capacity Utilization	66.5%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Future Volume (veh/h)	140	1070	70	160	1760	170	190	20	250	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	152	1163	76	174	1913	185	207	22	272			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	199	2080	136	199	2374	1062	303	32	298			
Arrive On Green	0.06	0.62	0.62	0.11	0.67	0.67	0.19	0.19	0.19			
Sat Flow, veh/h	3442	3373	220	1774	3539	1583	1611	171	1583			
Grp Volume(v), veh/h	152	610	629	174	1913	185	229	0	272			
Grp Sat Flow(s),veh/h/ln	1721	1770	1824	1774	1770	1583	1782	0	1583			
Q Serve(g_s), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Cycle Q Clear(g_c), s	6.3	29.1	29.2	14.0	56.0	6.3	17.3	0.0	24.3			
Prop In Lane	1.00		0.12	1.00		1.00	0.90		1.00			
Lane Grp Cap(c), veh/h	199	1091	1125	199	2374	1062	336	0	298			
V/C Ratio(X)	0.76	0.56	0.56	0.87	0.81	0.17	0.68	0.00	0.91			
Avail Cap(c_a), veh/h	262	1091	1125	294	2374	1062	370	0	328			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	67.1	16.2	16.2	63.2	17.1	8.9	54.7	0.0	57.5			
Incr Delay (d2), s/veh	9.1	2.1	2.0	17.4	3.0	0.4	4.5	0.0	27.2			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	3.3	14.9	15.3	7.8	28.1	2.8	8.9	0.0	12.9			
LnGrp Delay(d), s/veh	76.2	18.3	18.2	80.6	20.1	9.2	59.2	0.0	84.7			
LnGrp LOS	E	B	B	F	C	A	E		F			
Approach Vol, veh/h		1391			2272			501				
Approach Delay, s/veh		24.6			23.8			73.0				
Approach LOS		C			C			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	20.2	93.2			12.4	101.0		31.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	24.0	84.0			11.0	97.0		30.0
Max Q Clear Time (g_c+I1), s	16.0	31.2			8.3	58.0		26.3
Green Ext Time (p_c), s	0.3	10.5			0.1	23.3		0.9

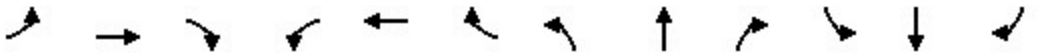
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	30.0
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Future Volume (veh/h)	10	1330	0	0	1840	720	280	10	230	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	11	1446	0	0	2000	783	304	11	250			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	35	3793	0	0	3591	1118	345	362	308			
Arrive On Green	0.01	0.75	0.00	0.00	0.71	0.71	0.19	0.19	0.19			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	11	1446	0	0	2000	783	304	11	250			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Cycle Q Clear(g_c), s	0.4	13.5	0.0	0.0	25.5	38.5	22.3	0.6	20.3			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	35	3793	0	0	3591	1118	345	362	308			
V/C Ratio(X)	0.32	0.38	0.00	0.00	0.56	0.70	0.88	0.03	0.81			
Avail Cap(c_a), veh/h	103	3793	0	0	3591	1118	556	584	496			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	65.9	6.0	0.0	0.0	9.5	11.5	52.5	43.8	51.7			
Incr Delay (d2), s/veh	5.2	0.3	0.0	0.0	0.6	3.7	9.5	0.0	5.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	0.2	6.4	0.0	0.0	12.1	17.9	11.9	0.3	9.3			
LnGrp Delay(d), s/veh	71.1	6.3	0.0	0.0	10.2	15.1	62.0	43.8	57.0			
LnGrp LOS	E	A			B	B	E	D	E			
Approach Vol, veh/h		1457			2783			565				
Approach Delay, s/veh		6.8			11.6			59.4				
Approach LOS		A			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		104.0			5.3	98.7		30.1
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		100.0			4.0	92.0		42.0
Max Q Clear Time (g_c+I1), s		15.5			2.4	40.5		24.3
Green Ext Time (p_c), s		15.2			0.0	33.5		1.7

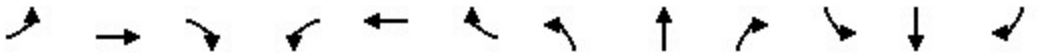
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	15.8
HCM 2010 LOS	B



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Future Volume (vph)	340	1290	100	10	2360	210	30	10	300	10	10	360
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.99		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	5030		1770	5023		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	370	1402	109	11	2565	228	33	11	326	11	11	391
RTOR Reduction (vph)	0	4	0	0	6	0	0	0	200	0	0	191
Lane Group Flow (vph)	370	1507	0	11	2787	0	33	11	126	11	11	200
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Effective Green, g (s)	16.9	102.4		1.5	87.0		14.0	14.0	14.0	4.0	4.0	20.9
Actuated g/C Ratio	0.12	0.74		0.01	0.63		0.10	0.10	0.10	0.03	0.03	0.15
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	420	3735		19	3168		179	189	160	51	54	422
v/s Ratio Prot	c0.11	0.30		0.01	c0.55		0.02	0.01		0.01	0.01	c0.06
v/s Ratio Perm									c0.08			0.01
v/c Ratio	0.88	0.40		0.58	0.88		0.18	0.06	0.79	0.22	0.20	0.47
Uniform Delay, d1	59.5	6.5		67.9	21.1		56.7	56.0	60.5	65.4	65.4	53.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	18.9	0.3		36.3	3.9		0.5	0.1	21.9	2.1	1.9	0.8
Delay (s)	78.4	6.8		104.2	25.0		57.2	56.1	82.4	67.5	67.3	54.3
Level of Service	E	A		F	C		E	E	F	E	E	D
Approach Delay (s/veh)		20.9			25.3			79.3			55.0	
Approach LOS		C			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	29.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.85		
Actuated Cycle Length (s)	137.9	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.3%	ICU Level of Service	D
Analysis Period (min)	15		

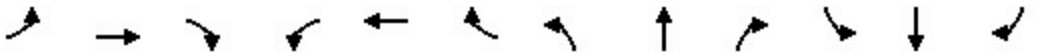
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	210	1190	0	10	1360	640	10	20	10	70	10	260
Future Volume (vph)	210	1190	0	10	1360	640	10	20	10	70	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	1.00	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.98	0.85		0.97			0.92	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1764	4704	1332		1780			1594	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1764	4704	1332		1780			1594	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	219	1240	0	10	1417	667	10	21	10	73	10	271
RTOR Reduction (vph)	0	0	0	0	10	194	0	7	0	0	29	150
Lane Group Flow (vph)	219	1240	0	10	1607	273	0	34	0	0	152	23
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	21.3	81.4		0.7	60.8	60.8		12.4			17.3	17.3
Effective Green, g (s)	21.3	81.4		0.7	60.8	60.8		12.4			17.3	17.3
Actuated g/C Ratio	0.17	0.64		0.01	0.48	0.48		0.10			0.14	0.14
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	295	3238		9	2237	633		172			215	203
v/s Ratio Prot	c0.12	0.24		0.01	c0.34			c0.02			c0.10	
v/s Ratio Perm						0.20						0.02
v/c Ratio	0.74	0.38		1.11	0.72	0.43		0.20			0.71	0.12
Uniform Delay, d1	50.6	11.1		63.6	26.7	22.1		53.1			52.8	48.5
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	9.7	0.1		342.2	1.1	0.5		2.5			10.0	0.3
Delay (s)	60.3	11.2		405.8	27.8	22.6		55.7			62.9	48.8
Level of Service	E	B		F	C	C		E			E	D
Approach Delay (s/veh)		18.6			28.4			55.7			56.0	
Approach LOS		B			C			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.5	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.66		
Actuated Cycle Length (s)	127.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	69.1%	ICU Level of Service	C
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1000	230	330	1720	40	310	140	340	20	30	40
Future Volume (vph)	90	1000	230	330	1720	40	310	140	340	20	30	40
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	1.00		1.00	0.95	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1752	4877		1752	5015		1665	1551	1404	1665	1747	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1752	4877		1752	5015		1665	1551	1404	1665	1747	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	95	1053	242	347	1811	42	326	147	358	21	32	42
RTOR Reduction (vph)	0	25	0	0	2	0	0	12	186	0	0	40
Lane Group Flow (vph)	95	1270	0	347	1851	0	284	274	75	19	34	2
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	12.2	43.4		32.3	63.5		40.3	40.3	40.3	8.1	8.1	8.1
Effective Green, g (s)	12.2	43.4		32.3	63.5		40.3	40.3	40.3	8.1	8.1	8.1
Actuated g/C Ratio	0.09	0.31		0.23	0.45		0.29	0.29	0.29	0.06	0.06	0.06
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	152	1510		403	2273		478	446	403	96	101	90
v/s Ratio Prot	0.05	0.26		c0.20	c0.37		0.17	c0.18		0.01	c0.02	
v/s Ratio Perm									0.05			0.00
v/c Ratio	0.63	0.84		0.86	0.81		0.59	0.61	0.19	0.20	0.34	0.03
Uniform Delay, d1	61.7	45.1		51.7	33.2		42.9	43.2	37.6	62.9	63.4	62.3
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	7.8	4.4		16.9	2.4		5.4	6.2	1.0	4.6	8.8	0.6
Delay (s)	69.5	49.6		68.7	35.5		48.2	49.4	38.6	67.5	72.2	62.8
Level of Service	E	D		E	D		D	D	D	E	E	E
Approach Delay (s/veh)		50.9			40.8			45.6			67.1	
Approach LOS		D			D			D			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	45.3	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.75		
Actuated Cycle Length (s)	140.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	75.5%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	390	390	210	150	450	440
Future Volume (veh/h)	390	390	210	150	450	440
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	443	0	239	170	511	500
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	535	246	272	2719	2057	901
Arrive On Green	0.16	0.00	0.16	0.78	0.59	0.59
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	443	0	239	170	511	500
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	14.9	0.0	15.8	1.4	8.4	23.7
Cycle Q Clear(g_c), s	14.9	0.0	15.8	1.4	8.4	23.7
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	535	246	272	2719	2057	901
V/C Ratio(X)	0.83	0.00	0.88	0.06	0.25	0.56
Avail Cap(c_a), veh/h	1437	661	533	2719	2057	901
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	48.5	0.0	49.0	3.1	11.8	15.0
Incr Delay (d2), s/veh	3.4	0.0	8.8	0.0	0.3	2.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	0.0	8.3	0.7	4.1	10.6
LnGrp Delay(d), s/veh	51.8	0.0	57.8	3.2	12.1	17.5
LnGrp LOS	D		E	A	B	B
Approach Vol, veh/h	443			409	1011	
Approach Delay, s/veh	51.8			35.1	14.8	
Approach LOS	D			D	B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		96.0		22.6	22.4	73.6		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		92.0		50.0	36.0	52.0		
Max Q Clear Time (g_c+I1), s		3.4		16.9	17.8	25.7		
Green Ext Time (p_c), s		1.1		1.7	0.6	5.7		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.0
HCM 2010 LOS	C



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	840	570	310	840	470	410
Future Volume (veh/h)	840	570	310	840	470	410
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	923	0	341	923	516	451
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1006	463	368	2340	1506	653
Arrive On Green	0.29	0.00	0.21	0.65	0.42	0.42
Sat Flow, veh/h	3476	1599	1792	3668	3668	1549
Grp Volume(v), veh/h	923	0	341	923	516	451
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1549
Q Serve(g_s), s	36.9	0.0	26.8	17.3	14.0	34.1
Cycle Q Clear(g_c), s	36.9	0.0	26.8	17.3	14.0	34.1
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1006	463	368	2340	1506	653
V/C Ratio(X)	0.92	0.00	0.93	0.39	0.34	0.69
Avail Cap(c_a), veh/h	1162	535	474	2340	1506	653
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.3	0.0	56.0	11.5	28.1	33.9
Incr Delay (d2), s/veh	10.5	0.0	21.0	0.5	0.6	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	19.2	0.0	15.4	8.6	7.0	15.6
LnGrp Delay(d), s/veh	59.8	0.0	76.9	12.0	28.7	39.8
LnGrp LOS	E		E	B	C	D
Approach Vol, veh/h	923			1264	967	
Approach Delay, s/veh	59.8			29.5	33.9	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		98.0		45.6	33.5	64.5		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		94.0		48.0	38.0	52.0		
Max Q Clear Time (g_c+I1), s		19.3		38.9	28.8	36.1		
Green Ext Time (p_c), s		7.6		2.7	0.7	4.5		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.7
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	940	240	500	1590	30	240	810	900	60	300	250
Future Volume (veh/h)	160	940	240	500	1590	30	240	810	900	60	300	250
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.92	1.00		0.96	1.00		0.97	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	182	1068	273	568	1807	34	273	920	1023	68	341	284
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	192	932	267	503	1840	35	301	1298	565	59	816	351
Arrive On Green	0.11	0.18	0.18	0.28	0.36	0.36	0.17	0.37	0.37	0.03	0.23	0.23
Sat Flow, veh/h	1774	5085	1454	1774	5134	97	1774	3539	1540	1774	3539	1522
Grp Volume(v), veh/h	182	1068	273	568	1193	648	273	920	1023	68	341	284
Grp Sat Flow(s),veh/h/ln	1774	1695	1454	1774	1695	1840	1774	1770	1540	1774	1770	1522
Q Serve(g_s), s	12.2	22.0	22.0	34.0	41.8	41.9	18.1	26.7	44.0	4.0	9.8	21.2
Cycle Q Clear(g_c), s	12.2	22.0	22.0	34.0	41.8	41.9	18.1	26.7	44.0	4.0	9.8	21.2
Prop In Lane	1.00		1.00	1.00		0.05	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	192	932	267	503	1215	659	301	1298	565	59	816	351
V/C Ratio(X)	0.95	1.15	1.02	1.13	0.98	0.98	0.91	0.71	1.81	1.15	0.42	0.81
Avail Cap(c_a), veh/h	192	932	267	503	1215	659	340	1298	565	59	816	351
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	53.2	49.0	49.0	43.0	38.1	38.1	48.9	32.5	38.0	58.0	39.3	43.7
Incr Delay (d2), s/veh	49.7	78.2	61.5	81.0	21.5	30.6	25.2	3.3	372.4	163.7	1.6	18.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.2	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.7	17.0	13.4	27.9	23.2	26.9	11.0	13.6	77.1	4.6	5.0	10.6
LnGrp Delay(d), s/veh	102.9	127.2	110.5	124.0	59.6	68.7	74.1	35.8	410.4	221.9	40.9	61.7
LnGrp LOS	F	F	F	F	E	E	E	D	F	F	D	E
Approach Vol, veh/h		1523			2409			2216			693	
Approach Delay, s/veh		121.3			77.2			213.5			67.2	
Approach LOS		F			E			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	48.0	38.0	26.0	24.3	31.7	17.0	47.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	44.0	34.0	22.0	23.0	25.0	13.0	43.0
Max Q Clear Time (g_c+I1), s	6.0	46.0	36.0	24.0	20.1	23.2	14.2	43.9
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.2	0.6	0.0	0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		130.2
HCM 2010 LOS		F



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	30	30	1370	0	0	580
Future Volume (veh/h)	30	30	1370	0	0	580
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	33	33	1489	0	0	630
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	48	3128	0	1	3128
Arrive On Green	0.06	0.06	0.88	0.00	0.00	0.88
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	33	33	1489	0	0	630
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	2.5	6.9	11.8	0.0	0.0	3.5
Cycle Q Clear(g_c), s	2.5	6.9	11.8	0.0	0.0	3.5
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	105	48	3128	0	1	3128
V/C Ratio(X)	0.32	0.68	0.48	0.00	0.00	0.20
Avail Cap(c_a), veh/h	228	158	3128	0	51	3128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	63.3	256.1	1.6	0.0	0.0	1.1
Incr Delay (d2), s/veh	1.7	15.6	0.5	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.3	0.2	5.8	0.0	0.0	1.7
LnGrp Delay(d), s/veh	65.0	271.7	2.2	0.0	0.0	1.3
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	66		1489			630
Approach Delay, s/veh	168.3		2.2			1.3
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	128.0				128.0		12.3
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	116.0				124.0		18.0
Max Q Clear Time (g_c+I1), s	0.0	13.8				5.5		8.9
Green Ext Time (p_c), s	0.0	17.6				4.6		0.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	6.9
HCM 2010 LOS	A

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	120	390	400	660	480	130
Future Volume (veh/h)	120	390	400	660	480	130
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	130	424	435	717	522	141
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	284	253	615	2784	2171	584
Arrive On Green	0.16	0.16	0.79	0.79	0.79	0.79
Sat Flow, veh/h	1774	1583	769	3632	2853	742
Grp Volume(v), veh/h	130	424	435	717	334	329
Grp Sat Flow(s),veh/h/ln	1774	1583	769	1770	1770	1732
Q Serve(g_s), s	10.0	24.0	51.4	8.1	7.4	7.5
Cycle Q Clear(g_c), s	10.0	24.0	58.9	8.1	7.4	7.5
Prop In Lane	1.00	1.00	1.00			0.43
Lane Grp Cap(c), veh/h	284	253	615	2784	1392	1362
V/C Ratio(X)	0.46	1.67	0.71	0.26	0.24	0.24
Avail Cap(c_a), veh/h	284	253	615	2784	1392	1362
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.1	63.0	12.0	4.3	4.2	4.2
Incr Delay (d2), s/veh	1.2	319.9	6.8	0.2	0.4	0.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.0	33.0	11.9	4.0	3.8	3.7
LnGrp Delay(d), s/veh	58.3	382.9	18.7	4.5	4.6	4.6
LnGrp LOS	E	F	B	A	A	A
Approach Vol, veh/h	554			1152	663	
Approach Delay, s/veh	306.7			9.9	4.6	
Approach LOS	F			A	A	

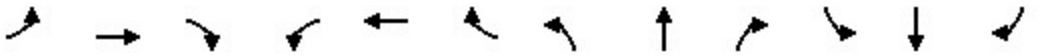
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		122.0		28.0		122.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		118.0		24.0		118.0		
Max Q Clear Time (g_c+I1), s		60.9		26.0		9.5		
Green Ext Time (p_c), s		10.8		0.0		4.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	77.8
HCM 2010 LOS	E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	750	130	670	810	240	190	310	430	490	290	90
Future Volume (veh/h)	90	750	130	670	810	240	190	310	430	490	290	90
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	98	815	141	728	880	261	207	337	467	533	315	98
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	121	1199	536	807	1788	1893	234	485	588	600	636	284
Arrive On Green	0.07	0.34	0.34	0.23	0.51	0.51	0.13	0.14	0.14	0.17	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	98	815	141	728	880	261	207	337	467	533	315	98
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	7.6	27.4	9.0	28.5	22.7	4.6	15.9	12.6	19.0	21.0	11.1	7.5
Cycle Q Clear(g_c), s	7.6	27.4	9.0	28.5	22.7	4.6	15.9	12.6	19.0	21.0	11.1	7.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	121	1199	536	807	1788	1893	234	485	588	600	636	284
V/C Ratio(X)	0.81	0.68	0.26	0.90	0.49	0.14	0.88	0.69	0.79	0.89	0.50	0.34
Avail Cap(c_a), veh/h	192	1199	536	993	1788	1893	358	485	588	745	636	284
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.7	39.4	33.3	51.5	22.6	7.9	59.1	57.0	38.8	55.9	51.2	49.7
Incr Delay (d2), s/veh	13.1	3.1	1.2	9.8	1.0	0.2	15.4	8.0	10.6	10.9	2.7	3.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	13.9	4.1	14.6	11.2	1.8	8.8	6.7	17.7	10.9	5.7	3.5
LnGrp Delay(d), s/veh	76.8	42.5	34.5	61.3	23.6	8.0	74.5	65.0	49.4	66.8	53.9	53.0
LnGrp LOS	E	D	C	E	C	A	E	E	D	E	D	D
Approach Vol, veh/h		1054			1869			1011			946	
Approach Delay, s/veh		44.6			36.1			59.7			61.1	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	36.5	50.9	22.3	28.9	13.4	74.0	28.2	23.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	40.0	45.0	28.0	21.0	15.0	70.0	30.0	19.0
Max Q Clear Time (g_c+I1), s	30.5	29.4	17.9	13.1	9.6	24.7	23.0	21.0
Green Ext Time (p_c), s	2.0	5.2	0.4	1.3	0.1	8.5	1.2	0.0

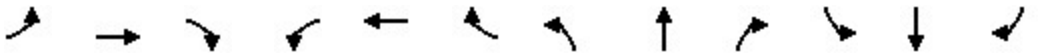
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	110	1140	0	0	1310	110	350	30	70	0	0	0
Future Volume (vph)	110	1140	0	0	1310	110	350	30	70	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1698	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1698	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	120	1239	0	0	1424	120	380	33	76	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	63	0	0	0
Lane Group Flow (vph)	120	1239	0	0	1424	120	205	208	13	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	14.1	101.2			83.1	83.1	21.8	21.8	21.8			
Effective Green, g (s)	14.1	101.2			83.1	83.1	21.8	21.8	21.8			
Actuated g/C Ratio	0.11	0.77			0.63	0.63	0.17	0.17	0.17			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	190	2733			3225	1004	279	282	263			
v/s Ratio Prot	c0.07	c0.35			0.28		0.12	c0.12				
v/s Ratio Perm						0.08			0.01			
v/c Ratio	0.63	0.45			0.44	0.12	0.73	0.74	0.05			
Uniform Delay, d1	56.0	5.2			12.2	9.5	51.9	51.9	45.9			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.7	0.5			0.4	0.2	9.6	9.7	0.1			
Delay (s)	62.6	5.8			12.6	9.7	61.5	61.5	46.0			
Level of Service	E	A			B	A	E	E	D			
Approach Delay (s/veh)		10.8			12.4			59.1			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	18.5	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	131.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1150	520	140	1630	0	0	0	0	110	20	80
Future Volume (vph)	0	1150	520	140	1630	0	0	0	0	110	20	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1711	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.97	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1711	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1250	565	152	1772	0	0	0	0	120	22	87
RTOR Reduction (vph)	0	0	268	0	0	0	0	0	0	0	0	43
Lane Group Flow (vph)	0	1250	297	152	1772	0	0	0	0	71	71	44
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		49.9	49.9	14.4	68.3					22.7	22.7	22.7
Effective Green, g (s)		49.9	49.9	14.4	68.3					22.7	22.7	22.7
Actuated g/C Ratio		0.50	0.50	0.15	0.69					0.23	0.23	0.23
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1783	797	257	3508					385	392	362
v/s Ratio Prot		c0.35		c0.09	0.35					c0.04	0.04	0.03
v/s Ratio Perm			0.19									
v/c Ratio		0.70	0.37	0.59	0.51					0.18	0.18	0.12
Uniform Delay, d1		18.8	15.0	39.5	7.3					30.7	30.7	30.2
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.3	0.3	3.6	0.1					1.1	1.0	0.7
Delay (s)		20.1	15.3	43.2	7.4					31.8	31.7	30.9
Level of Service		C	B	D	A					C	C	C
Approach Delay (s/veh)		18.6			10.2			0.0			31.4	
Approach LOS		B			B			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	15.3	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.55		
Actuated Cycle Length (s)	99.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	53.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Future Volume (veh/h)	240	940	150	220	1120	130	130	350	160	150	340	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.90	1.00		0.91
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	255	1000	160	234	1191	138	138	372	170	160	362	160
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	287	1183	500	265	1480	171	166	619	276	189	659	284
Arrive On Green	0.16	0.34	0.34	0.15	0.33	0.33	0.09	0.27	0.27	0.11	0.29	0.29
Sat Flow, veh/h	1757	3505	1483	1757	4551	527	1757	2275	1014	1757	2309	994
Grp Volume(v), veh/h	255	1000	160	234	878	451	138	284	258	160	272	250
Grp Sat Flow(s),veh/h/ln	1757	1752	1483	1757	1679	1721	1757	1752	1536	1757	1752	1551
Q Serve(g_s), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Cycle Q Clear(g_c), s	17.2	32.1	9.7	15.8	29.0	29.0	9.4	17.1	17.8	10.8	15.9	16.6
Prop In Lane	1.00		1.00	1.00		0.31	1.00		0.66	1.00		0.64
Lane Grp Cap(c), veh/h	287	1183	500	265	1092	560	166	477	418	189	500	442
V/C Ratio(X)	0.89	0.85	0.32	0.88	0.80	0.81	0.83	0.60	0.62	0.85	0.54	0.56
Avail Cap(c_a), veh/h	449	1475	624	420	1357	696	290	477	418	304	500	442
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	49.7	37.2	29.8	50.4	37.4	37.4	53.9	38.3	38.6	53.1	36.7	36.9
Incr Delay (d2), s/veh	13.0	3.9	0.4	12.6	2.9	5.6	10.2	5.4	6.7	11.6	4.2	5.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	9.4	16.2	4.0	8.6	13.9	14.6	5.0	9.0	8.3	5.9	8.3	7.8
LnGrp Delay(d), s/veh	62.6	41.1	30.2	63.0	40.3	43.0	64.1	43.7	45.2	64.7	40.9	42.0
LnGrp LOS	E	D	C	E	D	D	E	D	D	E	D	D
Approach Vol, veh/h		1415			1563			680			682	
Approach Delay, s/veh		43.8			44.5			48.4			46.9	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	17.0	37.0	22.3	44.9	15.4	38.6	23.8	43.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	33.0	29.0	51.0	20.0	34.0	31.0	49.0
Max Q Clear Time (g_c+I1), s	12.8	19.8	17.8	34.1	11.4	18.6	19.2	31.0
Green Ext Time (p_c), s	0.2	2.7	0.5	6.8	0.2	2.9	0.5	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	45.2
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	7.9

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	140	160	190	140	230	110
Future Vol, veh/h	140	160	190	140	230	110
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	152	174	207	152	250	120

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	816	250	370	0	-	0
Stage 1	250	-	-	-	-	-
Stage 2	566	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	347	789	1189	-	-	-
Stage 1	792	-	-	-	-	-
Stage 2	568	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	287	789	1189	-	-	-
Mov Cap-2 Maneuver	287	-	-	-	-	-
Stage 1	654	-	-	-	-	-
Stage 2	568	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	20.2	5	0
HCM LOS	C		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1189	-	287	789	-	-
HCM Lane V/C Ratio	0.174	-	0.53	0.22	-	-
HCM Control Delay (s/veh)	8.7	-	30.9	10.8	-	-
HCM Lane LOS	A	-	D	B	-	-
HCM 95th %tile Q(veh)	0.6	-	2.9	0.8	-	-

Intersection	
Int Delay, s/veh	5.8

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	250	60	20	250	40	10
Future Vol, veh/h	250	60	20	250	40	10
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	272	65	22	272	43	11

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	119	22	0	0	294	0
Stage 1	22	-	-	-	-	-
Stage 2	97	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	877	1055	-	-	1268	-
Stage 1	1001	-	-	-	-	-
Stage 2	927	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	847	1055	-	-	1268	-
Mov Cap-2 Maneuver	847	-	-	-	-	-
Stage 1	1001	-	-	-	-	-
Stage 2	895	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	10.7	0	6.4
HCM LOS	B		

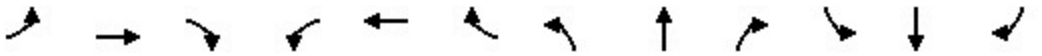
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	847	1055	1268	-	-	-
HCM Lane V/C Ratio	0.321	0.062	0.034	-	-	-
HCM Control Delay (s/veh)	11.2	8.6	7.9	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	1.4	0.2	0.1	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	360	840	70	60	890	100	110	770	60	190	720	450
Future Volume (veh/h)	360	840	70	60	890	100	110	770	60	190	720	450
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	387	903	75	65	957	108	118	828	65	204	774	484
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	449	1086	90	83	1133	127	142	1263	564	231	1439	842
Arrive On Green	0.13	0.34	0.34	0.05	0.25	0.25	0.08	0.36	0.36	0.13	0.41	0.41
Sat Flow, veh/h	3375	3238	269	1740	4534	510	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	387	484	494	65	701	364	118	828	65	204	774	484
Grp Sat Flow(s),veh/h/ln	1688	1736	1771	1740	1663	1719	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	26.4	3.7	15.3	22.3	27.7
Cycle Q Clear(g_c), s	14.9	34.1	34.1	4.9	26.6	26.7	8.9	26.4	3.7	15.3	22.3	27.7
Prop In Lane	1.00		0.15	1.00		0.30	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	449	582	594	83	831	430	142	1263	564	231	1439	842
V/C Ratio(X)	0.86	0.83	0.83	0.79	0.84	0.85	0.83	0.66	0.12	0.88	0.54	0.57
Avail Cap(c_a), veh/h	585	667	681	131	953	492	236	1263	564	341	1439	842
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.3	40.6	40.6	62.5	47.3	47.3	60.0	35.3	28.0	56.5	29.2	19.8
Incr Delay (d2), s/veh	10.1	7.9	7.7	15.0	6.3	11.7	11.5	2.7	0.4	16.6	1.4	2.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.6	17.5	17.9	2.7	12.9	14.0	4.7	13.1	1.6	8.4	10.9	12.4
LnGrp Delay(d), s/veh	66.5	48.5	48.4	77.5	53.6	59.1	71.5	37.9	28.4	73.1	30.7	22.7
LnGrp LOS	E	D	D	E	D	E	E	D	C	E	C	C
Approach Vol, veh/h		1365			1130			1011			1462	
Approach Delay, s/veh		53.5			56.7			41.2			34.0	
Approach LOS		D			E			D			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	52.2	10.3	48.5	14.9	59.0	21.6	37.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	47.0	10.0	51.0	18.0	55.0	23.0	38.0
Max Q Clear Time (g_c+I1), s	17.3	28.4	6.9	36.1	10.9	29.7	16.9	28.7
Green Ext Time (p_c), s	0.3	5.3	0.0	5.3	0.1	7.4	0.7	4.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	46.0
HCM 2010 LOS	D

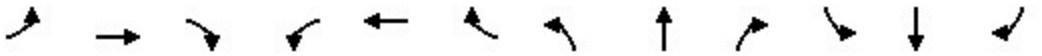
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	140	90	510	0	0	660	220
Future Volume (vph)	0	0	0	160	0	140	90	510	0	0	660	220
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.35	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1272	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	152	98	554	0	0	717	239
RTOR Reduction (vph)	0	0	0	0	0	130	0	0	0	0	0	53
Lane Group Flow (vph)	0	0	0	174	0	22	98	554	0	0	717	186
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				15.7		15.7	83.1	83.1			83.1	83.1
Effective Green, g (s)				15.7		15.7	83.1	83.1			83.1	83.1
Actuated g/C Ratio				0.15		0.15	0.78	0.78			0.78	0.78
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				260		232	989	3956			4986	1231
v/s Ratio Prot								0.11			0.11	
v/s Ratio Perm				c0.10		0.01	0.08					c0.12
v/c Ratio				0.67		0.10	0.10	0.14			0.14	0.15
Uniform Delay, d1				43.1		39.4	2.8	3.0			3.0	3.0
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				6.4		0.2	0.2	0.1			0.1	0.3
Delay (s)				49.5		39.6	3.0	3.0			3.0	3.2
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			44.9			3.0			3.1	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	10.1	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.23		
Actuated Cycle Length (s)	106.8	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

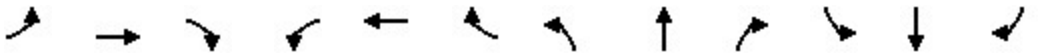
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	150	0	90	0	0	0	0	480	90	300	850	0
Future Volume (vph)	150	0	90	0	0	0	0	480	90	300	850	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.43	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1572	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	163	0	98	0	0	0	0	522	98	326	924	0
RTOR Reduction (vph)	0	0	85	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	163	0	13	0	0	0	0	522	78	326	924	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	16.3		16.3					96.0	96.0	96.0	96.0	
Effective Green, g (s)	16.3		16.3					96.0	96.0	96.0	96.0	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	239		377					5113	1263	1254	4057	
v/s Ratio Prot								0.08			0.18	
v/s Ratio Perm	c0.09		0.00						0.05	c0.21		
v/c Ratio	0.68		0.04					0.10	0.06	0.26	0.23	
Uniform Delay, d1	49.5		45.2					2.7	2.6	3.1	3.0	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	7.8		0.0					0.0	0.1	0.5	0.1	
Delay (s)	57.3		45.2					2.7	2.7	3.6	3.1	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		52.8			0.0			2.7			3.3	
Approach LOS		D			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	9.2	HCM 2000 Level of Service	A
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	120.3	Sum of lost time (s)	8.0
Intersection Capacity Utilization	35.8%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	460	10	90	0	970	580	150	980	0
Future Volume (vph)	10	10	10	460	10	90	0	970	580	150	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1718		1665	1672	1473		5036	1519	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1672	1473		5036	1519	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	511	11	100	0	1078	644	167	1089	0
RTOR Reduction (vph)	0	10	0	0	0	76	0	0	182	0	0	0
Lane Group Flow (vph)	0	23	0	261	261	24	0	1078	462	167	1089	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		32.0	32.0	32.0		58.0	90.0	17.6	79.6	
Effective Green, g (s)		7.5		32.0	32.0	32.0		58.0	90.0	17.6	79.6	
Actuated g/C Ratio		0.06		0.24	0.24	0.24		0.44	0.69	0.13	0.61	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		406	408	359		2227	1042	235	3057	
v/s Ratio Prot				c0.16	0.16			c0.21	0.11	c0.10	0.22	
v/s Ratio Perm		c0.04				0.02			0.20			
v/c Ratio		0.65		0.64	0.64	0.07		0.48	0.44	0.71	0.36	
Uniform Delay, d1		60.5		44.4	44.4	38.1		25.9	9.3	54.3	12.9	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.4		3.5	3.3	0.1		0.8	0.3	9.7	0.3	
Delay (s)		94.9		47.9	47.7	38.2		26.7	9.6	64.0	13.2	
Level of Service		F		D	D	D		C	A	E	B	
Approach Delay (s/veh)		94.9			46.2			20.3			20.0	
Approach LOS		F			D			C			B	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	131.1	Sum of lost time (s)	16.0
Intersection Capacity Utilization	59.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	320	20	120	30	60	20	190	800	10	20	360	310
Future Volume (veh/h)	320	20	120	30	60	20	190	800	10	20	360	310
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	381	24	143	36	71	24	226	952	12	24	429	369
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	491	27	574	0	687	575	297	1791	23	34	1534	673
Arrive On Green	0.37	0.37	0.37	0.00	0.37	0.37	0.09	0.50	0.50	0.02	0.43	0.43
Sat Flow, veh/h	1155	73	1557	0	1863	1559	3442	3578	45	1774	3539	1553
Grp Volume(v), veh/h	405	0	143	0	71	24	226	471	493	24	429	369
Grp Sat Flow(s),veh/h/ln	1228	0	1557	0	1863	1559	1721	1770	1853	1774	1770	1553
Q Serve(g_s), s	31.4	0.0	6.9	0.0	2.7	1.1	6.9	19.5	19.5	1.5	8.4	19.0
Cycle Q Clear(g_c), s	34.1	0.0	6.9	0.0	2.7	1.1	6.9	19.5	19.5	1.5	8.4	19.0
Prop In Lane	0.94		1.00	0.00		1.00	1.00		0.02	1.00		1.00
Lane Grp Cap(c), veh/h	518	0	574	0	687	575	297	886	928	34	1534	673
V/C Ratio(X)	0.78	0.00	0.25	0.00	0.10	0.04	0.76	0.53	0.53	0.71	0.28	0.55
Avail Cap(c_a), veh/h	887	0	1010	0	1347	1127	511	886	928	99	1534	673
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	33.5	0.0	23.6	0.0	22.3	21.8	48.2	18.3	18.3	52.6	19.7	22.7
Incr Delay (d2), s/veh	2.6	0.0	0.2	0.0	0.1	0.0	4.0	2.3	2.2	24.0	0.5	3.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.7	0.0	3.0	0.0	1.4	0.5	3.5	10.1	10.6	0.9	4.2	8.7
LnGrp Delay(d), s/veh	36.1	0.0	23.9	0.0	22.4	21.8	52.2	20.6	20.5	76.6	20.2	25.9
LnGrp LOS	D		C		C	C	D	C	C	E	C	C
Approach Vol, veh/h		548			95			1190			822	
Approach Delay, s/veh		32.9			22.2			26.5			24.4	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.1	58.0	0.0	43.8	13.3	50.7		43.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	54.0	4.0	70.0	16.0	44.0		78.0
Max Q Clear Time (g_c+I1), s	3.5	21.5	0.0	36.1	8.9	21.0		4.7
Green Ext Time (p_c), s	0.0	6.6	0.0	3.7	0.4	4.1		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	80	40	60	70	240	20	670	20	180	280	20
Future Volume (veh/h)	30	80	40	60	70	240	20	670	20	180	280	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.87	1.00		0.87	0.99		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	36	96	48	72	84	289	24	807	24	217	337	24
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	50	124	53	118	126	338	735	2515	1109	458	2515	1086
Arrive On Green	0.24	0.24	0.24	0.24	0.24	0.24	0.70	0.70	0.70	0.70	0.70	0.70
Sat Flow, veh/h	89	510	218	342	521	1391	1021	3574	1576	664	3574	1544
Grp Volume(v), veh/h	180	0	0	156	0	289	24	807	24	217	337	24
Grp Sat Flow(s),veh/h/ln	816	0	0	863	0	1391	1021	1787	1576	664	1787	1544
Q Serve(g_s), s	8.7	0.0	0.0	0.0	0.0	29.6	1.2	12.9	0.7	27.8	4.6	0.7
Cycle Q Clear(g_c), s	34.2	0.0	0.0	25.4	0.0	29.6	5.8	12.9	0.7	40.7	4.6	0.7
Prop In Lane	0.20		0.27	0.46		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	227	0	0	245	0	338	735	2515	1109	458	2515	1086
V/C Ratio(X)	0.79	0.00	0.00	0.64	0.00	0.86	0.03	0.32	0.02	0.47	0.13	0.02
Avail Cap(c_a), veh/h	235	0	0	253	0	345	735	2515	1109	458	2515	1086
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	55.2	0.0	0.0	51.1	0.0	54.0	8.2	8.5	6.7	16.3	7.2	6.7
Incr Delay (d2), s/veh	16.3	0.0	0.0	5.0	0.0	18.4	0.1	0.3	0.0	3.5	0.1	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.4	0.0	0.0	6.3	0.0	13.1	0.4	6.4	0.3	5.5	2.3	0.3
LnGrp Delay(d), s/veh	71.6	0.0	0.0	56.1	0.0	72.4	8.3	8.8	6.7	19.7	7.3	6.7
LnGrp LOS	E			E		E	A	A	A	B	A	A
Approach Vol, veh/h		180			445			855			578	
Approach Delay, s/veh		71.6			66.7			8.7			12.0	
Approach LOS		E			E			A			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		109.0		40.2		109.0		40.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		105.0		37.0		105.0		37.0
Max Q Clear Time (g_c+I1), s		14.9		36.2		42.7		31.6
Green Ext Time (p_c), s		6.6		0.1		4.8		1.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.7
HCM 2010 LOS	C

Intersection	
Intersection Delay, s/veh	17.3
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Future Vol, veh/h	220	30	50	0	30	10	70	60	10	10	50	230
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	306	42	69	0	42	14	97	83	14	14	69	319
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	20.5	10.3	13.2	16.9
HCM LOS	C	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	54%	0%	73%	0%	3%
Vol Thru, %	46%	0%	10%	75%	17%
Vol Right, %	0%	100%	17%	25%	79%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	130	10	300	40	290
LT Vol	70	0	220	0	10
Through Vol	60	0	30	30	50
RT Vol	0	10	50	10	230
Lane Flow Rate	181	14	417	56	403
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.348	0.023	0.678	0.102	0.612
Departure Headway (Hd)	6.941	5.952	5.856	6.585	5.469
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	515	595	613	548	657
Service Time	4.74	3.75	3.929	4.585	3.551
HCM Lane V/C Ratio	0.351	0.024	0.68	0.102	0.613
HCM Control Delay, s/veh	13.5	8.9	20.5	10.3	16.9
HCM Lane LOS	B	A	C	B	C
HCM 95th-tile Q	1.5	0.1	5.2	0.3	4.2

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	10	20	110	20	10	20	160	940	100	40	1100	20
Future Volume (veh/h)	10	20	110	20	10	20	160	940	100	40	1100	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	11	22	122	22	11	22	178	1044	111	44	1222	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	72	122	146	122	54	118	206	2727	1192	56	2429	1073
Arrive On Green	0.09	0.09	0.09	0.09	0.09	0.09	0.12	0.79	0.79	0.03	0.70	0.70
Sat Flow, veh/h	387	1301	1553	809	571	1257	1740	3471	1518	1740	3471	1533
Grp Volume(v), veh/h	33	0	122	30	0	25	178	1044	111	44	1222	22
Grp Sat Flow(s),veh/h/ln	1688	0	1553	1196	0	1441	1740	1736	1518	1740	1736	1533
Q Serve(g_s), s	0.0	0.0	10.5	1.9	0.0	2.2	13.7	12.6	2.3	3.4	22.2	0.6
Cycle Q Clear(g_c), s	2.3	0.0	10.5	4.2	0.0	2.2	13.7	12.6	2.3	3.4	22.2	0.6
Prop In Lane	0.33		1.00	0.74		0.87	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	194	0	146	158	0	135	206	2727	1192	56	2429	1073
V/C Ratio(X)	0.17	0.00	0.84	0.19	0.00	0.19	0.87	0.38	0.09	0.78	0.50	0.02
Avail Cap(c_a), veh/h	280	0	228	229	0	212	409	2727	1192	141	2429	1073
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.9	0.0	60.7	57.9	0.0	56.9	59.0	4.5	3.4	65.4	9.5	6.2
Incr Delay (d2), s/veh	0.4	0.0	14.3	0.6	0.0	0.7	10.4	0.4	0.2	20.3	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.2	0.0	5.1	1.1	0.0	0.9	7.2	6.1	1.0	2.0	10.8	0.3
LnGrp Delay(d), s/veh	57.3	0.0	75.0	58.5	0.0	57.6	69.4	4.9	3.5	85.7	10.2	6.3
LnGrp LOS	E		E	E		E	E	A	A	F	B	A
Approach Vol, veh/h		155			55			1333			1288	
Approach Delay, s/veh		71.2			58.1			13.4			12.7	
Approach LOS		E			E			B			B	

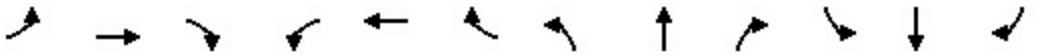
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	8.4	111.0		16.8	20.1	99.3		16.8
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	11.0	107.0		20.0	32.0	86.0		20.0
Max Q Clear Time (g_c+I1), s	5.4	14.6		12.5	15.7	24.2		6.2
Green Ext Time (p_c), s	0.0	11.0		0.3	0.4	12.6		0.2

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		17.1
HCM 2010 LOS		B

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1340	70	580	1640	310	470
Future Volume (veh/h)	1340	70	580	1640	310	470
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1396	73	604	1708	323	490
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1566	1116	673	3391	488	436
Arrive On Green	0.44	0.44	0.20	0.67	0.28	0.28
Sat Flow, veh/h	3632	1537	3442	5253	1774	1583
Grp Volume(v), veh/h	1396	73	604	1708	323	490
Grp Sat Flow(s),veh/h/ln	1770	1537	1721	1695	1774	1583
Q Serve(g_s), s	50.1	1.9	23.7	23.3	22.3	38.0
Cycle Q Clear(g_c), s	50.1	1.9	23.7	23.3	22.3	38.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1566	1116	673	3391	488	436
V/C Ratio(X)	0.89	0.07	0.90	0.50	0.66	1.12
Avail Cap(c_a), veh/h	1743	1193	797	3830	488	436
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	35.4	5.8	54.2	11.5	44.4	50.0
Incr Delay (d2), s/veh	5.8	0.0	11.7	0.1	6.9	81.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	25.7	1.6	12.3	10.8	11.9	26.5
LnGrp Delay(d), s/veh	41.2	5.8	65.9	11.7	51.3	131.7
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1469			2312	813	
Approach Delay, s/veh	39.5			25.8	99.8	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		42.0	31.0	65.1				96.1
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		38.0	32.0	68.0				104.0
Max Q Clear Time (g_c+I1), s		40.0	25.7	52.1				25.3
Green Ext Time (p_c), s		0.0	1.3	9.0				23.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	43.3
HCM 2010 LOS	D



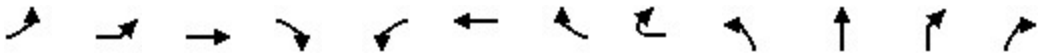
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	20	860	480	70	1110	60	10	10	20	580	30	280
Future Volume (vph)	20	860	480	70	1110	60	10	10	20	580	30	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.97	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1787	3574	1545	1787	3574	1547		1715		1698	1620	1519
Flt Permitted	0.14	1.00	1.00	0.95	1.00	1.00		0.90		0.95	0.71	1.00
Satd. Flow (perm)	264	3574	1545	1787	3574	1547		1566		1698	1192	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	21	887	495	72	1144	62	10	10	21	598	31	289
RTOR Reduction (vph)	0	0	110	0	0	35	0	16	0	0	2	42
Lane Group Flow (vph)	21	887	385	72	1144	27	0	25	0	329	327	218
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	42.8	42.8	42.8	8.2	55.0	55.0		28.0		29.3	61.3	61.3
Effective Green, g (s)	42.8	42.8	42.8	8.2	55.0	55.0		28.0		29.3	61.3	61.3
Actuated g/C Ratio	0.34	0.34	0.34	0.07	0.44	0.44		0.23		0.24	0.49	0.49
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	90	1230	531	117	1581	684		352		400	688	749
v/s Ratio Prot		0.25		0.04	c0.32					c0.19	0.11	
v/s Ratio Perm	0.08		0.25			0.02		0.02			c0.12	0.14
v/c Ratio	0.23	0.72	0.72	0.62	0.72	0.04		0.07		0.82	0.48	0.29
Uniform Delay, d1	29.1	35.5	35.6	56.5	28.4	19.7		37.9		45.0	20.9	18.6
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	1.3	2.1	4.9	9.3	1.7	0.0		0.1		12.8	0.5	1.0
Delay (s)	30.4	37.7	40.5	65.8	30.1	19.7		38.0		57.8	21.4	19.6
Level of Service	C	D	D	E	C	B		D		E	C	B
Approach Delay (s/veh)		38.5			31.6			38.0			33.9	
Approach LOS		D			C			D			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.72		
Actuated Cycle Length (s)	124.3	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.4%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	990	310	250	1280	220	320	710	180	170	500	260
Future Volume (veh/h)	170	990	310	250	1280	220	320	710	180	170	500	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.96	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	183	1065	333	269	1376	237	344	763	194	183	538	280
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	207	1156	503	293	1630	281	368	1023	439	207	700	300
Arrive On Green	0.12	0.32	0.32	0.16	0.37	0.37	0.21	0.29	0.29	0.12	0.20	0.20
Sat Flow, veh/h	1792	3574	1554	1792	4388	755	1792	3574	1535	1792	3574	1533
Grp Volume(v), veh/h	183	1065	333	269	1073	540	344	763	194	183	538	280
Grp Sat Flow(s),veh/h/ln	1792	1787	1554	1792	1712	1720	1792	1787	1535	1792	1787	1533
Q Serve(g_s), s	14.4	41.1	26.4	21.2	41.1	41.2	27.0	27.8	14.8	14.4	20.4	25.8
Cycle Q Clear(g_c), s	14.4	41.1	26.4	21.2	41.1	41.2	27.0	27.8	14.8	14.4	20.4	25.8
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	207	1156	503	293	1272	639	368	1023	439	207	700	300
V/C Ratio(X)	0.89	0.92	0.66	0.92	0.84	0.84	0.93	0.75	0.44	0.89	0.77	0.93
Avail Cap(c_a), veh/h	238	1197	521	325	1314	660	413	1023	439	238	700	300
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.4	46.7	41.7	59.0	41.2	41.2	56.0	46.4	41.8	62.4	54.5	56.7
Incr Delay (d2), s/veh	28.0	11.4	3.0	28.6	5.1	9.6	26.8	5.0	3.2	28.0	7.9	37.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	22.1	11.8	12.8	20.3	21.2	16.1	14.4	6.7	8.8	10.9	14.0
LnGrp Delay(d), s/veh	90.4	58.1	44.7	87.6	46.3	50.8	82.8	51.4	45.0	90.4	62.5	93.9
LnGrp LOS	F	E	D	F	D	D	F	D	D	F	E	F
Approach Vol, veh/h		1581			1882			1301			1001	
Approach Delay, s/veh		59.0			53.5			58.7			76.4	
Approach LOS		E			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.5	45.0	27.4	50.4	33.5	32.1	20.5	57.2
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	19.0	41.0	26.0	48.0	33.0	27.0	19.0	55.0
Max Q Clear Time (g_c+I1), s	16.4	29.8	23.2	43.1	29.0	27.8	16.4	43.2
Green Ext Time (p_c), s	0.1	4.3	0.2	3.2	0.4	0.0	0.1	7.7

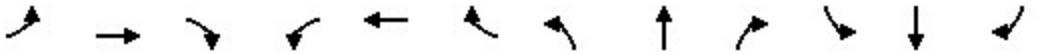
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	60.2
HCM 2010 LOS	E



Movement	EBL2	EBL	EBT	EBR	WBL	WBT	WBR	WBR2	NBL	NBT	NBR	NBR2
Lane Configurations												
Traffic Volume (vph)	30	260	820	80	40	700	240	120	100	510	370	10
Future Volume (vph)	30	260	820	80	40	700	240	120	100	510	370	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	0.91			1.00	0.91	0.91	
Frpb, ped/bikes		1.00	1.00	0.97	1.00	0.99			1.00	0.98	0.91	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.95			1.00	0.97	0.85	
Flt Protected		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (prot)		1770	3539	1534	1770	4771			1770	3250	1310	
Flt Permitted		0.95	1.00	1.00	0.95	1.00			0.95	1.00	1.00	
Satd. Flow (perm)		1770	3539	1534	1770	4771			1770	3250	1310	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	32	277	872	85	43	745	255	128	106	543	394	11
RTOR Reduction (vph)	0	0	0	58	0	10	0	0	0	0	122	0
Lane Group Flow (vph)	0	309	872	27	43	1118	0	0	106	657	169	0
Confl. Peds. (#/hr)		7		7	7		7		2		27	
Confl. Bikes (#/hr)							2				4	
Turn Type	Prot	Prot	NA	Perm	Prot	NA			Prot	NA	Perm	
Protected Phases	7	7	4		3	8			5	2		
Permitted Phases				4							2	
Actuated Green, G (s)		23.0	48.2	48.2	5.6	30.8			13.1	31.0	31.0	
Effective Green, g (s)		23.0	48.2	48.2	5.6	30.8			13.1	31.0	31.0	
Actuated g/C Ratio		0.15	0.32	0.32	0.04	0.20			0.09	0.21	0.21	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0			4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0			3.0	3.0	3.0	
Lane Grp Cap (vph)		269	1131	490	65	974			153	668	269	
v/s Ratio Prot		c0.17	0.25		0.02	c0.23			0.06	c0.20		
v/s Ratio Perm				0.02							0.13	
v/c Ratio		1.15	0.77	0.06	0.66	1.15			0.69	0.98	0.63	
Uniform Delay, d1		63.9	46.3	35.5	71.7	60.0			66.9	59.6	54.7	
Progression Factor		1.00	1.00	1.00	1.00	1.00			1.00	1.00	1.00	
Incremental Delay, d2		101.1	3.3	0.0	22.5	78.5			12.7	31.0	10.7	
Delay (s)		165.0	49.6	35.6	94.1	138.5			79.6	90.7	65.4	
Level of Service		F	D	D	F	F			E	F	E	
Approach Delay (s/veh)			76.9			136.9				82.6		
Approach LOS			E			F				F		

Intersection Summary			
HCM 2000 Control Delay (s/veh)	102.3	HCM 2000 Level of Service	F
HCM 2000 Volume to Capacity ratio	1.11		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	24.0
Intersection Capacity Utilization	100.4%	ICU Level of Service	G
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Future Volume (veh/h)	50	90	80	70	220	80	270	630	50	30	510	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
Arrive On Green	0.20	0.20	0.20	0.20	0.20	0.20	0.74	0.74	0.74	0.74	0.74	0.74
Sat Flow, veh/h	1015	1827	1541	1158	1827	1541	741	3471	1518	681	3471	1517
Grp Volume(v), veh/h	57	102	91	80	250	91	307	716	57	34	580	102
Grp Sat Flow(s),veh/h/ln	1015	1827	1541	1158	1827	1541	741	1736	1518	681	1736	1517
Q Serve(g_s), s	7.9	6.7	7.2	9.0	18.1	7.2	31.0	9.5	1.4	2.4	7.3	2.6
Cycle Q Clear(g_c), s	25.9	6.7	7.2	15.7	18.1	7.2	38.4	9.5	1.4	11.9	7.3	2.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	125	366	309	228	366	309	563	2581	1129	511	2581	1128
V/C Ratio(X)	0.46	0.28	0.29	0.35	0.68	0.29	0.54	0.28	0.05	0.07	0.22	0.09
Avail Cap(c_a), veh/h	178	461	389	288	461	389	563	2581	1129	511	2581	1128
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.8	48.3	48.4	54.9	52.8	48.4	11.5	5.9	4.9	7.8	5.6	5.0
Incr Delay (d2), s/veh	2.6	0.4	0.5	0.9	2.9	0.5	3.8	0.3	0.1	0.3	0.2	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.3	3.4	3.1	2.9	9.4	3.1	6.9	4.6	0.6	0.5	3.5	1.2
LnGrp Delay(d), s/veh	67.4	48.7	49.0	55.9	55.7	49.0	15.3	6.2	5.0	8.1	5.8	5.2
LnGrp LOS	E	D	D	E	E	D	B	A	A	A	A	A
Approach Vol, veh/h		250			421			1080			716	
Approach Delay, s/veh		53.1			54.3			8.7			5.8	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		110.0		32.5		110.0		32.5
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		106.0		36.0		106.0		36.0
Max Q Clear Time (g_c+I1), s		40.4		27.9		13.9		20.1
Green Ext Time (p_c), s		9.5		0.6		4.9		1.7

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Future Volume (veh/h)	60	50	90	40	130	40	170	830	20	60	810	110
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.94	1.00		0.94	1.00		0.96	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	66	55	99	44	143	44	187	912	22	66	890	121
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	20	333	30	79	333	391	2523	1081	415	2523	1104
Arrive On Green	0.23	0.23	0.23	0.23	0.23	0.23	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	0	90	1468	0	349	1467	550	3505	1502	591	3505	1533
Grp Volume(v), veh/h	121	0	99	187	0	44	187	912	22	66	890	121
Grp Sat Flow(s),veh/h/ln	90	0	1468	349	0	1467	550	1752	1502	591	1752	1533
Q Serve(g_s), s	0.0	0.0	8.4	0.0	0.0	3.6	29.0	14.8	0.6	7.1	14.3	3.6
Cycle Q Clear(g_c), s	34.0	0.0	8.4	34.0	0.0	3.6	43.3	14.8	0.6	21.9	14.3	3.6
Prop In Lane	0.55		1.00	0.24		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
V/C Ratio(X)	2.10	0.00	0.30	1.72	0.00	0.13	0.48	0.36	0.02	0.16	0.35	0.11
Avail Cap(c_a), veh/h	58	0	333	109	0	333	391	2523	1081	415	2523	1104
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.2	0.0	48.1	52.6	0.0	46.2	16.0	7.9	6.0	12.1	7.9	6.4
Incr Delay (d2), s/veh	549.3	0.0	0.5	359.4	0.0	0.2	4.1	0.4	0.0	0.8	0.4	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	11.2	0.0	3.5	15.4	0.0	1.5	4.8	7.2	0.3	1.2	6.9	1.6
LnGrp Delay(d), s/veh	612.5	0.0	48.6	412.1	0.0	46.4	20.1	8.4	6.0	12.9	8.3	6.6
LnGrp LOS	F		D	F		D	C	A	A	B	A	A
Approach Vol, veh/h		220			231			1121			1077	
Approach Delay, s/veh		358.7			342.4			10.3			8.4	
Approach LOS		F			F			B			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		112.0		38.0		112.0		38.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		108.0		34.0		108.0		34.0
Max Q Clear Time (g_c+I1), s		45.3		36.0		23.9		36.0
Green Ext Time (p_c), s		11.9		0.0		9.4		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	67.4
HCM 2010 LOS	E

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	110	55	4	110	55	4
Future Volume (veh/h)	110	55	4	110	55	4
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	120	60	4	120	60	4
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1623	1379	1109	1623	81	73
Arrive On Green	0.87	0.87	0.87	0.87	0.05	0.05
Sat Flow, veh/h	1863	1583	1199	1863	1774	1583
Grp Volume(v), veh/h	120	60	4	120	60	4
Grp Sat Flow(s),veh/h/ln	1863	1583	1199	1863	1774	1583
Q Serve(g_s), s	0.9	0.5	0.0	0.9	3.2	0.2
Cycle Q Clear(g_c), s	0.9	0.5	0.9	0.9	3.2	0.2
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1623	1379	1109	1623	81	73
V/C Ratio(X)	0.07	0.04	0.00	0.07	0.74	0.06
Avail Cap(c_a), veh/h	1623	1379	1109	1623	1067	952
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	0.9	0.8	0.9	0.9	45.4	44.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	12.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.5	0.2	0.0	0.5	1.9	0.1
LnGrp Delay(d), s/veh	0.9	0.9	0.9	0.9	57.6	44.3
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h	180			124	64	
Approach Delay, s/veh	0.9			0.9	56.8	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		88.0		8.4		88.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		84.0		58.0		84.0		
Max Q Clear Time (g_c+I1), s		2.9		5.2		2.9		
Green Ext Time (p_c), s		0.8		0.2		0.9		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.6
HCM 2010 LOS	B

NORWALK - 2040 PLUS PROJECT PM

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (vph)	0	1480	380	20	1720	380	390	540	0	370	710	10
Future Volume (vph)	0	1480	380	20	1720	380	390	540	0	370	710	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Lane Util. Factor		0.91		1.00	0.91	1.00	0.86	0.86		0.86	0.86	1.00
Frpb, ped/bikes		1.00		1.00	1.00	0.98	1.00	1.00		1.00	1.00	0.99
Flpb, ped/bikes		1.00		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Frt		0.97		1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85
Flt Protected		1.00		0.95	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (prot)		4914		1770	5085	1551	1522	4751		1522	4775	1560
Flt Permitted		1.00		0.05	1.00	1.00	0.95	0.99		0.95	0.99	1.00
Satd. Flow (perm)		4914		87	5085	1551	1522	4751		1522	4775	1560
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	0	1644	422	22	1911	422	433	600	0	411	789	11
RTOR Reduction (vph)	0	30	0	0	0	67	0	0	0	0	0	9
Lane Group Flow (vph)	0	2036	0	22	1911	355	251	782	0	292	908	2
Confl. Peds. (#/hr)	3		1	1		3			7	7		
Confl. Bikes (#/hr)			1						1			2
Turn Type		NA		Perm	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases		4			8		6	6		5	5	
Permitted Phases				8		8						5
Actuated Green, G (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Effective Green, g (s)		86.0		86.0	86.0	86.0	29.0	29.0		23.0	23.0	23.0
Actuated g/C Ratio		0.57		0.57	0.57	0.57	0.19	0.19		0.15	0.15	0.15
Clearance Time (s)		4.0		4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0
Vehicle Extension (s)		3.0		3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0
Lane Grp Cap (vph)		2817		49	2915	889	294	918		233	732	239
v/s Ratio Prot		c0.41			0.38		c0.16	0.16		c0.19	0.19	
v/s Ratio Perm				0.25		0.23						0.00
v/c Ratio		0.72		0.45	0.66	0.40	0.85	0.85		1.25	1.24	0.01
Uniform Delay, d1		23.3		18.4	21.9	17.7	58.5	58.4		63.5	63.5	53.8
Progression Factor		0.82		1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00
Incremental Delay, d2		0.1		6.4	0.5	0.3	25.7	9.8		144.2	119.7	0.1
Delay (s)		19.3		24.8	22.4	18.0	84.2	68.3		207.7	183.2	53.9
Level of Service		B		C	C	B	F	E		F	F	D
Approach Delay (s/veh)		19.3			21.6			72.1			187.9	
Approach LOS		B			C			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	58.9	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.84		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	76.8%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Future Volume (veh/h)	70	1330	250	150	1370	80	220	360	120	90	420	100
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.98	1.00		0.88	0.97		0.88
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Adj No. of Lanes	1	2	1	1	2	1	2	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
Arrive On Green	0.04	0.48	0.48	0.06	0.50	0.50	0.09	0.28	0.28	0.05	0.25	0.25
Sat Flow, veh/h	1757	3505	1522	1757	3505	1544	3408	3505	1382	1757	3505	1379
Grp Volume(v), veh/h	75	1430	269	161	1473	86	237	387	129	97	452	108
Grp Sat Flow(s),veh/h/ln	1757	1752	1522	1757	1752	1544	1704	1752	1382	1757	1752	1379
Q Serve(g_s), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Cycle Q Clear(g_c), s	2.8	46.2	14.4	5.8	46.0	3.7	8.7	11.4	9.5	5.2	14.2	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	1671	726	199	1767	778	294	985	388	314	875	344
V/C Ratio(X)	0.45	0.86	0.37	0.81	0.83	0.11	0.81	0.39	0.33	0.31	0.52	0.31
Avail Cap(c_a), veh/h	213	1997	867	309	2216	976	399	985	388	342	875	344
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	25.1	29.6	21.3	28.0	27.1	16.7	57.5	37.2	36.5	33.1	41.4	39.1
Incr Delay (d2), s/veh	1.9	3.4	0.3	8.6	2.3	0.1	8.5	1.2	2.3	0.6	2.2	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.4	23.0	6.1	3.3	22.7	1.6	4.5	5.7	3.9	2.6	7.2	3.4
LnGrp Delay(d), s/veh	27.1	33.0	21.6	36.6	29.5	16.7	65.9	38.4	38.8	33.6	43.6	41.5
LnGrp LOS	C	C	C	D	C	B	E	D	D	C	D	D
Approach Vol, veh/h		1774			1720			753			657	
Approach Delay, s/veh		31.0			29.5			47.1			41.8	
Approach LOS		C			C			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.0	40.0	12.0	65.1	15.0	36.0	8.5	68.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	9.0	36.0	16.0	73.0	15.0	30.0	8.0	81.0
Max Q Clear Time (g_c+I1), s	7.2	13.4	7.8	48.2	10.7	16.2	4.8	48.0
Green Ext Time (p_c), s	0.0	2.8	0.2	12.9	0.3	2.7	0.0	14.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	34.4
HCM 2010 LOS	C

Notes

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	310	1280	100	170	1480	80	70	590	120	100	510	280
Future Volume (veh/h)	310	1280	100	170	1480	80	70	590	120	100	510	280
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	320	1320	103	175	1526	82	72	608	124	103	526	289
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	2	2	1
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	350	2244	685	202	1821	562	91	990	439	151	963	426
Arrive On Green	0.20	0.44	0.44	0.11	0.36	0.36	0.05	0.28	0.28	0.04	0.27	0.27
Sat Flow, veh/h	1774	5085	1552	1774	5085	1569	1774	3539	1568	3442	3539	1568
Grp Volume(v), veh/h	320	1320	103	175	1526	82	72	608	124	103	526	289
Grp Sat Flow(s),veh/h/ln	1774	1695	1552	1774	1695	1569	1774	1770	1568	1721	1770	1568
Q Serve(g_s), s	23.4	25.9	5.3	12.8	36.4	4.7	5.3	19.8	8.2	3.9	16.8	21.8
Cycle Q Clear(g_c), s	23.4	25.9	5.3	12.8	36.4	4.7	5.3	19.8	8.2	3.9	16.8	21.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	350	2244	685	202	1821	562	91	990	439	151	963	426
V/C Ratio(X)	0.91	0.59	0.15	0.86	0.84	0.15	0.79	0.61	0.28	0.68	0.55	0.68
Avail Cap(c_a), veh/h	496	2538	775	322	2038	629	134	990	439	182	963	426
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.0	27.9	22.1	57.6	38.9	28.7	62.0	41.4	37.2	62.3	41.2	43.0
Incr Delay (d2), s/veh	16.9	0.3	0.1	13.3	3.0	0.1	17.0	2.8	1.6	7.8	2.2	8.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.1	12.2	2.3	7.0	17.5	2.0	3.0	10.0	3.8	2.0	8.5	10.4
LnGrp Delay(d), s/veh	68.9	28.2	22.2	70.8	41.9	28.9	79.0	44.3	38.9	70.1	43.4	51.3
LnGrp LOS	E	C	C	E	D	C	E	D	D	E	D	D
Approach Vol, veh/h		1743			1783			804			918	
Approach Delay, s/veh		35.3			44.1			46.5			48.9	
Approach LOS		D			D			D			D	

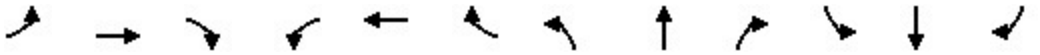
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	9.8	41.0	19.1	62.4	10.8	40.0	30.1	51.4
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	7.0	37.0	24.0	66.0	10.0	34.0	37.0	53.0
Max Q Clear Time (g_c+I1), s	5.9	21.8	14.8	27.9	7.3	23.8	25.4	38.4
Green Ext Time (p_c), s	0.0	3.8	0.3	12.3	0.0	3.2	0.7	9.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Future Volume (veh/h)	100	1240	200	100	1130	100	170	500	90	140	720	230
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.98	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	105	1305	211	105	1189	105	179	526	95	147	758	242
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	129	1595	487	129	1490	132	207	1325	583	174	1259	676
Arrive On Green	0.07	0.32	0.32	0.07	0.32	0.32	0.12	0.38	0.38	0.10	0.36	0.36
Sat Flow, veh/h	1740	4988	1524	1740	4659	411	1740	3471	1527	1740	3471	1548
Grp Volume(v), veh/h	105	1305	211	105	848	446	179	526	95	147	758	242
Grp Sat Flow(s),veh/h/ln	1740	1663	1524	1740	1663	1745	1740	1736	1527	1740	1736	1548
Q Serve(g_s), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Cycle Q Clear(g_c), s	7.6	30.9	14.0	7.6	29.9	29.9	13.0	14.2	5.3	10.7	22.9	13.4
Prop In Lane	1.00		1.00	1.00		0.24	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	129	1595	487	129	1063	558	207	1325	583	174	1259	676
V/C Ratio(X)	0.81	0.82	0.43	0.81	0.80	0.80	0.87	0.40	0.16	0.85	0.60	0.36
Avail Cap(c_a), veh/h	217	1865	570	217	1243	653	339	1325	583	285	1259	676
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.6	40.2	34.5	58.6	39.9	39.9	55.5	28.9	26.2	56.8	33.3	24.1
Incr Delay (d2), s/veh	11.6	2.6	0.6	11.6	3.2	6.0	12.2	0.9	0.6	11.8	2.1	1.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	14.6	6.0	4.1	14.1	15.4	6.9	7.0	2.3	5.7	11.3	6.0
LnGrp Delay(d), s/veh	70.2	42.8	35.1	70.2	43.1	45.9	67.7	29.8	26.8	68.6	35.5	25.6
LnGrp LOS	E	D	D	E	D	D	E	C	C	E	D	C
Approach Vol, veh/h		1621			1399			800			1147	
Approach Delay, s/veh		43.6			46.0			37.9			37.7	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.8	53.0	13.5	45.0	19.3	50.6	13.5	45.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	49.0	16.0	48.0	25.0	45.0	16.0	48.0
Max Q Clear Time (g_c+I1), s	12.7	16.2	9.6	32.9	15.0	24.9	9.6	31.9
Green Ext Time (p_c), s	0.2	3.8	0.1	8.1	0.3	5.6	0.1	7.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.0
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Future Volume (veh/h)	150	1240	130	140	1030	40	170	500	120	120	690	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
Arrive On Green	0.07	0.44	0.44	0.06	0.44	0.44	0.09	0.31	0.31	0.07	0.28	0.28
Sat Flow, veh/h	1740	3471	1524	1740	3471	1526	1740	3471	1547	1740	3471	1527
Grp Volume(v), veh/h	170	1409	148	159	1170	45	193	568	136	136	784	170
Grp Sat Flow(s),veh/h/ln	1740	1736	1524	1740	1736	1526	1740	1736	1547	1740	1736	1527
Q Serve(g_s), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Cycle Q Clear(g_c), s	7.4	53.1	8.4	7.0	39.8	2.4	10.7	19.0	9.4	7.7	29.2	12.6
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	241	1543	677	185	1530	673	255	1066	475	296	987	434
V/C Ratio(X)	0.70	0.91	0.22	0.86	0.76	0.07	0.76	0.53	0.29	0.46	0.79	0.39
Avail Cap(c_a), veh/h	308	1636	718	234	1587	698	294	1066	475	325	987	434
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.8	36.4	23.9	31.8	33.0	22.6	34.6	40.2	36.8	32.8	46.3	40.4
Incr Delay (d2), s/veh	5.1	8.0	0.2	21.8	2.2	0.0	9.4	1.9	1.5	1.1	6.6	2.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	27.1	3.6	4.4	19.5	1.0	5.8	9.4	4.2	3.8	14.9	5.6
LnGrp Delay(d), s/veh	32.9	44.3	24.1	53.6	35.2	22.6	44.0	42.1	38.4	33.9	52.9	43.0
LnGrp LOS	C	D	C	D	D	C	D	D	D	C	D	D
Approach Vol, veh/h		1727			1374			897			1090	
Approach Delay, s/veh		41.5			37.0			41.9			49.0	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	13.7	47.0	13.1	66.2	16.9	43.8	13.6	65.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	43.0	13.0	66.0	16.0	39.0	15.0	64.0
Max Q Clear Time (g_c+I1), s	9.7	21.0	9.0	55.1	12.7	31.2	9.4	41.8
Green Ext Time (p_c), s	0.1	4.1	0.1	7.1	0.2	3.3	0.2	8.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.9
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	160	1530	560	680	1970	70	680	840	430	100	1130	150
Future Volume (veh/h)	160	1530	560	680	1970	70	680	840	430	100	1130	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	168	1611	589	716	2074	74	716	884	453	105	1189	158
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	3	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	152	1108	333	422	1880	570	422	1268	930	126	974	293
Arrive On Green	0.09	0.22	0.22	0.24	0.37	0.37	0.24	0.36	0.36	0.07	0.19	0.19
Sat Flow, veh/h	1757	5036	1512	1757	5036	1527	1757	3505	1531	1757	5036	1514
Grp Volume(v), veh/h	168	1611	589	716	2074	74	716	884	453	105	1189	158
Grp Sat Flow(s),veh/h/ln	1757	1679	1512	1757	1679	1527	1757	1752	1531	1757	1679	1514
Q Serve(g_s), s	13.0	33.0	33.0	36.0	56.0	4.8	36.0	32.3	25.1	8.9	29.0	14.1
Cycle Q Clear(g_c), s	13.0	33.0	33.0	36.0	56.0	4.8	36.0	32.3	25.1	8.9	29.0	14.1
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	152	1108	333	422	1880	570	422	1268	930	126	974	293
V/C Ratio(X)	1.10	1.45	1.77	1.70	1.10	0.13	1.70	0.70	0.49	0.83	1.22	0.54
Avail Cap(c_a), veh/h	152	1108	333	422	1880	570	422	1268	930	141	974	293
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.5	58.5	58.5	57.0	47.0	31.0	57.0	40.9	16.9	68.8	60.5	54.5
Incr Delay (d2), s/veh	103.3	209.4	358.7	324.2	55.0	0.1	324.2	3.2	1.8	30.9	108.9	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.7	36.8	46.9	55.4	35.5	2.0	55.4	16.2	11.0	5.4	23.2	6.4
LnGrp Delay(d), s/veh	171.8	267.9	417.2	381.2	102.0	31.1	381.2	44.1	18.7	99.6	169.4	61.5
LnGrp LOS	F	F	F	F	F	C	F	D	B	F	F	E
Approach Vol, veh/h		2368			2864			2053			1452	
Approach Delay, s/veh		298.2			170.0			156.1			152.6	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	14.7	58.3	40.0	37.0	40.0	33.0	17.0	60.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	12.0	53.0	36.0	33.0	36.0	29.0	13.0	56.0
Max Q Clear Time (g_c+I1), s	10.9	34.3	38.0	35.0	38.0	31.0	15.0	58.0
Green Ext Time (p_c), s	0.0	7.7	0.0	0.0	0.0	0.0	0.0	0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	198.6
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Future Volume (veh/h)	170	1130	100	50	760	60	100	610	70	110	590	260
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.98	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Adj No. of Lanes	1	3	1	1	3	1	1	2	1	1	2	1
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
Arrive On Green	0.12	0.31	0.31	0.04	0.23	0.23	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	1757	5036	1541	1757	5036	1538	613	3505	1547	725	3505	1546
Grp Volume(v), veh/h	179	1189	105	53	800	63	105	642	74	116	621	274
Grp Sat Flow(s),veh/h/ln	1757	1679	1541	1757	1679	1538	613	1752	1547	725	1752	1546
Q Serve(g_s), s	12.2	26.2	6.2	3.7	17.9	4.0	13.7	12.2	2.7	12.7	11.8	11.8
Cycle Q Clear(g_c), s	12.2	26.2	6.2	3.7	17.9	4.0	25.5	12.2	2.7	25.0	11.8	11.8
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	209	1553	475	68	1149	351	340	1944	858	389	1944	858
V/C Ratio(X)	0.85	0.77	0.22	0.78	0.70	0.18	0.31	0.33	0.09	0.30	0.32	0.32
Avail Cap(c_a), veh/h	444	2383	729	172	1602	489	340	1944	858	389	1944	858
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.9	38.4	31.5	58.4	43.4	38.1	21.7	14.9	12.8	21.7	14.8	14.8
Incr Delay (d2), s/veh	9.5	0.8	0.2	16.9	0.8	0.2	2.3	0.5	0.2	2.0	0.4	1.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	6.5	12.2	2.7	2.1	8.4	1.7	2.5	6.0	1.2	2.8	5.8	5.2
LnGrp Delay(d), s/veh	62.5	39.2	31.7	75.3	44.2	38.3	24.0	15.3	13.0	23.6	15.2	15.7
LnGrp LOS	E	D	C	E	D	D	C	B	B	C	B	B
Approach Vol, veh/h		1473			916			821			1011	
Approach Delay, s/veh		41.5			45.6			16.2			16.3	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		72.0	8.8	41.8		72.0	18.6	32.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		68.0	12.0	58.0		68.0	31.0	39.0
Max Q Clear Time (g_c+I1), s		27.5	5.7	28.2		27.0	14.2	19.9
Green Ext Time (p_c), s		6.0	0.0	9.6		6.6	0.4	5.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.4
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Future Volume (veh/h)	90	1290	80	110	970	40	100	660	230	80	600	130
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
Arrive On Green	0.07	0.44	0.44	0.08	0.45	0.45	0.39	0.39	0.39	0.39	0.39	0.39
Sat Flow, veh/h	1757	3505	1547	1757	3505	1547	686	3505	1545	584	3505	1544
Grp Volume(v), veh/h	96	1372	85	117	1032	43	106	702	245	85	638	138
Grp Sat Flow(s),veh/h/ln	1757	1752	1547	1757	1752	1547	686	1752	1545	584	1752	1544
Q Serve(g_s), s	7.4	49.5	4.5	9.0	31.4	2.2	18.7	21.0	15.8	17.8	18.6	8.2
Cycle Q Clear(g_c), s	7.4	49.5	4.5	9.0	31.4	2.2	37.3	21.0	15.8	38.8	18.6	8.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	118	1545	682	140	1589	701	228	1375	606	192	1375	606
V/C Ratio(X)	0.81	0.89	0.12	0.83	0.65	0.06	0.46	0.51	0.40	0.44	0.46	0.23
Avail Cap(c_a), veh/h	191	1757	775	191	1757	776	228	1375	606	192	1375	606
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	63.3	35.4	22.8	62.4	29.2	21.2	44.9	31.8	30.2	46.5	31.1	27.9
Incr Delay (d2), s/veh	12.5	5.5	0.1	19.9	0.7	0.0	6.6	1.4	2.0	7.2	1.1	0.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	25.0	1.9	5.2	15.4	0.9	4.0	10.4	7.1	3.3	9.3	3.7
LnGrp Delay(d), s/veh	75.9	40.9	22.9	82.3	29.9	21.2	51.6	33.1	32.2	53.7	32.2	28.8
LnGrp LOS	E	D	C	F	C	C	D	C	C	D	C	C
Approach Vol, veh/h		1553			1192			1053			861	
Approach Delay, s/veh		42.0			34.7			34.8			33.8	
Approach LOS		D			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		58.0	15.0	64.7		58.0	13.3	66.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		54.0	15.0	69.0		54.0	15.0	69.0
Max Q Clear Time (g_c+I1), s		39.3	11.0	51.5		40.8	9.4	33.4
Green Ext Time (p_c), s		5.3	0.1	9.1		4.3	0.1	8.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	37.0
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Future Volume (veh/h)	80	290	40	80	300	50	140	750	80	90	650	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
Arrive On Green	0.28	0.28	0.28	0.28	0.28	0.28	0.66	0.66	0.66	0.66	0.66	0.66
Sat Flow, veh/h	985	1845	1546	1005	1845	1566	669	3505	1529	604	3505	1530
Grp Volume(v), veh/h	88	319	44	88	330	55	154	824	88	99	714	88
Grp Sat Flow(s),veh/h/ln	985	1845	1546	1005	1845	1566	669	1752	1529	604	1752	1530
Q Serve(g_s), s	11.5	20.1	2.8	11.1	20.9	3.5	16.8	13.7	2.7	11.4	11.4	2.7
Cycle Q Clear(g_c), s	32.4	20.1	2.8	31.2	20.9	3.5	28.2	13.7	2.7	25.2	11.4	2.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	171	509	427	180	509	432	441	2326	1015	392	2326	1015
V/C Ratio(X)	0.52	0.63	0.10	0.49	0.65	0.13	0.35	0.35	0.09	0.25	0.31	0.09
Avail Cap(c_a), veh/h	300	751	630	311	751	638	441	2326	1015	392	2326	1015
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.6	42.0	35.8	55.7	42.3	36.0	15.4	9.8	8.0	15.3	9.4	8.0
Incr Delay (d2), s/veh	2.4	1.3	0.1	2.1	1.4	0.1	2.2	0.4	0.2	1.5	0.3	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.2	10.4	1.2	3.2	10.8	1.5	3.3	6.8	1.2	2.1	5.6	1.2
LnGrp Delay(d), s/veh	59.0	43.3	35.9	57.7	43.7	36.1	17.6	10.2	8.1	16.9	9.8	8.1
LnGrp LOS	E	D	D	E	D	D	B	B	A	B	A	A
Approach Vol, veh/h		451			473			1066			901	
Approach Delay, s/veh		45.6			45.4			11.1			10.4	
Approach LOS		D			D			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		92.0		40.6		92.0		40.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		88.0		54.0		88.0		54.0
Max Q Clear Time (g_c+I1), s		30.2		34.4		27.2		33.2
Green Ext Time (p_c), s		8.7		2.2		6.9		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	1600	90	270	1770	100	120	560	480	160	680	180
Future Volume (veh/h)	90	1600	90	270	1770	100	120	560	480	160	680	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.96	1.00		0.97	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	101	1798	101	303	1989	112	135	629	539	180	764	202
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89	0.89
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	122	1813	541	316	2292	128	156	865	376	187	927	408
Arrive On Green	0.07	0.36	0.36	0.18	0.47	0.47	0.09	0.25	0.25	0.11	0.26	0.26
Sat Flow, veh/h	1757	5036	1502	1757	4869	273	1757	3505	1523	1757	3505	1545
Grp Volume(v), veh/h	101	1798	101	303	1369	732	135	629	539	180	764	202
Grp Sat Flow(s),veh/h/ln	1757	1679	1502	1757	1679	1784	1757	1752	1523	1757	1752	1545
Q Serve(g_s), s	8.5	53.3	6.9	25.6	54.6	55.2	11.4	24.7	37.0	15.3	30.8	16.6
Cycle Q Clear(g_c), s	8.5	53.3	6.9	25.6	54.6	55.2	11.4	24.7	37.0	15.3	30.8	16.6
Prop In Lane	1.00		1.00	1.00		0.15	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	122	1813	541	316	1580	840	156	865	376	187	927	408
V/C Ratio(X)	0.83	0.99	0.19	0.96	0.87	0.87	0.86	0.73	1.43	0.96	0.82	0.49
Avail Cap(c_a), veh/h	141	1813	541	316	1580	840	164	865	376	187	927	408
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	68.9	47.8	32.9	60.9	35.5	35.6	67.4	51.9	56.5	66.7	51.9	46.7
Incr Delay (d2), s/veh	29.2	19.1	0.2	39.4	5.3	9.9	34.0	5.3	210.2	54.2	8.3	4.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.1	27.9	2.9	15.9	26.5	29.4	7.0	12.6	37.5	10.3	15.9	7.6
LnGrp Delay(d), s/veh	98.2	66.9	33.1	100.3	40.8	45.5	101.4	57.2	266.7	120.8	60.2	50.9
LnGrp LOS	F	E	C	F	D	D	F	E	F	F	E	D
Approach Vol, veh/h		2000			2404			1303			1146	
Approach Delay, s/veh		66.8			49.8			148.4			68.1	
Approach LOS		E			D			F			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	41.0	31.0	58.0	17.3	43.7	14.4	74.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	16.0	37.0	27.0	54.0	14.0	39.0	12.0	69.0
Max Q Clear Time (g_c+I1), s	17.3	39.0	27.6	55.3	13.4	32.8	10.5	57.2
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	2.8	0.0	9.3

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		76.5
HCM 2010 LOS		E

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1580	160	40	1460	10	210	10	120	0	0	10
Future Volume (veh/h)	0	1580	160	40	1460	10	210	10	120	0	0	10
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.96	1.00		0.97	1.00		1.00	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1900	1900	1827	1900
Adj Flow Rate, veh/h	0	1756	178	44	1622	11	233	11	133	0	0	11
Adj No. of Lanes	1	3	0	1	3	0	1	1	0	0	1	0
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	56	2233	225	136	2773	19	590	47	571	0	0	604
Arrive On Green	0.00	0.49	0.49	0.02	0.54	0.54	0.40	0.40	0.40	0.00	0.00	0.40
Sat Flow, veh/h	301	4584	463	1740	5110	35	1366	120	1446	0	0	1528
Grp Volume(v), veh/h	0	1272	662	44	1055	578	233	0	144	0	0	11
Grp Sat Flow(s),veh/h/ln	301	1663	1721	1740	1663	1819	1366	0	1565	0	0	1528
Q Serve(g_s), s	0.0	41.0	41.4	1.6	27.4	27.4	16.2	0.0	7.9	0.0	0.0	0.6
Cycle Q Clear(g_c), s	0.0	41.0	41.4	1.6	27.4	27.4	16.7	0.0	7.9	0.0	0.0	0.6
Prop In Lane	1.00		0.27	1.00		0.02	1.00		0.92	0.00		1.00
Lane Grp Cap(c), veh/h	56	1620	838	136	1805	988	590	0	619	0	0	604
V/C Ratio(X)	0.00	0.79	0.79	0.32	0.58	0.58	0.40	0.00	0.23	0.00	0.00	0.02
Avail Cap(c_a), veh/h	98	2087	1080	174	2345	1283	590	0	619	0	0	604
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	27.5	27.6	23.9	19.8	19.8	28.9	0.0	26.0	0.0	0.0	23.8
Incr Delay (d2), s/veh	0.0	1.5	3.1	1.4	0.3	0.6	2.0	0.0	0.9	0.0	0.0	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	19.1	20.2	0.8	12.5	13.8	6.4	0.0	3.6	0.0	0.0	0.2
LnGrp Delay(d), s/veh	0.0	29.0	30.7	25.2	20.1	20.3	30.8	0.0	26.9	0.0	0.0	23.8
LnGrp LOS		C	C	C	C	C	C		C			C
Approach Vol, veh/h		1934			1677			377			11	
Approach Delay, s/veh		29.6			20.3			29.3			23.8	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		55.0	7.2	66.9		55.0		74.0
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		51.0	6.0	81.0		51.0		91.0
Max Q Clear Time (g_c+I1), s		18.7	3.6	43.4		2.6		29.4
Green Ext Time (p_c), s		1.7	0.0	19.5		0.0		16.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	25.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Future Volume (veh/h)	60	1330	190	50	840	50	110	370	80	60	480	150
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	65	1430	204	54	903	54	118	398	86	65	516	161
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	0
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	1898	838	119	1898	837	250	1442	636	352	1080	335
Arrive On Green	0.54	0.54	0.54	0.54	0.54	0.54	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	584	3539	1562	306	3539	1561	759	3539	1560	907	2649	822
Grp Volume(v), veh/h	65	1430	204	54	903	54	118	398	86	65	344	333
Grp Sat Flow(s),veh/h/ln	584	1770	1562	306	1770	1561	759	1770	1560	907	1770	1702
Q Serve(g_s), s	11.1	44.7	9.9	23.7	22.6	2.4	19.3	10.7	4.9	7.3	20.3	20.5
Cycle Q Clear(g_c), s	33.7	44.7	9.9	68.5	22.6	2.4	39.8	10.7	4.9	18.0	20.3	20.5
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.48
Lane Grp Cap(c), veh/h	271	1898	838	119	1898	837	250	1442	636	352	721	694
V/C Ratio(X)	0.24	0.75	0.24	0.46	0.48	0.06	0.47	0.28	0.14	0.18	0.48	0.48
Avail Cap(c_a), veh/h	303	2089	922	135	2089	921	250	1442	636	352	721	694
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	31.0	25.7	17.6	52.3	20.5	15.9	45.7	28.1	26.4	34.2	31.0	31.1
Incr Delay (d2), s/veh	0.5	1.4	0.1	2.7	0.2	0.0	6.2	0.5	0.4	1.2	2.3	2.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.2	4.3	2.1	11.1	1.0	4.5	5.3	2.2	2.0	10.4	10.1
LnGrp Delay(d), s/veh	31.5	27.1	17.8	55.0	20.7	15.9	52.0	28.6	26.9	35.3	33.3	33.4
LnGrp LOS	C	C	B	E	C	B	D	C	C	D	C	C
Approach Vol, veh/h		1699			1011			602			742	
Approach Delay, s/veh		26.2			22.3			32.9			33.5	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		62.0		80.3		62.0		80.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		58.0		84.0		58.0		84.0
Max Q Clear Time (g_c+I1), s		41.8		46.7		22.5		70.5
Green Ext Time (p_c), s		3.2		15.6		4.8		5.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.6
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	120	1450	120	40	1210	150	160	60	30	230	50	90
Future Volume (veh/h)	120	1450	120	40	1210	150	160	60	30	230	50	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.97	0.99		0.98	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	125	1510	125	42	1260	156	167	62	31	240	52	94
Adj No. of Lanes	1	3	0	1	3	0	1	1	1	1	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	156	2067	171	53	1711	212	530	457	380	567	514	429
Arrive On Green	0.09	0.44	0.44	0.03	0.38	0.38	0.09	0.25	0.25	0.12	0.28	0.28
Sat Flow, veh/h	1740	4687	388	1740	4479	555	1740	1827	1520	1740	1827	1522
Grp Volume(v), veh/h	125	1071	564	42	935	481	167	62	31	240	52	94
Grp Sat Flow(s),veh/h/ln	1740	1663	1750	1740	1663	1709	1740	1827	1520	1740	1827	1522
Q Serve(g_s), s	7.3	27.3	27.4	2.5	24.9	24.9	7.2	2.7	1.6	10.1	2.2	4.9
Cycle Q Clear(g_c), s	7.3	27.3	27.4	2.5	24.9	24.9	7.2	2.7	1.6	10.1	2.2	4.9
Prop In Lane	1.00		0.22	1.00		0.32	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	156	1467	772	53	1270	653	530	457	380	567	514	429
V/C Ratio(X)	0.80	0.73	0.73	0.79	0.74	0.74	0.31	0.14	0.08	0.42	0.10	0.22
Avail Cap(c_a), veh/h	389	2422	1275	186	2034	1045	692	457	380	792	514	429
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.0	23.7	23.7	49.6	27.4	27.4	24.7	30.0	29.6	22.7	27.4	28.3
Incr Delay (d2), s/veh	9.2	0.7	1.4	22.4	0.8	1.6	0.3	0.6	0.4	0.5	0.4	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.9	12.6	13.5	1.5	11.6	12.0	3.5	1.4	0.7	4.9	1.2	2.2
LnGrp Delay(d), s/veh	55.1	24.4	25.1	72.0	28.2	29.0	25.0	30.6	30.0	23.2	27.7	29.5
LnGrp LOS	E	C	C	E	C	C	C	C	C	C	C	C
Approach Vol, veh/h		1760			1458			260			386	
Approach Delay, s/veh		26.8			29.7			27.0			25.3	
Approach LOS		C			C			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	16.7	29.7	7.1	49.4	13.4	33.0	13.2	43.3
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	22.0	11.0	75.0	19.0	29.0	23.0	63.0
Max Q Clear Time (g_c+I1), s	12.1	4.7	4.5	29.4	9.2	6.9	9.3	26.9
Green Ext Time (p_c), s	0.5	0.3	0.0	16.0	0.3	0.5	0.2	12.1

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.8
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	540	1100	120	60	900	40	130	60	40	10	40	320
Future Volume (veh/h)	540	1100	120	60	900	40	130	60	40	10	40	320
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.99	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	557	1134	124	62	928	41	134	62	41	10	41	330
Adj No. of Lanes	2	3	0	1	3	0	1	1	1	1	1	2
Peak Hour Factor	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	677	1911	209	80	1300	57	465	746	632	563	746	1112
Arrive On Green	0.20	0.42	0.42	0.05	0.27	0.27	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	3375	4550	497	1740	4896	216	986	1827	1547	1258	1827	2723
Grp Volume(v), veh/h	557	828	430	62	630	339	134	62	41	10	41	330
Grp Sat Flow(s),veh/h/ln	1688	1663	1722	1740	1663	1787	986	1827	1547	1258	1827	1362
Q Serve(g_s), s	15.1	18.4	18.4	3.4	16.4	16.4	9.1	2.0	1.5	0.5	1.3	7.8
Cycle Q Clear(g_c), s	15.1	18.4	18.4	3.4	16.4	16.4	10.4	2.0	1.5	2.5	1.3	7.8
Prop In Lane	1.00		0.29	1.00		0.12	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	677	1396	723	80	883	475	465	746	632	563	746	1112
V/C Ratio(X)	0.82	0.59	0.59	0.77	0.71	0.72	0.29	0.08	0.06	0.02	0.05	0.30
Avail Cap(c_a), veh/h	1697	2820	1461	328	1776	955	465	746	632	563	746	1112
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.6	21.4	21.4	45.1	31.8	31.8	20.2	17.3	17.2	18.1	17.1	19.0
Incr Delay (d2), s/veh	2.6	0.4	0.8	14.6	1.1	2.0	1.6	0.2	0.2	0.1	0.1	0.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.3	8.5	8.9	1.9	7.7	8.4	2.7	1.0	0.7	0.2	0.7	3.0
LnGrp Delay(d), s/veh	39.1	21.8	22.2	59.6	32.9	33.8	21.8	17.5	17.4	18.1	17.2	19.7
LnGrp LOS	D	C	C	E	C	C	C	B	B	B	B	B
Approach Vol, veh/h		1815			1031			237			381	
Approach Delay, s/veh		27.2			34.8			19.9			19.4	
Approach LOS		C			C			B			B	

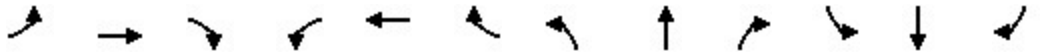
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6	7	8
Phs Duration (G+Y+Rc), s		43.0	8.4	44.1		43.0	23.1	29.4
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0	4.0	4.0
Max Green Setting (Gmax), s		39.0	18.0	81.0		39.0	48.0	51.0
Max Q Clear Time (g_c+I1), s		12.4	5.4	20.4		9.8	17.1	18.4
Green Ext Time (p_c), s		1.1	0.1	11.0		1.6	2.1	6.9

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.1
HCM 2010 LOS	C

Movement	NBL	NBT	NBR	SBL	SBT	SBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Future Volume (veh/h)	190	730	120	210	570	110	180	820	240	180	970	130
Number	5	2	12	1	6	16	7	4	14	3	8	18
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.98	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	198	760	125	219	594	115	188	854	250	188	1010	135
Adj No. of Lanes	1	2	1	1	2	1	1	3	0	1	3	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	228	1206	534	249	1248	545	217	1048	305	217	1219	162
Arrive On Green	0.13	0.34	0.34	0.14	0.35	0.35	0.12	0.27	0.27	0.12	0.27	0.27
Sat Flow, veh/h	1774	3539	1567	1774	3539	1548	1774	3879	1128	1774	4510	601
Grp Volume(v), veh/h	198	760	125	219	594	115	188	746	358	188	759	386
Grp Sat Flow(s),veh/h/ln	1774	1770	1567	1774	1770	1548	1774	1695	1616	1774	1695	1721
Q Serve(g_s), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Cycle Q Clear(g_c), s	13.8	22.8	7.2	15.3	16.5	6.6	13.1	26.0	26.2	13.1	26.6	26.7
Prop In Lane	1.00		1.00	1.00		1.00	1.00		0.70	1.00		0.35
Lane Grp Cap(c), veh/h	228	1206	534	249	1248	545	217	916	437	217	916	465
V/C Ratio(X)	0.87	0.63	0.23	0.88	0.48	0.21	0.87	0.81	0.82	0.87	0.83	0.83
Avail Cap(c_a), veh/h	379	1206	534	379	1248	545	337	1074	512	337	1074	545
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.0	34.9	29.8	53.2	31.8	28.6	54.4	43.1	43.2	54.4	43.3	43.3
Incr Delay (d2), s/veh	11.1	2.5	1.0	14.2	1.3	0.9	13.5	4.3	9.0	13.5	4.8	9.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.5	11.5	3.3	8.5	8.3	2.9	7.2	12.7	12.8	7.2	13.0	13.9
LnGrp Delay(d), s/veh	65.1	37.4	30.8	67.5	33.1	29.5	67.9	47.3	52.1	67.9	48.1	52.6
LnGrp LOS	E	D	C	E	C	C	E	D	D	E	D	D
Approach Vol, veh/h		1083			928			1292			1333	
Approach Delay, s/veh		41.7			40.8			51.7			52.2	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.7	47.0	19.4	38.1	20.2	48.5	19.4	38.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	27.0	43.0	24.0	40.0	27.0	43.0	24.0	40.0
Max Q Clear Time (g_c+I1), s	17.3	24.8	15.1	28.2	15.8	18.5	15.1	28.7
Green Ext Time (p_c), s	0.4	5.3	0.3	5.4	0.4	4.5	0.3	5.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	47.3
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Future Volume (veh/h)	190	1190	130	140	620	40	100	800	220	90	640	120
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.98	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
Arrive On Green	0.13	0.40	0.40	0.10	0.37	0.37	0.05	0.34	0.34	0.05	0.33	0.33
Sat Flow, veh/h	1774	3539	1552	1774	3539	1572	1774	3539	1549	1774	3539	1529
Grp Volume(v), veh/h	198	1240	135	146	646	42	104	833	229	94	667	125
Grp Sat Flow(s),veh/h/ln	1774	1770	1552	1774	1770	1572	1774	1770	1549	1774	1770	1529
Q Serve(g_s), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Cycle Q Clear(g_c), s	14.7	43.4	7.7	10.9	18.9	2.3	5.2	27.5	15.5	4.7	20.8	8.0
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	225	1417	622	172	1310	582	267	1187	520	209	1172	506
V/C Ratio(X)	0.88	0.87	0.22	0.85	0.49	0.07	0.39	0.70	0.44	0.45	0.57	0.25
Avail Cap(c_a), veh/h	344	1635	717	251	1451	644	306	1187	520	229	1172	506
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	57.6	37.1	26.4	59.7	32.6	27.4	29.0	38.8	34.8	30.6	37.0	32.7
Incr Delay (d2), s/veh	15.1	5.1	0.2	16.5	0.3	0.1	0.9	3.5	2.7	1.5	2.0	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.2	22.2	3.3	6.1	9.3	1.0	2.6	14.0	7.0	2.4	10.5	3.5
LnGrp Delay(d), s/veh	72.7	42.2	26.6	76.2	32.9	27.4	29.9	42.2	37.5	32.1	39.0	33.9
LnGrp LOS	E	D	C	E	C	C	C	D	D	C	D	C
Approach Vol, veh/h		1573			834			1166			886	
Approach Delay, s/veh		44.7			40.2			40.2			37.5	
Approach LOS		D			D			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.5	49.0	17.0	57.7	11.1	48.4	21.1	53.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	8.0	45.0	19.0	62.0	10.0	43.0	26.0	55.0
Max Q Clear Time (g_c+I1), s	6.7	29.5	12.9	45.4	7.2	22.8	16.7	20.9
Green Ext Time (p_c), s	0.0	5.8	0.2	8.3	0.1	4.8	0.3	4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	41.3
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Future Volume (veh/h)	90	490	30	210	310	90	40	1010	340	110	650	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Adj No. of Lanes	1	2	1	1	2	1	1	2	1	1	2	1
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
Arrive On Green	0.39	0.39	0.39	0.39	0.39	0.39	0.55	0.55	0.55	0.55	0.55	0.55
Sat Flow, veh/h	957	3539	1562	852	3539	1562	699	3539	1560	371	3539	1558
Grp Volume(v), veh/h	96	521	32	223	330	96	43	1074	362	117	691	74
Grp Sat Flow(s),veh/h/ln	957	1770	1562	852	1770	1562	699	1770	1560	371	1770	1558
Q Serve(g_s), s	10.8	15.2	1.8	36.6	9.0	5.8	5.2	28.0	19.4	42.5	15.6	3.2
Cycle Q Clear(g_c), s	19.9	15.2	1.8	51.8	9.0	5.8	20.8	28.0	19.4	70.4	15.6	3.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	363	1379	609	292	1379	609	363	1964	866	184	1964	865
V/C Ratio(X)	0.26	0.38	0.05	0.76	0.24	0.16	0.12	0.55	0.42	0.64	0.35	0.09
Avail Cap(c_a), veh/h	402	1522	672	326	1522	672	363	1964	866	184	1964	865
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	36.3	31.5	27.4	50.0	29.6	28.6	23.5	20.5	18.6	43.0	17.7	15.0
Incr Delay (d2), s/veh	0.4	0.2	0.0	9.2	0.1	0.1	0.7	1.1	1.5	15.7	0.5	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.9	7.5	0.8	9.4	4.5	2.5	1.1	13.9	8.7	5.2	7.7	1.4
LnGrp Delay(d), s/veh	36.7	31.7	27.5	59.3	29.7	28.7	24.2	21.6	20.1	58.7	18.2	15.2
LnGrp LOS	D	C	C	E	C	C	C	C	C	E	B	B
Approach Vol, veh/h		649			649			1479			882	
Approach Delay, s/veh		32.2			39.7			21.3			23.3	
Approach LOS		C			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		84.0		60.2		84.0		60.2
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		80.0		62.0		80.0		62.0
Max Q Clear Time (g_c+I1), s		30.0		21.9		72.4		53.8
Green Ext Time (p_c), s		12.9		4.3		3.8		2.4

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	27.0
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	890	160	130	730	120	200	1150	110	110	730	70
Future Volume (veh/h)	130	890	160	130	730	120	200	1150	110	110	730	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.99	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	141	967	174	141	793	130	217	1250	120	120	793	76
Adj No. of Lanes	1	3	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	166	1112	199	165	1131	184	375	1678	740	217	1575	695
Arrive On Green	0.09	0.26	0.26	0.09	0.26	0.26	0.08	0.48	0.48	0.05	0.45	0.45
Sat Flow, veh/h	1757	4281	768	1757	4362	710	1757	3505	1546	1757	3505	1546
Grp Volume(v), veh/h	141	758	383	141	609	314	217	1250	120	120	793	76
Grp Sat Flow(s),veh/h/ln	1757	1679	1692	1757	1679	1715	1757	1752	1546	1757	1752	1546
Q Serve(g_s), s	10.9	29.7	29.9	10.9	22.6	22.9	8.8	39.8	6.0	5.0	22.2	3.9
Cycle Q Clear(g_c), s	10.9	29.7	29.9	10.9	22.6	22.9	8.8	39.8	6.0	5.0	22.2	3.9
Prop In Lane	1.00		0.45	1.00		0.41	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	166	872	439	165	871	445	375	1678	740	217	1575	695
V/C Ratio(X)	0.85	0.87	0.87	0.85	0.70	0.71	0.58	0.74	0.16	0.55	0.50	0.11
Avail Cap(c_a), veh/h	268	950	479	229	877	448	450	1678	740	267	1575	695
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.4	48.8	48.8	61.5	46.2	46.3	19.6	29.1	20.3	25.1	27.0	22.0
Incr Delay (d2), s/veh	13.2	8.2	15.2	19.3	2.5	5.0	1.4	3.1	0.5	2.2	1.2	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.9	14.8	15.8	6.2	10.8	11.4	4.4	20.0	2.7	2.5	10.9	1.7
LnGrp Delay(d), s/veh	74.6	57.0	64.1	80.8	48.7	51.3	21.0	32.1	20.8	27.4	28.2	22.3
LnGrp LOS	E	E	E	F	D	D	C	C	C	C	C	C
Approach Vol, veh/h		1282			1064			1587			989	
Approach Delay, s/veh		61.0			53.7			29.8			27.6	
Approach LOS		E			D			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	11.1	70.0	17.0	39.8	15.1	65.9	17.0	39.7
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	11.0	66.0	18.0	39.0	17.0	60.0	21.0	36.0
Max Q Clear Time (g_c+I1), s	7.0	41.8	12.9	31.9	10.8	24.2	12.9	24.9
Green Ext Time (p_c), s	0.1	9.8	0.1	3.9	0.3	6.5	0.2	4.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	42.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	SEL	SET	SER	NWL	NWT	NWR
Lane Configurations												
Traffic Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Future Volume (veh/h)	70	1110	410	170	570	100	190	1140	40	250	990	120
Number	7	4	14	3	8	18	1	6	16	5	2	12
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1900	1881	1881	1900
Adj Flow Rate, veh/h	74	1168	432	179	600	105	200	1200	0	263	1042	126
Adj No. of Lanes	1	2	1	1	2	0	1	3	0	1	3	0
Peak Hour Factor	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	307	1300	579	205	1228	214	225	1466	0	288	1490	180
Arrive On Green	0.04	0.36	0.36	0.08	0.40	0.40	0.13	0.29	0.00	0.16	0.32	0.32
Sat Flow, veh/h	1792	3574	1591	1792	3041	531	1792	5305	0	1792	4640	560
Grp Volume(v), veh/h	74	1168	432	179	352	353	200	1200	0	263	768	400
Grp Sat Flow(s),veh/h/ln	1792	1787	1591	1792	1787	1785	1792	1712	0	1792	1712	1777
Q Serve(g_s), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Cycle Q Clear(g_c), s	3.6	43.3	33.2	8.5	20.5	20.6	15.4	30.5	0.0	20.2	27.5	27.6
Prop In Lane	1.00		1.00	1.00		0.30	1.00		0.00	1.00		0.32
Lane Grp Cap(c), veh/h	307	1300	579	205	722	721	225	1466	0	288	1099	570
V/C Ratio(X)	0.24	0.90	0.75	0.87	0.49	0.49	0.89	0.82	0.00	0.91	0.70	0.70
Avail Cap(c_a), veh/h	307	1377	613	248	803	802	268	1466	0	345	1099	570
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	27.3	42.2	39.0	32.9	31.0	31.1	60.4	46.7	0.0	57.8	41.7	41.7
Incr Delay (d2), s/veh	0.4	8.0	4.7	24.2	0.5	0.5	25.7	5.2	0.0	25.0	3.7	7.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	1.8	22.9	15.3	5.5	10.2	10.2	9.2	15.2	0.0	12.0	13.6	14.7
LnGrp Delay(d), s/veh	27.7	50.1	43.7	57.0	31.5	31.6	86.1	51.9	0.0	82.8	45.4	48.7
LnGrp LOS	C	D	D	E	C	C	F	D		F	D	D
Approach Vol, veh/h		1674			884			1400			1431	
Approach Delay, s/veh		47.5			36.7			56.8			53.2	
Approach LOS		D			D			E			D	

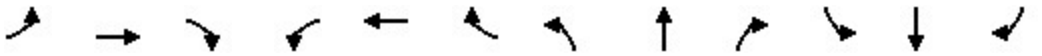
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	21.6	49.0	14.6	55.0	26.6	44.0	9.0	60.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	21.0	45.0	14.0	54.0	27.0	39.0	5.0	63.0
Max Q Clear Time (g_c+I1), s	17.4	29.6	10.5	45.3	22.2	32.5	5.6	22.6
Green Ext Time (p_c), s	0.2	6.4	0.1	5.7	0.3	3.8	0.0	4.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	49.6
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	510	2110	70	20	1300	770	130	320	40	0	0	0
Future Volume (veh/h)	510	2110	70	20	1300	770	130	320	40	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	554	2293	76	22	1413	837	141	348	43			
Adj No. of Lanes	2	3	0	1	3	1	0	2	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	607	3759	124	29	2966	923	155	410	250			
Arrive On Green	0.18	0.74	0.74	0.02	0.58	0.58	0.16	0.16	0.16			
Sat Flow, veh/h	3442	5057	167	1774	5085	1583	985	2598	1583			
Grp Volume(v), veh/h	554	1534	835	22	1413	837	260	229	43			
Grp Sat Flow(s),veh/h/ln	1721	1695	1833	1774	1695	1583	1814	1770	1583			
Q Serve(g_s), s	23.0	30.8	31.2	1.8	23.3	67.9	20.4	18.2	3.4			
Cycle Q Clear(g_c), s	23.0	30.8	31.2	1.8	23.3	67.9	20.4	18.2	3.4			
Prop In Lane	1.00		0.09	1.00		1.00	0.54		1.00			
Lane Grp Cap(c), veh/h	607	2520	1363	29	2966	923	286	279	250			
V/C Ratio(X)	0.91	0.61	0.61	0.77	0.48	0.91	0.91	0.82	0.17			
Avail Cap(c_a), veh/h	663	2520	1363	73	3010	937	300	292	262			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	58.7	8.7	8.8	71.2	17.5	26.8	60.1	59.2	53.0			
Incr Delay (d2), s/veh	16.2	1.1	2.1	33.5	0.1	12.2	28.8	16.3	0.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	12.3	14.7	16.3	1.1	10.9	32.7	12.5	10.2	1.5			
LnGrp Delay(d), s/veh	74.9	9.8	10.8	104.7	17.6	39.0	89.0	75.5	53.3			
LnGrp LOS	E	A	B	F	B	D	F	E	D			
Approach Vol, veh/h		2923			2272			532				
Approach Delay, s/veh		22.5			26.3			80.3				
Approach LOS		C			C			F				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	6.4	112.0			29.6	88.7		26.9
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	108.0			28.0	86.0		24.0
Max Q Clear Time (g_c+I1), s	3.8	33.2			25.0	69.9		22.4
Green Ext Time (p_c), s	0.0	37.5			0.7	11.5		0.5

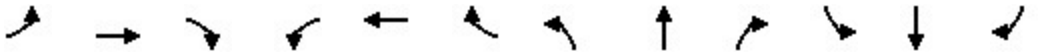
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	29.4
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1490	360	350	1390	0	0	0	0	920	50	110
Future Volume (vph)	0	1490	360	350	1390	0	0	0	0	920	50	110
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.91	1.00	0.97	0.91					0.91	0.91	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		5085	1583	3433	5085					1610	3244	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		5085	1583	3433	5085					1610	3244	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1620	391	380	1511	0	0	0	0	1000	54	120
RTOR Reduction (vph)	0	0	103	0	0	0	0	0	0	0	0	23
Lane Group Flow (vph)	0	1620	288	380	1511	0	0	0	0	500	554	97
Turn Type		NA	Perm	Prot	NA					Split	NA	Perm
Protected Phases		2		1	6					4	4	
Permitted Phases			2									4
Actuated Green, G (s)		60.0	60.0	19.4	83.4					49.7	49.7	49.7
Effective Green, g (s)		60.0	60.0	19.4	83.4					49.7	49.7	49.7
Actuated g/C Ratio		0.43	0.43	0.14	0.59					0.35	0.35	0.35
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		2162	673	472	3005					567	1142	557
v/s Ratio Prot		c0.32		c0.11	0.30					c0.31	0.17	
v/s Ratio Perm			0.18									0.06
v/c Ratio		0.75	0.43	0.81	0.50					0.88	0.49	0.17
Uniform Delay, d1		34.2	28.5	59.0	16.8					42.9	35.7	31.5
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.5	0.4	9.6	0.6					14.9	0.3	0.1
Delay (s)		35.7	28.9	68.7	17.4					57.9	36.0	31.7
Level of Service		D	C	E	B					E	D	C
Approach Delay (s/veh)		34.4			27.7			0.0			44.9	
Approach LOS		C			C			A			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	34.3	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.81		
Actuated Cycle Length (s)	141.1	Sum of lost time (s)	12.0
Intersection Capacity Utilization	74.3%	ICU Level of Service	D
Analysis Period (min)	15		

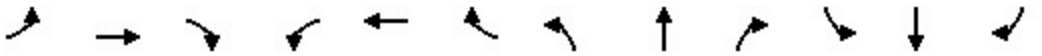
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	0	20	30	160	330	330	440	0	0	1240	70
Future Volume (veh/h)	60	0	20	30	160	330	330	440	0	0	1240	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	0	1863	1900	1863	1863	1863	1863	0	0	1863	1900
Adj Flow Rate, veh/h	65	0	22	33	174	359	359	478	0	0	1348	76
Adj No. of Lanes	1	0	1	0	2	1	2	3	0	0	3	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	0	2	2	2	2	2	2	0	0	2	2
Cap, veh/h	0	0	0	135	750	388	429	3522	0	0	2644	149
Arrive On Green	0.00	0.00	0.00	0.25	0.25	0.25	0.12	0.69	0.00	0.00	0.54	0.54
Sat Flow, veh/h		0		549	3056	1583	3442	5253	0	0	5094	278
Grp Volume(v), veh/h		0.0		110	97	359	359	478	0	0	928	496
Grp Sat Flow(s),veh/h/ln				1835	1770	1583	1721	1695	0	0	1695	1814
Q Serve(g_s), s				6.2	5.6	28.4	13.1	4.1	0.0	0.0	22.4	22.4
Cycle Q Clear(g_c), s				6.2	5.6	28.4	13.1	4.1	0.0	0.0	22.4	22.4
Prop In Lane				0.30		1.00	1.00		0.00	0.00		0.15
Lane Grp Cap(c), veh/h				450	434	388	429	3522	0	0	1820	974
V/C Ratio(X)				0.25	0.22	0.92	0.84	0.14	0.00	0.00	0.51	0.51
Avail Cap(c_a), veh/h				500	482	431	669	3522	0	0	1820	974
HCM Platoon Ratio				1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)				1.00	1.00	1.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh				38.9	38.7	47.3	55.0	6.7	0.0	0.0	19.0	19.0
Incr Delay (d2), s/veh				0.3	0.3	24.4	5.5	0.1	0.0	0.0	1.0	1.9
Initial Q Delay(d3),s/veh				0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln				3.2	2.8	15.1	6.6	1.9	0.0	0.0	10.7	11.7
LnGrp Delay(d), s/veh				39.2	39.0	71.7	60.5	6.8	0.0	0.0	20.0	20.9
LnGrp LOS				D	D	E	E	A			C	C
Approach Vol, veh/h					566			837			1424	
Approach Delay, s/veh					59.8			29.8			20.3	
Approach LOS					E			C			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		93.0			20.0	73.0		35.5
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		89.0			25.0	60.0		35.0
Max Q Clear Time (g_c+I1), s		6.1			15.1	24.4		30.4
Green Ext Time (p_c), s		3.6			0.9	12.5		1.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		31.0
HCM 2010 LOS		C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	60	40	380	0	0	0	0	700	140	590	820	0
Future Volume (vph)	60	40	380	0	0	0	0	700	140	590	820	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91					0.91		0.97	0.91	
Frt	1.00	0.88	0.85					0.98		1.00	1.00	
Flt Protected	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (prot)	1770	2969	1441					4958		3433	5085	
Flt Permitted	0.95	1.00	1.00					1.00		0.95	1.00	
Satd. Flow (perm)	1770	2969	1441					4958		3433	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	65	43	413	0	0	0	0	761	152	641	891	0
RTOR Reduction (vph)	0	189	188	0	0	0	0	12	0	0	0	0
Lane Group Flow (vph)	65	61	18	0	0	0	0	901	0	641	891	0
Turn Type	Split	NA	Perm					NA		Prot	NA	
Protected Phases	4	4						2		1	6	
Permitted Phases			4									
Actuated Green, G (s)	10.9	10.9	10.9					74.6		28.5	107.1	
Effective Green, g (s)	10.9	10.9	10.9					74.6		28.5	107.1	
Actuated g/C Ratio	0.09	0.09	0.09					0.59		0.23	0.85	
Clearance Time (s)	4.0	4.0	4.0					4.0		4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0					3.0		3.0	3.0	
Lane Grp Cap (vph)	153	256	124					2935		776	4322	
v/s Ratio Prot	c0.04	0.02						c0.18		c0.19	0.18	
v/s Ratio Perm			0.01									
v/c Ratio	0.42	0.24	0.14					0.31		0.83	0.21	
Uniform Delay, d1	54.6	53.7	53.2					12.8		46.4	1.7	
Progression Factor	1.00	1.00	1.00					1.00		1.00	1.00	
Incremental Delay, d2	1.9	0.5	0.5					0.3		7.2	0.1	
Delay (s)	56.5	54.2	53.8					13.1		53.6	1.8	
Level of Service	E	D	D					B		D	A	
Approach Delay (s/veh)		54.3			0.0			13.1			23.5	
Approach LOS		D			A			B			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	25.7	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.45		
Actuated Cycle Length (s)	126.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	48.7%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Future Volume (veh/h)	100	1120	270	170	860	40	430	380	340	50	380	70
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.99	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1900	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	104	1167	281	177	896	42	448	396	354	52	396	73
Adj No. of Lanes	1	3	0	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	301	2155	519	173	2628	123	341	724	639	216	1223	224
Arrive On Green	0.53	0.53	0.53	0.53	0.53	0.53	0.41	0.41	0.41	0.41	0.41	0.41
Sat Flow, veh/h	589	4041	973	363	4927	230	911	1752	1546	702	2960	541
Grp Volume(v), veh/h	104	970	478	177	610	328	448	396	354	52	233	236
Grp Sat Flow(s),veh/h/ln	589	1679	1656	363	1679	1800	911	1752	1546	702	1752	1748
Q Serve(g_s), s	18.4	28.4	28.4	51.6	15.5	15.6	48.3	25.7	26.1	9.1	13.5	13.7
Cycle Q Clear(g_c), s	34.0	28.4	28.4	80.0	15.5	15.6	62.0	25.7	26.1	35.3	13.5	13.7
Prop In Lane	1.00		0.59	1.00		0.13	1.00		1.00	1.00		0.31
Lane Grp Cap(c), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
V/C Ratio(X)	0.35	0.54	0.54	1.02	0.34	0.34	1.31	0.55	0.55	0.24	0.32	0.33
Avail Cap(c_a), veh/h	301	1791	883	173	1791	960	341	724	639	216	724	723
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	29.7	23.0	23.0	56.4	20.0	20.0	54.3	33.3	33.5	46.9	29.8	29.8
Incr Delay (d2), s/veh	0.7	0.3	0.7	75.1	0.1	0.2	160.1	3.0	3.4	2.6	1.2	1.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.0	13.3	13.2	10.8	7.2	7.8	29.3	13.0	11.7	1.9	6.8	6.9
LnGrp Delay(d), s/veh	30.3	23.3	23.6	131.7	20.1	20.2	214.4	36.3	36.9	49.5	30.9	31.0
LnGrp LOS	C	C	C	F	C	C	F	D	D	D	C	C
Approach Vol, veh/h		1552			1115			1198			521	
Approach Delay, s/veh		23.9			37.8			103.1			32.8	
Approach LOS		C			D			F			C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		66.0		84.0		66.0		84.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		62.0		80.0		62.0		80.0
Max Q Clear Time (g_c+I1), s		64.0		36.0		37.3		82.0
Green Ext Time (p_c), s		0.0		15.4		3.1		0.0

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		50.1
HCM 2010 LOS		D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Future Volume (veh/h)	80	60	40	210	90	220	20	250	90	170	500	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.96	0.99		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1900	1900	1863	1900	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	86	65	43	226	97	237	22	269	97	183	538	86
Adj No. of Lanes	0	1	0	0	1	0	1	2	0	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	252	187	112	290	110	260	397	1287	450	513	1791	786
Arrive On Green	0.42	0.42	0.42	0.42	0.42	0.42	0.51	0.51	0.51	0.51	0.51	0.51
Sat Flow, veh/h	487	443	265	580	260	616	795	2542	890	1006	3539	1554
Grp Volume(v), veh/h	194	0	0	560	0	0	22	185	181	183	538	86
Grp Sat Flow(s),veh/h/ln	1194	0	0	1456	0	0	795	1770	1662	1006	1770	1554
Q Serve(g_s), s	0.0	0.0	0.0	28.6	0.0	0.0	1.8	6.4	6.7	13.6	9.8	3.2
Cycle Q Clear(g_c), s	11.5	0.0	0.0	40.1	0.0	0.0	11.6	6.4	6.7	20.3	9.8	3.2
Prop In Lane	0.44		0.22	0.40		0.42	1.00		0.54	1.00		1.00
Lane Grp Cap(c), veh/h	550	0	0	660	0	0	397	896	841	513	1791	786
V/C Ratio(X)	0.35	0.00	0.00	0.85	0.00	0.00	0.06	0.21	0.22	0.36	0.30	0.11
Avail Cap(c_a), veh/h	1027	0	0	1185	0	0	397	896	841	513	1791	786
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	21.5	0.0	0.0	30.3	0.0	0.0	19.3	15.1	15.1	20.8	15.9	14.3
Incr Delay (d2), s/veh	0.4	0.0	0.0	3.2	0.0	0.0	0.3	0.5	0.6	1.9	0.4	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.1	0.0	0.0	16.6	0.0	0.0	0.4	3.2	3.2	4.0	4.9	1.4
LnGrp Delay(d), s/veh	21.9	0.0	0.0	33.5	0.0	0.0	19.6	15.6	15.7	22.7	16.3	14.6
LnGrp LOS	C			C			B	B	B	C	B	B
Approach Vol, veh/h		194			560			388			807	
Approach Delay, s/veh		21.9			33.5			15.9			17.6	
Approach LOS		C			C			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		60.0		50.6		60.0		50.6
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		56.0		86.0		56.0		86.0
Max Q Clear Time (g_c+I1), s		13.6		13.5		22.3		42.1
Green Ext Time (p_c), s		2.4		1.6		5.0		4.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	22.3
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Future Volume (veh/h)	40	130	20	130	260	160	60	750	140	80	1120	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		1.00	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	43	141	22	141	283	174	65	815	152	87	1217	87
Adj No. of Lanes	0	1	0	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	73	223	32	227	488	413	263	2373	1036	384	2373	1037
Arrive On Green	0.26	0.26	0.26	0.26	0.26	0.26	0.68	0.68	0.68	0.68	0.68	0.68
Sat Flow, veh/h	156	842	119	1206	1845	1561	416	3505	1530	573	3505	1531
Grp Volume(v), veh/h	206	0	0	141	283	174	65	815	152	87	1217	87
Grp Sat Flow(s),veh/h/ln	1117	0	0	1206	1845	1561	416	1752	1530	573	1752	1531
Q Serve(g_s), s	8.6	0.0	0.0	5.2	18.3	12.7	12.6	13.4	4.9	10.3	23.6	2.7
Cycle Q Clear(g_c), s	26.8	0.0	0.0	32.0	18.3	12.7	36.2	13.4	4.9	23.8	23.6	2.7
Prop In Lane	0.21		0.11	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	327	0	0	227	488	413	263	2373	1036	384	2373	1037
V/C Ratio(X)	0.63	0.00	0.00	0.62	0.58	0.42	0.25	0.34	0.15	0.23	0.51	0.08
Avail Cap(c_a), veh/h	465	0	0	338	658	557	263	2373	1036	384	2373	1037
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	46.5	0.0	0.0	51.5	43.9	41.8	19.9	9.3	8.0	14.3	11.0	7.6
Incr Delay (d2), s/veh	2.0	0.0	0.0	2.8	1.1	0.7	2.2	0.4	0.3	1.4	0.8	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	7.4	0.0	0.0	5.3	9.5	5.5	1.6	6.6	2.2	1.8	11.6	1.2
LnGrp Delay(d), s/veh	48.5	0.0	0.0	54.3	45.0	42.5	22.2	9.7	8.3	15.7	11.8	7.8
LnGrp LOS	D			D	D	D	C	A	A	B	B	A
Approach Vol, veh/h		206			598			1032			1391	
Approach Delay, s/veh		48.5			46.4			10.3			11.8	
Approach LOS		D			D			B			B	

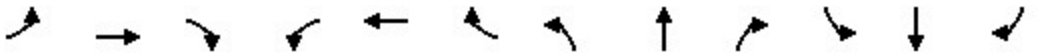
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		97.0		40.4		97.0		40.4
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		93.0		49.0		93.0		49.0
Max Q Clear Time (g_c+I1), s		38.2		28.8		25.8		34.0
Green Ext Time (p_c), s		8.7		1.1		14.3		2.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	20.1
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Future Volume (veh/h)	0	1090	410	760	960	0	0	0	0	330	0	420
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	0	1863	1900	1863	1863	0	1900	1863	1900	1863	1863	1900
Adj Flow Rate, veh/h	0	1185	446	826	1043	0	0	0	0	359	0	457
Adj No. of Lanes	0	3	0	2	2	0	0	1	0	2	1	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	0	2	2	2	2	0	2	2	2	2	2	2
Cap, veh/h	0	1276	480	890	2252	0	0	575	0	1161	0	489
Arrive On Green	0.00	0.35	0.35	0.26	0.64	0.00	0.00	0.00	0.00	0.31	0.00	0.31
Sat Flow, veh/h	0	3810	1369	3442	3632	0	0	1863	0	3442	0	1583
Grp Volume(v), veh/h	0	1103	528	826	1043	0	0	0	0	359	0	457
Grp Sat Flow(s),veh/h/ln	0	1695	1621	1721	1770	0	0	1863	0	1721	0	1583
Q Serve(g_s), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Cycle Q Clear(g_c), s	0.0	45.6	45.8	34.1	22.1	0.0	0.0	0.0	0.0	11.7	0.0	40.9
Prop In Lane	0.00		0.84	1.00		0.00	0.00		0.00	1.00		1.00
Lane Grp Cap(c), veh/h	0	1188	568	890	2252	0	0	575	0	1161	0	489
V/C Ratio(X)	0.00	0.93	0.93	0.93	0.46	0.00	0.00	0.00	0.00	0.31	0.00	0.93
Avail Cap(c_a), veh/h	0	1210	578	968	2356	0	0	575	0	1161	0	489
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	0.00	1.00	1.00	1.00	1.00	0.00	0.00	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	0.0	45.6	45.6	52.7	13.7	0.0	0.0	0.0	0.0	38.9	0.0	48.9
Incr Delay (d2), s/veh	0.0	12.2	21.6	14.1	0.1	0.0	0.0	0.0	0.0	0.7	0.0	27.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.0	23.3	23.8	17.9	10.8	0.0	0.0	0.0	0.0	5.7	0.0	21.6
LnGrp Delay(d), s/veh	0.0	57.8	67.2	66.8	13.8	0.0	0.0	0.0	0.0	39.6	0.0	76.3
LnGrp LOS		E	E	E	B					D		E
Approach Vol, veh/h		1631			1869			0			816	
Approach Delay, s/veh		60.9			37.2			0.0			60.1	
Approach LOS		E			D						E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4		6		8
Phs Duration (G+Y+Rc), s		49.0	41.7	55.1		49.0		96.7
Change Period (Y+Rc), s		4.0	4.0	4.0		4.0		4.0
Max Green Setting (Gmax), s		45.0	41.0	52.0		45.0		97.0
Max Q Clear Time (g_c+I1), s		0.0	36.1	47.8		42.9		24.1
Green Ext Time (p_c), s		0.0	1.5	3.3		0.9		9.2

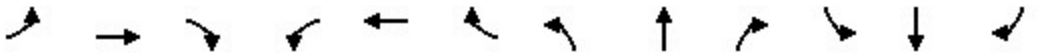
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.5
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Future Volume (vph)	10	990	320	180	1450	10	270	10	980	10	10	10
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00	0.91	0.91	0.97	0.95		0.95	0.95	0.88	1.00	1.00	
Frt	1.00	1.00	0.85	1.00	1.00		1.00	1.00	0.85	1.00	0.93	
Flt Protected	0.95	1.00	1.00	0.95	1.00		0.95	0.96	1.00	0.95	1.00	
Satd. Flow (prot)	1770	3374	1441	3433	3536		1681	1691	2787	1770	1723	
Flt Permitted	0.95	1.00	1.00	0.95	1.00		0.95	0.67	1.00	0.66	1.00	
Satd. Flow (perm)	1770	3374	1441	3433	3536		1681	1191	2787	1221	1723	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	11	1076	348	196	1576	11	293	11	1065	11	11	11
RTOR Reduction (vph)	0	2	152	0	1	0	0	0	184	0	8	0
Lane Group Flow (vph)	11	1109	161	196	1586	0	152	152	881	11	14	0
Turn Type	Prot	NA	Perm	Prot	NA		Prot	NA	Perm	Perm	NA	
Protected Phases	7	4		3	8		5	2			6	
Permitted Phases			4						2	6		
Actuated Green, G (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Effective Green, g (s)	1.5	57.6	57.6	12.4	68.5		17.2	58.4	58.4	37.2	37.2	
Actuated g/C Ratio	0.01	0.41	0.41	0.09	0.49		0.12	0.42	0.42	0.26	0.26	
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0		4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0		3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	18	1384	591	303	1725		205	556	1159	323	456	
v/s Ratio Prot	0.01	0.33		c0.06	c0.45		0.09	0.03			0.01	
v/s Ratio Perm			0.11					0.08	c0.32	0.01		
v/c Ratio	0.61	0.80	0.27	0.65	0.92		0.74	0.27	0.76	0.03	0.03	
Uniform Delay, d1	69.2	36.4	27.5	61.9	33.4		59.5	27.0	35.0	38.3	38.2	
Progression Factor	1.00	1.00	1.00	1.00	1.00		1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2	48.7	3.4	0.3	4.7	8.3		13.5	0.3	4.7	0.2	0.1	
Delay (s)	117.8	39.8	27.7	66.6	41.7		72.9	27.3	39.7	38.5	38.4	
Level of Service	F	D	C	E	D		E	C	D	D	D	
Approach Delay (s/veh)		37.8			44.4			42.0			38.4	
Approach LOS		D			D			D			D	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	41.6	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.88		
Actuated Cycle Length (s)	140.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	78.4%	ICU Level of Service	D
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Future Volume (vph)	30	10	10	10	10	40	70	1170	10	30	220	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.95	0.95			1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.94			0.91		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	0.99			0.99		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1681	1646			1682		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	0.98			0.96		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	1681	1625			1629		1770	3539	1583	1770	3539	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	11	11	11	11	43	76	1272	11	33	239	315
RTOR Reduction (vph)	0	9	0	0	37	0	0	0	4	0	0	114
Lane Group Flow (vph)	28	18	0	0	28	0	76	1272	7	33	239	201
Turn Type	Prot	NA		Prot	NA		Prot	NA	Perm	Prot	NA	Perm
Protected Phases	7	4		3	8		5	2		1	6	
Permitted Phases									2			6
Actuated Green, G (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Effective Green, g (s)	5.2	28.7			19.5		9.6	93.7	93.7	5.0	89.1	89.1
Actuated g/C Ratio	0.04	0.21			0.14		0.07	0.67	0.67	0.04	0.64	0.64
Clearance Time (s)	4.0	4.0			4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0			3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	62	335			227		121	2378	1064	63	2262	1011
v/s Ratio Prot	c0.02	0.00					c0.04	c0.36		0.02	0.07	
v/s Ratio Perm		0.01			c0.02				0.00			0.13
v/c Ratio	0.45	0.05			0.12		0.63	0.53	0.01	0.52	0.11	0.20
Uniform Delay, d1	65.7	44.5			52.5		63.2	11.7	7.5	66.0	9.7	10.4
Progression Factor	1.00	1.00			1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	5.2	0.1			0.2		9.8	0.9	0.0	7.6	0.1	0.4
Delay (s)	70.9	44.5			52.7		72.9	12.6	7.5	73.7	9.8	10.8
Level of Service	E	D			D		E	B	A	E	A	B
Approach Delay (s/veh)		57.9			52.7			15.9			14.0	
Approach LOS		E			D			B			B	

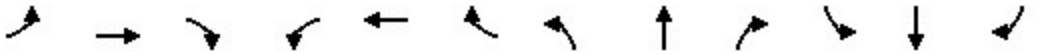
Intersection Summary			
HCM 2000 Control Delay (s/veh)	17.6	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.48		
Actuated Cycle Length (s)	139.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	55.9%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Future Volume (veh/h)	330	1680	240	30	1380	140	120	30	220	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1863	1900	1863	1863			
Adj Flow Rate, veh/h	359	1826	261	33	1500	152	130	33	239			
Adj No. of Lanes	2	2	0	1	2	1	0	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2			
Cap, veh/h	415	2276	318	42	2239	1002	236	60	261			
Arrive On Green	0.12	0.73	0.73	0.02	0.63	0.63	0.17	0.17	0.17			
Sat Flow, veh/h	3442	3120	436	1774	3539	1583	1429	363	1583			
Grp Volume(v), veh/h	359	1017	1070	33	1500	152	163	0	239			
Grp Sat Flow(s),veh/h/ln	1721	1770	1786	1774	1770	1583	1791	0	1583			
Q Serve(g_s), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Cycle Q Clear(g_c), s	15.0	53.6	59.4	2.7	39.6	5.7	12.3	0.0	21.8			
Prop In Lane	1.00		0.24	1.00		1.00	0.80		1.00			
Lane Grp Cap(c), veh/h	415	1291	1303	42	2239	1002	296	0	261			
V/C Ratio(X)	0.87	0.79	0.82	0.78	0.67	0.15	0.55	0.00	0.91			
Avail Cap(c_a), veh/h	540	1291	1303	60	2239	1002	317	0	281			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.00	1.00			
Uniform Delay (d), s/veh	63.3	12.6	13.4	71.2	17.2	10.9	56.3	0.0	60.2			
Incr Delay (d2), s/veh	11.2	4.9	5.9	33.1	1.6	0.3	1.8	0.0	31.3			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	7.8	27.5	31.0	1.7	19.7	2.6	6.2	0.0	11.8			
LnGrp Delay(d), s/veh	74.5	17.5	19.3	104.3	18.8	11.3	58.0	0.0	91.5			
LnGrp LOS	E	B	B	F	B	B	E		F			
Approach Vol, veh/h		2446			1685			402				
Approach Delay, s/veh		26.7			19.8			77.9				
Approach LOS		C			B			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2			5	6		8
Phs Duration (G+Y+Rc), s	7.5	111.0			21.7	96.8		28.2
Change Period (Y+Rc), s	4.0	4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s	5.0	107.0			23.0	89.0		26.0
Max Q Clear Time (g_c+I1), s	4.7	61.4			17.0	41.6		23.8
Green Ext Time (p_c), s	0.0	27.7			0.7	17.1		0.4

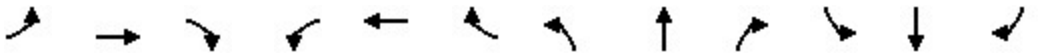
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	28.7
HCM 2010 LOS	C



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Future Volume (veh/h)	50	1910	0	0	1510	330	40	10	110	0	0	0
Number	5	2	12	1	6	16	3	8	18			
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0			
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00			
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Adj Sat Flow, veh/h/ln	1863	1863	0	0	1863	1863	1863	1863	1863			
Adj Flow Rate, veh/h	54	2076	0	0	1641	359	43	11	120			
Adj No. of Lanes	2	3	0	0	3	1	1	1	1			
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92			
Percent Heavy Veh, %	2	2	0	0	2	2	2	2	2			
Cap, veh/h	92	4305	0	0	4016	1250	165	173	147			
Arrive On Green	0.03	0.85	0.00	0.00	0.79	0.79	0.09	0.09	0.09			
Sat Flow, veh/h	3442	5253	0	0	5253	1583	1774	1863	1583			
Grp Volume(v), veh/h	54	2076	0	0	1641	359	43	11	120			
Grp Sat Flow(s),veh/h/ln	1721	1695	0	0	1695	1583	1774	1863	1583			
Q Serve(g_s), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Cycle Q Clear(g_c), s	2.1	14.0	0.0	0.0	13.3	8.2	3.0	0.7	9.8			
Prop In Lane	1.00		0.00	0.00		1.00	1.00		1.00			
Lane Grp Cap(c), veh/h	92	4305	0	0	4016	1250	165	173	147			
V/C Ratio(X)	0.59	0.48	0.00	0.00	0.41	0.29	0.26	0.06	0.82			
Avail Cap(c_a), veh/h	234	4305	0	0	4016	1250	402	422	359			
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00			
Upstream Filter(I)	1.00	1.00	0.00	0.00	1.00	1.00	1.00	1.00	1.00			
Uniform Delay (d), s/veh	63.7	2.6	0.0	0.0	4.3	3.8	55.8	54.8	58.9			
Incr Delay (d2), s/veh	5.9	0.4	0.0	0.0	0.3	0.6	0.8	0.2	10.4			
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0			
%ile BackOfQ(50%),veh/ln	1.0	6.5	0.0	0.0	6.2	3.7	1.5	0.4	4.7			
LnGrp Delay(d), s/veh	69.5	3.0	0.0	0.0	4.6	4.4	56.6	54.9	69.3			
LnGrp LOS	E	A			A	A	E	D	E			
Approach Vol, veh/h		2130			2000			174				
Approach Delay, s/veh		4.7			4.6			65.3				
Approach LOS		A			A			E				

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2			5	6		8
Phs Duration (G+Y+Rc), s		116.0			7.5	108.5		16.3
Change Period (Y+Rc), s		4.0			4.0	4.0		4.0
Max Green Setting (Gmax), s		112.0			9.0	99.0		30.0
Max Q Clear Time (g_c+I1), s		16.0			4.1	15.3		11.8
Green Ext Time (p_c), s		33.2			0.0	23.6		0.5

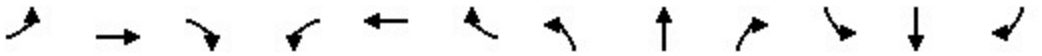
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	7.1
HCM 2010 LOS	A



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Future Volume (vph)	90	1750	320	60	1820	90	100	10	150	120	10	260
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	0.91		1.00	0.91		1.00	1.00	1.00	1.00	1.00	0.88
Frt	1.00	0.98		1.00	0.99		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Flt Permitted	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (perm)	3433	4967		1770	5049		1770	1863	1583	1770	1863	2787
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	98	1902	348	65	1978	98	109	11	163	130	11	283
RTOR Reduction (vph)	0	15	0	0	3	0	0	0	137	0	0	88
Lane Group Flow (vph)	98	2235	0	65	2073	0	109	11	26	130	11	195
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	pm+ov
Protected Phases	5	2		1	6		8	8		7	7	5
Permitted Phases									8			7
Actuated Green, G (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Effective Green, g (s)	8.9	89.6		8.5	89.2		13.5	13.5	13.5	15.1	15.1	24.0
Actuated g/C Ratio	0.06	0.63		0.06	0.63		0.09	0.09	0.09	0.11	0.11	0.17
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	214	3118		105	3156		167	176	149	187	197	468
v/s Ratio Prot	0.03	c0.45		c0.04	0.41		c0.06	0.01		c0.07	0.01	0.03
v/s Ratio Perm									0.02			0.04
v/c Ratio	0.46	0.72		0.62	0.66		0.65	0.06	0.18	0.70	0.06	0.42
Uniform Delay, d1	64.6	18.0		65.5	17.0		62.3	58.8	59.5	61.6	57.4	53.1
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	1.6	1.4		10.4	1.1		8.8	0.1	0.6	10.7	0.1	0.6
Delay (s)	66.1	19.4		75.9	18.1		71.2	59.0	60.0	72.3	57.5	53.7
Level of Service	E	B		E	B		E	E	E	E	E	D
Approach Delay (s/veh)		21.4			19.9			64.3			59.5	
Approach LOS		C			B			E			E	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	26.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.70		
Actuated Cycle Length (s)	142.7	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.6%	ICU Level of Service	C
Analysis Period (min)	15		

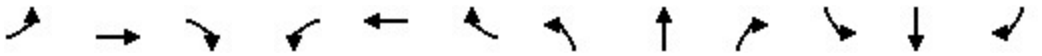
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	610	1660	0	40	1050	1090	20	20	30	90	20	280
Future Volume (vph)	610	1660	0	40	1050	1090	20	20	30	90	20	280
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.86	0.86		1.00			0.95	0.95
Frpb, ped/bikes	1.00	1.00		1.00	0.99	0.98		1.00			1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Frt	1.00	1.00		1.00	0.95	0.85		0.94			0.93	0.85
Flt Protected	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (prot)	1770	5085		1770	4523	1329		1731			1613	1504
Flt Permitted	0.95	1.00		0.95	1.00	1.00		0.99			0.98	1.00
Satd. Flow (perm)	1770	5085		1770	4523	1329		1731			1613	1504
Peak-hour factor, PHF	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
Adj. Flow (vph)	635	1729	0	42	1094	1135	21	21	31	94	21	292
RTOR Reduction (vph)	0	0	0	0	62	260	0	18	0	0	20	174
Lane Group Flow (vph)	635	1729	0	42	1600	307	0	55	0	0	191	22
Confl. Peds. (#/hr)	4		5	5		4						
Confl. Bikes (#/hr)			1			1						
Turn Type	Prot	NA		Prot	NA	Perm	Split	NA		Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases						8						6
Actuated Green, G (s)	54.0	100.9		6.9	53.8	53.8		10.0			17.0	17.0
Effective Green, g (s)	54.0	100.9		6.9	53.8	53.8		10.0			17.0	17.0
Actuated g/C Ratio	0.36	0.67		0.05	0.36	0.36		0.07			0.11	0.11
Clearance Time (s)	4.0	4.0		4.0	4.0	4.0		4.0			4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0	3.0		3.0			3.0	3.0
Lane Grp Cap (vph)	633	3402		80	1613	474		114			181	169
v/s Ratio Prot	c0.36	0.34		0.02	c0.35			c0.03			c0.12	
v/s Ratio Perm						0.23						0.01
v/c Ratio	1.00	0.51		0.53	0.99	0.65		0.48			1.05	0.13
Uniform Delay, d1	48.4	12.5		70.3	48.3	40.6		67.9			66.9	60.2
Progression Factor	1.00	1.00		1.00	1.00	1.00		1.00			1.00	1.00
Incremental Delay, d2	36.5	0.1		6.1	20.3	3.0		14.0			81.6	0.4
Delay (s)	84.9	12.6		76.4	68.6	43.6		81.9			148.5	60.6
Level of Service	F	B		E	E	D		F			F	E
Approach Delay (s/veh)		32.1			62.5			81.9			106.2	
Approach LOS		C			E			F			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	52.2	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.96		
Actuated Cycle Length (s)	150.8	Sum of lost time (s)	16.0
Intersection Capacity Utilization	93.2%	ICU Level of Service	F
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	190	1310	280	350	1450	120	500	240	520	90	60	120
Future Volume (vph)	190	1310	280	350	1450	120	500	240	520	90	60	120
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.91		1.00	0.91		0.95	0.91	0.95	0.95	0.95	1.00
Frpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	0.98	0.94	1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Frt	1.00	0.97		1.00	0.99		1.00	0.96	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (prot)	1752	4885		1752	4967		1665	1566	1400	1665	1734	1568
Flt Permitted	0.95	1.00		0.95	1.00		0.95	0.99	1.00	0.95	0.99	1.00
Satd. Flow (perm)	1752	4885		1752	4967		1665	1566	1400	1665	1734	1568
Peak-hour factor, PHF	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
Adj. Flow (vph)	200	1379	295	368	1526	126	526	253	547	95	63	126
RTOR Reduction (vph)	0	22	0	0	7	0	0	10	260	0	0	119
Lane Group Flow (vph)	200	1652	0	368	1645	0	452	448	156	78	80	7
Confl. Peds. (#/hr)	2		3	3		2			16	16		
Confl. Bikes (#/hr)						1			6			
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Prot	NA		Prot	NA		Split	NA	Perm	Split	NA	Perm
Protected Phases	7	4		3	8		2	2		6	6	
Permitted Phases									2			6
Actuated Green, G (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Effective Green, g (s)	19.8	49.0		32.0	61.2		45.0	45.0	45.0	8.0	8.0	8.0
Actuated g/C Ratio	0.13	0.33		0.21	0.41		0.30	0.30	0.30	0.05	0.05	0.05
Clearance Time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	231	1595		373	2026		499	469	420	88	92	83
v/s Ratio Prot	0.11	c0.34		c0.21	0.33		0.27	c0.29		c0.05	0.05	
v/s Ratio Perm									0.11			0.00
v/c Ratio	0.87	1.04		0.99	0.81		0.91	0.96	0.37	0.89	0.87	0.08
Uniform Delay, d1	63.8	50.5		58.8	39.3		50.5	51.5	41.4	70.5	70.5	67.5
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	27.0	32.3		42.6	2.6		22.6	31.9	2.5	68.3	62.9	1.9
Delay (s)	90.8	82.8		101.4	41.9		73.1	83.4	43.9	138.9	133.4	69.4
Level of Service	F	F		F	D		E	F	D	F	F	E
Approach Delay (s/veh)		83.7			52.7			67.5			106.5	
Approach LOS		F			D			E			F	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	69.6	HCM 2000 Level of Service	E
HCM 2000 Volume to Capacity ratio	0.99		
Actuated Cycle Length (s)	150.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	94.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	610	80	320	530	230	460
Future Volume (veh/h)	610	80	320	530	230	460
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	693	0	364	602	261	523
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	3	3	3	3	3	3
Cap, veh/h	775	357	394	2507	1621	709
Arrive On Green	0.23	0.00	0.22	0.72	0.46	0.46
Sat Flow, veh/h	3408	1568	1757	3597	3597	1534
Grp Volume(v), veh/h	693	0	364	602	261	523
Grp Sat Flow(s),veh/h/ln	1704	1568	1757	1752	1752	1534
Q Serve(g_s), s	27.6	0.0	28.3	8.3	6.0	38.9
Cycle Q Clear(g_c), s	27.6	0.0	28.3	8.3	6.0	38.9
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	775	357	394	2507	1621	709
V/C Ratio(X)	0.89	0.00	0.92	0.24	0.16	0.74
Avail Cap(c_a), veh/h	1024	471	591	2507	1621	709
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.4	0.0	53.1	6.8	21.8	30.7
Incr Delay (d2), s/veh	8.2	0.0	15.3	0.2	0.2	6.7
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	13.9	0.0	15.4	4.0	3.0	17.7
LnGrp Delay(d), s/veh	60.6	0.0	68.4	7.1	22.0	37.4
LnGrp LOS	E		E	A	C	D
Approach Vol, veh/h	693			966	784	
Approach Delay, s/veh	60.6			30.2	32.3	
Approach LOS	E			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		104.0		35.8	35.3	68.7		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		100.0		42.0	47.0	49.0		
Max Q Clear Time (g_c+I1), s		10.3		29.6	30.3	40.9		
Green Ext Time (p_c), s		4.6		2.2	1.0	2.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	39.5
HCM 2010 LOS	D



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	830	630	230	640	660	240
Future Volume (veh/h)	830	630	230	640	660	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	912	0	253	703	725	264
Adj No. of Lanes	2	1	1	2	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	1	1	1	1	1	1
Cap, veh/h	1030	474	284	2289	1609	698
Arrive On Green	0.30	0.00	0.16	0.64	0.45	0.45
Sat Flow, veh/h	3476	1599	1792	3668	3668	1550
Grp Volume(v), veh/h	912	0	253	703	725	264
Grp Sat Flow(s),veh/h/ln	1738	1599	1792	1787	1787	1550
Q Serve(g_s), s	31.7	0.0	17.5	11.1	17.7	14.3
Cycle Q Clear(g_c), s	31.7	0.0	17.5	11.1	17.7	14.3
Prop In Lane	1.00	1.00	1.00			1.00
Lane Grp Cap(c), veh/h	1030	474	284	2289	1609	698
V/C Ratio(X)	0.89	0.00	0.89	0.31	0.45	0.38
Avail Cap(c_a), veh/h	1676	771	467	2289	1609	698
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	42.5	0.0	52.1	10.2	24.0	23.0
Incr Delay (d2), s/veh	3.6	0.0	11.6	0.3	0.9	1.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	15.7	0.0	9.6	5.6	9.0	6.4
LnGrp Delay(d), s/veh	46.1	0.0	63.7	10.5	24.9	24.6
LnGrp LOS	D		E	B	C	C
Approach Vol, veh/h	912			956	989	
Approach Delay, s/veh	46.1			24.6	24.8	
Approach LOS	D			C	C	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4	5	6		
Phs Duration (G+Y+Rc), s		85.0		41.5	24.1	60.9		
Change Period (Y+Rc), s		4.0		4.0	4.0	4.0		
Max Green Setting (Gmax), s		81.0		61.0	33.0	44.0		
Max Q Clear Time (g_c+I1), s		13.1		33.7	19.5	19.7		
Green Ext Time (p_c), s		5.3		3.8	0.6	6.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	31.5
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	190	1320	320	520	1240	50	530	730	760	80	390	160
Future Volume (veh/h)	190	1320	320	520	1240	50	530	730	760	80	390	160
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.93	1.00		0.95	1.00		0.97	1.00		0.95
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	216	1500	364	591	1409	57	602	830	864	91	443	182
Adj No. of Lanes	1	3	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	243	1187	345	429	1691	68	429	1268	551	59	531	225
Arrive On Green	0.14	0.23	0.23	0.24	0.34	0.34	0.24	0.36	0.36	0.03	0.15	0.15
Sat Flow, veh/h	1774	5085	1477	1774	5003	202	1774	3539	1539	1774	3539	1500
Grp Volume(v), veh/h	216	1500	364	591	955	511	602	830	864	91	443	182
Grp Sat Flow(s),veh/h/ln	1774	1695	1477	1774	1695	1815	1774	1770	1539	1774	1770	1500
Q Serve(g_s), s	14.4	28.0	28.0	29.0	31.1	31.1	29.0	23.6	43.0	4.0	14.6	14.1
Cycle Q Clear(g_c), s	14.4	28.0	28.0	29.0	31.1	31.1	29.0	23.6	43.0	4.0	14.6	14.1
Prop In Lane	1.00		1.00	1.00		0.11	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	243	1187	345	429	1146	614	429	1268	551	59	531	225
V/C Ratio(X)	0.89	1.26	1.06	1.38	0.83	0.83	1.40	0.65	1.57	1.54	0.83	0.81
Avail Cap(c_a), veh/h	266	1187	345	429	1146	614	429	1268	551	59	531	225
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	50.9	46.0	46.0	45.5	36.6	36.6	45.5	32.3	38.5	58.0	49.6	49.3
Incr Delay (d2), s/veh	27.0	125.7	63.9	184.4	5.4	9.6	195.4	2.6	263.7	310.4	14.3	26.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	8.8	26.9	17.5	36.1	15.4	17.3	37.4	12.0	58.6	7.1	8.2	7.4
LnGrp Delay(d), s/veh	77.9	171.7	109.9	229.9	42.0	46.2	240.9	34.9	302.2	368.4	63.9	75.4
LnGrp LOS	E	F	F	F	D	D	F	C	F	F	E	E
Approach Vol, veh/h		2080			2057			2296			716	
Approach Delay, s/veh		151.2			97.0			189.5			105.5	
Approach LOS		F			F			F			F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	8.0	47.0	33.0	32.0	33.0	22.0	20.4	44.6
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	4.0	43.0	29.0	28.0	29.0	18.0	18.0	39.0
Max Q Clear Time (g_c+I1), s	6.0	45.0	31.0	30.0	31.0	16.6	16.4	33.1
Green Ext Time (p_c), s	0.0	0.0	0.0	0.0	0.0	0.5	0.1	4.1

Intersection Summary		
HCM 2010 Ctrl Delay, s/veh		143.3
HCM 2010 LOS		F



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	90	90	880	0	0	850
Future Volume (veh/h)	90	90	880	0	0	850
Number	3	18	2	12	1	6
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1900	1863	1863
Adj Flow Rate, veh/h	98	98	957	0	0	924
Adj No. of Lanes	1	1	2	0	1	2
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	194	126	2938	0	1	2938
Arrive On Green	0.11	0.11	0.83	0.00	0.00	0.83
Sat Flow, veh/h	1774	1583	3725	0	1774	3632
Grp Volume(v), veh/h	98	98	957	0	0	924
Grp Sat Flow(s),veh/h/ln	1774	1583	1770	0	1774	1770
Q Serve(g_s), s	6.9	12.0	8.3	0.0	0.0	8.0
Cycle Q Clear(g_c), s	6.9	12.0	8.3	0.0	0.0	8.0
Prop In Lane	1.00	1.00		0.00	1.00	
Lane Grp Cap(c), veh/h	194	126	2938	0	1	2938
V/C Ratio(X)	0.50	0.78	0.33	0.00	0.00	0.31
Avail Cap(c_a), veh/h	428	335	2938	0	54	2938
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	0.00	0.00	1.00
Uniform Delay (d), s/veh	55.6	120.3	2.6	0.0	0.0	2.6
Incr Delay (d2), s/veh	2.0	9.9	0.3	0.0	0.0	0.3
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	0.3	4.1	0.0	0.0	4.0
LnGrp Delay(d), s/veh	57.6	130.2	2.9	0.0	0.0	2.9
LnGrp LOS	E	F	A			A
Approach Vol, veh/h	196		957			924
Approach Delay, s/veh	93.9		2.9			2.9
Approach LOS	F		A			A

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2				6		8
Phs Duration (G+Y+Rc), s	0.0	114.0				114.0		18.5
Change Period (Y+Rc), s	4.0	4.0				4.0		4.0
Max Green Setting (Gmax), s	4.0	102.0				110.0		32.0
Max Q Clear Time (g_c+I1), s	0.0	10.3				10.0		14.0
Green Ext Time (p_c), s	0.0	8.1				7.7		0.5

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	11.5
HCM 2010 LOS	B

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Volume (veh/h)	80	340	450	590	620	240
Future Volume (veh/h)	80	340	450	590	620	240
Number	7	14	5	2	6	16
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00	1.00			1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1900
Adj Flow Rate, veh/h	87	370	489	641	674	261
Adj No. of Lanes	1	1	1	2	2	0
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	189	169	514	2973	2096	812
Arrive On Green	0.11	0.11	0.84	0.84	0.84	0.84
Sat Flow, veh/h	1774	1583	596	3632	2589	966
Grp Volume(v), veh/h	87	370	489	641	478	457
Grp Sat Flow(s),veh/h/ln	1774	1583	596	1770	1770	1692
Q Serve(g_s), s	6.9	16.0	117.1	5.3	8.9	8.9
Cycle Q Clear(g_c), s	6.9	16.0	126.0	5.3	8.9	8.9
Prop In Lane	1.00	1.00	1.00			0.57
Lane Grp Cap(c), veh/h	189	169	514	2973	1486	1421
V/C Ratio(X)	0.46	2.19	0.95	0.22	0.32	0.32
Avail Cap(c_a), veh/h	189	169	514	2973	1486	1421
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.9	67.0	19.2	2.3	2.6	2.6
Incr Delay (d2), s/veh	1.7	554.8	29.4	0.2	0.6	0.6
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.5	33.0	24.4	2.7	4.5	4.3
LnGrp Delay(d), s/veh	64.7	621.8	48.6	2.5	3.2	3.2
LnGrp LOS	E	F	D	A	A	A
Approach Vol, veh/h	457			1130	935	
Approach Delay, s/veh	515.7			22.5	3.2	
Approach LOS	F			C	A	

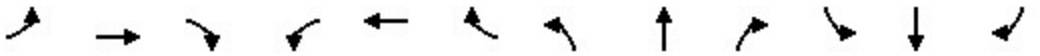
Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		130.0		20.0		130.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		126.0		16.0		126.0		
Max Q Clear Time (g_c+I1), s		128.0		18.0		10.9		
Green Ext Time (p_c), s		0.0		0.0		7.0		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	104.7
HCM 2010 LOS	F

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	80	780	110	270	660	260	320	540	450	450	370	140
Future Volume (veh/h)	80	780	110	270	660	260	320	540	450	450	370	140
Number	5	2	12	1	6	16	3	8	18	7	4	14
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	87	848	120	293	717	283	348	587	489	489	402	152
Adj No. of Lanes	1	2	1	2	2	2	1	2	1	2	2	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	108	1392	623	357	1543	1661	376	809	526	551	626	280
Arrive On Green	0.06	0.39	0.39	0.10	0.44	0.44	0.21	0.23	0.23	0.16	0.18	0.18
Sat Flow, veh/h	1774	3539	1583	3442	3539	2787	1774	3539	1583	3442	3539	1583
Grp Volume(v), veh/h	87	848	120	293	717	283	348	587	489	489	402	152
Grp Sat Flow(s),veh/h/ln	1774	1770	1583	1721	1770	1393	1774	1770	1583	1721	1770	1583
Q Serve(g_s), s	6.8	26.8	7.0	11.7	20.1	6.4	26.9	21.5	32.0	19.5	14.8	12.2
Cycle Q Clear(g_c), s	6.8	26.8	7.0	11.7	20.1	6.4	26.9	21.5	32.0	19.5	14.8	12.2
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	108	1392	623	357	1543	1661	376	809	526	551	626	280
V/C Ratio(X)	0.80	0.61	0.19	0.82	0.46	0.17	0.93	0.73	0.93	0.89	0.64	0.54
Avail Cap(c_a), veh/h	177	1392	623	713	1543	1661	482	809	526	664	626	280
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.9	33.9	27.9	61.4	27.9	12.7	54.1	49.9	45.1	57.5	53.5	52.4
Incr Delay (d2), s/veh	12.8	2.0	0.7	4.7	1.0	0.2	20.9	5.6	25.1	12.3	5.0	7.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	3.7	13.5	3.1	5.8	10.0	2.5	15.3	11.1	21.9	10.2	7.6	5.9
LnGrp Delay(d), s/veh	77.7	35.9	28.6	66.1	28.9	12.9	74.9	55.5	70.2	69.8	58.5	59.8
LnGrp LOS	E	D	C	E	C	B	E	E	E	E	E	E
Approach Vol, veh/h		1055			1293			1424			1043	
Approach Delay, s/veh		38.5			33.9			65.3			64.0	
Approach LOS		D			C			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	18.5	59.0	33.6	28.7	12.5	65.0	26.4	36.0
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	29.0	46.0	38.0	21.0	14.0	61.0	27.0	32.0
Max Q Clear Time (g_c+I1), s	13.7	28.8	28.9	16.8	8.8	22.1	21.5	34.0
Green Ext Time (p_c), s	0.8	5.6	0.7	1.2	0.1	6.7	0.9	0.0

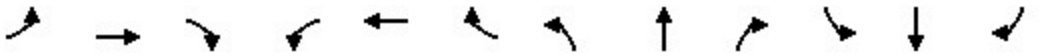
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.7
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	30	1280	0	0	780	80	550	30	100	0	0	0
Future Volume (vph)	30	1280	0	0	780	80	550	30	100	0	0	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Lane Util. Factor	1.00	0.95			0.91	1.00	0.95	0.95	1.00			
Frt	1.00	1.00			1.00	0.85	1.00	1.00	0.85			
Flt Protected	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (prot)	1770	3539			5085	1583	1681	1694	1583			
Flt Permitted	0.95	1.00			1.00	1.00	0.95	0.96	1.00			
Satd. Flow (perm)	1770	3539			5085	1583	1681	1694	1583			
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	33	1391	0	0	848	87	598	33	109	0	0	0
RTOR Reduction (vph)	0	0	0	0	0	0	0	0	38	0	0	0
Lane Group Flow (vph)	33	1391	0	0	848	87	317	314	71	0	0	0
Turn Type	Prot	NA			NA	Perm	Split	NA	Perm			
Protected Phases	5	2			6		8	8				
Permitted Phases						6			8			
Actuated Green, G (s)	4.9	93.1			84.2	84.2	31.2	31.2	31.2			
Effective Green, g (s)	4.9	93.1			84.2	84.2	31.2	31.2	31.2			
Actuated g/C Ratio	0.04	0.70			0.64	0.64	0.24	0.24	0.24			
Clearance Time (s)	4.0	4.0			4.0	4.0	4.0	4.0	4.0			
Vehicle Extension (s)	3.0	3.0			3.0	3.0	3.0	3.0	3.0			
Lane Grp Cap (vph)	65	2490			3236	1007	396	399	373			
v/s Ratio Prot	0.02	c0.39			0.17		c0.19	0.19				
v/s Ratio Perm						0.05			0.04			
v/c Ratio	0.51	0.56			0.26	0.09	0.80	0.79	0.19			
Uniform Delay, d1	62.5	9.6			10.5	9.3	47.6	47.4	40.4			
Progression Factor	1.00	1.00			1.00	1.00	1.00	1.00	1.00			
Incremental Delay, d2	6.1	0.9			0.2	0.2	11.0	9.9	0.2			
Delay (s)	68.6	10.5			10.7	9.4	58.7	57.3	40.7			
Level of Service	E	B			B	A	E	E	D			
Approach Delay (s/veh)		11.8			10.6			55.4			0.0	
Approach LOS		B			B			E			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	21.9	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.64		
Actuated Cycle Length (s)	132.3	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	1270	410	50	1270	0	0	0	0	90	10	80
Future Volume (vph)	0	1270	410	50	1270	0	0	0	0	90	10	80
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Lane Util. Factor		0.95	1.00	1.00	0.91					0.95	0.95	1.00
Frt		1.00	0.85	1.00	1.00					1.00	1.00	0.85
Flt Protected		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (prot)		3539	1583	1770	5085					1681	1702	1583
Flt Permitted		1.00	1.00	0.95	1.00					0.95	0.96	1.00
Satd. Flow (perm)		3539	1583	1770	5085					1681	1702	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	1380	446	54	1380	0	0	0	0	98	11	87
RTOR Reduction (vph)	0	0	208	0	0	0	0	0	0	0	0	64
Lane Group Flow (vph)	0	1380	238	54	1380	0	0	0	0	54	55	23
Turn Type		NA	Perm	Prot	NA					Split	NA	Prot
Protected Phases		4		3	8					6	6	6
Permitted Phases			4									
Actuated Green, G (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Effective Green, g (s)		50.3	50.3	6.8	61.1					25.3	25.3	25.3
Actuated g/C Ratio		0.53	0.53	0.07	0.65					0.27	0.27	0.27
Clearance Time (s)		4.0	4.0	4.0	4.0					4.0	4.0	4.0
Vehicle Extension (s)		3.0	3.0	3.0	3.0					3.0	3.0	3.0
Lane Grp Cap (vph)		1885	843	127	3291					450	456	424
v/s Ratio Prot		c0.39		0.03	c0.27					0.03	c0.03	0.01
v/s Ratio Perm			0.15									
v/c Ratio		0.73	0.28	0.43	0.42					0.12	0.12	0.05
Uniform Delay, d1		16.9	12.1	41.9	8.1					26.1	26.1	25.7
Progression Factor		1.00	1.00	1.00	1.00					1.00	1.00	1.00
Incremental Delay, d2		1.5	0.2	2.3	0.1					0.5	0.5	0.2
Delay (s)		18.4	12.3	44.2	8.1					26.7	26.7	25.9
Level of Service		B	B	D	A					C	C	C
Approach Delay (s/veh)		16.9			9.5			0.0			26.3	
Approach LOS		B			A			A			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	14.4	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.53		
Actuated Cycle Length (s)	94.4	Sum of lost time (s)	12.0
Intersection Capacity Utilization	58.1%	ICU Level of Service	B
Analysis Period (min)	15		

c Critical Lane Group

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Future Volume (veh/h)	130	1100	150	230	1150	90	190	270	270	170	290	90
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.96	1.00		0.89	1.00		0.89
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1845	1845	1845	1845	1845	1900	1845	1845	1900	1845	1845	1900
Adj Flow Rate, veh/h	138	1170	160	245	1223	96	202	287	287	181	309	96
Adj No. of Lanes	1	2	1	1	3	0	1	2	0	1	2	0
Peak Hour Factor	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	163	1309	556	271	2063	162	227	418	333	206	583	175
Arrive On Green	0.09	0.37	0.37	0.15	0.43	0.43	0.13	0.24	0.24	0.12	0.23	0.23
Sat Flow, veh/h	1757	3505	1488	1757	4746	372	1757	1752	1395	1757	2571	774
Grp Volume(v), veh/h	138	1170	160	245	865	454	202	287	287	181	207	198
Grp Sat Flow(s),veh/h/ln	1757	1752	1488	1757	1679	1761	1757	1752	1395	1757	1752	1593
Q Serve(g_s), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Cycle Q Clear(g_c), s	10.6	43.0	10.3	18.8	26.9	26.9	15.5	20.4	27.0	13.9	14.2	15.0
Prop In Lane	1.00		1.00	1.00		0.21	1.00		1.00	1.00		0.49
Lane Grp Cap(c), veh/h	163	1309	556	271	1460	765	227	418	333	206	397	361
V/C Ratio(X)	0.85	0.89	0.29	0.91	0.59	0.59	0.89	0.69	0.86	0.88	0.52	0.55
Avail Cap(c_a), veh/h	257	1434	609	334	1521	798	270	418	333	257	397	361
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	61.1	40.3	30.1	56.9	29.4	29.5	58.6	47.5	50.0	59.4	46.4	46.7
Incr Delay (d2), s/veh	13.9	7.2	0.3	23.8	0.6	1.1	25.8	8.9	24.4	23.8	4.8	5.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	5.8	22.1	4.3	10.9	12.5	13.2	9.1	10.9	12.7	8.1	7.4	7.2
LnGrp Delay(d), s/veh	75.1	47.5	30.4	80.7	30.0	30.6	84.5	56.4	74.4	83.2	51.3	52.6
LnGrp LOS	E	D	C	F	C	C	F	E	E	F	D	D
Approach Vol, veh/h		1468			1564			776			586	
Approach Delay, s/veh		48.2			38.1			70.3			61.6	
Approach LOS		D			D			E			E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.0	36.6	25.1	55.1	21.7	35.0	16.7	63.5
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	32.0	26.0	56.0	21.0	31.0	20.0	62.0
Max Q Clear Time (g_c+I1), s	15.9	29.0	20.8	45.0	17.5	17.0	12.6	28.9
Green Ext Time (p_c), s	0.2	1.1	0.3	6.2	0.2	2.1	0.2	10.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.3
HCM 2010 LOS	D

Intersection	
Int Delay, s/veh	52.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	200	190	360	150	180	140
Future Vol, veh/h	200	190	360	150	180	140
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	50	0	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	217	207	391	163	196	152

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	1141	196	348	0	-	0
Stage 1	196	-	-	-	-	-
Stage 2	945	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	222	845	1211	-	-	-
Stage 1	837	-	-	-	-	-
Stage 2	378	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	~ 150	845	1211	-	-	-
Mov Cap-2 Maneuver	~ 150	-	-	-	-	-
Stage 1	567	-	-	-	-	-
Stage 2	378	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s/v	154.3	6.6	0
HCM LOS	F		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	EBLn2	SBT	SBR
Capacity (veh/h)	1211	-	150	845	-	-
HCM Lane V/C Ratio	0.323	-	1.449	0.244	-	-
HCM Control Delay (s/veh)	9.4	-	290.9	10.6	-	-
HCM Lane LOS	A	-	F	B	-	-
HCM 95th %tile Q(veh)	1.4	-	14.2	1	-	-

Notes			
~: Volume exceeds capacity	$: Delay exceeds 300s	+: Computation Not Defined	*: All major volume in platoon

Intersection	
Int Delay, s/veh	8.5

Movement	NBL	NBR	SET	SER	NWL	NWT
Lane Configurations						
Traffic Vol, veh/h	300	80	10	130	70	30
Future Vol, veh/h	300	80	10	130	70	30
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	0	-	50	-	-
Veh in Median Storage, #	0	-	0	-	-	0
Grade, %	0	-	0	-	-	0
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	326	87	11	141	76	33

Major/Minor	Minor1		Major1		Major2	
Conflicting Flow All	196	11	0	0	152	0
Stage 1	11	-	-	-	-	-
Stage 2	185	-	-	-	-	-
Critical Hdwy	6.42	6.22	-	-	4.12	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	-	-	2.218	-
Pot Cap-1 Maneuver	793	1070	-	-	1429	-
Stage 1	1012	-	-	-	-	-
Stage 2	847	-	-	-	-	-
Platoon blocked, %			-	-		-
Mov Cap-1 Maneuver	750	1070	-	-	1429	-
Mov Cap-2 Maneuver	750	-	-	-	-	-
Stage 1	1012	-	-	-	-	-
Stage 2	801	-	-	-	-	-

Approach	NB	SE	NW
HCM Control Delay, s/v	12.4	0	5.4
HCM LOS	B		

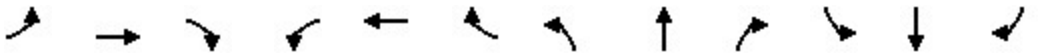
Minor Lane/Major Mvmt	NBLn1	NBLn2	NWL	NWT	SET	SER
Capacity (veh/h)	750	1070	1429	-	-	-
HCM Lane V/C Ratio	0.435	0.081	0.053	-	-	-
HCM Control Delay (s/veh)	13.4	8.7	7.7	0	-	-
HCM Lane LOS	B	A	A	A	-	-
HCM 95th %tile Q(veh)	2.2	0.3	0.2	-	-	-

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	460	950	70	60	860	140	180	940	90	170	710	460
Future Volume (veh/h)	460	950	70	60	860	140	180	940	90	170	710	460
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		1.00	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1900	1827	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	495	1022	75	65	925	151	194	1011	97	183	763	495
Adj No. of Lanes	2	2	0	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	548	1152	85	82	1018	166	217	1286	575	206	1264	810
Arrive On Green	0.16	0.35	0.35	0.05	0.24	0.24	0.12	0.37	0.37	0.12	0.36	0.36
Sat Flow, veh/h	3375	3273	240	1740	4304	699	1740	3471	1552	1740	3471	1532
Grp Volume(v), veh/h	495	542	555	65	714	362	194	1011	97	183	763	495
Grp Sat Flow(s),veh/h/ln	1688	1736	1777	1740	1663	1678	1740	1736	1552	1740	1736	1532
Q Serve(g_s), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	37.0	6.0	14.8	25.6	32.3
Cycle Q Clear(g_c), s	20.6	42.1	42.1	5.3	29.8	30.1	15.7	37.0	6.0	14.8	25.6	32.3
Prop In Lane	1.00		0.14	1.00		0.42	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	548	611	625	82	787	397	217	1286	575	206	1264	810
V/C Ratio(X)	0.90	0.89	0.89	0.79	0.91	0.91	0.89	0.79	0.17	0.89	0.60	0.61
Avail Cap(c_a), veh/h	614	643	659	97	814	411	255	1286	575	243	1264	810
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	58.8	43.7	43.7	67.4	53.1	53.1	61.6	40.0	30.2	62.1	37.1	23.7
Incr Delay (d2), s/veh	15.6	13.7	13.5	30.3	13.6	23.9	27.5	4.9	0.6	27.4	2.1	3.4
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	22.5	23.0	3.2	15.2	16.5	9.2	18.6	2.7	8.7	12.7	14.3
LnGrp Delay(d), s/veh	74.4	57.4	57.2	97.7	66.7	77.1	89.1	44.9	30.9	89.5	39.2	27.1
LnGrp LOS	E	E	E	F	E	E	F	D	C	F	D	C
Approach Vol, veh/h		1592			1141			1302			1441	
Approach Delay, s/veh		62.6			71.8			50.4			41.4	
Approach LOS		E			E			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	20.9	57.0	10.7	54.3	21.9	56.1	27.2	37.8
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	20.0	53.0	8.0	53.0	21.0	52.0	26.0	35.0
Max Q Clear Time (g_c+I1), s	16.8	39.0	7.3	44.1	17.7	34.3	22.6	32.1
Green Ext Time (p_c), s	0.1	5.9	0.0	4.4	0.2	6.4	0.7	1.8

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	56.0
HCM 2010 LOS	E

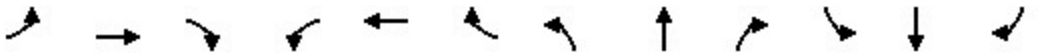
Notes



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	0	0	0	160	0	250	270	520	0	0	520	290
Future Volume (vph)	0	0	0	160	0	250	270	520	0	0	520	290
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Lane Util. Factor				1.00		1.00	0.97	0.91			0.86	1.00
Frt				1.00		0.85	1.00	1.00			1.00	0.85
Flt Protected				0.95		1.00	0.95	1.00			1.00	1.00
Satd. Flow (prot)				1770		1583	3433	5085			6408	1583
Flt Permitted				0.95		1.00	0.42	1.00			1.00	1.00
Satd. Flow (perm)				1770		1583	1500	5085			6408	1583
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	0	0	0	174	0	272	293	565	0	0	565	315
RTOR Reduction (vph)	0	0	0	0	0	232	0	0	0	0	0	69
Lane Group Flow (vph)	0	0	0	174	0	40	293	565	0	0	565	246
Turn Type				Perm		Perm	Perm	NA			NA	Perm
Protected Phases								2			6	
Permitted Phases				8		8	2					6
Actuated Green, G (s)				15.9		15.9	85.1	85.1			85.1	85.1
Effective Green, g (s)				15.9		15.9	85.1	85.1			85.1	85.1
Actuated g/C Ratio				0.15		0.15	0.78	0.78			0.78	0.78
Clearance Time (s)				4.0		4.0	4.0	4.0			4.0	4.0
Vehicle Extension (s)				3.0		3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)				258		230	1171	3970			5002	1235
v/s Ratio Prot								0.11			0.09	
v/s Ratio Perm				c0.10		0.03	c0.20					0.16
v/c Ratio				0.67		0.17	0.25	0.14			0.11	0.20
Uniform Delay, d1				44.1		40.8	3.3	2.9			2.9	3.1
Progression Factor				1.00		1.00	1.00	1.00			1.00	1.00
Incremental Delay, d2				6.8		0.4	0.5	0.1			0.0	0.4
Delay (s)				50.9		41.1	3.8	3.0			2.9	3.5
Level of Service				D		D	A	A			A	A
Approach Delay (s/veh)		0.0			44.9			3.3			3.1	
Approach LOS		A			D			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	11.7	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.32		
Actuated Cycle Length (s)	109.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

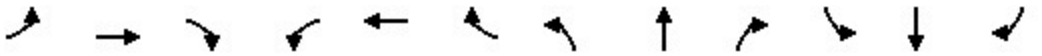
c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	170	0	220	0	0	0	0	760	90	420	980	0
Future Volume (vph)	170	0	220	0	0	0	0	760	90	420	980	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Lane Util. Factor	1.00		0.88					0.86	1.00	0.97	0.91	
Frt	1.00		0.85					1.00	0.85	1.00	1.00	
Flt Protected	0.95		1.00					1.00	1.00	0.95	1.00	
Satd. Flow (prot)	1770		2787					6408	1583	3433	5085	
Flt Permitted	0.95		1.00					1.00	1.00	0.31	1.00	
Satd. Flow (perm)	1770		2787					6408	1583	1127	5085	
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	185	0	239	0	0	0	0	826	98	457	1065	0
RTOR Reduction (vph)	0	0	205	0	0	0	0	0	20	0	0	0
Lane Group Flow (vph)	185	0	34	0	0	0	0	826	78	457	1065	0
Turn Type	Perm		Perm					NA	Perm	Perm	NA	
Protected Phases								2			6	
Permitted Phases	4		4						2	6		
Actuated Green, G (s)	19.6		19.6					111.1	111.1	111.1	111.1	
Effective Green, g (s)	19.6		19.6					111.1	111.1	111.1	111.1	
Actuated g/C Ratio	0.14		0.14					0.80	0.80	0.80	0.80	
Clearance Time (s)	4.0		4.0					4.0	4.0	4.0	4.0	
Vehicle Extension (s)	3.0		3.0					3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)	250		393					5132	1267	902	4073	
v/s Ratio Prot								0.13			0.21	
v/s Ratio Perm	c0.10		0.01						0.05	c0.41		
v/c Ratio	0.74		0.09					0.16	0.06	0.51	0.26	
Uniform Delay, d1	57.1		51.8					3.2	2.9	4.6	3.5	
Progression Factor	1.00		1.00					1.00	1.00	1.00	1.00	
Incremental Delay, d2	11.2		0.1					0.1	0.1	2.0	0.2	
Delay (s)	68.3		51.9					3.2	3.0	6.7	3.6	
Level of Service	E		D					A	A	A	A	
Approach Delay (s/veh)		59.0			0.0			3.2			4.5	
Approach LOS		E			A			A			A	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	12.2	HCM 2000 Level of Service	B
HCM 2000 Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	138.7	Sum of lost time (s)	8.0
Intersection Capacity Utilization	44.5%	ICU Level of Service	A
Analysis Period (min)	15		

c Critical Lane Group



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	10	10	10	500	0	210	0	800	500	200	1350	0
Future Volume (vph)	10	10	10	500	0	210	0	800	500	200	1350	0
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00		0.95	0.95	1.00		0.91	1.00	1.00	0.91	
Frpb, ped/bikes		1.00		1.00	1.00	0.94		1.00	0.97	1.00	1.00	
Flpb, ped/bikes		0.99		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Frt		0.96		1.00	1.00	0.85		1.00	0.85	1.00	1.00	
Flt Protected		0.98		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (prot)		1719		1665	1665	1473		5036	1521	1752	5036	
Flt Permitted		0.36		0.95	0.95	1.00		1.00	1.00	0.95	1.00	
Satd. Flow (perm)		621		1665	1665	1473		5036	1521	1752	5036	
Peak-hour factor, PHF	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Adj. Flow (vph)	11	11	11	556	0	233	0	889	556	222	1500	0
RTOR Reduction (vph)	0	10	0	0	0	174	0	0	183	0	0	0
Lane Group Flow (vph)	0	23	0	278	278	59	0	889	373	222	1500	0
Confl. Peds. (#/hr)	19					19			15	15		
Confl. Bikes (#/hr)						3			1			1
Heavy Vehicles (%)	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%	3%
Turn Type	Perm	NA		Split	NA	Perm		NA	pm+ov	Prot	NA	
Protected Phases		4		8	8			2	8	1	6	
Permitted Phases	4					8			2			
Actuated Green, G (s)		7.5		33.2	33.2	33.2		53.7	86.9	21.8	79.5	
Effective Green, g (s)		7.5		33.2	33.2	33.2		53.7	86.9	21.8	79.5	
Actuated g/C Ratio		0.06		0.25	0.25	0.25		0.41	0.66	0.16	0.60	
Clearance Time (s)		4.0		4.0	4.0	4.0		4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0		3.0	3.0	3.0		3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		35		418	418	369		2045	999	288	3028	
v/s Ratio Prot				c0.17	0.17			0.18	0.09	c0.13	c0.30	
v/s Ratio Perm		c0.04				0.04			0.15			
v/c Ratio		0.65		0.67	0.67	0.16		0.43	0.37	0.77	0.50	
Uniform Delay, d1		61.1		44.5	44.5	38.6		28.3	10.3	52.8	15.0	
Progression Factor		1.00		1.00	1.00	1.00		1.00	1.00	1.00	1.00	
Incremental Delay, d2		34.3		4.0	4.0	0.2		0.7	0.2	12.0	0.6	
Delay (s)		95.4		48.5	48.5	38.8		29.0	10.5	64.8	15.5	
Level of Service		F		D	D	D		C	B	E	B	
Approach Delay (s/veh)		95.4			45.6			21.9			21.9	
Approach LOS		F			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	27.2	HCM 2000 Level of Service	C
HCM 2000 Volume to Capacity ratio	0.62		
Actuated Cycle Length (s)	132.2	Sum of lost time (s)	16.0
Intersection Capacity Utilization	57.1%	ICU Level of Service	B
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	490	40	220	20	20	10	120	570	10	20	730	290
Future Volume (veh/h)	490	40	220	20	20	10	120	570	10	20	730	290
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.98	1.00		0.99	1.00		0.97	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1863	1863	1900	1863	1863	1863	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	583	48	262	24	24	12	143	679	12	24	869	345
Adj No. of Lanes	0	1	1	0	1	1	2	2	0	1	2	1
Peak Hour Factor	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84	0.84
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	688	52	774	0	925	775	197	1373	24	32	1228	538
Arrive On Green	0.50	0.50	0.50	0.00	0.50	0.50	0.06	0.39	0.39	0.02	0.35	0.35
Sat Flow, veh/h	1270	105	1559	0	1863	1560	3442	3556	63	1774	3539	1550
Grp Volume(v), veh/h	631	0	262	0	24	12	143	338	353	24	869	345
Grp Sat Flow(s),veh/h/ln	1374	0	1559	0	1863	1560	1721	1770	1849	1774	1770	1550
Q Serve(g_s), s	51.1	0.0	12.3	0.0	0.8	0.5	4.9	17.5	17.5	1.6	25.7	22.6
Cycle Q Clear(g_c), s	51.9	0.0	12.3	0.0	0.8	0.5	4.9	17.5	17.5	1.6	25.7	22.6
Prop In Lane	0.92		1.00	0.00		1.00	1.00		0.03	1.00		1.00
Lane Grp Cap(c), veh/h	740	0	774	0	925	775	197	683	714	32	1228	538
V/C Ratio(X)	0.85	0.00	0.34	0.00	0.03	0.02	0.73	0.49	0.49	0.74	0.71	0.64
Avail Cap(c_a), veh/h	969	0	1030	0	1355	1135	228	683	714	88	1228	538
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	28.8	0.0	18.4	0.0	15.5	15.5	56.1	28.2	28.2	59.1	34.2	33.2
Incr Delay (d2), s/veh	5.9	0.0	0.3	0.0	0.0	0.0	9.4	2.5	2.4	27.5	3.5	5.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	20.8	0.0	5.4	0.0	0.4	0.2	2.6	9.0	9.4	1.0	13.1	10.5
LnGrp Delay(d), s/veh	34.7	0.0	18.7	0.0	15.6	15.5	65.5	30.7	30.6	86.6	37.6	38.9
LnGrp LOS	C		B		B	B	E	C	C	F	D	D
Approach Vol, veh/h		893			36			834			1238	
Approach Delay, s/veh		30.0			15.5			36.7			39.0	
Approach LOS		C			B			D			D	

Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6		8
Phs Duration (G+Y+Rc), s	6.2	50.7	0.0	64.1	10.9	46.0		64.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	6.0	44.0	4.0	80.0	8.0	42.0		88.0
Max Q Clear Time (g_c+I1), s	3.6	19.5	0.0	53.9	6.9	27.7		2.8
Green Ext Time (p_c), s	0.0	4.1	0.0	6.2	0.0	6.0		0.2

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	35.4
HCM 2010 LOS	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	20	50	20	60	50	250	20	370	30	390	570	30
Future Volume (veh/h)	20	50	20	60	50	250	20	370	30	390	570	30
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.83	1.00		0.83	1.00		0.99	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1881	1900	1900	1881	1881	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	24	60	24	72	60	301	24	446	36	470	687	36
Adj No. of Lanes	0	1	0	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83	0.83
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	42	93	30	120	90	249	563	2716	1199	712	2716	1175
Arrive On Green	0.19	0.19	0.19	0.19	0.19	0.19	0.76	0.76	0.76	0.76	0.76	0.76
Sat Flow, veh/h	68	496	161	442	480	1334	733	3574	1578	915	3574	1546
Grp Volume(v), veh/h	108	0	0	132	0	301	24	446	36	470	687	36
Grp Sat Flow(s),veh/h/ln	725	0	0	922	0	1334	733	1787	1578	915	1787	1546
Q Serve(g_s), s	2.8	0.0	0.0	0.0	0.0	28.0	1.5	5.1	0.8	43.5	8.6	0.9
Cycle Q Clear(g_c), s	25.0	0.0	0.0	22.2	0.0	28.0	10.1	5.1	0.8	48.6	8.6	0.9
Prop In Lane	0.22		0.22	0.55		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	165	0	0	209	0	249	563	2716	1199	712	2716	1175
V/C Ratio(X)	0.66	0.00	0.00	0.63	0.00	1.21	0.04	0.16	0.03	0.66	0.25	0.03
Avail Cap(c_a), veh/h	165	0	0	209	0	249	563	2716	1199	712	2716	1175
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	0.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	56.1	0.0	0.0	57.7	0.0	61.0	6.8	4.9	4.4	11.6	5.3	4.4
Incr Delay (d2), s/veh	9.0	0.0	0.0	6.0	0.0	125.3	0.1	0.1	0.0	4.8	0.2	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.8	0.0	0.0	5.6	0.0	19.0	0.3	2.5	0.4	11.8	4.3	0.4
LnGrp Delay(d), s/veh	65.1	0.0	0.0	63.7	0.0	186.3	7.0	5.1	4.5	16.4	5.6	4.5
LnGrp LOS	E			E		F	A	A	A	B	A	A
Approach Vol, veh/h		108			433			506			1193	
Approach Delay, s/veh		65.1			148.9			5.1			9.8	
Approach LOS		E			F			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		118.0		32.0		118.0		32.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		114.0		28.0		114.0		28.0
Max Q Clear Time (g_c+I1), s		12.1		27.0		50.6		30.0
Green Ext Time (p_c), s		3.4		0.0		9.7		0.0

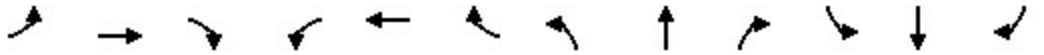
Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	38.3
HCM 2010 LOS	D

Intersection	
Intersection Delay, s/veh	20.8
Intersection LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Future Vol, veh/h	290	30	50	0	30	30	60	30	0	20	20	210
Peak Hour Factor	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72	0.72
Heavy Vehicles, %	5	5	5	5	5	5	5	5	5	5	5	5
Mvmt Flow	403	42	69	0	42	42	83	42	0	28	28	292
Number of Lanes	0	1	0	0	1	0	0	1	1	0	1	0

Approach	EB	WB	NB	SB
Opposing Approach	WB	EB	SB	NB
Opposing Lanes	1	1	1	2
Conflicting Approach Left	SB	NB	EB	WB
Conflicting Lanes Left	1	2	1	1
Conflicting Approach Right	NB	SB	WB	EB
Conflicting Lanes Right	2	1	1	1
HCM Control Delay, s/veh	28.3	10.3	12.6	15.3
HCM LOS	D	B	B	C

Lane	NBLn1	NBLn2	EBLn1	WBLn1	SBLn1
Vol Left, %	67%	0%	78%	0%	8%
Vol Thru, %	33%	100%	8%	50%	8%
Vol Right, %	0%	0%	14%	50%	84%
Sign Control	Stop	Stop	Stop	Stop	Stop
Traffic Vol by Lane	90	0	370	60	250
LT Vol	60	0	290	0	20
Through Vol	30	0	30	30	20
RT Vol	0	0	50	30	210
Lane Flow Rate	125	0	514	83	347
Geometry Grp	7	7	2	2	5
Degree of Util (X)	0.257	0	0.807	0.144	0.543
Departure Headway (Hd)	7.4	7.059	5.651	6.204	5.634
Convergence, Y/N	Yes	Yes	Yes	Yes	Yes
Cap	488	0	637	581	635
Service Time	5.106	4.764	3.724	4.213	3.724
HCM Lane V/C Ratio	0.256	0	0.807	0.143	0.546
HCM Control Delay, s/veh	12.6	9.8	28.3	10.3	15.3
HCM Lane LOS	B	N	D	B	C
HCM 95th-tile Q	1	0	8.2	0.5	3.3



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	30	30	210	70	30	70	90	1380	40	50	980	20
Future Volume (veh/h)	30	30	210	70	30	70	90	1380	40	50	980	20
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		0.98	1.00		0.99
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1827	1827	1900	1827	1900	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	33	33	233	78	33	78	100	1533	44	56	1089	22
Adj No. of Lanes	0	1	1	0	2	0	1	2	1	1	2	1
Peak Hour Factor	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90	0.90
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	119	107	269	138	74	189	122	2437	1066	72	2336	1031
Arrive On Green	0.17	0.17	0.17	0.17	0.17	0.17	0.07	0.70	0.70	0.04	0.67	0.67
Sat Flow, veh/h	470	617	1553	517	429	1093	1740	3471	1517	1740	3471	1533
Grp Volume(v), veh/h	66	0	233	84	0	105	100	1533	44	56	1089	22
Grp Sat Flow(s),veh/h/ln	1088	0	1553	569	0	1470	1740	1736	1517	1740	1736	1533
Q Serve(g_s), s	3.4	0.0	21.0	10.4	0.0	9.1	8.2	33.9	1.3	4.6	21.5	0.7
Cycle Q Clear(g_c), s	12.5	0.0	21.0	22.9	0.0	9.1	8.2	33.9	1.3	4.6	21.5	0.7
Prop In Lane	0.50		1.00	0.93		0.74	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	226	0	269	147	0	255	122	2437	1066	72	2336	1031
V/C Ratio(X)	0.29	0.00	0.87	0.57	0.00	0.41	0.82	0.63	0.04	0.78	0.47	0.02
Avail Cap(c_a), veh/h	227	0	270	147	0	255	242	2437	1066	145	2336	1031
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	54.7	0.0	57.8	64.4	0.0	52.9	66.0	11.4	6.6	68.3	11.2	7.8
Incr Delay (d2), s/veh	0.7	0.0	24.2	5.2	0.0	1.1	12.4	1.2	0.1	16.7	0.7	0.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	2.4	0.0	10.8	3.5	0.0	3.8	4.3	16.6	0.6	2.5	10.5	0.3
LnGrp Delay(d), s/veh	55.4	0.0	82.1	69.6	0.0	54.0	78.4	12.7	6.6	85.0	11.9	7.8
LnGrp LOS	E		F	E		D	E	B	A	F	B	A
Approach Vol, veh/h		299			189			1677			1167	
Approach Delay, s/veh		76.2			60.9			16.4			15.3	
Approach LOS		E			E			B			B	

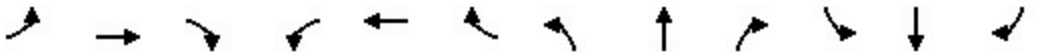
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2		4	5	6		8
Phs Duration (G+Y+Rc), s	9.9	105.0		28.9	14.1	100.8		28.9
Change Period (Y+Rc), s	4.0	4.0		4.0	4.0	4.0		4.0
Max Green Setting (Gmax), s	12.0	101.0		25.0	20.0	93.0		25.0
Max Q Clear Time (g_c+I1), s	6.6	35.9		23.0	10.2	23.5		24.9
Green Ext Time (p_c), s	0.0	20.6		0.2	0.1	10.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	23.9
HCM 2010 LOS	C

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1240	100	470	1320	410	610
Future Volume (veh/h)	1240	100	470	1320	410	610
Number	4	14	3	8	5	12
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		0.97	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	1292	104	490	1375	427	635
Adj No. of Lanes	2	1	2	3	1	1
Peak Hour Factor	0.96	0.96	0.96	0.96	0.96	0.96
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1399	1184	542	2950	647	578
Arrive On Green	0.40	0.40	0.16	0.58	0.36	0.36
Sat Flow, veh/h	3632	1535	3442	5253	1774	1583
Grp Volume(v), veh/h	1292	104	490	1375	427	635
Grp Sat Flow(s),veh/h/ln	1770	1535	1721	1695	1774	1583
Q Serve(g_s), s	50.5	2.5	20.3	22.6	29.2	53.0
Cycle Q Clear(g_c), s	50.5	2.5	20.3	22.6	29.2	53.0
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1399	1184	542	2950	647	578
V/C Ratio(X)	0.92	0.09	0.90	0.47	0.66	1.10
Avail Cap(c_a), veh/h	1462	1212	592	3116	647	578
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	41.8	4.5	60.1	17.6	38.6	46.1
Incr Delay (d2), s/veh	9.9	0.0	16.6	0.1	5.2	67.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	26.5	2.7	10.9	10.6	15.3	34.0
LnGrp Delay(d), s/veh	51.8	4.5	76.7	17.7	43.8	113.6
LnGrp LOS	D	A	E	B	D	F
Approach Vol, veh/h	1396			1865	1062	
Approach Delay, s/veh	48.2			33.2	85.5	
Approach LOS	D			C	F	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2	3	4				8
Phs Duration (G+Y+Rc), s		57.0	26.9	61.4				88.3
Change Period (Y+Rc), s		4.0	4.0	4.0				4.0
Max Green Setting (Gmax), s		53.0	25.0	60.0				89.0
Max Q Clear Time (g_c+I1), s		55.0	22.3	52.5				24.6
Green Ext Time (p_c), s		0.0	0.5	4.9				15.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	50.9
HCM 2010 LOS	D



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (vph)	70	600	350	40	900	120	10	10	20	770	30	300
Future Volume (vph)	70	600	350	40	900	120	10	10	20	770	30	300
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00		1.00		0.95	0.91	0.95
Frpb, ped/bikes	1.00	1.00	0.96	1.00	1.00	0.97		0.99		1.00	1.00	1.00
Flpb, ped/bikes	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85		0.93		1.00	0.99	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00		0.99		0.95	0.96	1.00
Satd. Flow (prot)	1784	3574	1542	1787	3574	1547		1715		1698	1621	1519
Flt Permitted	0.17	1.00	1.00	0.95	1.00	1.00		0.89		0.95	0.70	1.00
Satd. Flow (perm)	315	3574	1542	1787	3574	1547		1544		1698	1191	1519
Peak-hour factor, PHF	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97	0.97
Adj. Flow (vph)	72	619	361	41	928	124	10	10	21	794	31	309
RTOR Reduction (vph)	0	0	119	0	0	76	0	16	0	0	1	42
Lane Group Flow (vph)	72	619	242	41	928	48	0	25	0	429	426	236
Confl. Peds. (#/hr)	3		2	2		3			1	1		
Confl. Bikes (#/hr)			6			1						
Heavy Vehicles (%)	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%	1%
Turn Type	Perm	NA	Perm	Prot	NA	Perm	Prot	NA		Prot	NA	Perm
Protected Phases		4		3	8		5	2		1	6	
Permitted Phases	4		4			8						6
Actuated Green, G (s)	34.1	34.1	34.1	6.0	44.1	44.1		32.0		35.3	71.3	71.3
Effective Green, g (s)	34.1	34.1	34.1	6.0	44.1	44.1		32.0		35.3	71.3	71.3
Actuated g/C Ratio	0.28	0.28	0.28	0.05	0.36	0.36		0.26		0.29	0.58	0.58
Clearance Time (s)	4.0	4.0	4.0	4.0	4.0	4.0		4.0		4.0	4.0	4.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0		3.0		3.0	3.0	3.0
Lane Grp Cap (vph)	87	987	426	86	1277	552		400		485	811	877
v/s Ratio Prot		0.17		0.02	c0.26					c0.25	0.15	
v/s Ratio Perm	c0.23		0.16			0.03		0.02			c0.15	0.16
v/c Ratio	0.83	0.63	0.57	0.48	0.73	0.09		0.06		0.88	0.52	0.27
Uniform Delay, d1	41.9	39.1	38.3	57.2	34.4	26.3		34.4		42.1	15.8	13.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00		1.00		1.00	1.00	1.00
Incremental Delay, d2	44.8	1.3	1.7	4.1	2.1	0.1		0.1		17.2	0.6	0.8
Delay (s)	86.7	40.3	40.1	61.3	36.5	26.4		34.5		59.3	16.4	13.8
Level of Service	F	D	D	E	D	C		C		E	B	B
Approach Delay (s/veh)		43.4			36.3			34.5			32.0	
Approach LOS		D			D			C			C	

Intersection Summary			
HCM 2000 Control Delay (s/veh)	37.1	HCM 2000 Level of Service	D
HCM 2000 Volume to Capacity ratio	0.77		
Actuated Cycle Length (s)	123.4	Sum of lost time (s)	16.0
Intersection Capacity Utilization	70.6%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	200	1060	390	330	1210	210	300	620	200	280	620	180
Future Volume (veh/h)	200	1060	390	330	1210	210	300	620	200	280	620	180
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.97	1.00		0.97	1.00		0.95	1.00		0.96
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1881	1881	1881	1881	1881	1900	1881	1881	1881	1881	1881	1881
Adj Flow Rate, veh/h	215	1140	419	355	1301	226	323	667	215	301	667	194
Adj No. of Lanes	1	2	1	1	3	0	1	2	1	1	2	1
Peak Hour Factor	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93	0.93
Percent Heavy Veh, %	1	1	1	1	1	1	1	1	1	1	1	1
Cap, veh/h	237	1120	487	346	1639	285	322	763	324	311	739	317
Arrive On Green	0.13	0.31	0.31	0.19	0.37	0.37	0.18	0.21	0.21	0.17	0.21	0.21
Sat Flow, veh/h	1792	3574	1553	1792	4381	761	1792	3574	1521	1792	3574	1535
Grp Volume(v), veh/h	215	1140	419	355	1017	510	323	667	215	301	667	194
Grp Sat Flow(s),veh/h/ln	1792	1787	1553	1792	1712	1719	1792	1787	1521	1792	1787	1535
Q Serve(g_s), s	17.7	47.0	38.1	29.0	39.6	39.7	27.0	27.1	19.4	25.0	27.3	17.2
Cycle Q Clear(g_c), s	17.7	47.0	38.1	29.0	39.6	39.7	27.0	27.1	19.4	25.0	27.3	17.2
Prop In Lane	1.00		1.00	1.00		0.44	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	237	1120	487	346	1281	643	322	763	324	311	739	317
V/C Ratio(X)	0.91	1.02	0.86	1.02	0.79	0.79	1.00	0.87	0.66	0.97	0.90	0.61
Avail Cap(c_a), veh/h	263	1120	487	346	1281	643	322	763	324	311	739	317
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	64.1	51.5	48.4	60.5	41.8	41.8	61.5	57.1	54.1	61.6	58.0	54.0
Incr Delay (d2), s/veh	30.4	31.5	14.5	54.9	3.5	6.8	50.5	13.3	10.2	42.6	16.5	8.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	10.8	28.1	18.3	19.6	19.4	20.1	17.9	14.8	9.1	16.1	15.2	8.1
LnGrp Delay(d), s/veh	94.5	83.0	63.0	115.4	45.3	48.6	112.0	70.4	64.3	104.2	74.5	62.5
LnGrp LOS	F	F	E	F	D	D	F	E	E	F	E	E
Approach Vol, veh/h		1774			1882			1205			1162	
Approach Delay, s/veh		79.6			59.4			80.5			80.2	
Approach LOS		E			E			F			F	

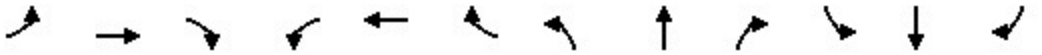
Timer	1	2	3	4	5	6	7	8
Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	30.0	36.0	33.0	51.0	31.0	35.0	23.9	60.1
Change Period (Y+Rc), s	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Max Green Setting (Gmax), s	26.0	32.0	29.0	47.0	27.0	31.0	22.0	54.0
Max Q Clear Time (g_c+I1), s	27.0	29.1	31.0	49.0	29.0	29.3	19.7	41.7
Green Ext Time (p_c), s	0.0	1.4	0.0	0.0	0.0	0.9	0.1	7.6

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	73.6
HCM 2010 LOS	E



Movement	SBL2	SBL	SBT	SBR	SWL2	SWL	SWR	SWR2
Lane Configurations								
Traffic Volume (vph)	10	150	560	120	110	340	320	20
Future Volume (vph)	10	150	560	120	110	340	320	20
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)		4.0	4.0	4.0	4.0	4.0	4.0	
Lane Util. Factor		1.00	0.95	1.00	1.00	1.00	0.95	
Frpb, ped/bikes		1.00	1.00	0.99	1.00	1.00	1.00	
Flpb, ped/bikes		1.00	1.00	1.00	1.00	1.00	1.00	
Frt		1.00	1.00	0.85	1.00	0.99	0.85	
Flt Protected		0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (prot)		1770	3539	1567	1770	1758	1504	
Flt Permitted		0.95	1.00	1.00	0.95	0.96	1.00	
Satd. Flow (perm)		1770	3539	1567	1770	1758	1504	
Peak-hour factor, PHF	0.94	0.94	0.94	0.94	0.94	0.94	0.94	0.94
Adj. Flow (vph)	11	160	596	128	117	362	340	21
RTOR Reduction (vph)	0	0	0	64	0	0	122	0
Lane Group Flow (vph)	0	171	596	64	117	396	205	0
Confl. Peds. (#/hr)		27		2				
Confl. Bikes (#/hr)								
Turn Type	Prot	Prot	NA	pm+ov	Prot	Prot	Perm	
Protected Phases	1	1	6	7	9	10		
Permitted Phases				6			10	
Actuated Green, G (s)		14.0	29.0	49.0	10.0	31.0	31.0	
Effective Green, g (s)		14.0	29.0	49.0	10.0	31.0	31.0	
Actuated g/C Ratio		0.09	0.19	0.32	0.07	0.21	0.21	
Clearance Time (s)		4.0	4.0	4.0	4.0	4.0	4.0	
Vehicle Extension (s)		3.0	3.0	3.0	3.0	3.0	3.0	
Lane Grp Cap (vph)		164	680	550	117	361	309	
v/s Ratio Prot		c0.10	c0.17	0.02	c0.07	c0.23		
v/s Ratio Perm				0.03			0.14	
v/c Ratio		1.04	0.88	0.12	1.00	1.10	0.66	
Uniform Delay, d1		68.4	59.2	35.7	70.4	59.9	55.1	
Progression Factor		1.00	1.00	1.00	1.00	1.00	1.00	
Incremental Delay, d2		82.0	12.2	0.1	83.2	76.0	5.3	
Delay (s)		150.4	71.4	35.8	153.6	135.9	60.4	
Level of Service		F	E	D	F	F	E	
Approach Delay (s/veh)			81.4			109.0		
Approach LOS			F			F		

Intersection Summary



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Future Volume (veh/h)	100	240	220	30	150	50	120	460	20	60	630	80
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.99	1.00		0.99	1.00		0.98	1.00		0.98
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827	1827
Adj Flow Rate, veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Adj No. of Lanes	1	1	1	1	1	1	1	2	1	1	2	1
Peak Hour Factor	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88	0.88
Percent Heavy Veh, %	4	4	4	4	4	4	4	4	4	4	4	4
Cap, veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
Arrive On Green	0.22	0.22	0.22	0.22	0.22	0.22	0.72	0.72	0.72	0.72	0.72	0.72
Sat Flow, veh/h	1125	1827	1542	859	1827	1542	659	3471	1518	840	3471	1517
Grp Volume(v), veh/h	114	273	250	34	170	57	136	523	23	68	716	91
Grp Sat Flow(s),veh/h/ln	1125	1827	1542	859	1827	1542	659	1736	1518	840	1736	1517
Q Serve(g_s), s	12.3	17.4	19.2	4.8	10.2	3.8	11.6	6.3	0.5	3.7	9.2	2.3
Cycle Q Clear(g_c), s	22.5	17.4	19.2	22.2	10.2	3.8	20.8	6.3	0.5	9.9	9.2	2.3
Prop In Lane	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	210	395	334	125	395	334	484	2500	1093	621	2500	1093
V/C Ratio(X)	0.54	0.69	0.75	0.27	0.43	0.17	0.28	0.21	0.02	0.11	0.29	0.08
Avail Cap(c_a), veh/h	421	737	622	285	737	622	484	2500	1093	621	2500	1093
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	52.5	45.6	46.3	55.8	42.8	40.3	9.9	5.8	5.0	7.5	6.2	5.3
Incr Delay (d2), s/veh	2.2	2.2	3.4	1.2	0.7	0.2	1.4	0.2	0.0	0.4	0.3	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	4.0	9.0	8.4	1.2	5.2	1.6	2.3	3.0	0.2	0.9	4.5	1.0
LnGrp Delay(d), s/veh	54.7	47.8	49.7	57.0	43.5	40.5	11.3	6.0	5.1	7.8	6.5	5.4
LnGrp LOS	D	D	D	E	D	D	B	A	A	A	A	A
Approach Vol, veh/h		637			261			682			875	
Approach Delay, s/veh		49.7			44.6			7.0			6.5	
Approach LOS		D			D			A			A	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		95.0		31.3		95.0		31.3
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		91.0		51.0		91.0		51.0
Max Q Clear Time (g_c+I1), s		22.8		24.5		11.9		24.2
Green Ext Time (p_c), s		5.4		2.9		6.4		1.3

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	21.9
HCM 2010 LOS	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Future Volume (veh/h)	110	90	180	20	40	40	90	1040	30	60	830	50
Number	7	4	14	3	8	18	5	2	12	1	6	16
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		0.95	1.00		0.95	1.00		0.95	1.00		0.97
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1900	1845	1845	1900	1845	1845	1845	1845	1845	1845	1845	1845
Adj Flow Rate, veh/h	121	99	198	22	44	44	99	1143	33	66	912	55
Adj No. of Lanes	0	1	1	0	1	1	1	2	1	1	2	1
Peak Hour Factor	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91	0.91
Percent Heavy Veh, %	3	3	3	3	3	3	3	3	3	3	3	3
Cap, veh/h	37	12	498	32	49	498	322	2150	917	248	2150	937
Arrive On Green	0.33	0.33	0.33	0.33	0.33	0.33	0.61	0.61	0.61	0.61	0.61	0.61
Sat Flow, veh/h	0	37	1494	0	148	1493	573	3505	1496	470	3505	1527
Grp Volume(v), veh/h	220	0	198	66	0	44	99	1143	33	66	912	55
Grp Sat Flow(s),veh/h/ln	37	0	1494	148	0	1493	573	1752	1496	470	1752	1527
Q Serve(g_s), s	0.0	0.0	15.3	0.0	0.0	3.0	16.4	28.1	1.3	14.0	20.4	2.2
Cycle Q Clear(g_c), s	50.0	0.0	15.3	50.0	0.0	3.0	36.8	28.1	1.3	42.1	20.4	2.2
Prop In Lane	0.55		1.00	0.33		1.00	1.00		1.00	1.00		1.00
Lane Grp Cap(c), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
V/C Ratio(X)	4.44	0.00	0.40	0.81	0.00	0.09	0.31	0.53	0.04	0.27	0.42	0.06
Avail Cap(c_a), veh/h	50	0	498	81	0	498	322	2150	917	248	2150	937
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	62.7	0.0	38.4	41.6	0.0	34.3	24.8	16.6	11.5	28.7	15.2	11.6
Incr Delay (d2), s/veh	1595.5	0.0	0.5	44.5	0.0	0.1	2.5	0.9	0.1	2.6	0.6	0.1
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	24.0	0.0	6.4	2.9	0.0	1.3	2.8	13.8	0.6	2.0	10.1	0.9
LnGrp Delay(d), s/veh	1658.2	0.0	38.9	86.1	0.0	34.4	27.2	17.6	11.5	31.3	15.8	11.8
LnGrp LOS	F		D	F		C	C	B	B	C	B	B
Approach Vol, veh/h		418			110			1275			1033	
Approach Delay, s/veh		891.2			65.5			18.2			16.6	
Approach LOS		F			E			B			B	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		8
Phs Duration (G+Y+Rc), s		96.0		54.0		96.0		54.0
Change Period (Y+Rc), s		4.0		4.0		4.0		4.0
Max Green Setting (Gmax), s		92.0		50.0		92.0		50.0
Max Q Clear Time (g_c+I1), s		38.8		52.0		44.1		52.0
Green Ext Time (p_c), s		13.2		0.0		9.5		0.0

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	148.1
HCM 2010 LOS	F

Movement	SET	SER	NWL	NWT	NEL	NER
Lane Configurations						
Traffic Volume (veh/h)	170	65	4	130	65	4
Future Volume (veh/h)	170	65	4	130	65	4
Number	6	16	5	2	7	14
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Adj Sat Flow, veh/h/ln	1863	1863	1863	1863	1863	1863
Adj Flow Rate, veh/h	185	71	4	141	71	4
Adj No. of Lanes	1	1	1	1	1	1
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1620	1377	1026	1620	95	85
Arrive On Green	0.87	0.87	0.87	0.87	0.05	0.05
Sat Flow, veh/h	1863	1583	1119	1863	1774	1583
Grp Volume(v), veh/h	185	71	4	141	71	4
Grp Sat Flow(s),veh/h/ln	1863	1583	1119	1863	1774	1583
Q Serve(g_s), s	1.5	0.6	0.1	1.1	4.1	0.3
Cycle Q Clear(g_c), s	1.5	0.6	1.6	1.1	4.1	0.3
Prop In Lane		1.00	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1620	1377	1026	1620	95	85
V/C Ratio(X)	0.11	0.05	0.00	0.09	0.75	0.05
Avail Cap(c_a), veh/h	1620	1377	1026	1620	865	772
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	1.0	0.9	1.1	1.0	48.8	47.0
Incr Delay (d2), s/veh	0.1	0.1	0.0	0.1	10.9	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(50%),veh/ln	0.8	0.3	0.0	0.6	2.3	0.1
LnGrp Delay(d), s/veh	1.1	1.0	1.1	1.1	59.7	47.2
LnGrp LOS	A	A	A	A	E	D
Approach Vol, veh/h	256			145	75	
Approach Delay, s/veh	1.1			1.1	59.1	
Approach LOS	A			A	E	

Timer	1	2	3	4	5	6	7	8
Assigned Phs		2		4		6		
Phs Duration (G+Y+Rc), s		95.0		9.6		95.0		
Change Period (Y+Rc), s		4.0		4.0		4.0		
Max Green Setting (Gmax), s		91.0		51.0		91.0		
Max Q Clear Time (g_c+I1), s		3.6		6.1		3.5		
Green Ext Time (p_c), s		0.9		0.2		1.4		

Intersection Summary	
HCM 2010 Ctrl Delay, s/veh	10.2
HCM 2010 LOS	B